



# User Manual

## ShareCenter™ 2-Bay Cloud Network Storage Enclosure

# Table of Contents

<b>Product Overview .....</b>	<b>1</b>	Home.....	81
Before you Begin.....	2	Applications.....	82
System Requirements .....	2	Management.....	83
Package Contents.....	2	Management.....	84
Features.....	3	Setup Wizard (Web UI) .....	84
Checking the Hardware Requirements .....	6	Disk Management .....	89
Hardware Overview .....	7	Hard Drive Configuration.....	89
Front Panel .....	7	Hard Drive Configuration Wizard .....	90
LED Description.....	8	JBOD .....	97
Rear Panel (Connections).....	9	RAID 0.....	101
Bottom Panel.....	10	RAID 1 .....	107
<b>Getting Started .....</b>	<b>11</b>	Hot Swapping to Migrate from Standard Mode to RAID 1 .....	113
Hardware Setup .....	11	S.M.A.R.T. Test .....	121
<b>Windows Installation.....</b>	<b>14</b>	Creating a Schedule .....	123
Setup Wizard .....	14	Scan Disk.....	124
Mapping a Drive.....	48	Account Management .....	126
Alternative methods to Mapping a Drive .....	51	Users / Groups.....	126
<b>Mac - Setup Wizard Installation.....</b>	<b>52</b>	Creating a Single User .....	126
<b>Configuration.....</b>	<b>70</b>	Creating Multiple Users .....	131
Managing your DNS-320L .....	70	Modify Users .....	135
D-Link Storage Utility .....	71	Deleting Users .....	139
D-Link Storage Utility - For Mac .....	73	Importing Users.....	140
Web UI Login.....	80	Creating a Group.....	143
Web UI General Layout .....	81	Modifying a Group.....	148
		Deleting a Group.....	154



Quotas.....	155	Time and Date.....	209
Network Shares.....	160	Device .....	210
Add/Modify Network Shares Wizard .....	161	System Settings .....	211
Deleting a Network Share .....	168	Power Management .....	212
Resetting the Network Shares.....	170	Notifications.....	214
ISO Shares Setup Wizard.....	171	Email Settings.....	214
Creating an ISO Image .....	175	SMS Settings .....	215
ISO image Creation Wizard .....	176	Adding an SMS Service Provider .....	216
ISO Name and File Path Settings .....	177	Event Settings .....	217
ISO Tree Editing.....	180	Logs.....	218
Verifying the ISO image .....	181	Firmware Upgrade.....	219
Admin Password.....	182	USB Devices .....	220
Network Management.....	183	UPS Settings.....	220
LAN Setup.....	183	USB Storage Information.....	220
IPv6 Settings .....	186	Printer Information.....	221
IPv6 Setup.....	187	System Status .....	222
Link Speed and LLTD Settings .....	189	System Info.....	222
DDNS .....	190	Home.....	224
Port Forwarding.....	191	My Photos.....	225
Application Management.....	195	Creating an Album .....	228
FTP server .....	195	Photo Album Wizard.....	229
Block IP List.....	196	Editing Photos in an Album .....	233
AFP Service.....	200	Select a Photo as a Cover image.....	236
NFS Service.....	200	Select a Photo to Move .....	238
Multimedia Services.....	201	Delete a Photo .....	240
UPnP AV Server .....	206	Share a Photo to Picasa.....	242
iTunes Server .....	207	Share a Photo to Facebook.....	245
System Management .....	208	Share a Photo to Flickr .....	248
Language .....	208	Deleting an Album .....	251

Refreshing the Album Database .....	253	My Music - Playback Music on an Apple device	301
Managing Photos .....	254	My Music - The Player .....	302
Slideshow Toolbar.....	255	My Music - Create a Playlist.....	303
Beam a Slideshow to your TV .....	264	My Favorites Application.....	305
Photo Gallery.....	265	Adding Applications .....	306
My Files.....	267	Applications.....	307
My Files - Icons.....	268	FTP/HTTP Downloads .....	307
Upload .....	269	Remote Backups.....	309
Download .....	271	Create Wizard .....	310
Copy.....	273	Local Backups.....	314
Move.....	276	Time Machine.....	315
Delete.....	278	Time Machine - On the Mac .....	316
Rename.....	280	Time Machine - Delete a Volume .....	323
Properties.....	282	USB Backups .....	326
Create a Zip file from the Selected Folder....	283	MTP Backups.....	327
Add to Zip.....	284	USB Backups .....	327
Unzipping a Zipped File .....	286	MTP Backup Process.....	328
Unzipping a Tar File .....	287	USB Backup Process .....	330
Opening a File .....	288	P2P Downloads.....	332
Previewing a File .....	289	Settings.....	332
Share to Facebook .....	290	Downloads .....	333
Share to Picasa .....	291	Amazon S3.....	334
Share to Flickr.....	292	Creating an AWS Account .....	335
Quick Search.....	293	mydlink.....	341
My Music.....	294	mydlink Verification .....	342
My Music - The Interface .....	296	mydlink Java Runtime Machine.....	344
My Music - The Categories.....	297	Creating a New Folder.....	349
My Music - The Categories.....	298	mydlink Settings Details.....	350
My Music - Music on your DNS-320L .....	299	ShareCenter™ NAS Status .....	351

Deleting a mydlink device ..... 352

Deleting a mydlink account ..... 353

The mydlink Access NAS App ..... 355

The mydlink Access NAS App - Features ..... 356

The mydlink Access NAS App - Compatibility 357

**Knowledge Base ..... 359**

    What is RAID? ..... 359

        RAID Options ..... 361

    UPS Connectivity ..... 363

        Deleting a UPS Slave..... 367

    USB Print Server ..... 369

        Setting up a printer using Mac OS 10.8 ..... 372

        Setting up a printer using Mac OS 10.8 ..... 373

        ..... 373

**Contacting Technical Support ..... 377**

**Warranty..... 378**

**Registration ..... 383**

# Product Overview

The D-Link ShareCenter™ DNS-320L is a 2-Bay Cloud Network Storage device. When used with internal SATA drives, it enables you to share documents, files, and digital media such as music, photos, and video with everyone in your home or in the office network. Remotely accessing files through the internet is also possible using the built-in FTP server, Web File server and the WebDAV protocol. Whether you are allowing access locally or over the internet, you can keep data safe by only giving rights to specific users or groups. Users can also access their DNS-320L remotely using the mydlink portal, or using mobile devices with the mydlink Access-NAS app on a mobile phone or tablet. When configuring the DNS-320L, you can create and assign users and groups to folders with either read or read/write permissions. This is ideal for an office environment with employee-specific sensitive data or for the home where you can limit your children to age appropriate material. The DNS-320L will be available to any computer (PC, Mac, or Linux) on your network, without the need to install any software.

You may back up your music, photos, and video collections to the DNS-320L for safekeeping. Then enjoy the benefits of the built-in UPnP AV media server as you stream digital content to compatible media players<sup>2</sup> (such as those found in D-Link's MediaLounge product line). This feature is highly convenient as it allows you to turn off a computer that would normally be needed for the same function.

The availability of four different hard drive modes (Standard, JBOD, RAID 0, RAID1) allows you to choose the configuration best suited to your needs. Standard mode creates two separately accessible hard drives. JBOD combines both drives in linear fashion for maximum space efficiency. RAID 0 combines both drives in a 'striped' configuration, which provides the highest performance when using a Gigabit Ethernet connection. RAID 1 causes the drives to mirror each other, providing maximum protection. If one drive fails while configured as RAID 1, the unaffected drive continues to function as a single drive until the failed drive is replaced. The new drive will then be re-mirrored, allowing the DNS-320L to return to its full protection.

To further enhance your ShareCenter's™ capabilities, the DNS-320L supports a proprietary mydlink service, provided to D-Link customers only, serves as a portal to those users who wish to access their data from any location. Mydlink service supports list, download, upload or delete files/folders and can see the status of a ShareCenter™ from any location via web browser.

<sup>1</sup> Hard Drive(s) not included.

<sup>2</sup> D-Link cannot guarantee full compatibility or proper playback with all codecs. Playback capability depends on the codec support of the UPnP™ AV media player.

## Before you Begin

- Check box contents
- Check system requirements
- Ensure that you have the hardware you need for your ShareCenter™ device

## System Requirements

For best results, the following minimum requirements are recommended on any system used to configure and use the ShareCenter™:

- Computer with: 1Ghz processor / 512MB RAM / 200MB available space / CD-ROM drive
- Internet Explorer® version 8, Mozilla® Firefox® 4, Google® Chrome 3, or Apple® Safari® 4 and above
- Windows® XP (with Service Pack 2), Windows Vista®, Windows® 7, Windows® 8
- Mac OS® X 10.5.6 or greater
- 3.5" SATA Hard Drive(s)

**Note:** This product is compatible with most SATA hard drives. Please visit your local D-Link support site for an updated list of compatible hard drives.

## Package Contents

- D-Link ShareCenter™ DNS-320L
- CD-ROM with Manual and Software
- Quick Installation Guide
- 12VDC 3A Output Power Adapter
- CAT5E Ethernet Cable



# Features

The ShareCenter™ DNS-320L is an easy to install data storage platform used for remote access through a local network or from the Internet. This ShareCenter™ supports up to 2 SATA hard drives and includes the product features listed below:

- Equipped one 10/100/1000 Mbps auto-MDIX Gigabit Ethernet LAN port, 1000BASE-T support Half duplex and Full duplex mode
- Embedded two SATA II 3.5" HDD interface, support 4TB HDD
- 2-bay Serial ATA with RAID 0/1 and JBOD supported
- Equipped Ultra Cooler (Plastic housing + FAN speed control)
- Trays for the hard drives.
- Supports Real-Time Clock (RTC)
- Network Options
  - DHCP Client or Static IP
  - NTP Client
  - Windows 7/ Vista x32/64 PnP-X/ LLTD
  - Dynamic DNS
  - Bonjour
  - UPnP Port Forwarding
  - IPv6
- Network File Services
  - Supports Windows XP/Vista/ 7/ 8, Mac OSX 10.5+, Linux clients
  - CIFS/SMB for Windows and Mac OS X and Linux
  - NFSv3 Server for Linux and UNIX
  - AFP3.3 for Mac OS X
  - HTTP and HTTP/S for web browsers
  - WebDAV
- File System
  - EXT4 for internal HDD
  - FAT32, NTFS for USB external Storage
- File System Management
  - Unicode Support for both Samba and FTP server
  - File sharing: Windows/ Mac/ Linux
  - File Searching
- FTP server
  - FTP over explicit SSL/ TLS mode (FTPES)
  - FTP bandwidth and connection control
  - FTP support FXP
  - IP Blocking
- Disk Management
  - RAID: Standard, JBOD, 0, 1
  - RAID 1 Auto/Manual Rebuild
  - RAID migration: Standard to RAID 1
  - Disk Status Monitoring (S.M.A.R.T)
  - HDD S.M.A.R.T test
  - Scandisk
  - Support Advanced Format HDD
  - Disk Roaming
  - RAID roaming

- Folder Management
  - Share Folder Level Permission
  - Supports ISO mount
  - ISO creator
- Remote File Sharing
  - My Files (Web File Server)
  - WebDAV
  - FTP Server
  - Mobile device accesss (mydlink Access NAS)
- User/Group Management
  - User/Group assignmentfor network sharing and FTP server
  - Quota for user and group
  - Assign users to multiple groups
  - Create User/Import User(s) batch files
- Backup Management
  - Schedule Backup from PC to NAS (ShareCenter™ Sync)
  - Remote network backup (Rsync, Remote Snapshot)
  - Apple Time Machine support
  - Local Backup
  - USB Backup
  - USB Copy button
  - Cloud Storage Backup (Amazon S3)
- Download Management
  - HTTP/FTP schedule download
  - Peer-to-peer (P2P) downloads
- System Management
  - Support mydlink portal
  - Support D-Link Storage Utility / Setup Wizard
    - OS Support: Windows XP, Vista, 7, 8 and Mac OS X
  - Two access modes supported: Open (Share) mode and Account (User) mode, no setup Account and Password necessary in open mode
  - Support Configuration file save/load
  - System Status
  - Email / SMS notifications
  - Network Recycle Bin
  - System /FTP Log (Syslog Client)
  - Rescue F/W image
  - Resource Monitor
  - Multi-lingual GUI support
- Power Management
  - Power Saving (Disk idle spin-down)
  - Automatic power recovery (with UPS)
  - Schedule power on/off
  - Auto-shutdown on UPS low battery
  - Smart FAN control
  - Network UPS
- USB port support
  - Print Server
  - UPS monitoring
  - External storage device
  - MTP/PTP
- Media Streaming
  - UPnP AV Server

- Support PS3 / XBOX 360
- Support UPnP AV > 4GB
- Comply with DLNA HNv1.5
- D-Link new Media Player (including Boxee) compatible
- Support Sonos Digital Music System via Samba
- iTunes Server
- Audio Streamer (icestation)
- My Music (Music Center)
- My Photos (Photo Center)
- Cloud Service-mylink Portal Web Access
  - Remote Files Access through Web Browser
  - Browse, Upload/Download, and Manage File/Folders
- Cloud Service-Mobile Apps (the “mylink Access-NAS” app)
  - Ability to Access Content from Mobile Devices
  - Browse, Upload/Download, Open, and Manage File/Folders
  - View Photo and Playback Multimedia Files
  - Access to Media: Streaming for Music, Photo Galleries
  - Content Classification : Classify Contents by “Photo, Music, Video, and Document”
  - Supports iOS, Android
- Built-in Applications
  - My Files (Web File Server)
  - My Photos (Photo Center)
  - My Music (Music Center)
- My Files
  - Access, and Manage (Copy, Move, Delete, Rename, zip/unzip) Files through Web Browser
  - Open Files on Web Browser or from PC’s Default Program
  - Share Files to Social Network (Facebook, Picasa, Flickr)
  - Shows File Properties
- My Photos
  - Generates Photo Library, and Sort by All Photos, and by Timeline
  - Creates Albums and Manage Photos
  - Share Photos to Social Networks (Facebook, Picasa, Flickr)
  - Views Photos through Cooliris
  - Slideshows
  - Supports AirPlay
  - Shows and Adds GPS information of Photos
- My Music
  - Generates Music Library, and Sort by All Tracks, Albums, Artists, and Genres
  - Supports Playlist
  - Integrates Music Player
  - Supports AirPlay
- Web Browsers supported
  - Internet Explorer 8+
  - Mozilla Firefox 4
  - Apple Safari 4+
  - Google Chrome 3+
  - Opera 10



# Checking the Hardware Requirements

To use your DNS-320L, you will need at least one hard drive. If you plan to use RAID 1, which protects your data against one hard drive failure, you will need two hard drives.

## **This section will help you:**

- Select the hard drives
- Determine hard disk space you will need
- Ensure your data is protected
- Understand the basic requirements for a router or switch

## **Selecting Hard Drives:**

You can use hard drives from any manufacturer and with any capacity with your DNS-320L The D-Link ShareCenter™ supports standard 3.5" internal SATA drives. If you are unsure, ask your administrator or hard drive retailer/manufacturer to verify that your hard drives meet this standard

**\*Warning - Any pre-existing data on the drives will be erased during installation.**

## **Determining How Much Hard Drive Space you Need:**

In order to protect your data from hard drive failure, your DNS-320L requires more space than what you will use for your data, sometimes more than double the amount of space required.

## **Using a Router or Switch:**

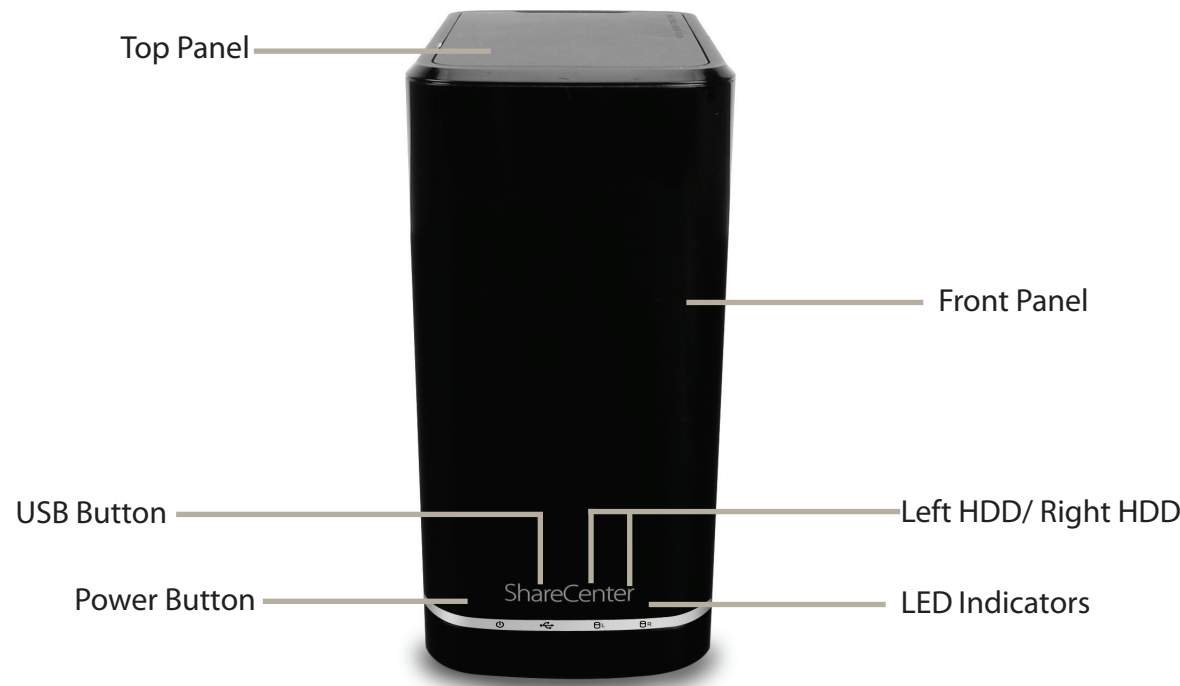
If you are connecting your ShareCenter™ to a router or switch, your router or switch needs to support Gigabit Ethernet (1000Mbit/s) for maximum performance. The ShareCenter™ will auto-negotiate the highest connection speed available to your router or switch. If you are using Port Bonding, use a managed switch.

## **Using an Uninterrupted Power Supply (UPS):**

We highly recommend that you use your ShareCenter™ in conjunction with an uninterrupted power supply (UPS), which will protect against sudden loss in power and power surges.

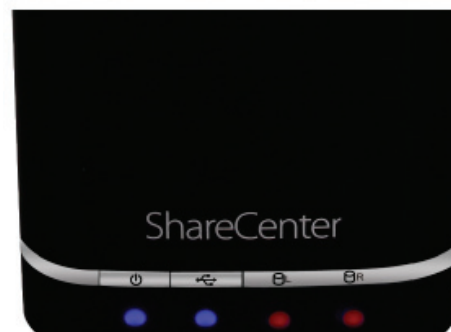
# Hardware Overview

## Front Panel



COMPONENT	DESCRIPTION
Top Panel	This panel unlatches simply by pressing the lever at the back. Unhook and lift up to insert or remove your hard drive(s).
Front Panel	The casing of the entire NAS
Power Button	Press once to power on the ShareCenter™. Press and hold the button for more than 5 seconds to power it down.
USB Button	Press once to activate USB or press and hold the button for more than 5 seconds to release USB activity.
Left HDD/Right HDD	Indicates the position of the drive (Left or Right)
LED Indicators	Illuminates blue or red depending on activity (see the next page for details)

## LED Description



### **Power On/Off:**

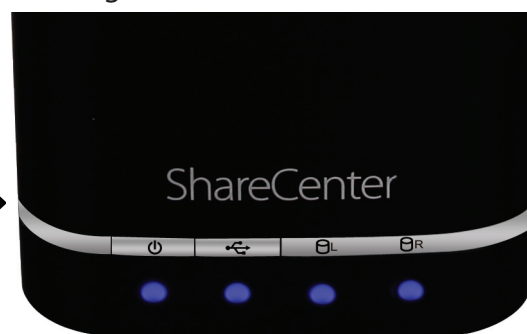
Blue Light - the device is on  
Blinking Orange - the device is booting or restarting  
No Light - the device is off

### **USB On/Off:**

Blue Light - the USB Storage is connected  
Blinking Orange - transferring data, a USB device is being installed or unmounted  
Orange Light - USB storage failed to mount  
No Light - No USB Storage or the device is off

### **HDD On/Off:**

Orange Light(s) - the hard drives are faulty  
No Light(s) - the hard drives are inactive



### **HDD On/Off:**

Blue Light(s) - the hard drives are working  
Blinking Orange Light(s) - the HDD(s) is writing/reading

# Rear Panel (Connections)



COMPONENT	DESCRIPTION
Cooling Fan	The cooling fan is used to cool the hard drives and features speed control. When the unit is first powered on, the fans rotate at a low speed and later rotate at a high speed when the temperature rises above 49 °C.
Gigabit Ethernet Ports	Use the Gigabit Ethernet port to connect the ShareCenter™ to the local network. The port is equipped with 2 LEDs. The LED on the left will illuminate solid green for a good connection and will blink during data transmission. If this LED is off, check the connection/cable to the device you are connecting to. The LED on the right will light solid for a Gigabit connection and will remain off when connected to a 10/100 device.
Power Receptacle	Connect the supplied power cord to the receptacle.
USB Port	A single USB 3.0 (Type A) connector. The USB Host port is for Print Servers, USB memory disks, or USB UPS monitoring.
Latch	Press the latch to release the Top Panel and insert or remove the hard drives
Security Lock	Prevent theft by tying a cable to the ShareCenter™ NAS and a desk. Cable is sold separately.

# Bottom Panel



COMPONENT	DESCRIPTION
Product Details	Information about the product - DNS-320L Serial Number, Part Number, Manufacturer Number
Reset Button	Press and hold this button for more than 5 seconds to reset the unit to factory defaults.

# Getting Started

## Hardware Setup

This User Guide will help you get your ShareCenter™ set up in just a few steps. To install the ShareCenter™ on your local network, refer to the steps below, or skip to page 17 to run the setup wizard which will show you how to install and configure your DNS-320L.



**Step 1** - Remove the top panel by firmly pressing the latch at the back.



**Step 2** - Once the faceplate is unlatched, pull it off the the device to expose the devices's bays.



**Step 3** - Attach the hard drive brackets to the sides of your hard drives with the included screws. Ensure the brackets are aligned so that when the hard drive is inserted, the arrow on the bracket points to the front of the ShareCenter™.



**Step 4** - Insert up to two 3.5" SATA hard drives into the drive bays.

**Note:** Make sure to align the drive connector to the SATA connector at the back edge inside the drive bay of the ShareCenter™. Gently push the drive in until it connects. When a drive is inserted properly, you will feel it "set" into the connector. Some hard drives that are thin or oddly shaped may need to be inserted carefully into position. If a drive is not properly set in place, the hard drive LED will not illuminate after powering on the device.



**Step 5** - Re-attach the top panel. Ensure the latch is inserted inside the panel.



**Step 6** - Connect an Ethernet cable to the Ethernet port. This cable should connect the ShareCenter™ to your local network via a router, switch, or directly to a computer for configuration (cross-over cable required).



**Step 7** - Connect the power adapter to the power receptacle.

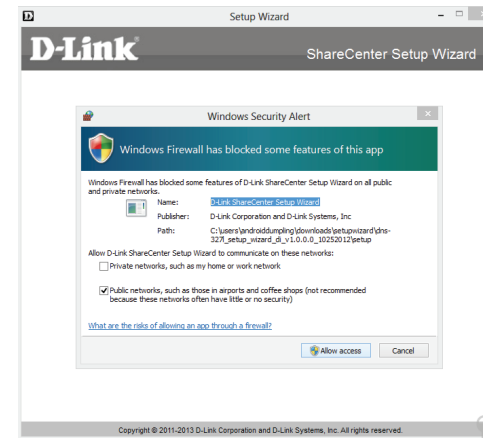


# Windows Installation Setup Wizard

To run the Setup Wizard, insert the ShareCenter™ CD into your CD-ROM drive.

**Step 1** - When the autorun screen appears, click **Install**

**Note:** Windows Firewall presents you with a warning message to unblock the device. Click Unblock to give your computer access to the NAS.



**Step 2** - Select the Language of your choice and then click the **Start** button.



## Install the Hard Drives

**Step 3** - Follow the instructions to remove the top cover of your ShareCenter™.

Click **Next** to continue.



**Step 4** - Attach the Hard Drives Bracket(s) to the side of the hard drives as indicated.

Click **Next** to continue.



**Step 5** - Slide one, or two hard drive into an available hard drive bay of your ShareCenter™.

Click **Next** to continue.



## Connect to your Network

**Step 6** - With the hard drives installed properly into each bay, close the chassis by re-attaching the top panel into place.

Click **Next** to continue.



**Step 7** - Connect a CAT5 Ethernet cable to your ShareCenter™ and connect the other end to a switch or router (Local LAN).

Click **Next** to continue.



## Power and Device Selection

**Step 8** - Connect the power adapter connector to the power receptacle on the back of the ShareCenter™. Then, power on the ShareCenter™ by pressing the power button located in the front panel.

Click **Next** to continue.



**Step 9** - With the power on, press the **Next** button on the device and check and make sure the IP address of your ShareCenter™ matches what you see on the screen.

**Note:** Allow 1-2 minutes for the DNS-320L to be recognized.

Click **Next** to continue.



**Step 10** - A warning message will appear prompting you to confirm the device. Click Yes, to proceed.

Click **Next** to continue.



## Admin Password

**Step 11** - Enter the administrator password. If this is the first time you are doing the installation on this NAS, leave the password blank.

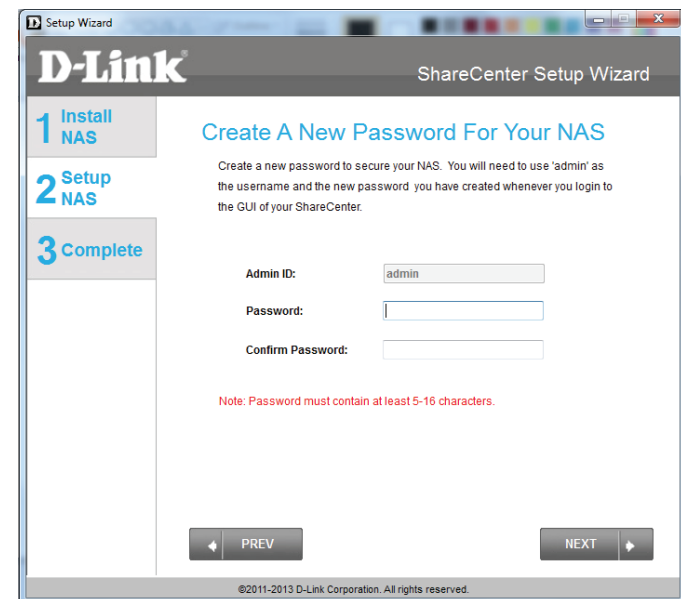
Click **Next** to continue.



The screenshot shows the 'D-Link ShareCenter Setup Wizard' window. On the left, a sidebar lists three steps: '1 Install NAS' (highlighted), '2 Setup NAS', and '3 Complete'. The main area is titled 'Input The Admin Password' and contains the following text: 'Enter your administrator account password in order to login to your NAS. For the first install, the password should be blank, but also the username should be "admin".' Below this text are two input fields: 'Username:' with 'admin' entered, and 'Password:' which is empty. At the bottom, there are 'PREV' and 'NEXT' buttons. The footer text reads '©2011-2013 D-Link Corporation. All rights reserved.'

**Step 12** - In this step you can create a new password for the **Admin** username. It is recommended you set a password, however you may also leave the fields blank.

Click **Next** to continue.



The screenshot shows the 'D-Link ShareCenter Setup Wizard' window. On the left, a sidebar lists three steps: '1 Install NAS', '2 Setup NAS' (highlighted), and '3 Complete'. The main area is titled 'Create A New Password For Your NAS' and contains the following text: 'Create a new password to secure your NAS. You will need to use "admin" as the username and the new password you have created whenever you login to the GUI of your ShareCenter.' Below this text are three input fields: 'Admin ID:' with 'admin' entered, 'Password:', and 'Confirm Password:'. A red note below the fields states: 'Note: Password must contain at least 5-16 characters.' At the bottom, there are 'PREV' and 'NEXT' buttons. The footer text reads '©2011-2013 D-Link Corporation. All rights reserved.'

## Networking Setup

**Step 13** - You may either use Static IP or DHCP to configure the IP network settings of the ShareCenter™. If you select Static IP, then enter the IP parameters as listed.

Click **Next** to continue.

You may also use DHCP to configure the IP network settings of the ShareCenter™. In this situation, leave the parameters blank as your router should automatically configure them.

Click **Next** to continue.

The screenshot shows the 'D-Link ShareCenter Setup Wizard' window. On the left, a sidebar indicates the progress: '1 Install NAS' (selected), '2 Setup NAS', and '3 Complete'. The main area is titled 'Configure Device LAN' and contains the following text: 'If you want to set an IP address for your ShareCenter please select "Static IP" and enter the required information. Otherwise click NEXT.' Below this, there are two radio buttons: 'DHCP Client' (unselected) and 'Static IP' (selected). Under 'Static IP', there are three input fields: 'IP Address:' with the value '192.168.0.2', 'Subnet Mask:' with '255.255.0.0', and 'Gateway:' with '192.168.0.1'. Below these, there are two more radio buttons: 'Obtain DNS server address automatically' (unselected) and 'Use the following DNS server address' (selected). Under the second option, there are two input fields: 'DNS1:' (empty) and 'DNS2:' with the value '172.19.10.100'. At the bottom, there are 'PREV' and 'NEXT' buttons. A copyright notice at the very bottom reads: '©2011-2013 D-Link Corporation. All rights reserved.'

The screenshot shows the 'D-Link ShareCenter Setup Wizard' window. On the left, a sidebar indicates the progress: '1 Install NAS' (selected), '2 Setup NAS', and '3 Complete'. The main area is titled 'Configure Device LAN' and contains the following text: 'If you want to set an IP address for your ShareCenter please select "Static IP" and enter the required information. Otherwise click NEXT.' Below this, there are two radio buttons: 'DHCP Client' (selected) and 'Static IP' (unselected). Under 'DHCP Client', there are three input fields: 'IP Address:' with the value '169.254.130.145', 'Subnet Mask:' with '255.255.0.0', and 'Gateway:' (empty). Below these, there are two radio buttons: 'Obtain DNS server address automatically' (selected) and 'Use the following DNS server address' (unselected). Under the first option, there are two input fields: 'DNS1:' (empty) and 'DNS2:' with the value '172.19.10.100'. At the bottom, there are 'PREV' and 'NEXT' buttons. A copyright notice at the very bottom reads: '©2011-2013 D-Link Corporation. All rights reserved.'



**Step 14** - Configure the **Device Information**. Type the workgroup name, a name and a description for the device. This **workgroup** works best when it uses the same name as your current **workgroup** settings. If you haven't setup a **workgroup** yet, type a name that best suits the environment or leave the default "**workgroup**" name.

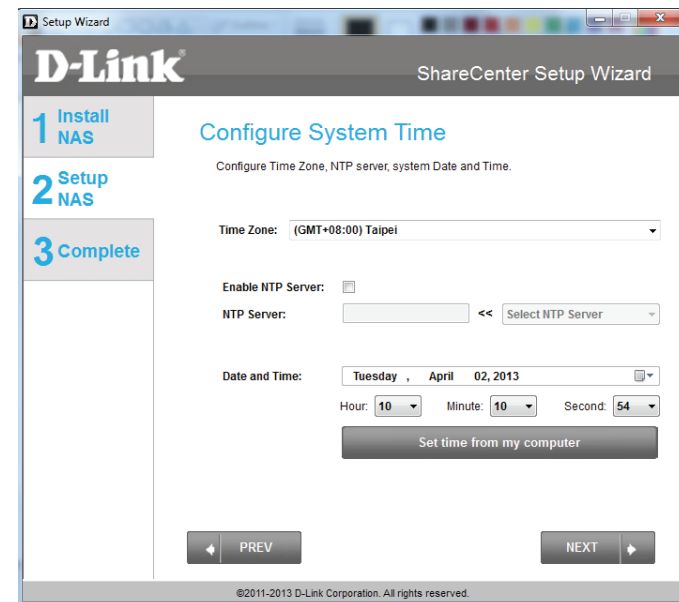
Click **Next** to continue.



The screenshot shows the 'Configure Device Information' step of the D-Link ShareCenter Setup Wizard. The left sidebar indicates the progress: 1. Install NAS, 2. Setup NAS, and 3. Complete. The main area contains instructions and three input fields: 'Workgroup' (pre-filled with 'workgroup'), 'Name' (pre-filled with 'dlink-E8A42C'), and 'Description' (pre-filled with 'DNS-320L'). Navigation buttons 'PREV' and 'NEXT' are at the bottom. The footer shows the copyright notice: ©2011-2013 D-Link Corporation. All rights reserved.

**Step 15** - Configure the **System Time**. Select a **Time Zone** from the drop-down list. Click Enable **NTP Server** and select NTP Server from the drop-down list if your network is connected to the internet. Set the **Date & Time** settings using the calendar drop-down menu. Configure the time settings by manually configuring the **Hour**, **Minute**, and **Second** settings or just click the "**Set time from my computer**" button.

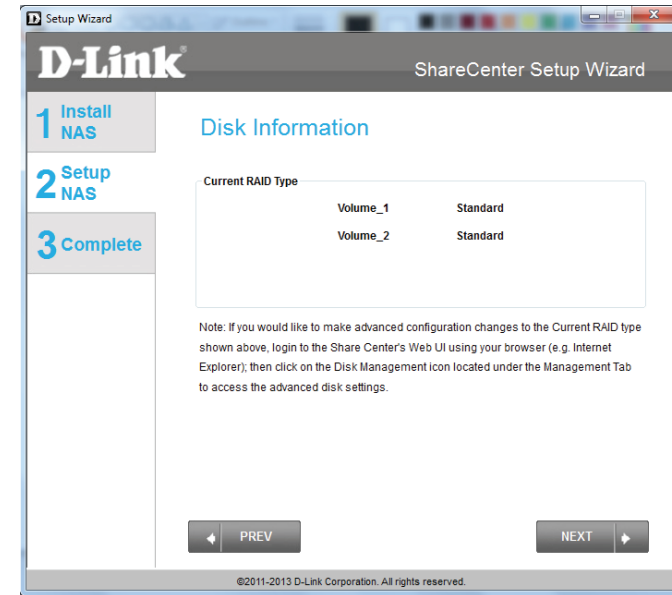
Click **Next** to continue.



The screenshot shows the 'Configure System Time' step of the D-Link ShareCenter Setup Wizard. The left sidebar shows the progress: 1. Install NAS, 2. Setup NAS, and 3. Complete. The main area contains instructions and several configuration options: 'Time Zone' (dropdown menu set to '(GMT+08:00) Taipei'), 'Enable NTP Server' (checkbox), 'NTP Server' (text field and dropdown menu), 'Date and Time' (calendar dropdown set to Tuesday, April 02, 2013), and 'Hour', 'Minute', and 'Second' (dropdown menus set to 10, 10, and 54 respectively). A 'Set time from my computer' button is also present. Navigation buttons 'PREV' and 'NEXT' are at the bottom. The footer shows the copyright notice: ©2011-2013 D-Link Corporation. All rights reserved.

**Step 16** - The **Disk Information** window provides the current RAID Type. However, if this isn't already configured, read the instructions under the **Note**.

Click **Next** to continue.



**Step 17** - The **RAID Configuration** window provides more detailed **Physical Disk** information. Here you can analyse your **Disk**, **Vendor**, **Model** number, **Serial** number, and **Disk** size. Under **Select RAID Type**, there are four options to choose from. **Standard**, **JBOD**, **RAID 0**, and **RAID 1**. Selecting each one provides a brief description of which each **RAID** format offers. See illustrations below and check the **Knowledge Base** at the back of this manual for more RAID descriptions. Skip this step if you have setup this system before.

By default **Standard** is selected.



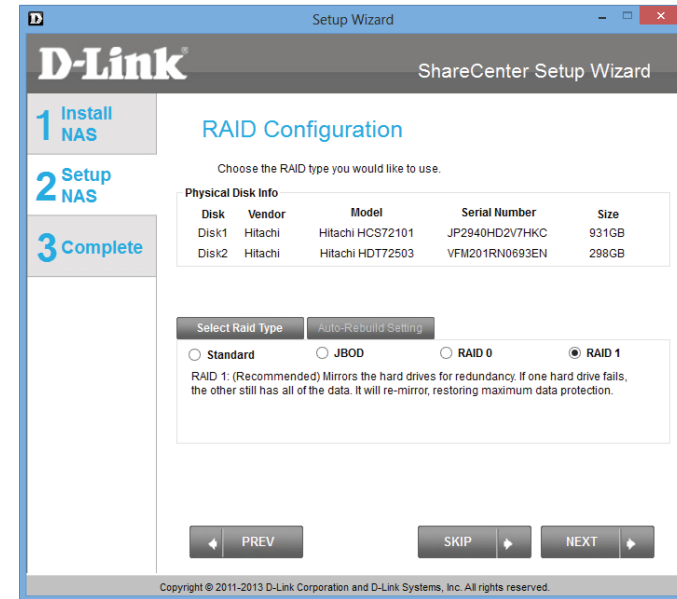
**Step 17** - Select **JBOD** to see your configuration options.



**Step 17** - Select **RAID 0** to see your configuration options.



**Step 17** - Select **RAID 1** to see your configuration options. When you select **RAID 1**, the **Auto-Rebuild** Settings tab appears. The **Auto-Rebuild Settings** tab allows you to **enable** or **disable Auto-Rebuild** the **RAID**. This is necessary should the **RAID** fail.



**Note** - In **Step 18** we resume the settings wizard using the **Standard RAID** configuration. Please see images further down for other configurations.

**Note** - Once you have configured the RAID of your choice, skip ahead to **Step 41**. Otherwise scroll through this manual to view other **RAID** installation options.

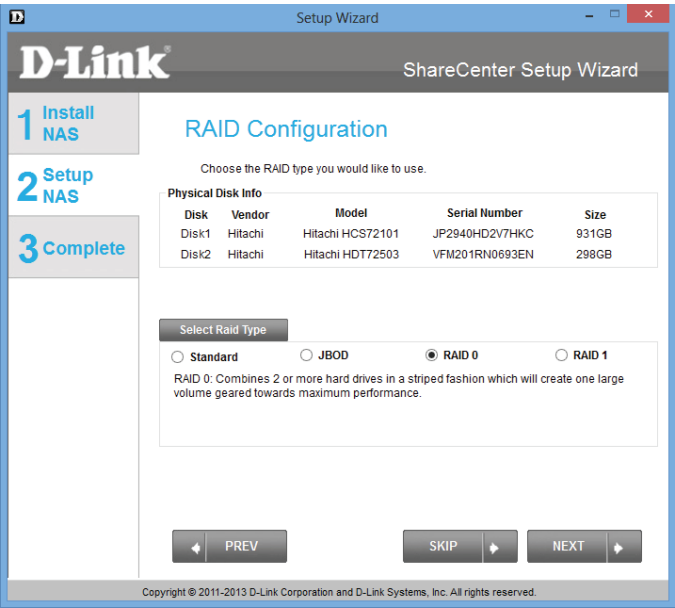
RAID OPTIONS



Standard - Step 18



JBOD - Step 23




RAID 0 - Step 29



RAID 1 - Step 35

**Step 18** - Click **Next** to configure the **Standard RAID** or click **SKIP** to bypass this step.

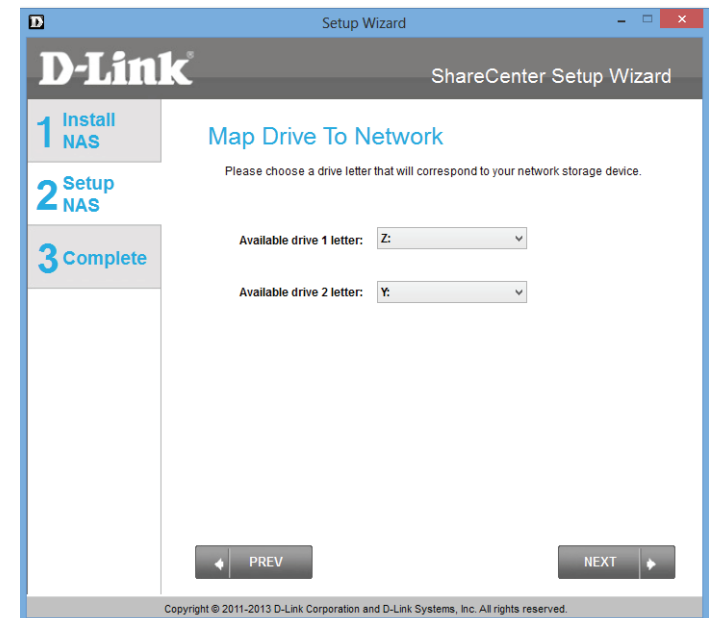


The screenshot shows the 'RAID Configuration' step of the D-Link ShareCenter Setup Wizard. On the left, a progress bar indicates three steps: '1 Install NAS', '2 Setup NAS' (current), and '3 Complete'. The main area is titled 'RAID Configuration' and instructs the user to 'Choose the RAID type you would like to use.' Below this is a table titled 'Physical Disk Info' with columns for Disk, Vendor, Model, Serial Number, and Size. The table lists two disks: Disk1 (Hitachi HCS72101, 931GB) and Disk2 (Hitachi HDT72503, 298GB). Under the 'Select Raid Type' section, there are four radio buttons: 'Standard' (selected), 'JBOD', 'RAID 0', and 'RAID 1'. A description for 'Standard' states: 'Standard: Creates 1 or more separate volumes. Each hard drive is its own volume.' At the bottom, there are 'PREV', 'SKIP', and 'NEXT' buttons. The footer contains the copyright notice: 'Copyright © 2011-2013 D-Link Corporation and D-Link Systems, Inc. All rights reserved.'

Disk	Vendor	Model	Serial Number	Size
Disk1	Hitachi	Hitachi HCS72101	JP2940HD2V7HKC	931GB
Disk2	Hitachi	Hitachi HDT72503	VFM201RN0693EN	298GB

**Step 19 - Map Drive to Network.** This window makes it possible for you and users on your network to communicate with your NAS directly. The **Map Drive** assigns a letter to each Volume on your NAS. See **Mapping a Drive** further in the manual for more details.

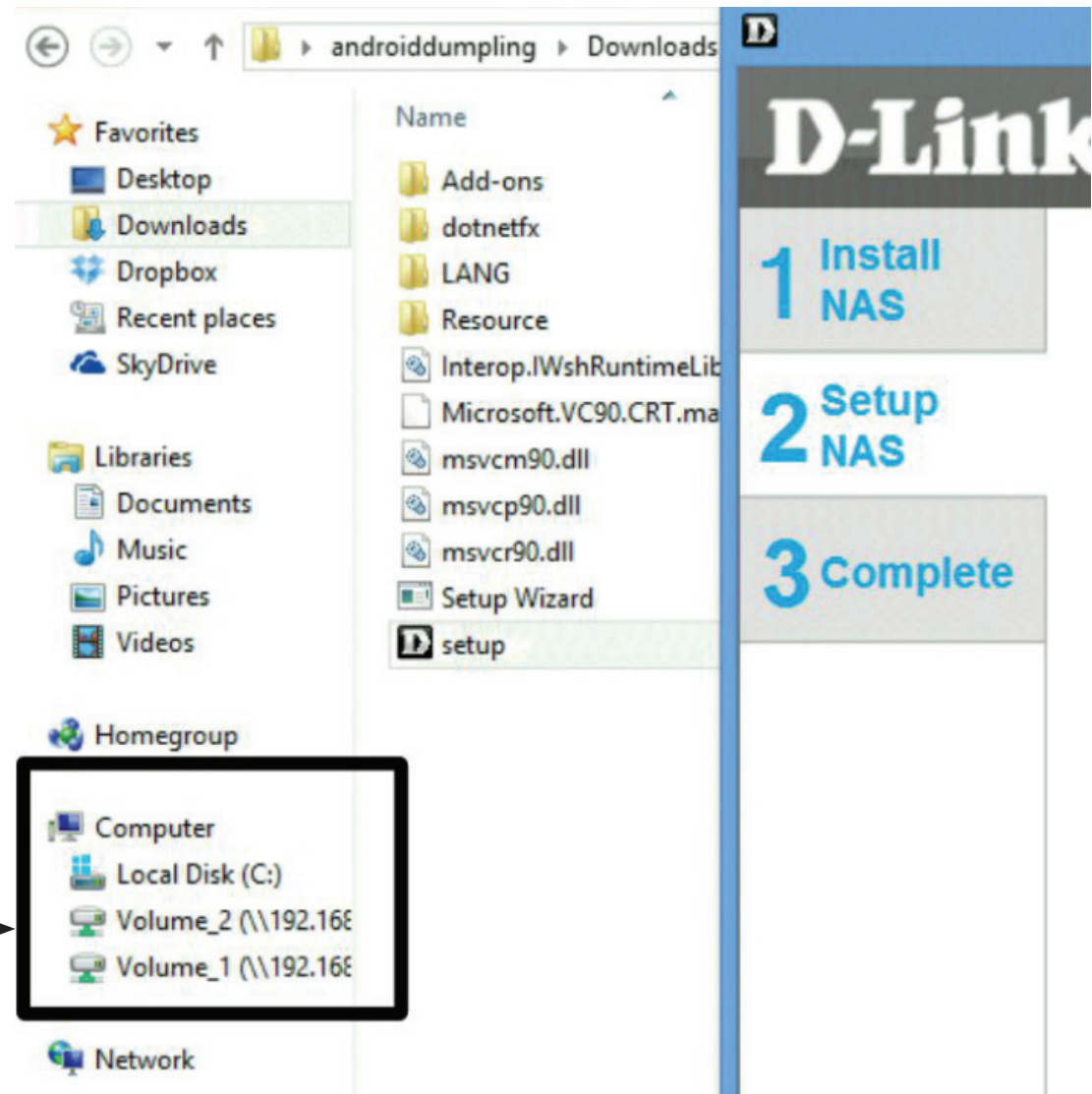
Click **Next** to continue.



The screenshot shows the 'Map Drive To Network' step of the D-Link ShareCenter Setup Wizard. On the left, the progress bar shows '1 Install NAS', '2 Setup NAS' (current), and '3 Complete'. The main area is titled 'Map Drive To Network' and instructs the user to 'Please choose a drive letter that will correspond to your network storage device.' There are two dropdown menus: 'Available drive 1 letter:' with 'Z:' selected, and 'Available drive 2 letter:' with 'Y:' selected. At the bottom, there are 'PREV' and 'NEXT' buttons. The footer contains the copyright notice: 'Copyright © 2011-2013 D-Link Corporation and D-Link Systems, Inc. All rights reserved.'

Once you have completed the previous step, the Wizard automatically creates mapping drives to your configured Volumes.

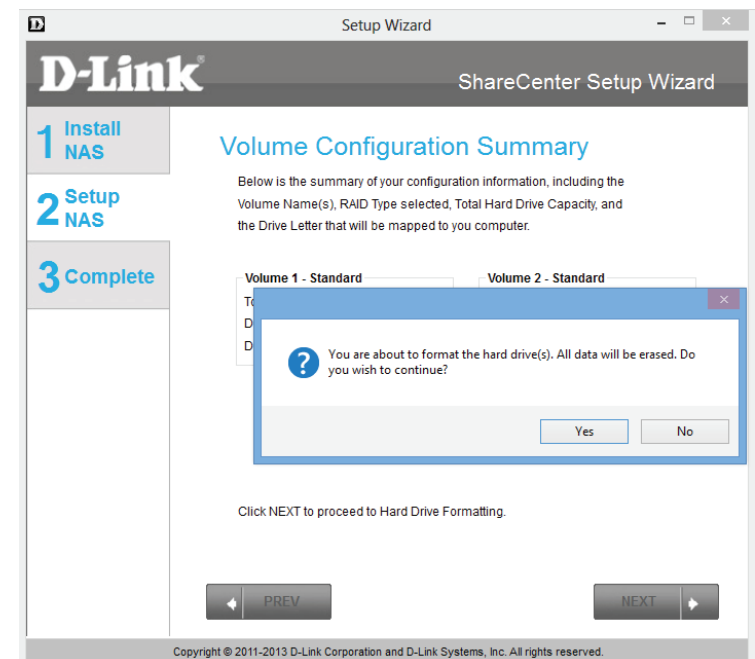
Click **Next** to continue.



**Step 20 - Volume Configuration Summary.** This window provides a detailed summary of your current configuration. If you are satisfied with your configuration click **Next** or if you want to change your settings click **PREV** to go back and change your settings. Read the details carefully before making your choice.

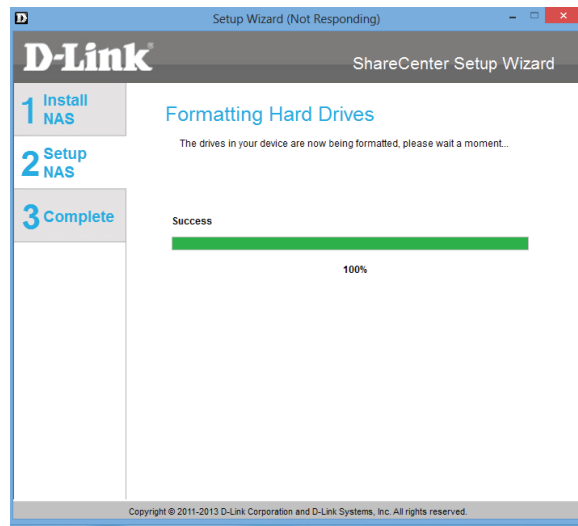
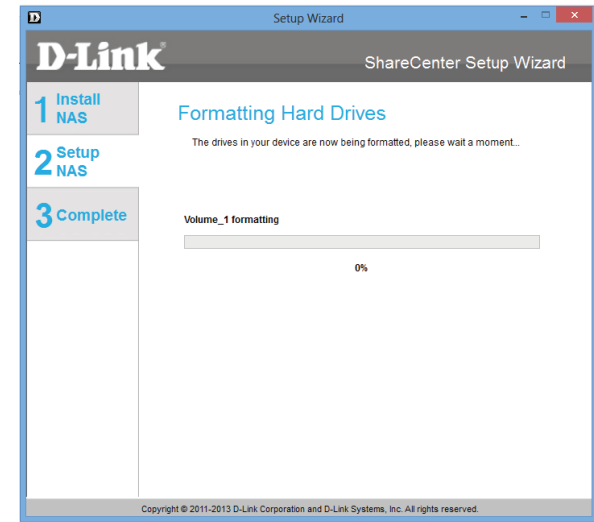
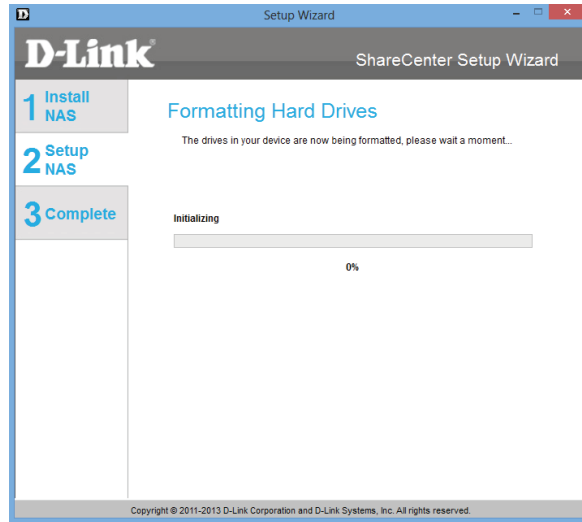


**Step 21 -** When you click **Next**, you are prompted to verify your decision before you continue.



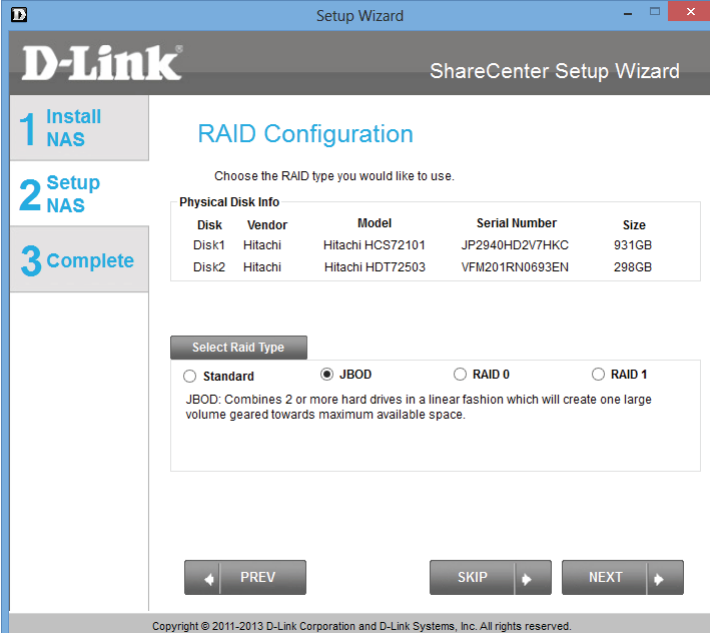


**Step 22** - The Wizard software starts the formatting process. **Initializing**, **formatting** and finally **Success**. This completes the **Format** process. Click **Next** to continue.



**Step 23** - Under **RAID Configuration**, select **RAID Type**, choose **JBOD**. Read the **JBOD RAID** configuration requirements.

Click **Next** to continue.

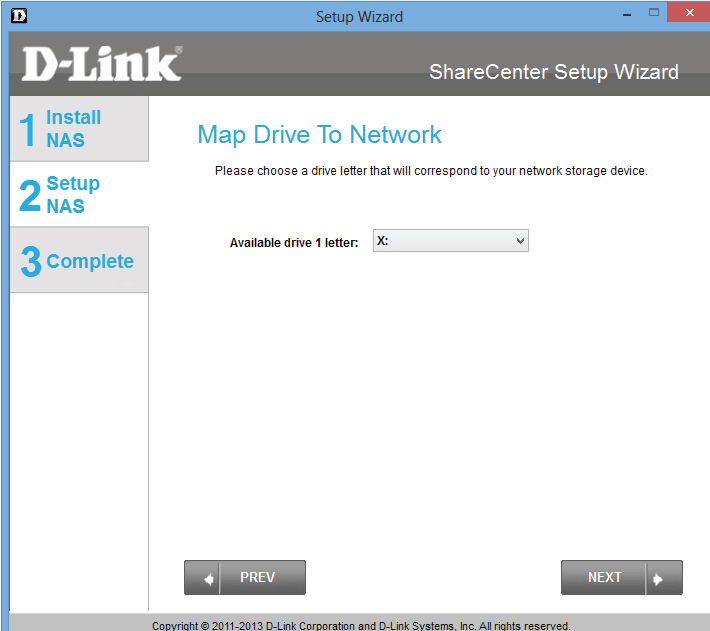


The screenshot shows the 'RAID Configuration' step of the D-Link ShareCenter Setup Wizard. On the left, a progress bar indicates three steps: '1 Install NAS', '2 Setup NAS', and '3 Complete'. The main area is titled 'RAID Configuration' and asks the user to 'Choose the RAID type you would like to use.' Below this, a table titled 'Physical Disk Info' lists two disks: Disk1 (Hitachi HCS72101, 931GB) and Disk2 (Hitachi HDT72503, 298GB). Under the 'Select Raid Type' section, four options are shown: 'Standard', 'JBOD' (selected), 'RAID 0', and 'RAID 1'. A description for JBOD states: 'JBOD: Combines 2 or more hard drives in a linear fashion which will create one large volume geared towards maximum available space.' At the bottom, there are 'PREV', 'SKIP', and 'NEXT' buttons. The footer contains the copyright notice: 'Copyright © 2011-2013 D-Link Corporation and D-Link Systems, Inc. All rights reserved.'

Disk	Vendor	Model	Serial Number	Size
Disk1	Hitachi	HCS72101	JP2940HD2V7HKC	931GB
Disk2	Hitachi	HDT72503	VFM201RN0693EN	298GB

**Step 24** - Under **JBOD** more than one disk is classified as a complete **Volume** so when mapping a drive, only one drive letter is needed. **Map Drive to Network** only shows one drive.

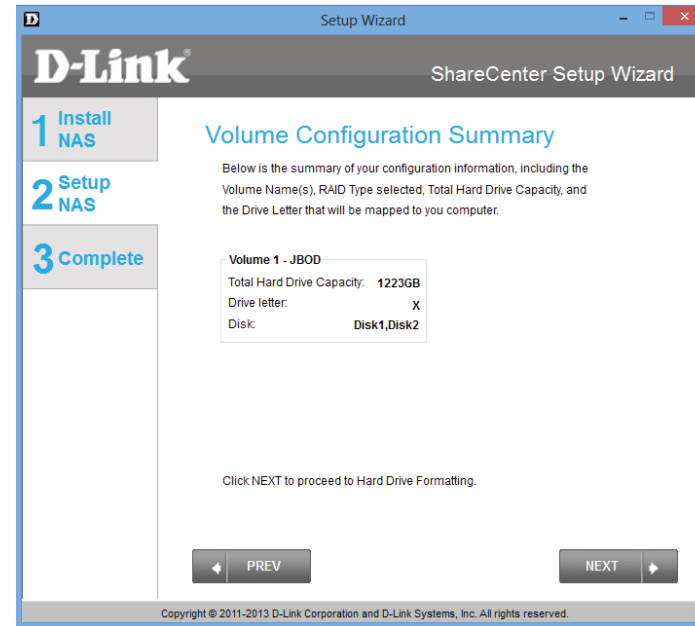
Click **Next** to continue.



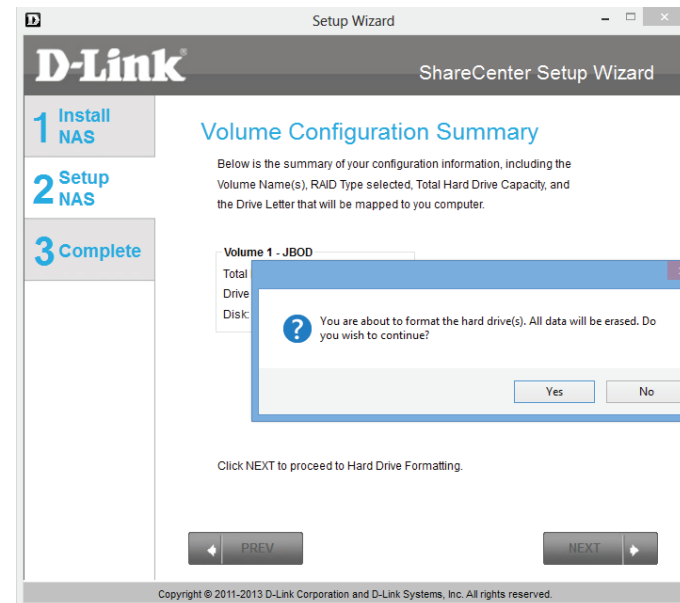
The screenshot shows the 'Map Drive To Network' step of the D-Link ShareCenter Setup Wizard. The progress bar on the left shows '1 Install NAS', '2 Setup NAS', and '3 Complete'. The main area is titled 'Map Drive To Network' and asks the user to 'Please choose a drive letter that will correspond to your network storage device.' Below this, a label 'Available drive 1 letter:' is followed by a dropdown menu showing 'X:'. At the bottom, there are 'PREV' and 'NEXT' buttons. The footer contains the copyright notice: 'Copyright © 2011-2013 D-Link Corporation and D-Link Systems, Inc. All rights reserved.'

**Step 25** - The **Volume Configuration Summary** displays a detailed summary of **JBOD**.

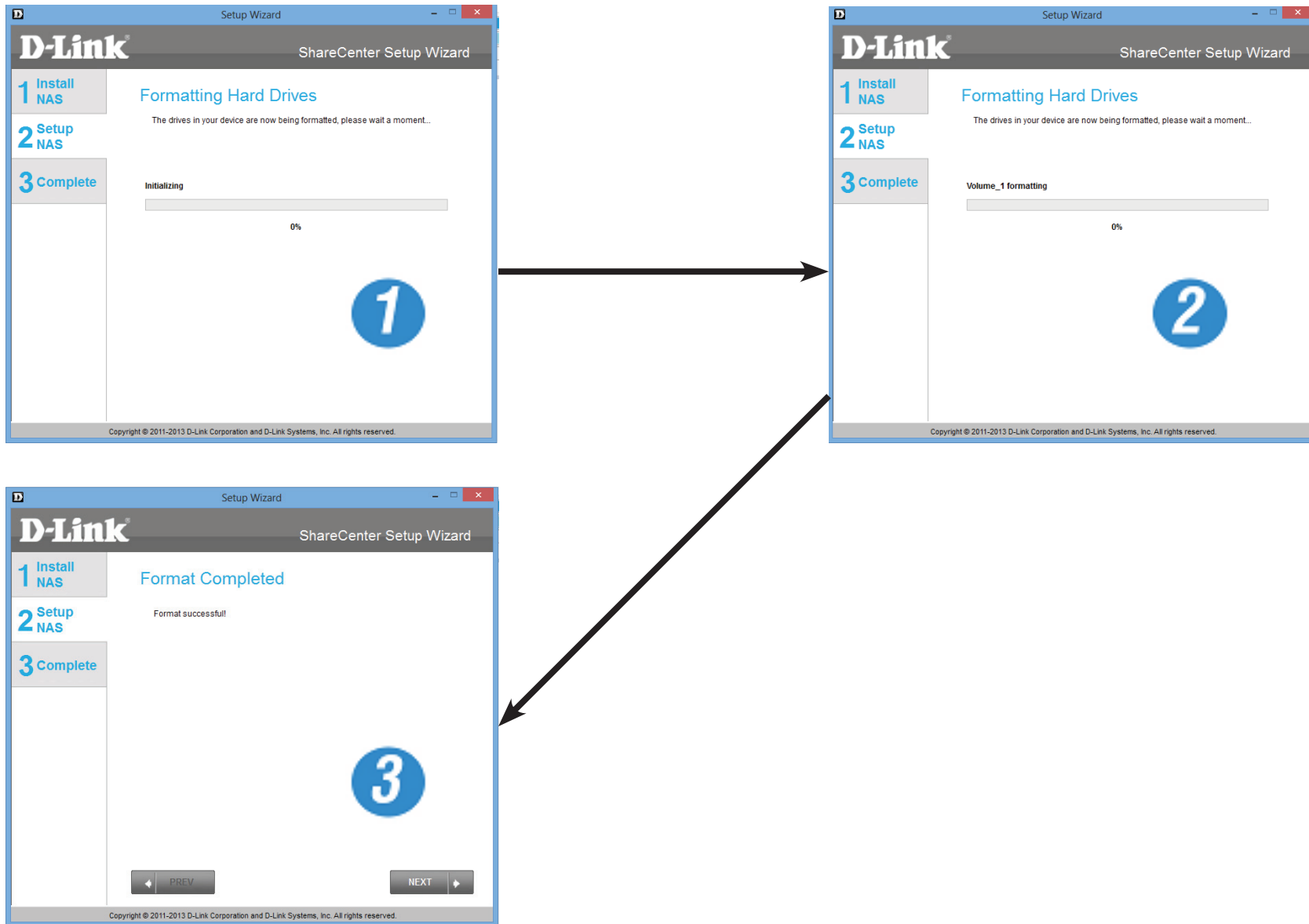
Click **Next** to continue.



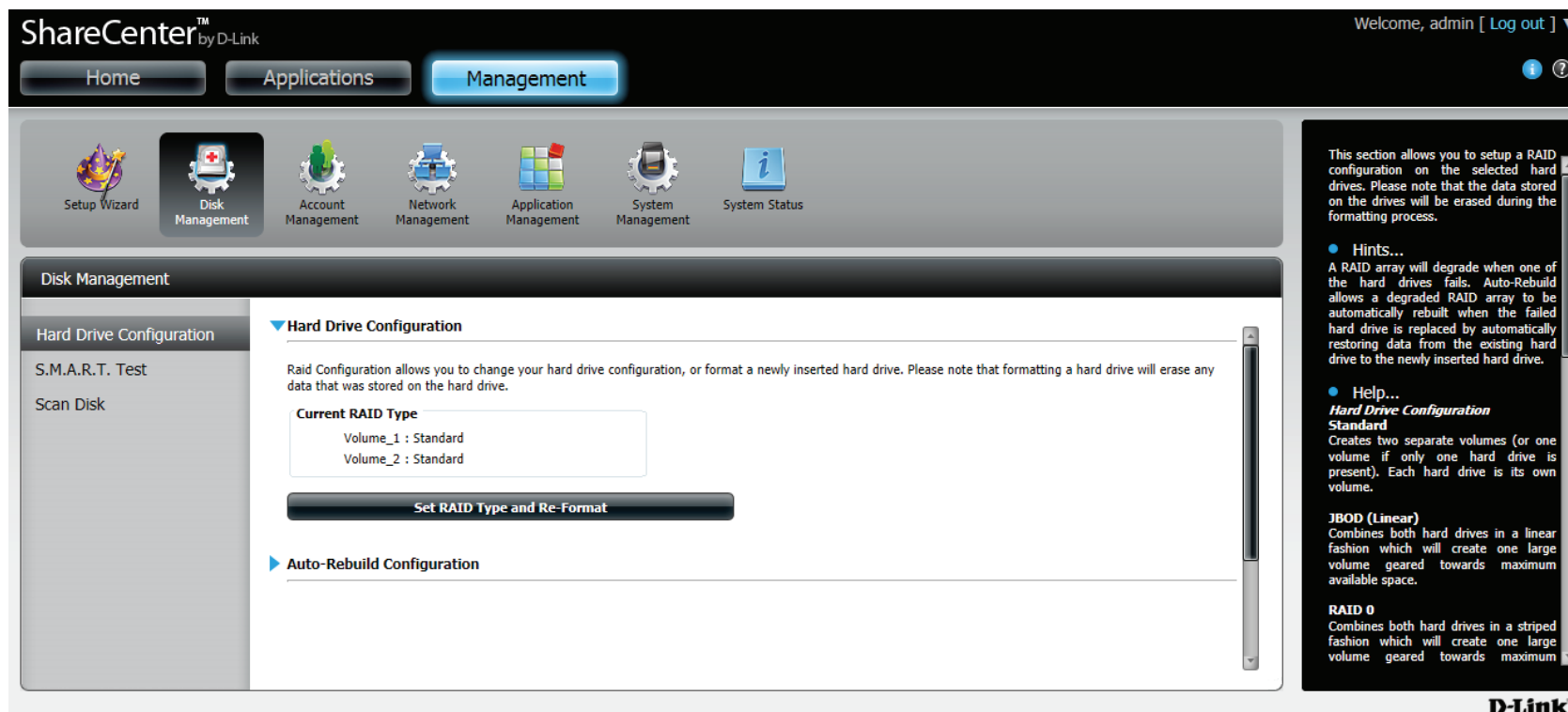
**Step 26** - Click **Next**, you are prompted to verify your decision before you continue. Click **Yes** to continue.



**Step 27** - The **JBOD** is **initialized, formatted, and complete** in 3 easy steps. Do not click any buttons while this process is ongoing.



**Step 28** - To verify your **JBOD**, login to your NAS, go to **Management. Disk Management**, and **Hard Drive Configuration**. This shows the current status of your drives.



**Step 29** - Under **RAID Configuration**, select **RAID Type**, choose **RAID 0**. Read the **RAID 0** configuration requirements.

Click **Next** to continue.

The screenshot shows the 'RAID Configuration' step of the D-Link ShareCenter Setup Wizard. On the left, a sidebar indicates the progress: '1 Install NAS' (selected), '2 Setup NAS', and '3 Complete'. The main area is titled 'RAID Configuration' and instructs the user to 'Choose the RAID type you would like to use.' Below this, a table titled 'Physical Disk Info' lists two disks:

Disk	Vendor	Model	Serial Number	Size
Disk1	Hitachi	Hitachi HCS72101	JP2940HD2V7HKC	931GB
Disk2	Hitachi	Hitachi HDT72503	VFM201RN0693EN	298GB

Below the table, the 'Select Raid Type' section shows three radio buttons: 'Standard', 'JBOD', and 'RAID 0' (which is selected). 'RAID 1' is also an option. A description for RAID 0 states: 'RAID 0: Combines 2 or more hard drives in a striped fashion which will create one large volume geared towards maximum performance.' At the bottom, there are navigation buttons: 'PREV', 'SKIP', and 'NEXT'. The footer contains the copyright notice: 'Copyright © 2011-2013 D-Link Corporation and D-Link Systems, Inc. All rights reserved.'

**Step 30** - With **RAID 0**, the two drives are striped into one Volume, making it appear that you have one drive. **Map Drive to Network** indicates that the NAS has separated the drive into 2 Volumes. To explain, if the size of the two drives are different, the spare drive space will be formatted as a JBOD volume. It is better to have drives of the same sizes.

Click **Next** to continue.

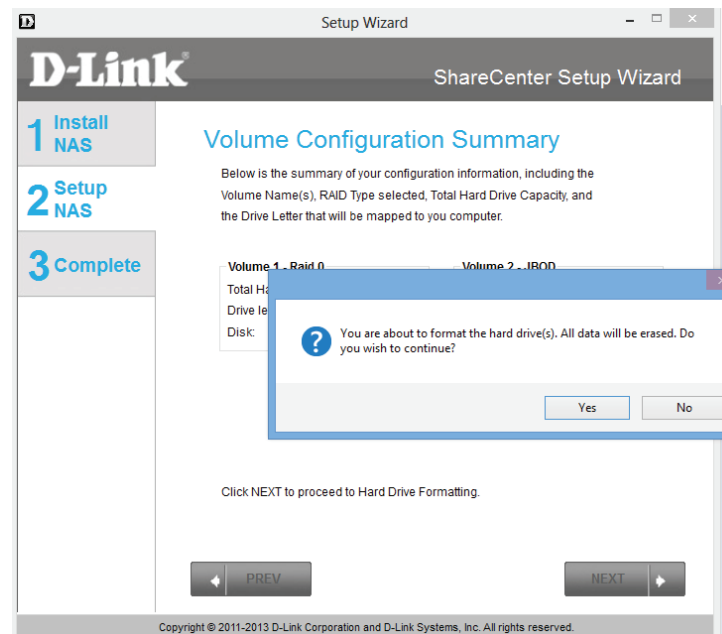
The screenshot shows the 'Map Drive To Network' step of the D-Link ShareCenter Setup Wizard. The sidebar on the left shows '1 Install NAS' (selected), '2 Setup NAS', and '3 Complete'. The main area is titled 'Map Drive To Network' and asks the user to 'Please choose a drive letter that will correspond to your network storage device.' There are two dropdown menus: 'Available drive 1 letter:' with 'W:' selected, and 'Available drive 2 letter:' with 'V:' selected. At the bottom, there are 'PREV' and 'NEXT' navigation buttons. The footer contains the copyright notice: 'Copyright © 2011-2013 D-Link Corporation and D-Link Systems, Inc. All rights reserved.'

**Step 31** - The **Volume Configuration Summary**, displays the details of the new configuration.

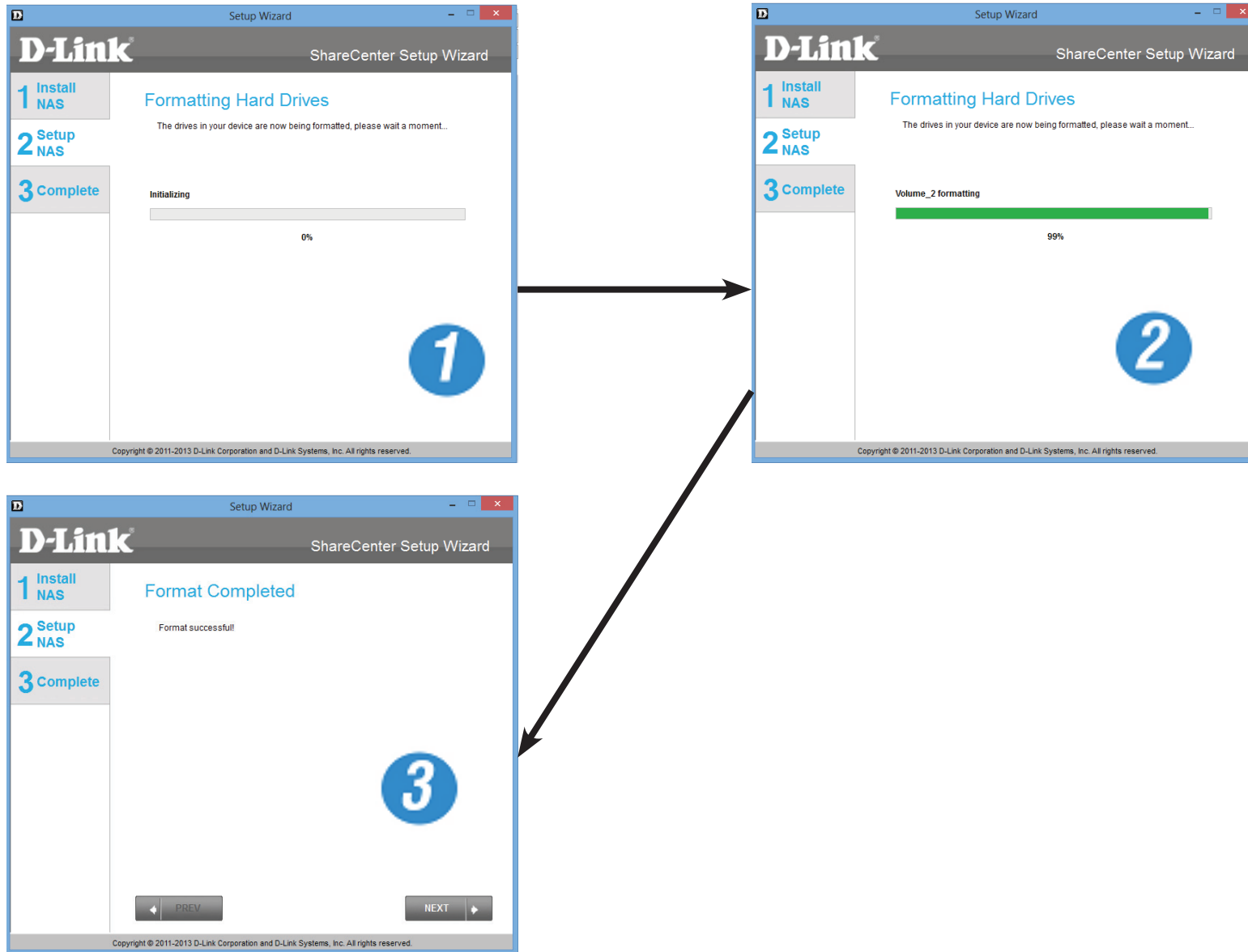
Click **Next** to continue.



**Step 32** - Verify your configuration selection before continuing. Click **Yes** to continue

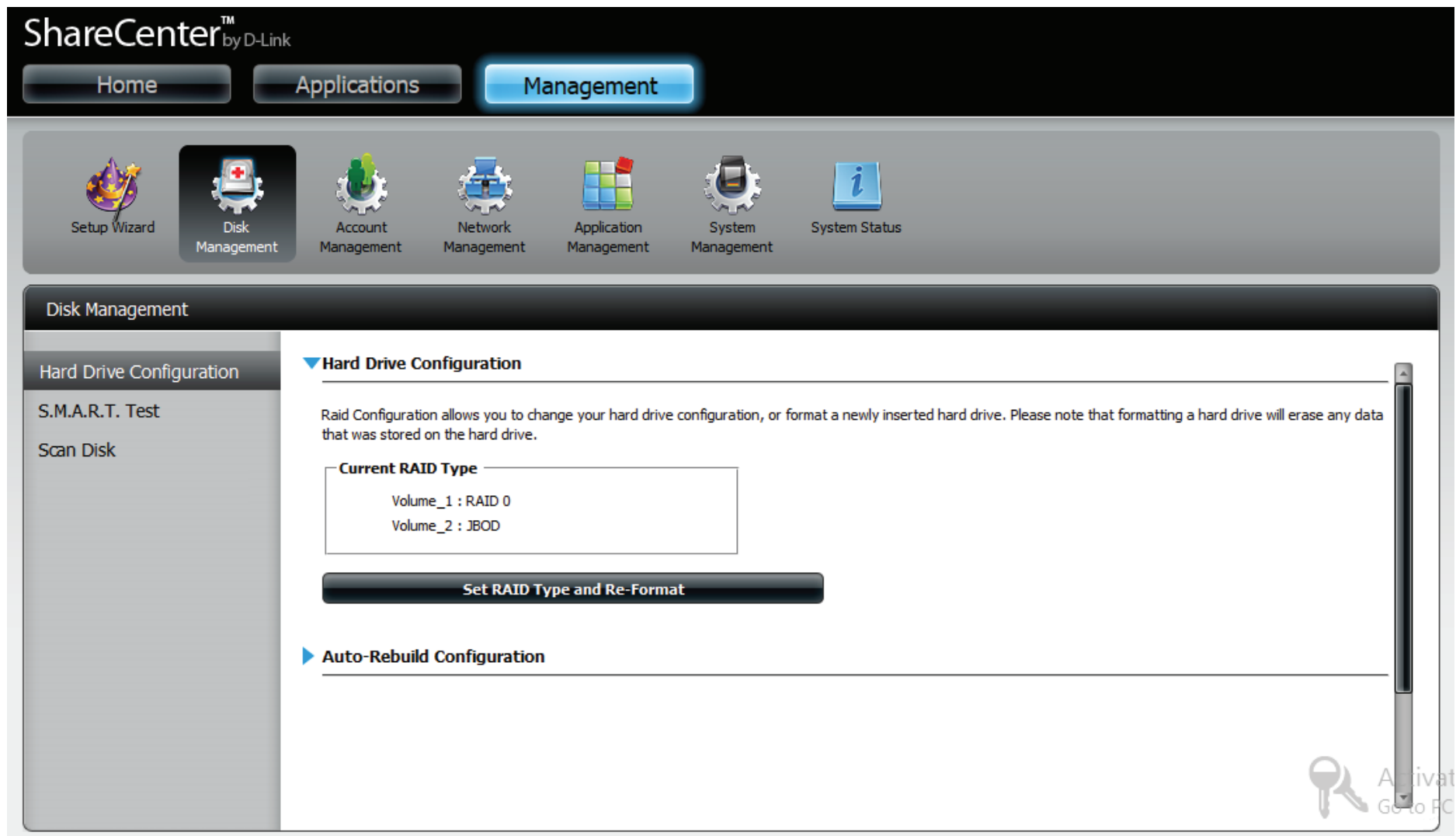


**Step 33** - The **RAID 0** is **initialized, formatted, and complete** in 3 easy steps. Do not click any buttons while this process is ongoing.





**Step 34** - To verify your **RAID 0**, login to your NAS, go to **Management. Disk Management**, and **Hard Drive Configuration**. This shows the current status of your drives.



**Step 35** - Under **RAID Configuration**, Select **RAID Type**, choose **RAID 1**. Read the **RAID 1** configuration requirements.

Click **Next** to continue.



The screenshot shows the 'RAID Configuration' step of the D-Link ShareCenter Setup Wizard. On the left, a progress bar indicates three steps: '1 Install NAS' (completed), '2 Setup NAS' (current step), and '3 Complete'. The main area is titled 'RAID Configuration' and instructs the user to 'Choose the RAID type you would like to use.' Below this, a table lists 'Physical Disk Info' with columns for Disk, Vendor, Model, Serial Number, and Size. Two disks are listed: Disk1 (Hitachi HCS72101, 931GB) and Disk2 (Hitachi HDT72503, 298GB). Under 'Select Raid Type', there are radio buttons for Standard, JBOD, RAID 0, and RAID 1. RAID 1 is selected. A note explains that RAID 1 mirrors data for redundancy. At the bottom, there are 'PREV', 'SKIP', and 'NEXT' buttons.

Disk	Vendor	Model	Serial Number	Size
Disk1	Hitachi	Hitachi HCS72101	JP2940HD2V7HKC	931GB
Disk2	Hitachi	Hitachi HDT72503	VFM201RN0693EN	298GB

Select Raid Type: ☐ Standard ☐ JBOD ☐ RAID 0 ☒ RAID 1

RAID 1: (Recommended) Mirrors the hard drives for redundancy. If one hard drive fails, the other still has all of the data. It will re-mirror, restoring maximum data protection.

**Step 36** - With RAID 1, the drives are mirrored for redundancy. **Map Drive to Network** indicates that the NAS has separated the drive into a RAID array.

**Note:** If the size of these two drives are different, the spare drive space will be formatted as **JBOD** Volume.

Click **Next** to continue.



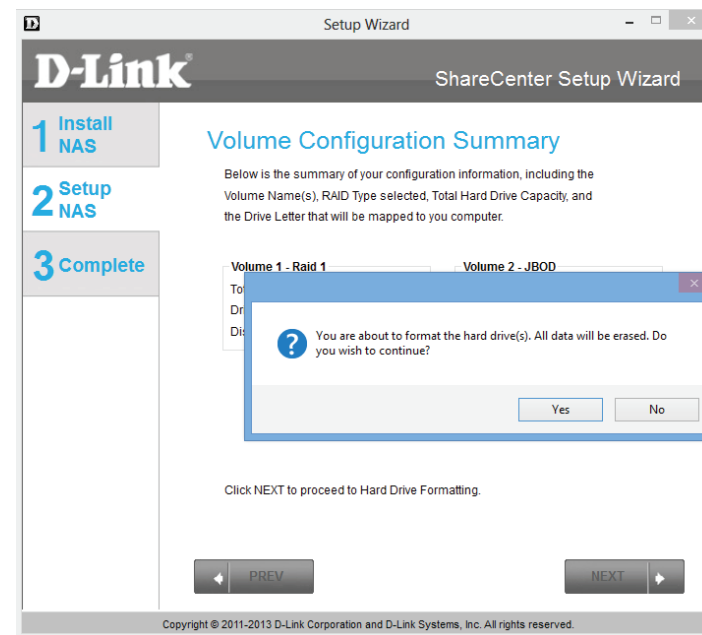
The screenshot shows the 'Map Drive To Network' step of the D-Link ShareCenter Setup Wizard. The progress bar on the left shows '1 Install NAS' (completed), '2 Setup NAS' (current step), and '3 Complete'. The main area is titled 'Map Drive To Network' and asks the user to 'Please choose a drive letter that will correspond to your network storage device.' There are two dropdown menus: 'Available drive 1 letter:' with 'Q:' selected, and 'Available drive 2 letter:' with 'P:' selected. At the bottom, there are 'PREV' and 'NEXT' buttons.

**Step 37** - The **Volume Configuration Summary**, displays the details of the new configuration.

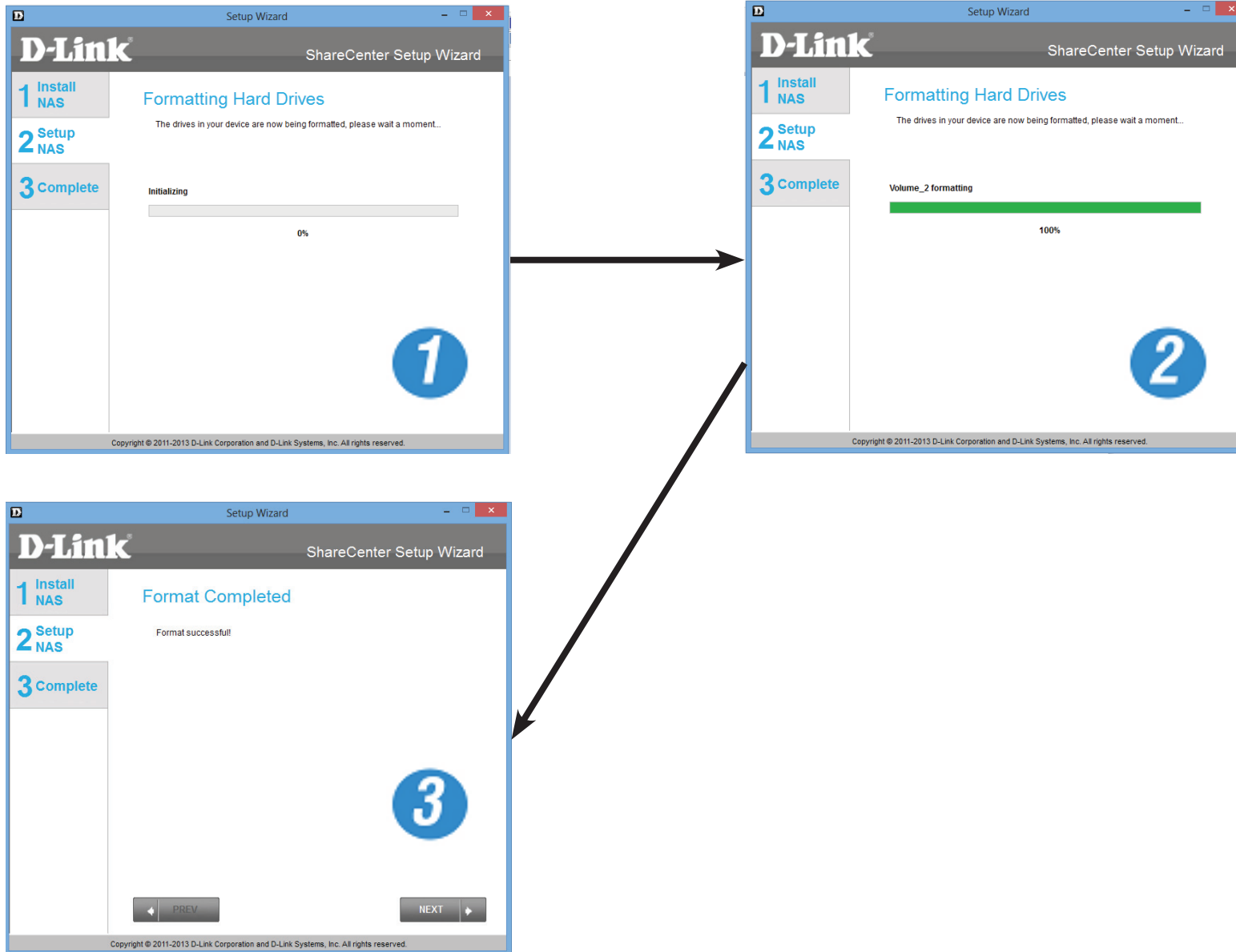
Click **Next** to continue.



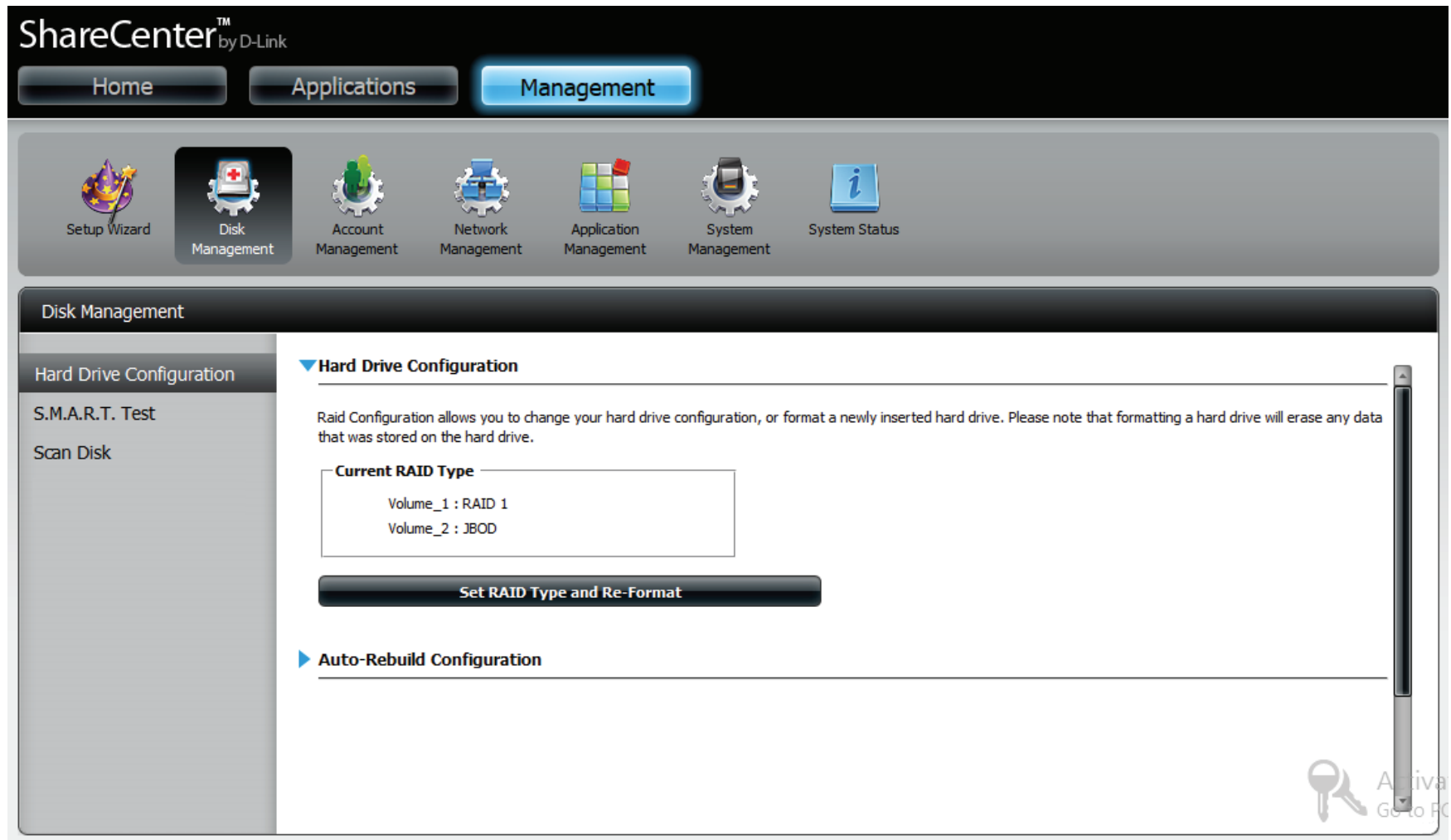
**Step 38** - Verify your configuration selection before continuing. Click **Yes** to continue



**Step 39** - The **RAID 1** is **initialized, formatted, and complete** in 3 easy steps. Do not click any buttons while this process is ongoing.



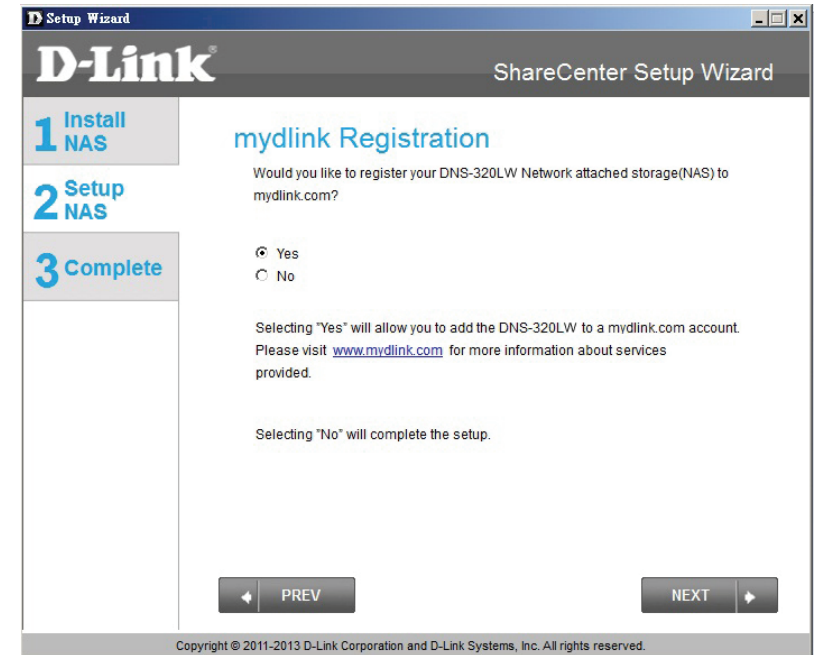
**Step 40** - To verify your **RAID 1**, login to your NAS, go to **Management. Disk Management**, and **Hard Drive Configuration**. This shows the current status of your drives.



## Connecting to the mydlink

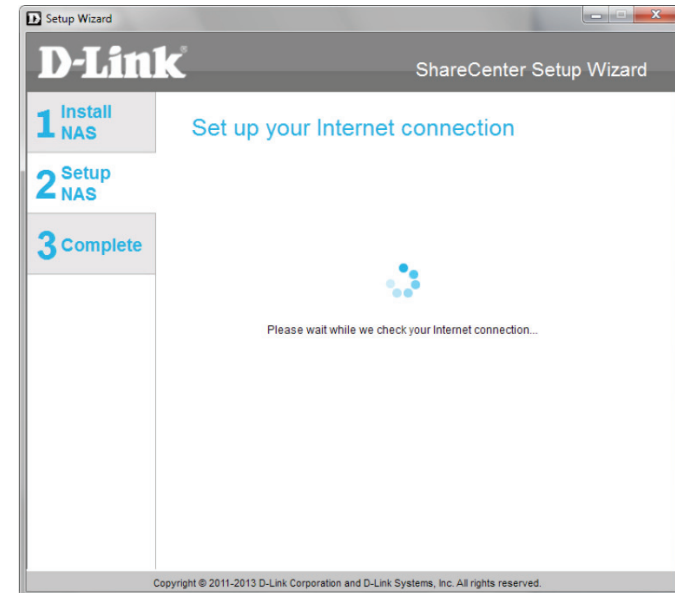
**Step 41** - D-Link has provided a mydlink service that allows you to remotely access the files from your NAS through the mydlink portal. Read the installation instructions and wait for the process to complete.

Click **Next** to continue.



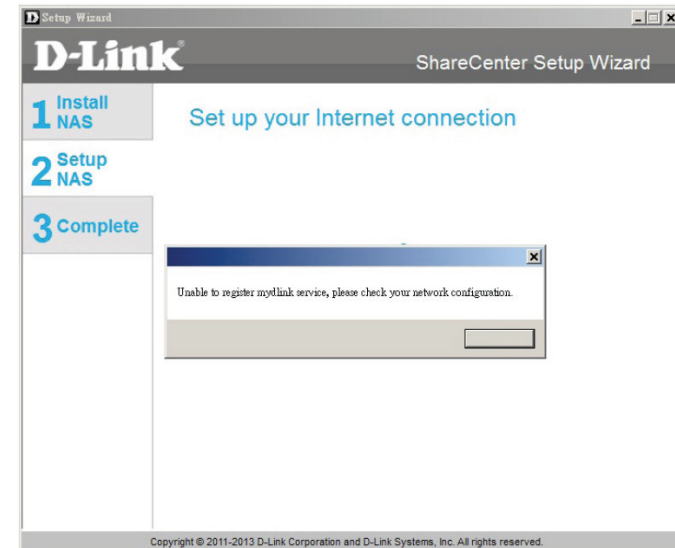
**Step 42** - The wizard connects you to the mydlink servers and configures your cloud service.

Click **Next** to continue.



**Step 43** - When the wizard fails to connect you to the mydlink servers and configures your cloud service, the following screen appears to warn you of your network configuration.

Click **Next** to continue.



**Step 44** - The next screen allows you to setup the remote mydlink cloud service. Select the Yes radio button if you already have a mydlink account.

Enter your email address and password.

Click **Next** to continue.

D-Link ShareCenter Setup Wizard

1 Install NAS

2 Setup NAS

3 Complete

Let's add your NAS to your mydlink account

Adding your NAS to your mydlink.com account will allow you to access your NAS through the Internet.

Do you have a mydlink account?

☒ Yes, I already have a mydlink account.

☐ No, I need to sign up for a new account.

Please enter your mydlink sign-in E-mail address and password:

E-mail:

Password:

PREV SKIP NEXT

Copyright © 2011-2013 D-Link Corporation and D-Link Systems, Inc. All rights reserved.

**Step 45** - Alternatively, you can create a new account if you select "No, I need to sign up for a new account."

Enter your email address and a password that you can remember. Then retype the password, enter a First Name and a Last Name. Then click the checkbox that reads:

"I accept the mydlink terms and conditions."

Click **Next** to continue.

D-Link ShareCenter Setup Wizard

1 Install NAS

2 Setup NAS

3 Complete

Let's add your NAS to your mydlink account

Adding your NAS to your mydlink.com account will allow you to access your NAS through the Internet.

Do you have a mydlink account?

☐ Yes, I already have a mydlink account.

☒ No, I need to sign up for a new account.

Please enter the following information to sign up for a mydlink account:

E-mail:

Password:

Must be at least 6 characters and is case-sensitive.

Retype password:

First name:

Last name:

☐ I accept the mydlink terms and conditions.

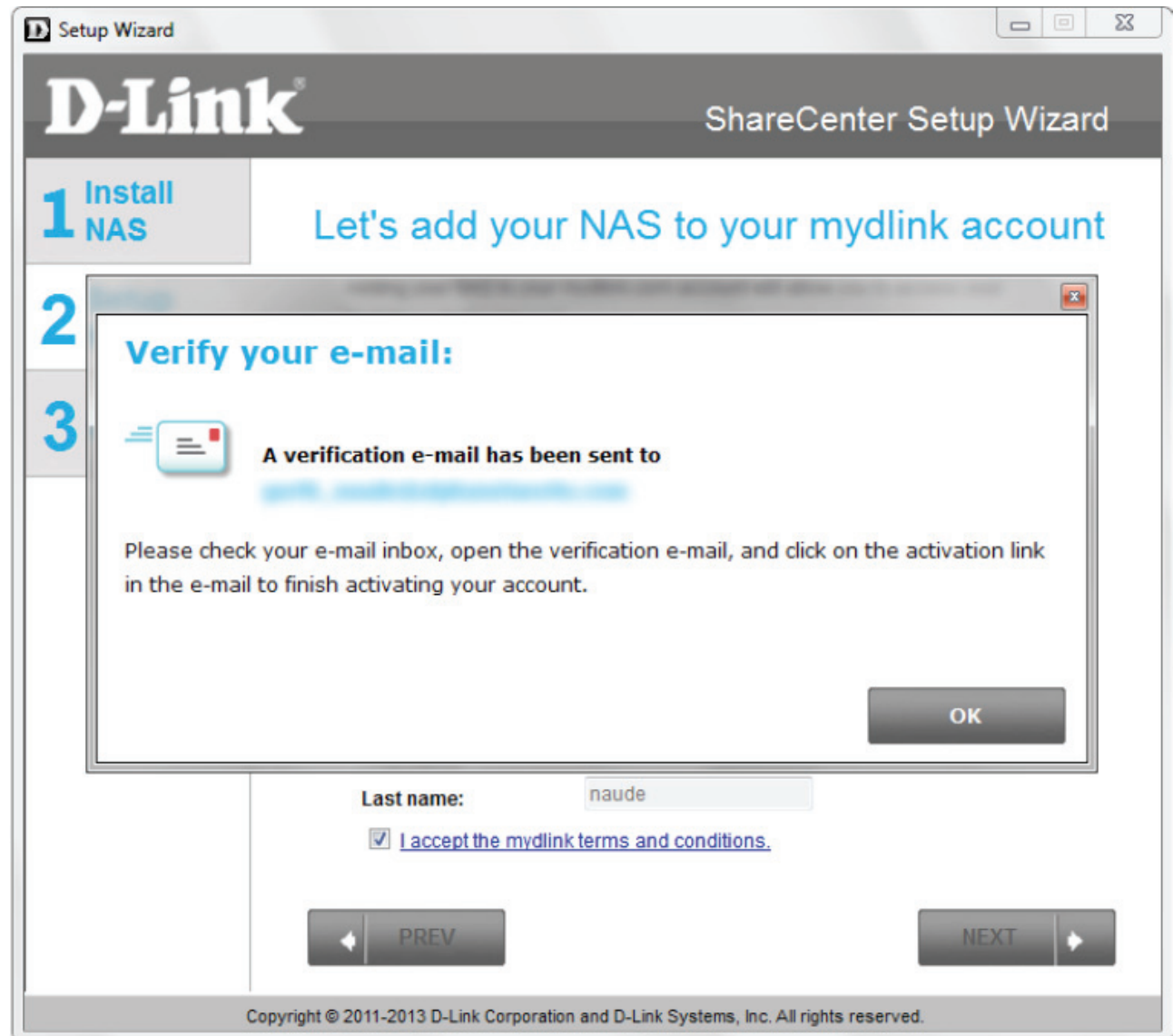
PREV SKIP NEXT

Copyright © 2011-2013 D-Link Corporation and D-Link Systems, Inc. All rights reserved.



**Step 46** - A message appears asking you to verify your email address and account.

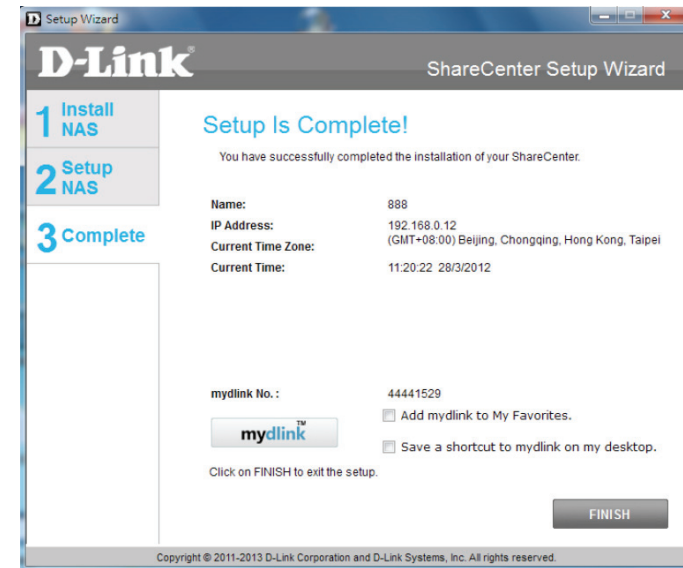
Click **OK** to continue.



## Wizard Complete

**Step 47** - The mydlink section of the wizard installation is complete. The wizard provides you with a **mydlink number**. You can also tick the **Add mydlink to My Favorites** checkbox, or **Save a shortcut to mydlink on my computer** checkbox. You can use this mydlink number for future reference.

Click **Finish** to continue.



**Step 48** - The ShareCenter™ Setup Wizard is complete. Click **Finish** to exit the wizard and start using your DNS-320L.

Your ShareCenter™ is now installed and ready to use. If your drives are mapped using the wizard, you will be able to access them under your 'My Computer' icon.

If you did not use the wizard to map the drives, you can manually map or access the created volumes through your computers operating system. Detailed configurations using the Web UI is explained in the configuration section of this manual.

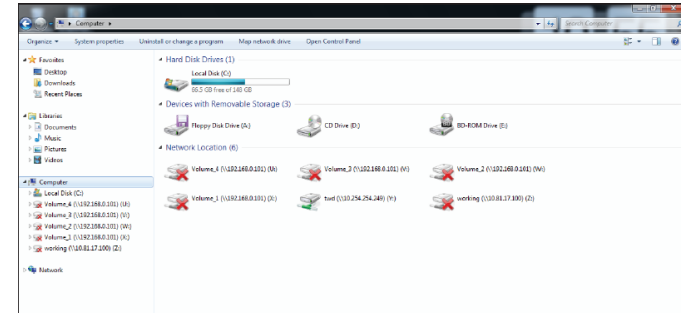


# Mapping a Drive

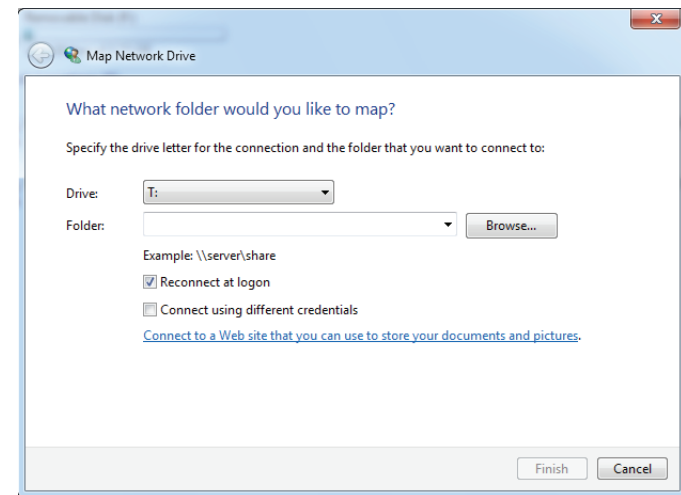
Map a Volume on your DNS-320L using Windows® Explorer in Windows® 7.

**Step 1** - Press the Windows key and the letter E on your keyboard at the same time.

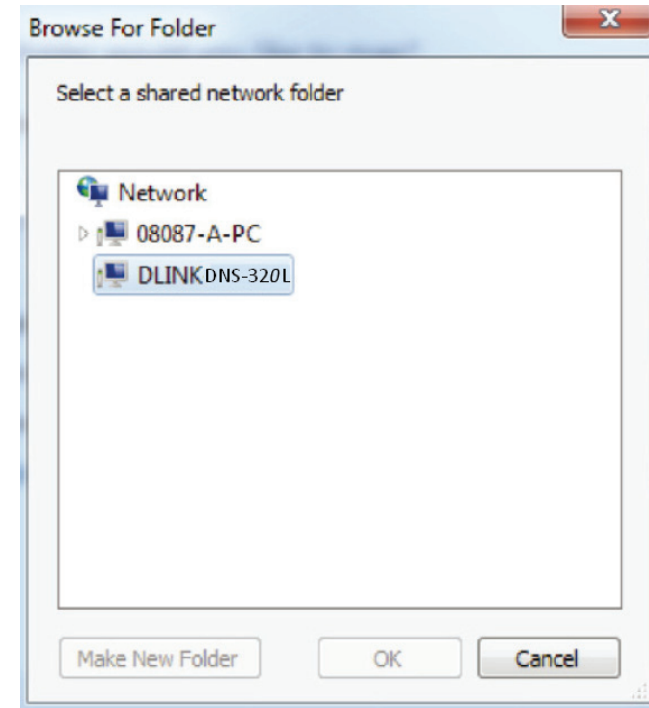
The right-side panel displays a list of your hard drives, removable storage, and network locations. If you do not have any network locations, this may be the first time you set up a network drive.. Begin by clicking on '**Map Network Drive**'



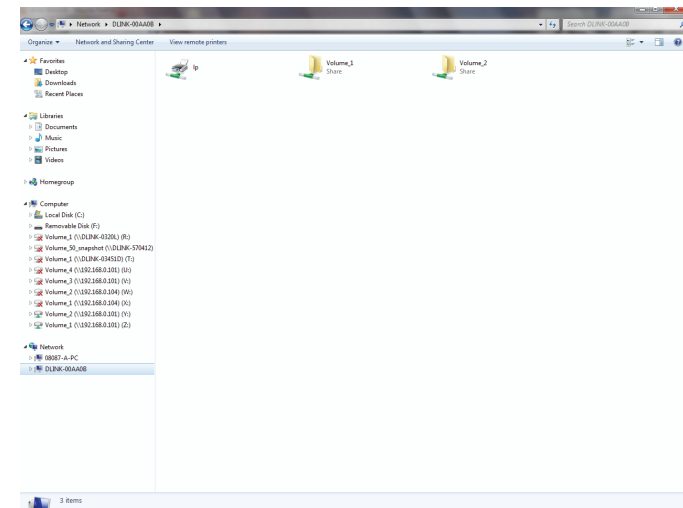
**Step 2** - The Map Network Drive screen appears. Choose a Drive letter, click **Browse** to find your network.



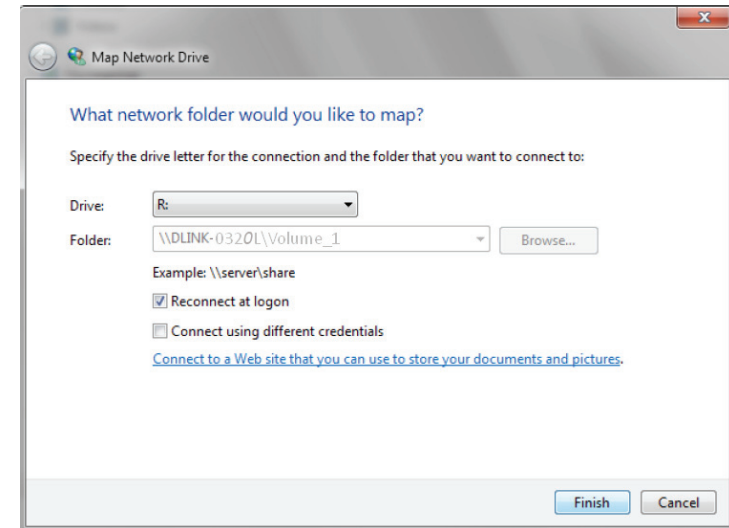
**Step 3** - Windows will automatically detect all devices on your network including your ShareCenter™



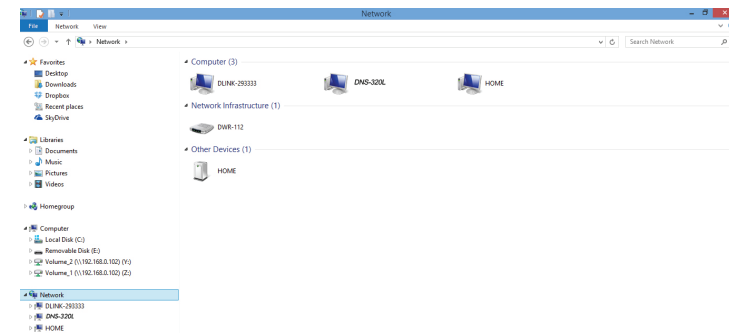
**Step 4** - Click on your ShareCenter™ to see the volumes you created earlier. Then select the volume that you wish to access and click **OK**.



**Step 5** - After selecting your volume, click **Finish** to proceed.

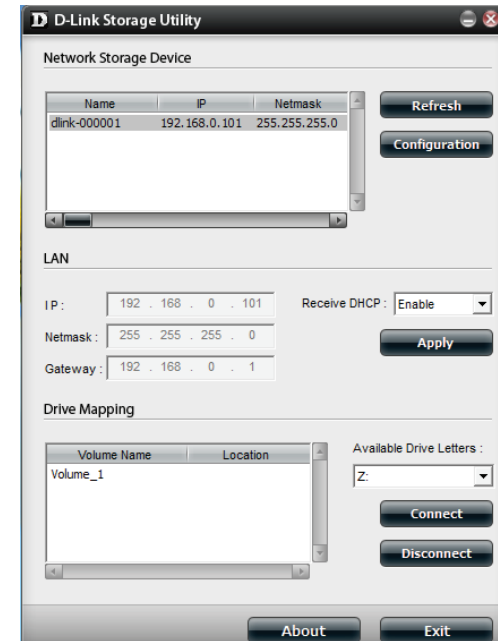



**Step 6** - The drive will then appear in your Windows® Explorer under Network. This means the drive is active and ready for use.

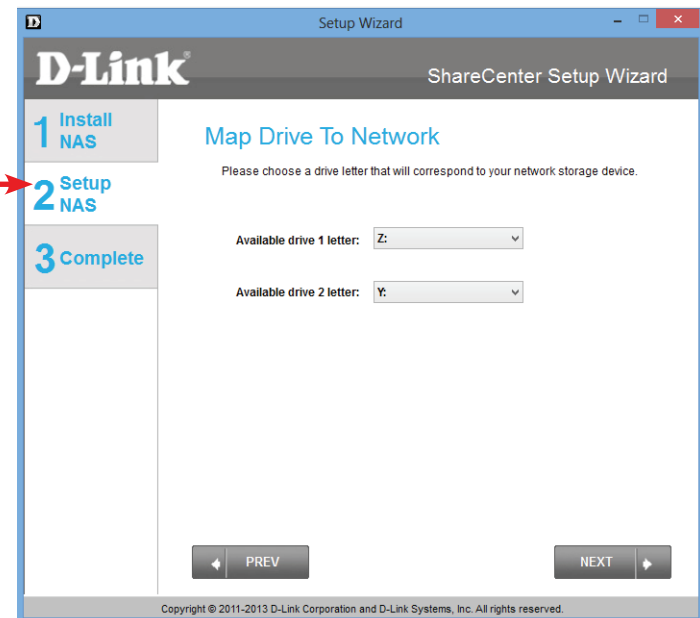


## Alternative methods to Mapping a Drive

You can also map a drive using the D-Link Storage Utility. Once the DNS-320L is discovered in the Storage Utility, and the LAN configuration settings are complete, finding the drives happens automatically. Select the drive letter and click Connect. To disconnect the drive, click the Disconnect button.



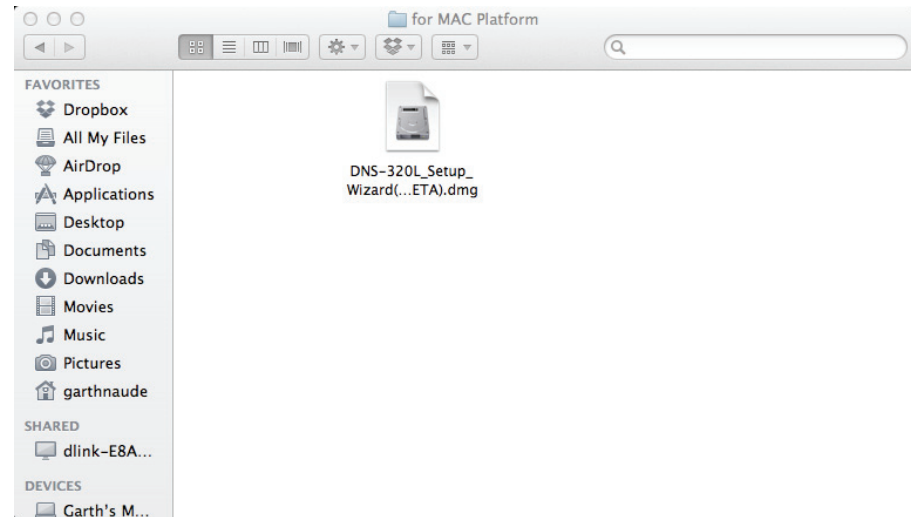
Another method is using the Setup Wizard. As you go through the Setup Wizard process, there is a step in the process to map the drive. See the image here. 



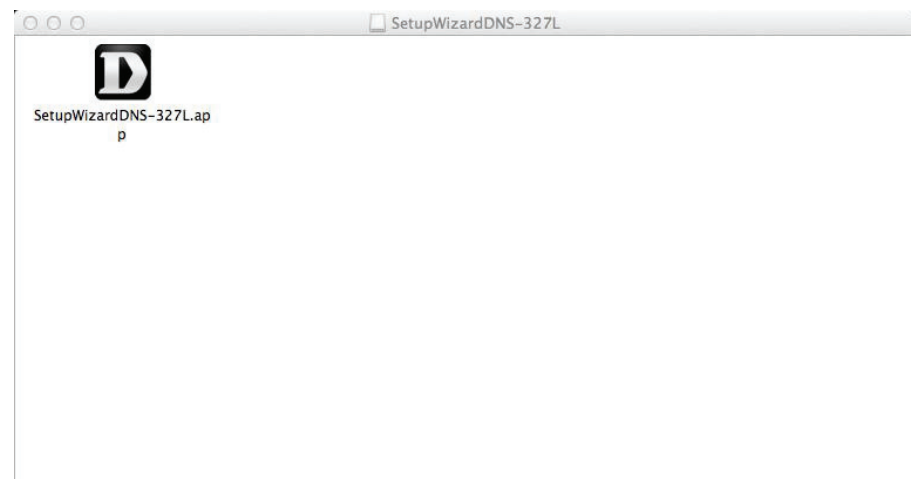
# Mac - Setup Wizard Installation

To run the Setup Wizard, insert the ShareCenter™ CD into your CD-ROM drive.

**Step 1** - When the autorun screen appears, double-click the dmg file.



**Step 2** - Double-click the SetupWizardDNS icon.



**Step 3** - Click Start to begin the wizard.



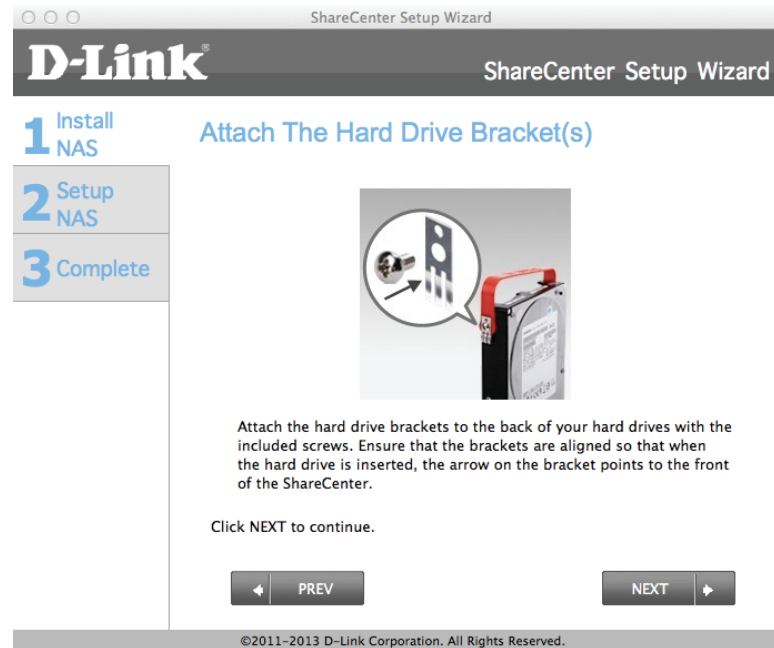
**Step 4** - Follow the instructions on the screen (Pull the Top out) and click **Next**.

Click **Previous** if you want to go back and make changes to any parts of your past configuration options.

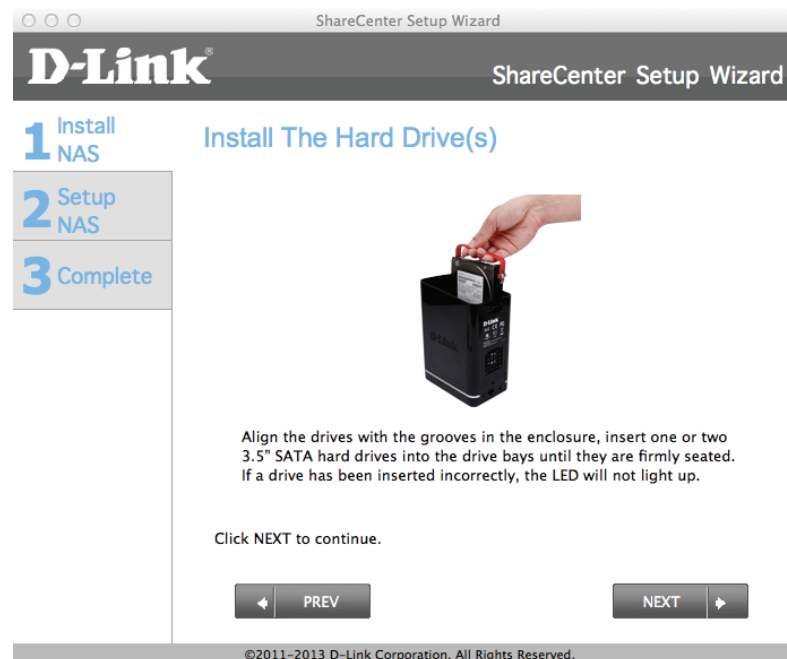




**Step 5** - Follow the instructions on the screen (Attach the Hard Drive Bracket(s)) and click **Next**.



**Step 6** - Follow the instructions on the screen (Install the Hard Drive(s)) and click **Next**.



**Step 7** - Follow the instructions on the screen (Attach the Faceplate) and click **Next**.

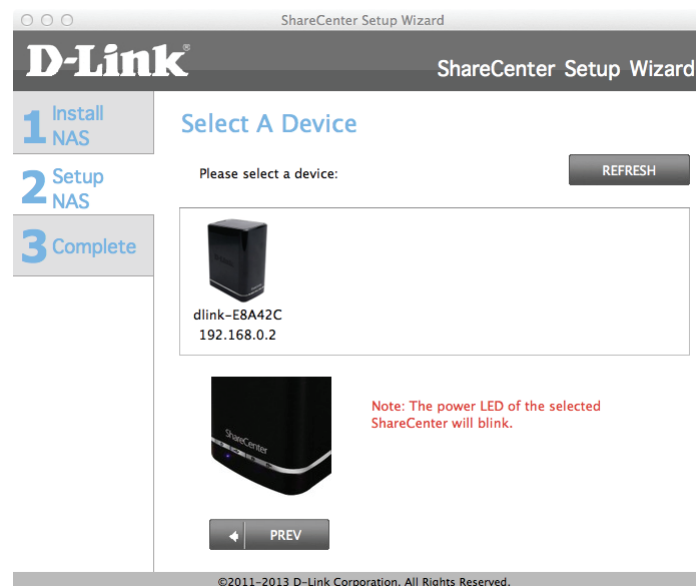
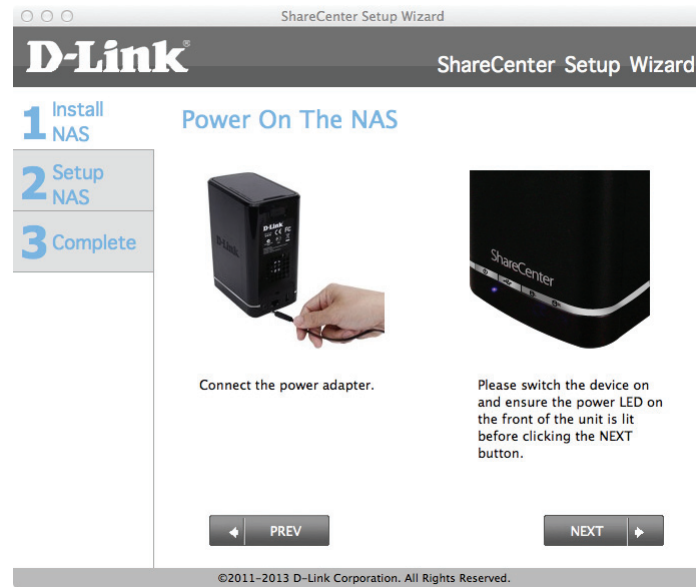


**Step 8** - Follow the instructions on the screen (Connect to your Network) and click **Next**.

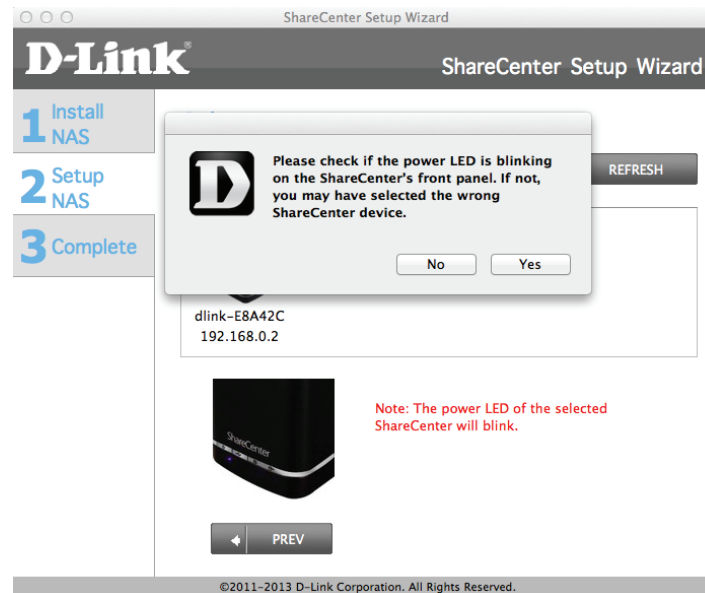


**Step 9** - Follow the instructions on the screen (Power on the NAS) and click **Next**.

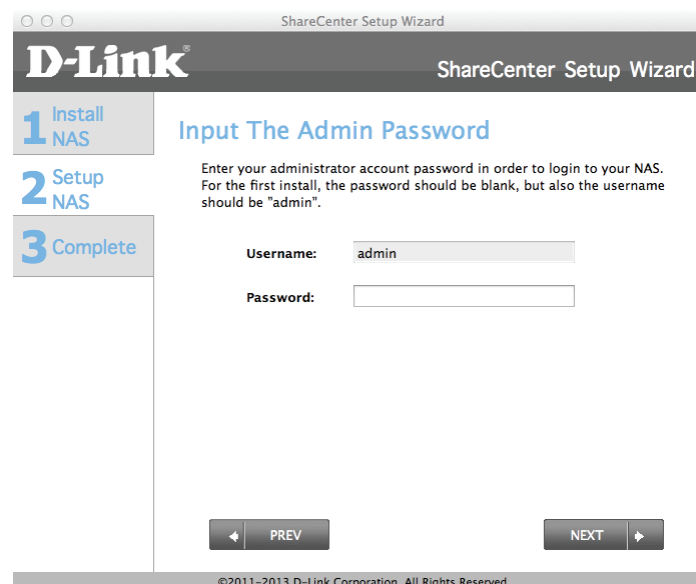
**Step 10** - Return to the DNS-320L on your desktop and click the device if you see it onscreen. Alternatively, if you do not see the DNS-320L , check the settings as explained previously.



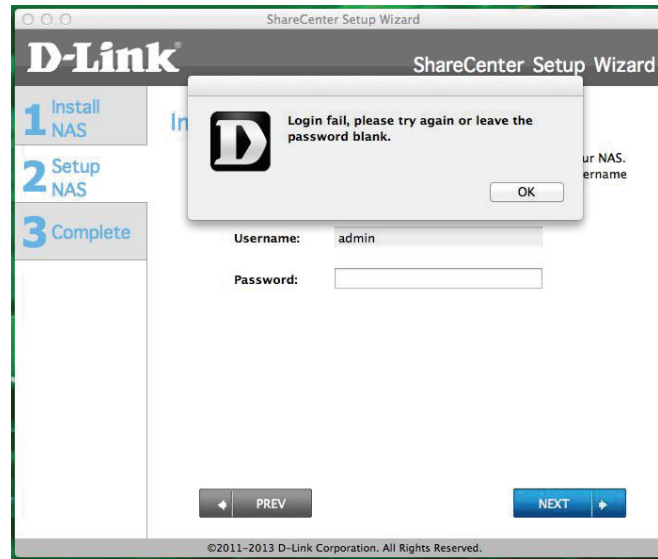
**Step 11** - A warning message appears. Read the instructions before proceeding. If all is working, click **Yes**. Otherwise click **No** and check your set up again.



**Step 12** - Enter an admin Password. If you have setup this system before, use the password you used before. Otherwise leave the password field blank. Click **Next** to continue.



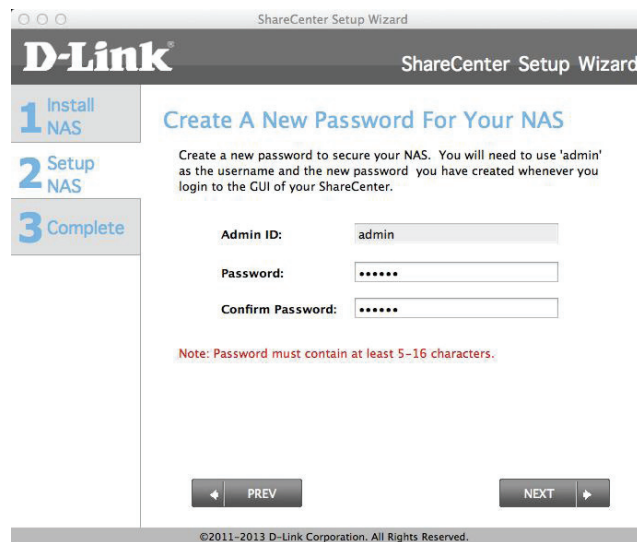
**Step 13** - If you have entered a wrong password from a previous installation, a warning message prompts you to relog-in. Click **OK** to continue.



**Step 14** - Create a new password and verify that password by filling in the **Confirm Password** field.

Click **Next**.

Click **Previous** if you want to go back and make changes to any parts of your past configuration options.



**Step 15** - To configure the Device IP, select either DHCP or Static IP. In this window, we select DHCP (the router automatically configures the Device IP ) and click **Next**.

Click **Previous** if you want to go back and make changes to any parts of your past configuration options.

**Step 16** - To configure the Device IP, select either DHCP or Static IP. In this window, we select Static IP (you manually configure the Device IP ) and click **Next**.

Click **Previous** if you want to go back and make changes to any parts of your past configuration options.

ShareCenter Setup Wizard

**D-Link** ShareCenter Setup Wizard

1 Install NAS  
2 Setup NAS  
3 Complete

**Configure Device IP**

If you want to set an IP address for your ShareCenter please select "Static IP" and enter the required information. Otherwise click NEXT.

☒ DHCP Client ☐ Static IP

IP Address: 192.168.0.2

Subnet Mask: 255.255.255.0

Gateway: 192.168.0.1

☒ Obtain DNS server address automatically  
☐ Use the following DNS server address

DNS1:

DNS2:

PREV NEXT

©2011-2013 D-Link Corporation. All Rights Reserved.

ShareCenter Setup Wizard

**D-Link** ShareCenter Setup Wizard

1 Install NAS  
2 Setup NAS  
3 Complete

**Configure Device IP**

If you want to set an IP address for your ShareCenter please select "Static IP" and enter the required information. Otherwise click NEXT.

☐ DHCP Client ☒ Static IP

IP Address: 192.168.0.2

Subnet Mask: 255.255.255.0

Gateway: 192.168.0.1

☐ Obtain DNS server address automatically  
☒ Use the following DNS server address

DNS1:

DNS2:

PREV NEXT

©2011-2013 D-Link Corporation. All Rights Reserved.

**Step 17** - To configure the Device Information, enter the particulars in the fields provided: Workgroup, Name, and Description.

Click **Next**.

Click **Previous** if you want to go back and make changes to any parts of your past configuration options.

**Step 18** - To configure the System Time, select a Time Zone from the drop-down list. Click Enable NTP Server if you are connected to one. Select a NTP server from the drop-down list. Enter a Date and Time manually or click Set time from my computer.

Click **Next**.

Click **Previous** if you want to go back and make changes to any parts of your past configuration options.

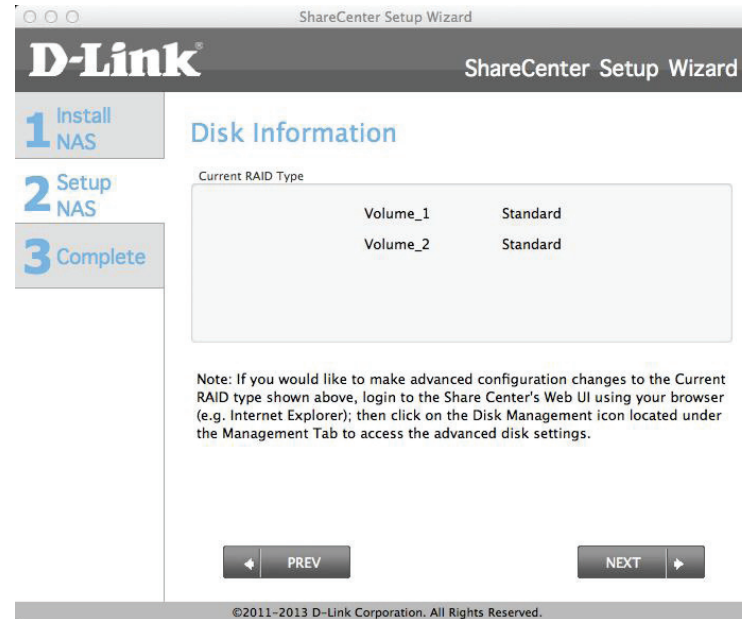
The screenshot shows the 'ShareCenter Setup Wizard' window. On the left, there is a vertical sidebar with three steps: '1 Install NAS' (highlighted in blue), '2 Setup NAS', and '3 Complete'. The main area is titled 'Configure Device Information'. Below the title, there is a paragraph: 'If you have a workgroup other than your Operating System's default, or if you want to customize the device name and description of your ShareCenter, please enter the information below. Otherwise click NEXT.' Below this text are three input fields: 'Workgroup:' with the value 'workgroup', 'Name:' with the value 'dlink-E8A42C', and 'Description:' with the value 'DNS-320L'. At the bottom of the main area, there are two buttons: 'PREV' with a left arrow and 'NEXT' with a right arrow. The footer of the window contains the text '©2011-2013 D-Link Corporation. All Rights Reserved.'

The screenshot shows the 'ShareCenter Setup Wizard' window. On the left, there is a vertical sidebar with three steps: '1 Install NAS', '2 Setup NAS' (highlighted in blue), and '3 Complete'. The main area is titled 'Configure System Time'. Below the title, there is a paragraph: 'Configure Time Zone, NTP server, system Date and Time.' Below this text are several configuration options: 'Time Zone:' with a dropdown menu showing '(GMT+08:00) Taipei', 'Enable NTP Server:' with an unchecked checkbox, 'NTP Server:' with a text input field and a '<< Select NTP Server' button, 'Date and Time:' with a date input field showing '4/ 2/2013', and 'Hour:', 'Minute:', and 'Second:' each with a dropdown menu showing '14', '23', and '46' respectively. Below these fields is a button labeled 'Set time from my computer'. At the bottom of the main area, there are two buttons: 'PREV' with a left arrow and 'NEXT' with a right arrow. The footer of the window contains the text '©2011-2013 D-Link Corporation. All Rights Reserved.'

**Step 19** - The Wizard displays the Disk Information.

Click **Next**.

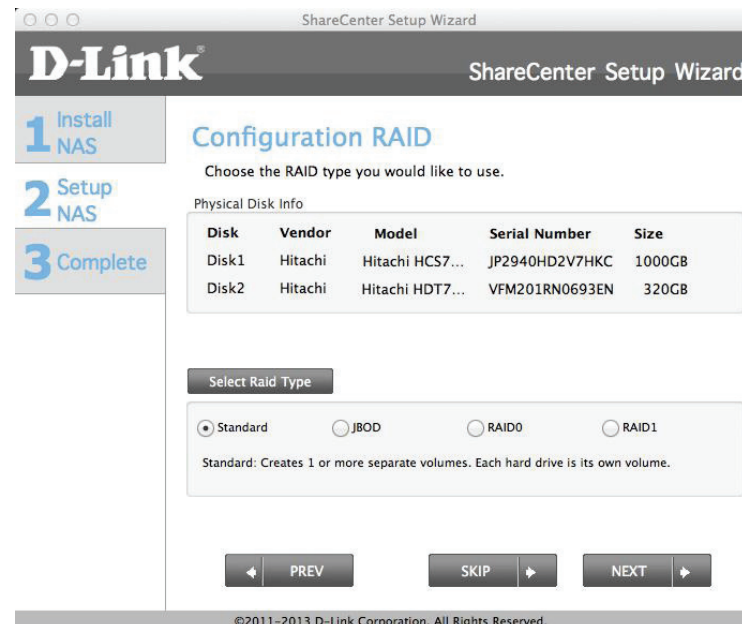
Click **Previous** if you want to go back and make changes to any parts of your past configuration options.



**Step 20** - To configure RAID, select one of the RAID Types from the list (Standard, JBOD, RAID 0, and RAID 1). Selecting each one provides a brief description of which each RAID format offers. See illustrations below and check the Knowledge Base at the back of this manual for more RAID descriptions. Skip this step if you have setup this system before

Click **Next**.

Click **Previous** if you want to go back and make changes to any parts of your past configuration options.

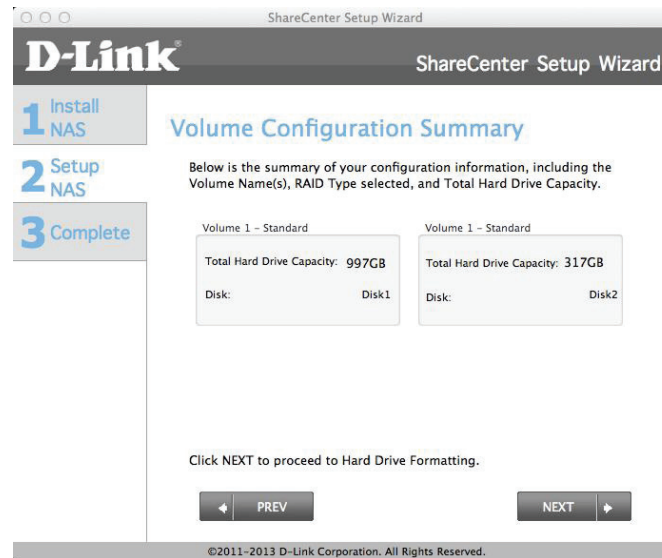




**Step 21** - Now that you have set the RAID, a Volume Configuration Summary shows you details about your settings.

Click **Next**.

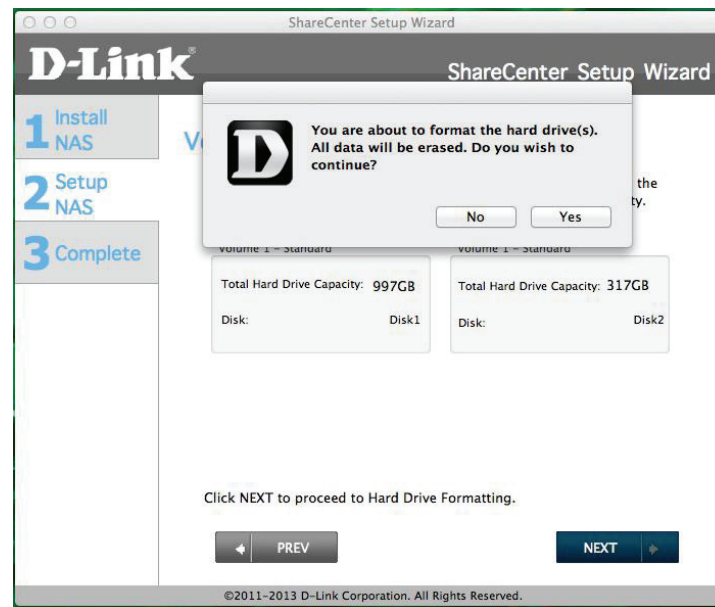
Click **Previous** if you want to go back and make changes to any parts of your past configuration options.



**Step 22** - Before the RAID configuration is set, a warning message appears to inform you that all data will be erased.

Click **Next**.

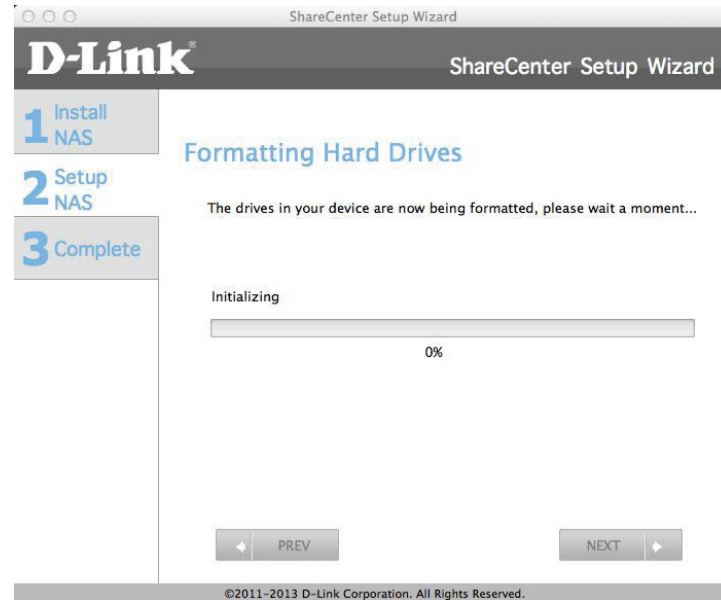
Click **Previous** if you want to go back and make changes to any parts of your past configuration options.



### Step 23 - The format begins.

Click **Next**.

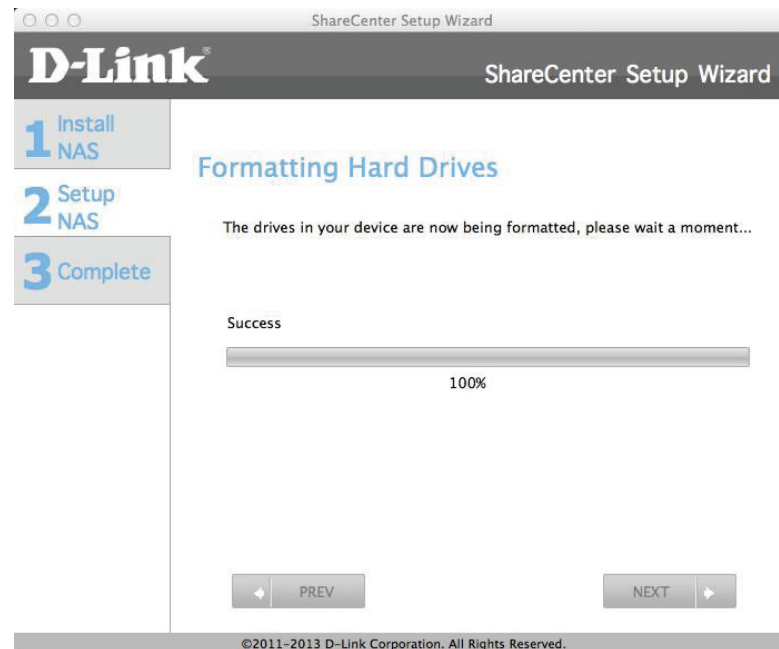
Click **Previous** if you want to go back and make changes to any parts of your past configuration options.



### Step 24 - The formatted process is successful.

Click **Next**.

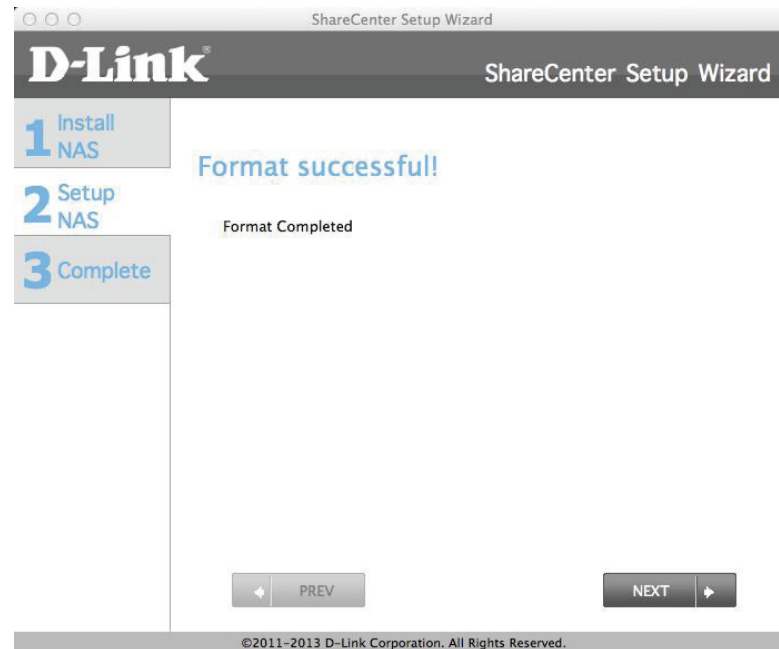
Click **Previous** if you want to go back and make changes to any parts of your past configuration options.



### Step 25 - The format is complete.

Click **Next**.

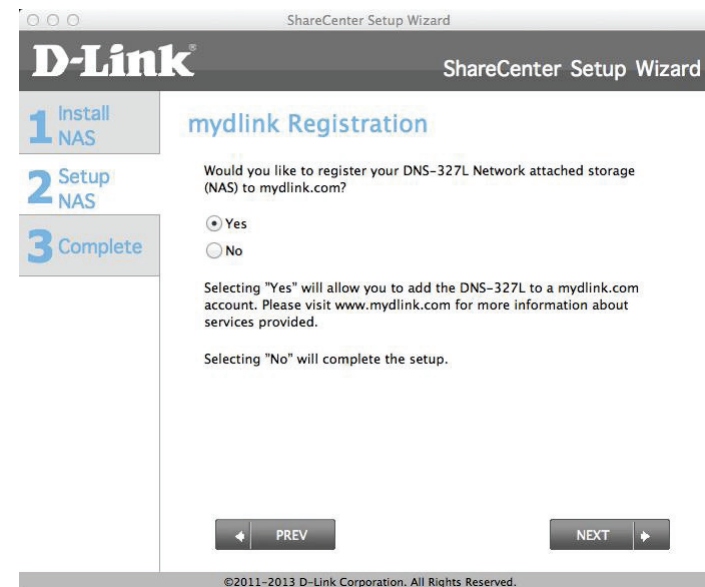
Click **Previous** if you want to go back and make changes to any parts of your past configuration options.



### Step 26 - Setup the mydlink administration.

Click **Next** to view the next screen.

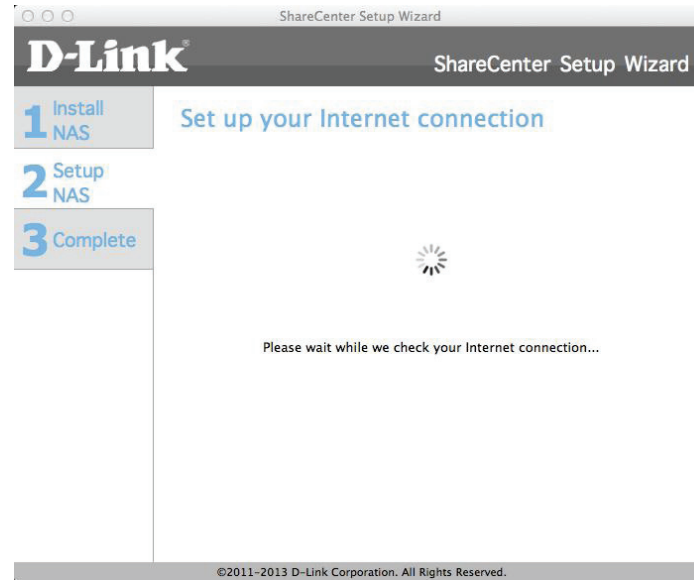
Click **Previous** if you want to go back and make changes to any parts of your past configuration options.



**Step 27** - The NAS starts to link to the internet and register mydlink.

Click **Next** to view the next screen.

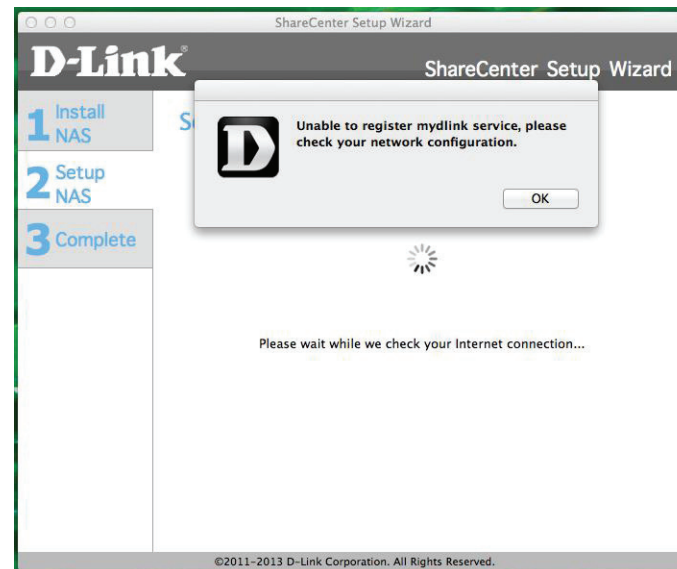
Click **Previous** if you want to go back and make changes to any parts of your past configuration options.



**Step 28**- If you are unable to connect to the mydlink registration site, a warning message notifies you of an unsuccessful connection.

Click **OK** to continue. Check your connection settings or your NAS settings.

Click **Previous** if you want to go back and make changes to any parts of your past configuration options.



**Step 29** - When the connection settings are correct, the mydlink server provides the connection details.

The next screen allows you to setup the remote mydlink cloud service. Select the Yes radio button if you already have a mydlink account.

Enter your email address and password.

Click **Next** to view the next screen.

Click **Previous** if you want to go back and make changes to any parts of your past configuration options.

**Step 30** - Alternatively, you can create a new account if you select "No, I need to sign up for a new account."

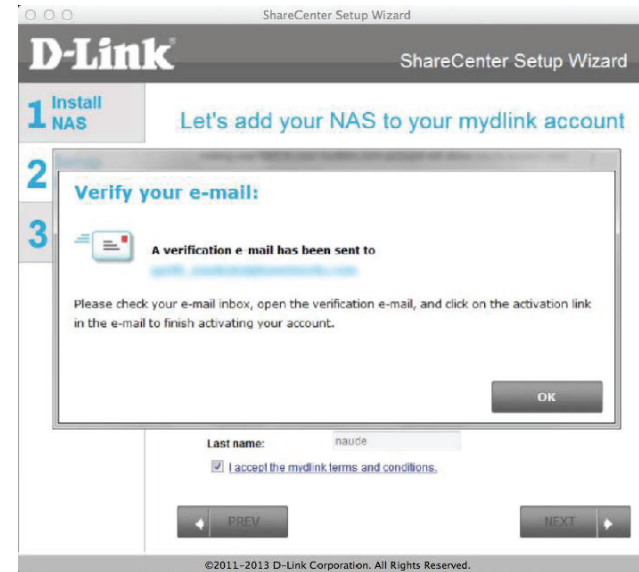
Enter your email address and a password that you can remember. Then retype the password, enter a First Name and a Last Name. Then click the checkbox that reads:

**"I accept the mydlink terms and conditions."**

Click **Next** to continue.

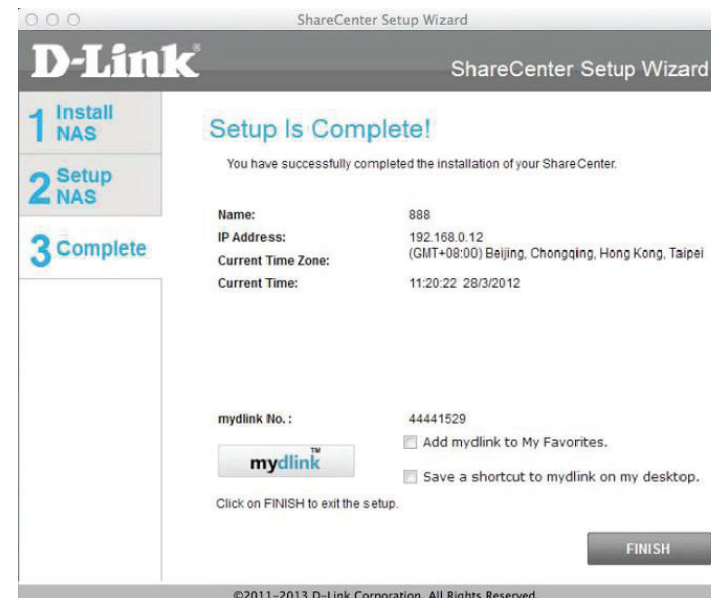
**Step 31** - A message appears asking you to verify your email address and account.

Click OK to continue.



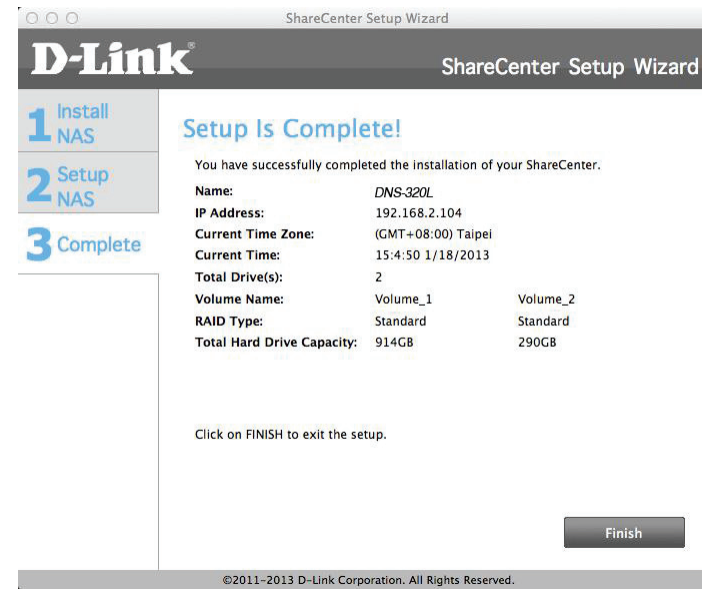
**Step 32** - The mydlink section of the wizard installation is complete. The wizard provides you with a **mydlink number**. You can also tick the **Add mydlink to My Favorites** checkbox, or **Save a shortcut to mydlink on my computer** checkbox. You can use this mydlink number for future reference.

Click **Finish** to continue.

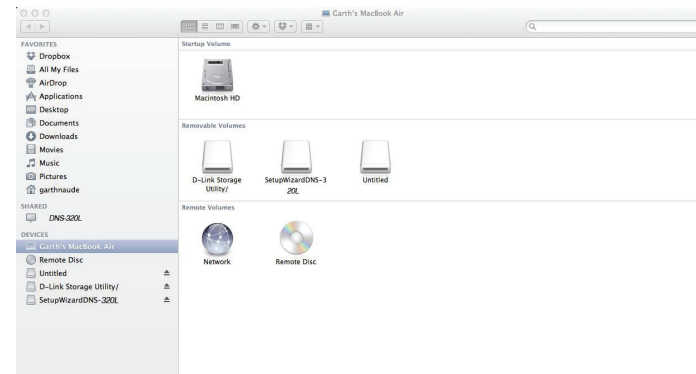


**Step 33** - The setup is complete.

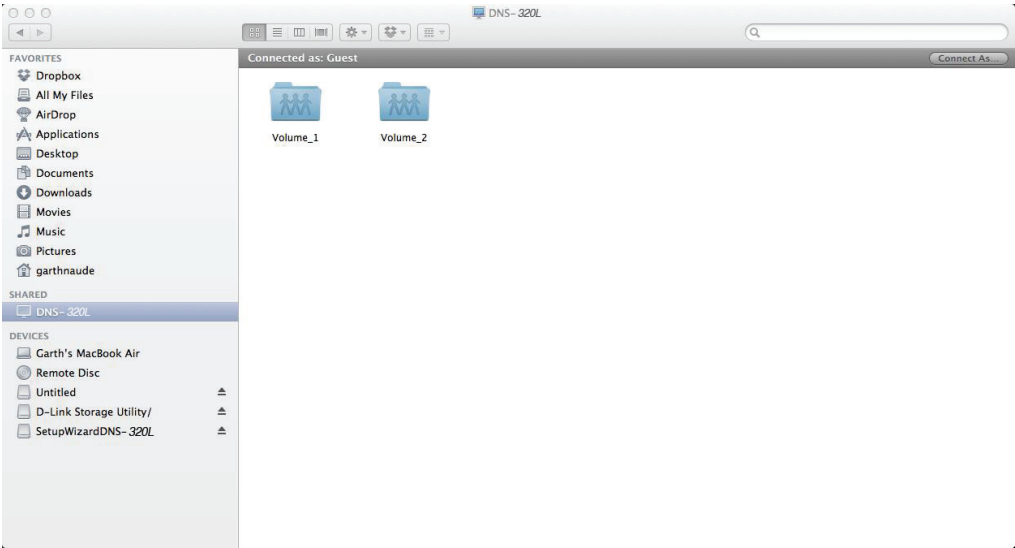
Click **Finish**.



**Step 34** - You can now view the DNS-320L in the Finder on the left panel.



**Step 35** - Click the icon to view contents on your NAS.





# Configuration

## Managing your DNS-320L

ShareCenter™ Web UI (User Interface) is a browser-based utility that allows you to manage and configure the different tools and services. The Web UI is divided into three main sections:

1. Home
2. Applications
3. Management

SECTION	OPTION	DESCRIPTION
Home - My Folder	My Photos	Create albums and manage photos, share photos through social networking sites, and slideshows
	My Files	Access files on your NAS via a web browser
	My Music	Access your music collection. Add tracks, albums, etc
	My Favorites Application	Add the favorite applications you use on a regular basis to the Home page

SECTION	OPTION	DESCRIPTION
Applications	FTP/HTTP Downloads	Configure FTP and HTTP download settings
	Remote Backup	Configure remote backup services
	Local Backups	Configures local backups, Time Machine© settings, and USB backups
	P2P Downloads	Configure your P2P downloads and control your download schedules
	My Files	Access files on your NAS via a web browser
	Amazon S3	Create, modify, and delete your Amazon S3© settings

SECTION	OPTION	DESCRIPTION
Management	Setup Wizard	Step by step guide through password & time settings, connectivity, and device configuration
	Disk Management	Configures disk volumes, RAID, and performs disk diagnostics
	Account Management	Configures user and group management, network shares
	Network Management	Configures LAN, Dynamic DNS, and Port Forwarding
	Application Management	Configures FTP, add-ons, AFP, NFS, and multimedia services
	System Management	Configures language, time and date, device, and system settings. Also allows you to control power, notifications, view logs, do firmware upgrades, and manage USB devices.
	System Status	Displays system and hard drive information along with resource monitoring

# D-Link Storage Utility

When first powered on, during the initial boot sequence, the ShareCenter™ will wait to be assigned an IP address via DHCP. If it does not receive a DHCP assigned IP address, the ShareCenter™ will be automatically assigned a 169.254.xxx.xxx address. It is recommended that you use the included D-Link Storage Utility software when accessing and configuring the ShareCenter™ for the first time. If you want to change the IP address before logging in or you are having trouble connecting to the ShareCenter™ IP address, you can use the Storage Utility software included on the product CD to locate the device on your network and make any necessary changes.

**Network Storage Device:** The D-Link Storage Utility displays any ShareCenter™ devices it detects on the network here.

**Refresh:** Click **Refresh** to refresh the device list.

**Configuration:** Click **Configuration** to access the Web based configuration of the ShareCenter™.

**LAN:** Configure the LAN Settings for the ShareCenter™ here.

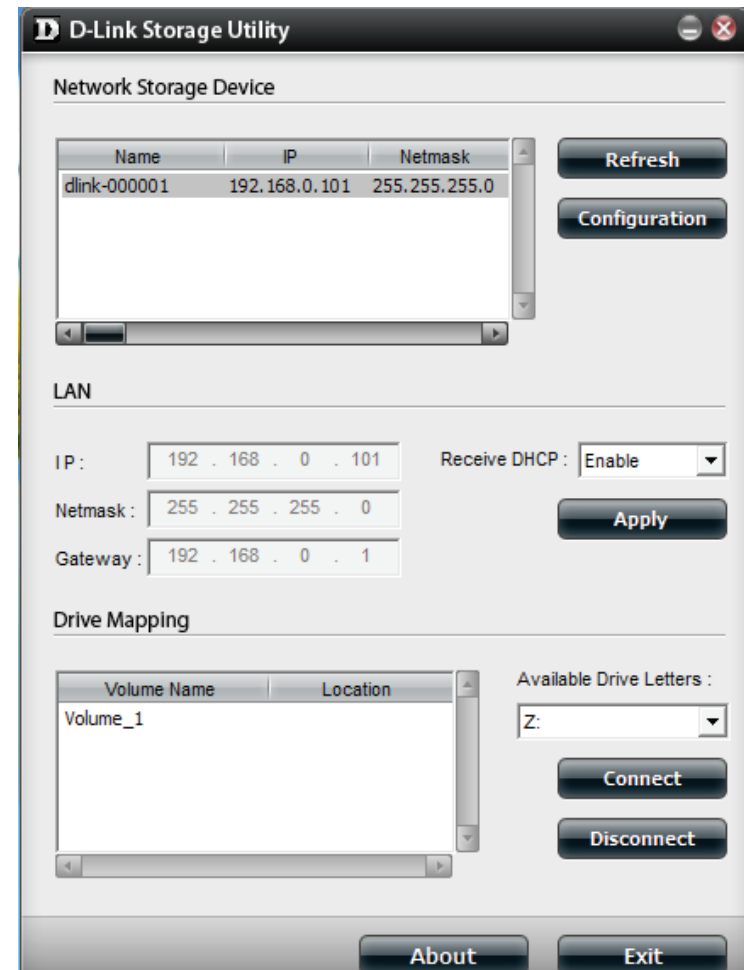
**Apply:** Click **Apply** to save changes to the LAN Settings.

**Drive Mapping:** Volumes available for mapping are displayed here.

**Available Drive Letters:** Choose an available drive letter. Click **Connect** to map the selected volume. Click **Disconnect** to disconnect the selected mapped volume.

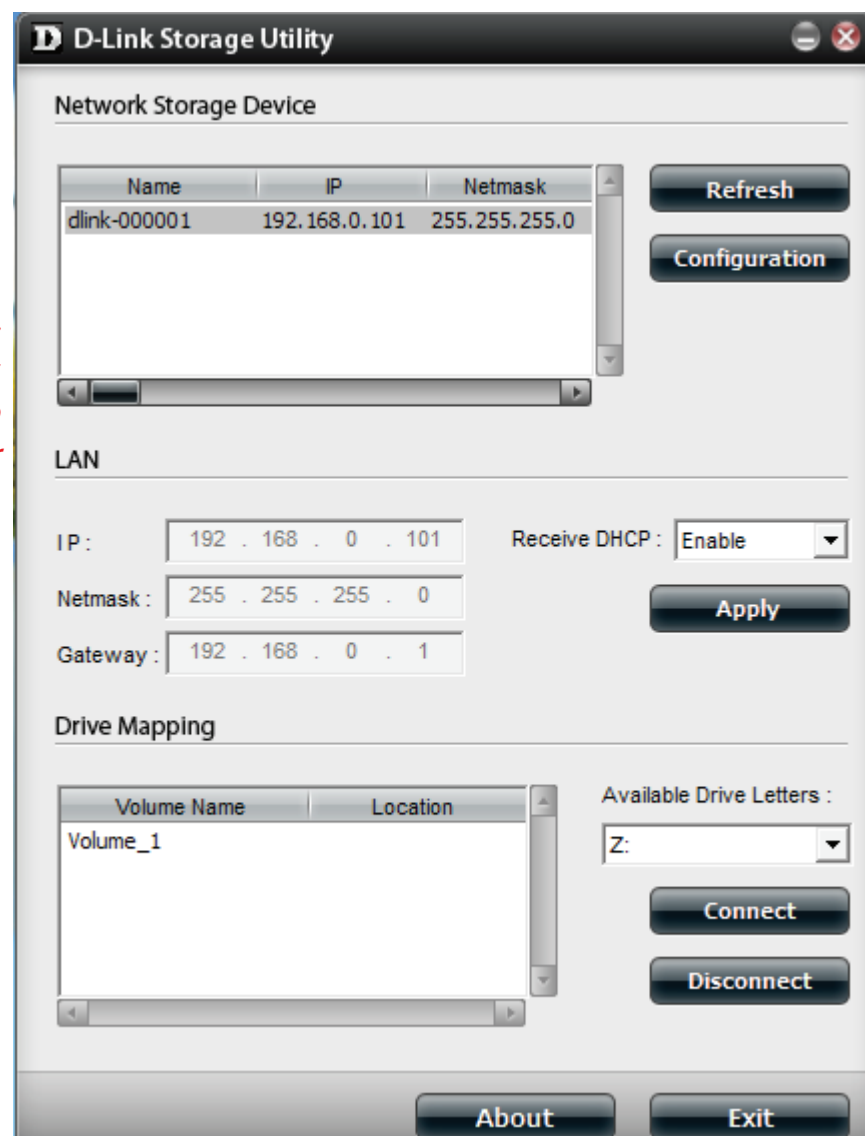
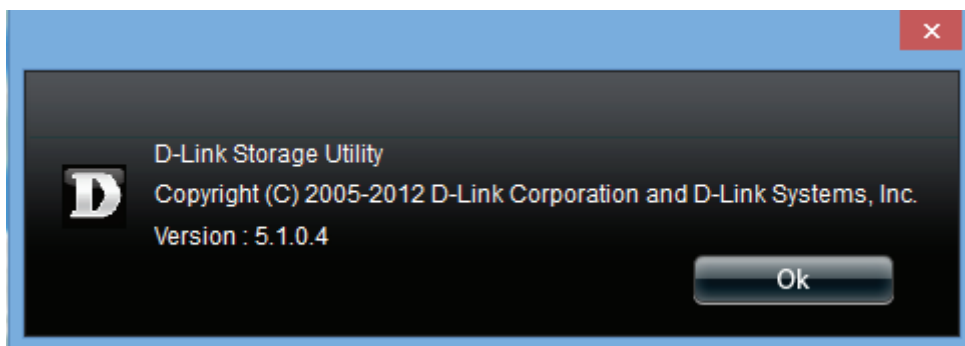
**About:** Click **About** to view the software version of the Easy Search Utility.

**Exit:** Click **Exit** to close the utility.



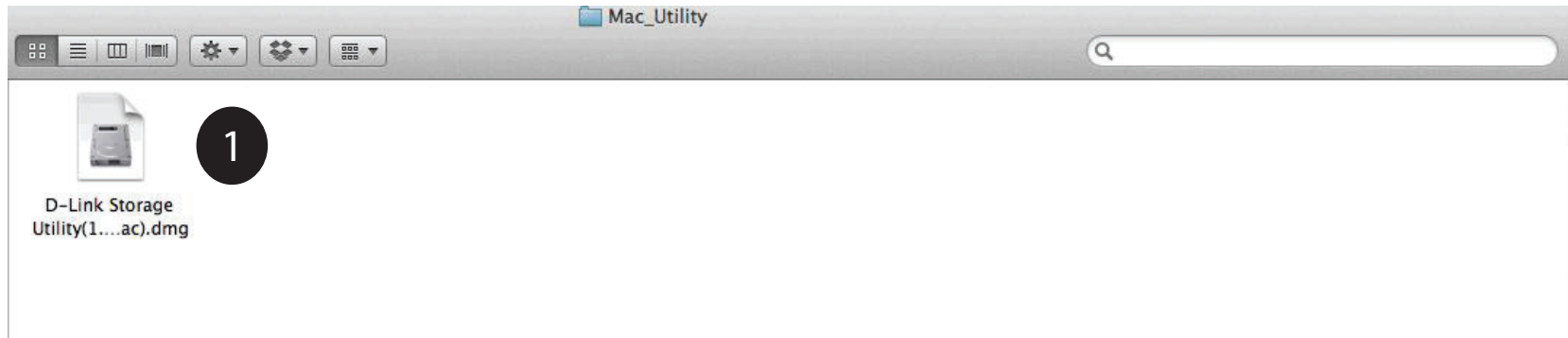
Select the ShareCenter™ from the list and click the **Configuration** button. This will launch the computer's default web browser and direct it to the IP address listed for the device. Make sure the browser is not configured to use a proxy server.

**Note:** The computer used to access the ShareCenter™ web-based configuration manager must be on the same subnet as the ShareCenter.™ If your network is using a DHCP server and the computer receives IP settings from DHCP server, the ShareCenter™ will automatically be in the same subnet.

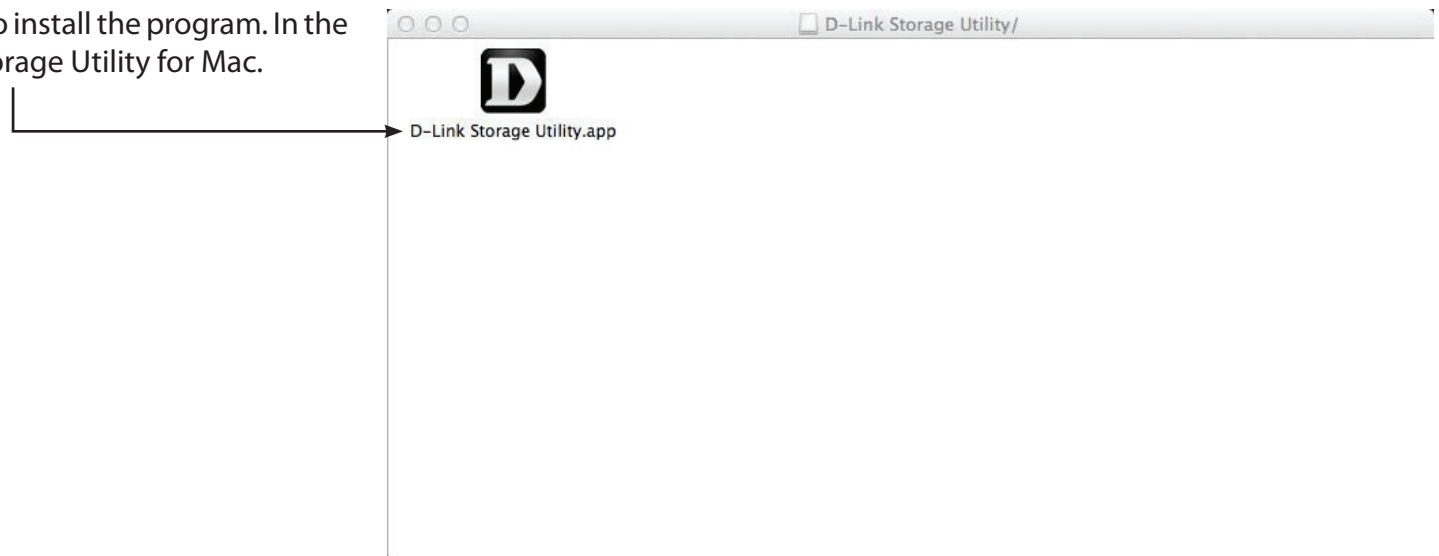


# D-Link Storage Utility - For Mac

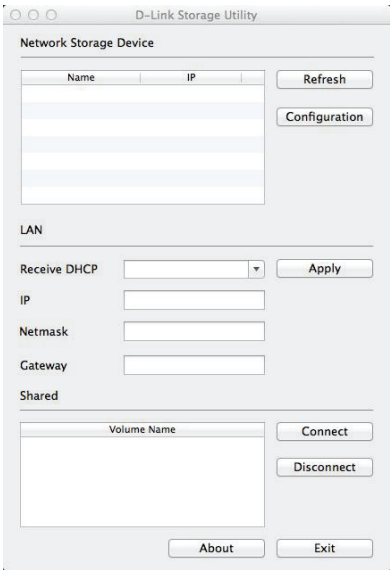
**Step 1:** To get started with the ShareCenter™ Storage Utility for Mac, insert the supplied CD into your CD-ROM drive: Double-click the .dmg file.



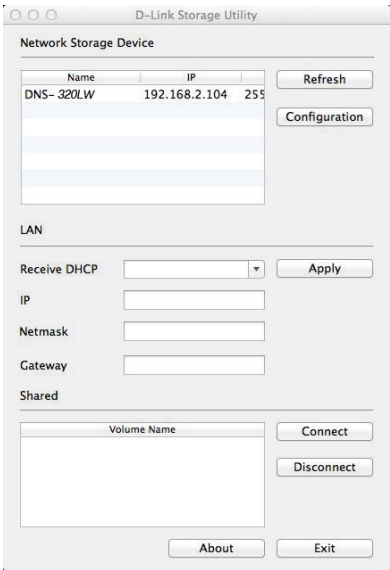
**Step 2:** Double-click the .dmg file to install the program. In the end you should have the D-link Storage Utility for Mac.



**Step 3:** This opens the D-Link Storage Utility

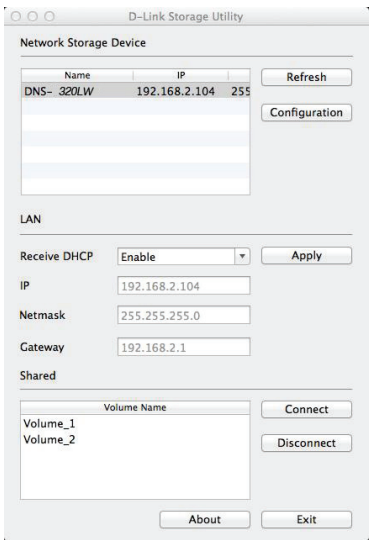


**Step 4:** Make sure you are connected to your local LAN. Click the Refresh button. The D-Link Storage Utility displays the D-Link DNS-320L.

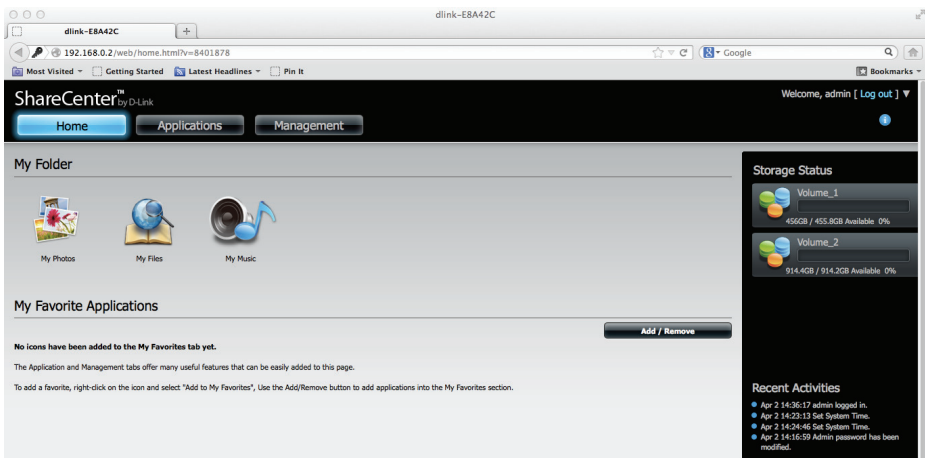


**Step 5:** The Storage Utility now shows the DNS-320L, the LAN configuration (toggle between DHCP and manual), and the Volume details.

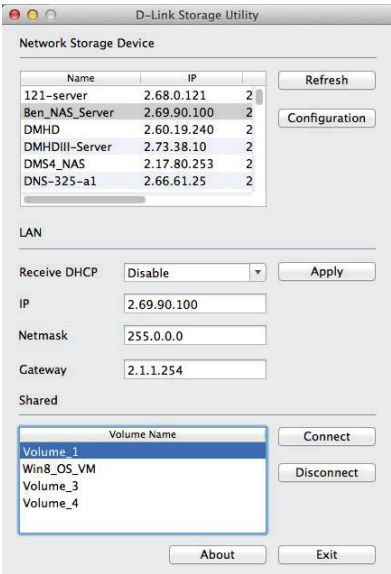
Use the drop-down list to configure your LAN settings and click Apply.



**Step 6:** To configure the NAS, click the configuration button. This opens your default browser. Log in and configure.



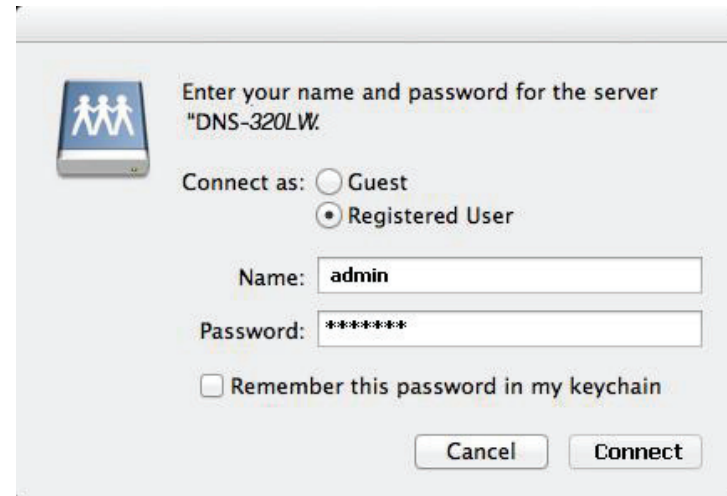
**Step 7:** To map the NAS volume, select a **Volume** from the list then click the **Connect** button.



**Step 8:** The Log-in window appears. Select Guest or Registered User.

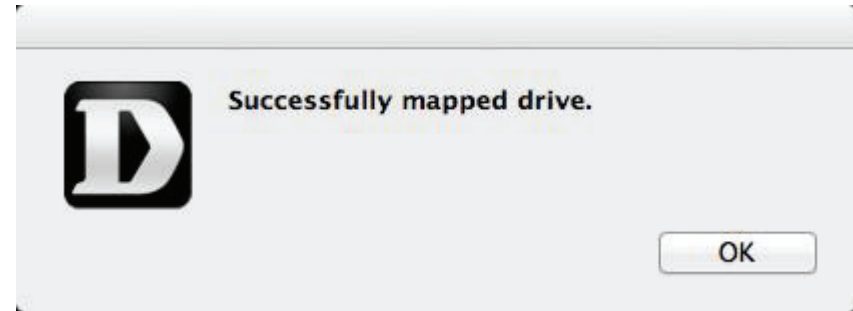


**Step 9:** Enter a username and password for the DNS-320L and click Connect.

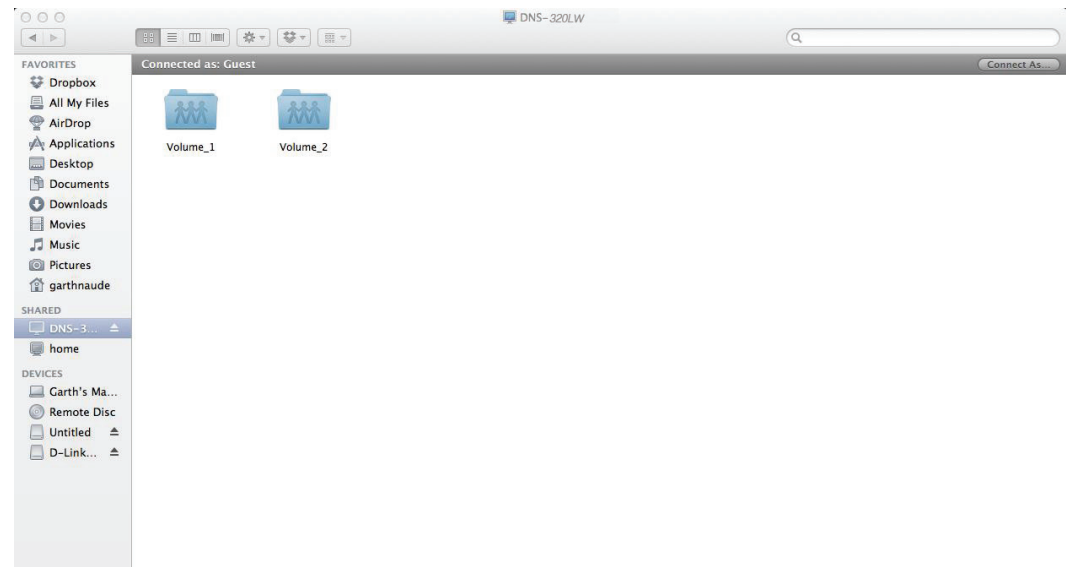




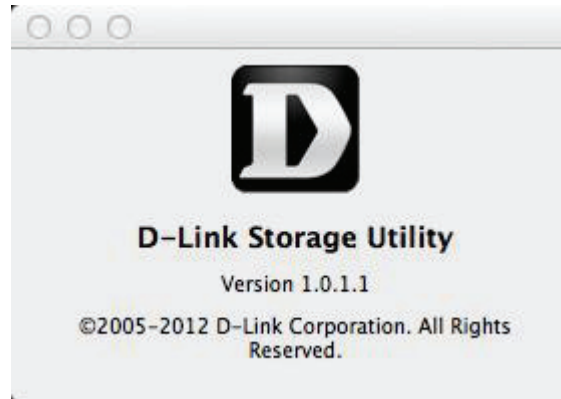
**Step 10:** A pop-up window appears notifying you that mapping the drive was a success. Click OK to continue. Use the Disconnect button to disconnect from the mapped drive(s).



**Step 11:** Finder now opens the drive and displays the DNS-320L under the Shared column on the left and the Volumes on the right.



**Step 12:** When you click the About button it displays the software version number. This comes in handy when updating to a new version.

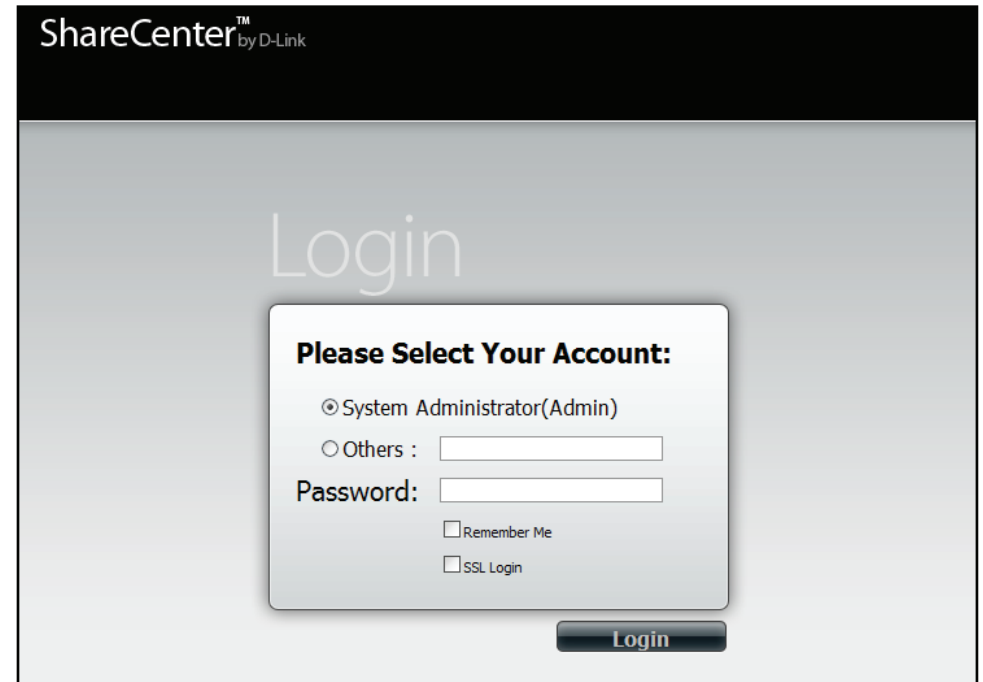


# Web UI Login

To access the Web UI, open the D-Link Storage utility, select DNS-320L from the Network Storage Device list, then click the Configuration button.

The following screen will appear:

Select **System Administrator** and enter the password created during the Setup Wizard. Click **Login**.

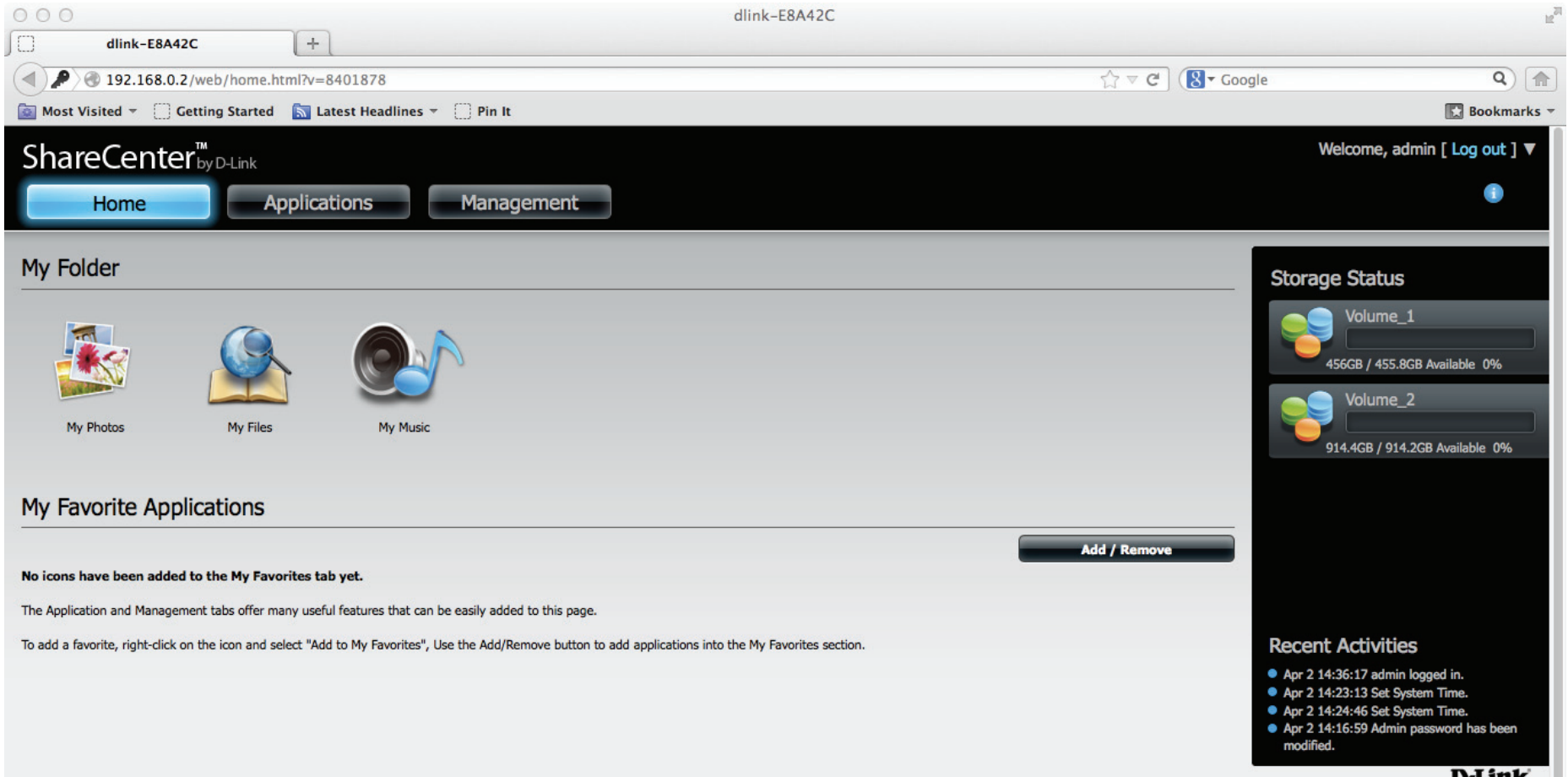
The image shows the ShareCenter™ by D-Link login interface. At the top, there is a black header with the text "ShareCenter™ by D-Link" in white. Below the header, the word "Login" is displayed in a large, light gray font. In the center, there is a white login box with a gray border. Inside this box, the text "Please Select Your Account:" is followed by two radio button options: "System Administrator(Admin)" (which is selected) and "Others :". Below these options are two input fields: "Password:" and a "Remember Me" checkbox. At the bottom of the login box, there is an "SSL Login" checkbox. A dark gray "Login" button is located at the bottom right of the login box.

**Note:** The computer used to access the ShareCenter™ web-based configuration manager must be on the same subnet as the ShareCenter™. If your network is using a DHCP server and the computer receives IP settings from the DHCP, the ShareCenter™ will automatically be in the same subnet.

# Web UI General Layout

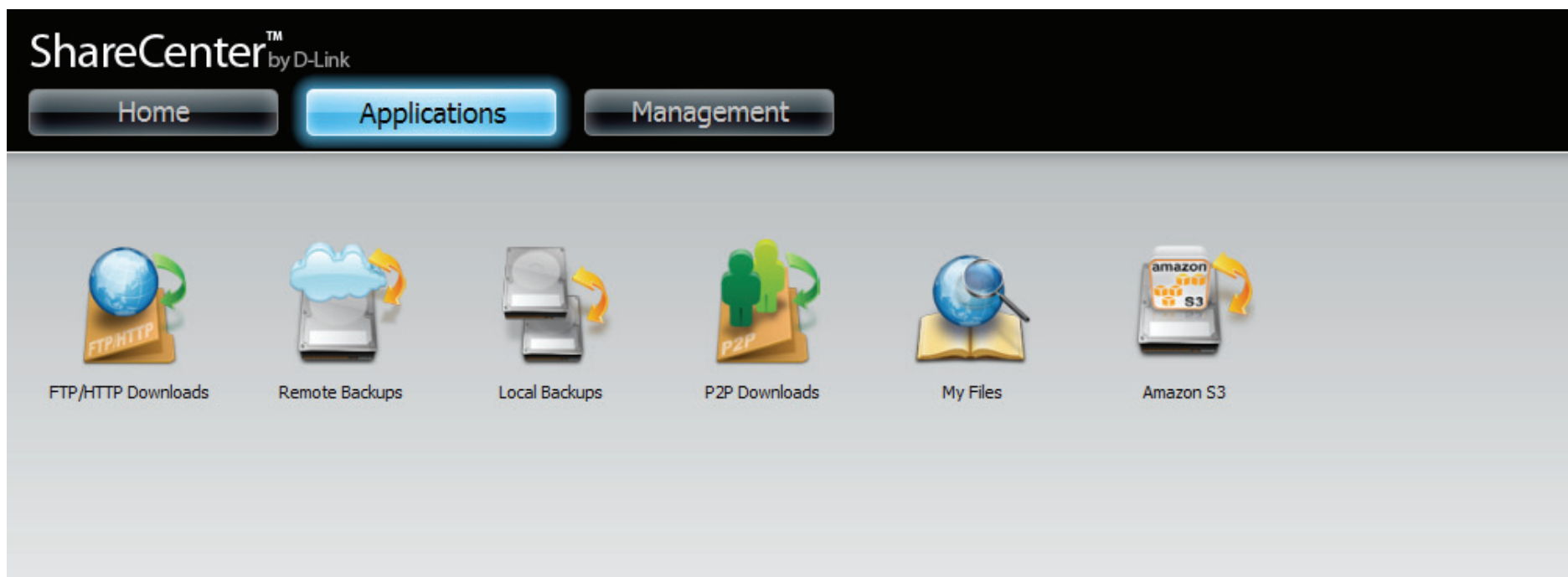
## Home

After logging in, the ShareCenter™ Home' tab will appear. You will see the Applications and Management tabs alongside of it.



## Applications

The Applications tab contains FTP/HTTP Downloads, Remote Backups, Local Backups, P2P Downloads, My Files, and Amazon S3 icons. Click on each icon to see the submenus.



## Management

The Management tab contains the Setup Wizard, Disk Management, Account Management, Network Management, Application Management, System Management, and Status icons. Click on each icon to see the submenus.

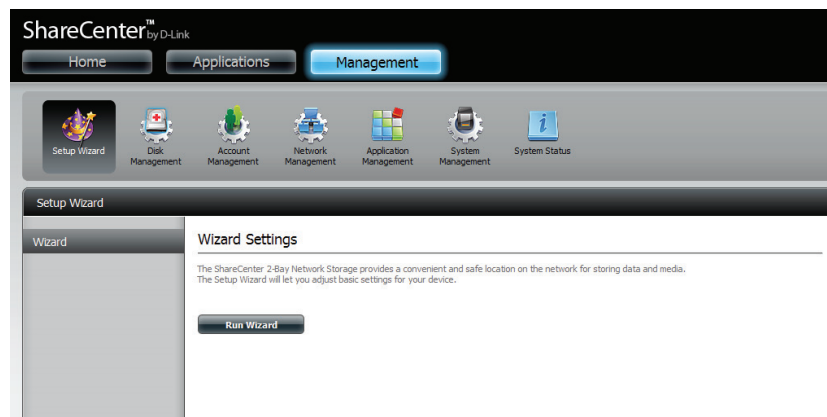


# Management

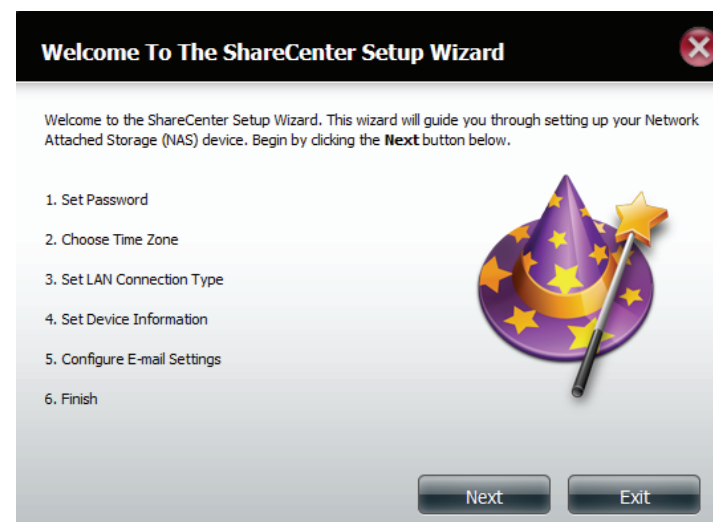
## Setup Wizard (Web UI)

The ShareCenter™ has a Setup Wizard that allows you to quickly configure some of the basic device settings. Click the **Setup Wizard** icon to start the Setup Wizard.

**Step 1** - Click the **Run Wizard** button to start the setup wizard.

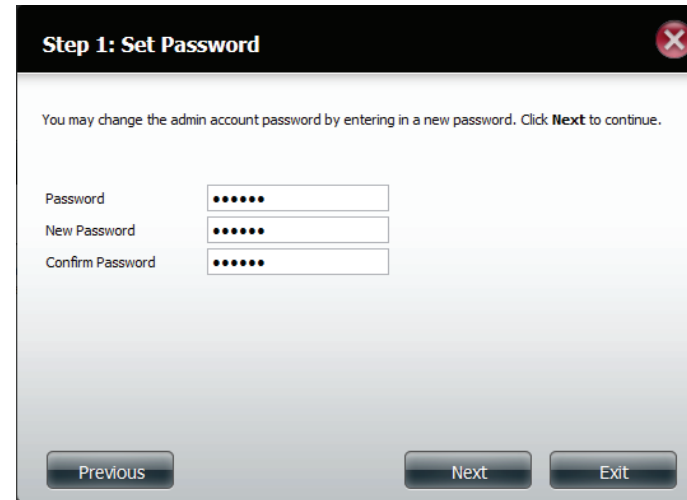


**Step 2** - Click **Next** to continue.



**Step 3** - Update the administrator account password here and confirm the password or leave it blank.

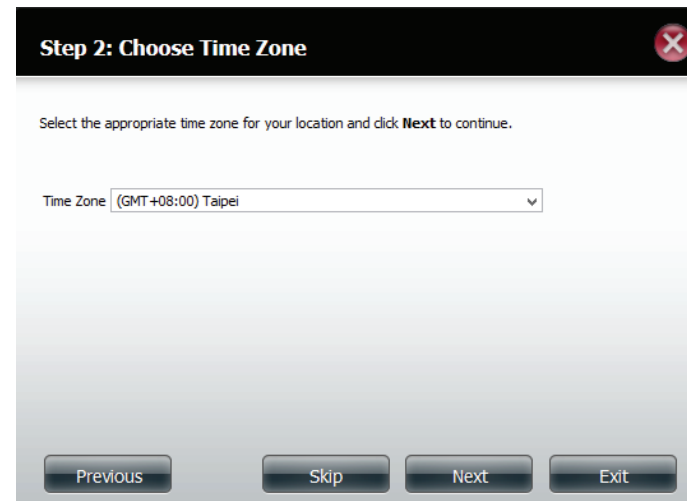
Click **Next** to continue.



The screenshot shows a configuration window titled "Step 1: Set Password" with a red close button in the top right corner. Below the title bar, a message reads: "You may change the admin account password by entering in a new password. Click **Next** to continue." There are three input fields: "Password", "New Password", and "Confirm Password", each containing six black dots. At the bottom, there are three buttons: "Previous", "Next", and "Exit".

**Step 4** - Set the time zone from the drop-down menu to the appropriate geographical zone closest to your location.

Click **Next** to continue or click **Skip** to ignore these settings.



The screenshot shows a configuration window titled "Step 2: Choose Time Zone" with a red close button in the top right corner. Below the title bar, a message reads: "Select the appropriate time zone for your location and click **Next** to continue." There is a "Time Zone" label followed by a drop-down menu showing "(GMT+08:00) Taipei". At the bottom, there are four buttons: "Previous", "Skip", "Next", and "Exit".



**Step 5** - Select **DHCP** to obtain IP settings automatically from a DHCP server (router) or **Static** to assign the parameters below manually.

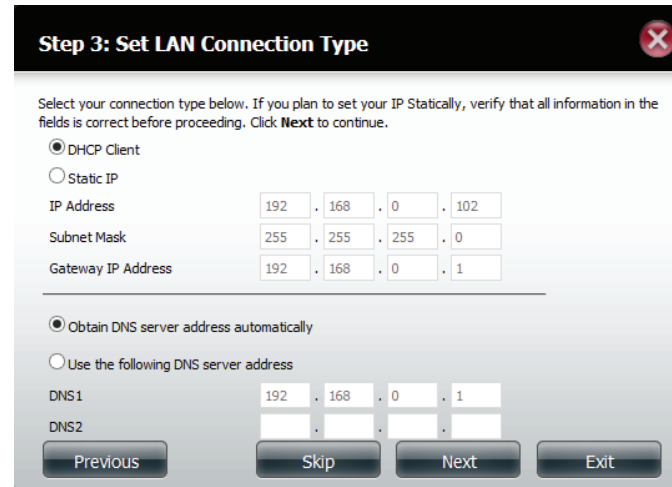
**IP Address:** Enter an IP address for the DNS-320L.

**Subnet Mask:** Enter the subnet mask of your network.

**Gateway IP Address:** Enter the IP address of your gateway (usually the local IP of your router).

**DNS Servers:** Enter the IP address(es) of your DNS server(s). DNS1 is usually the IP address of your router.

Click **Next** to continue or click **Skip** to ignore these settings.



**Step 3: Set LAN Connection Type**

Select your connection type below. If you plan to set your IP statically, verify that all information in the fields is correct before proceeding. Click **Next** to continue.

☒ DHCP Client

☐ Static IP

IP Address: 192 . 168 . 0 . 102

Subnet Mask: 255 . 255 . 255 . 0

Gateway IP Address: 192 . 168 . 0 . 1

☒ Obtain DNS server address automatically

☐ Use the following DNS server address

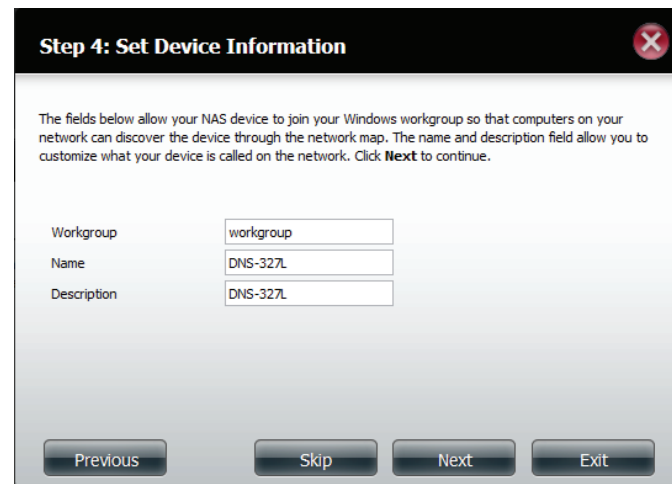
DNS1: 192 . 168 . 0 . 1

DNS2: . . . .

Previous Skip Next Exit

**Step 6** - Here you can assign a workgroup and name to the ShareCenter™ with a short description.

Click **Next** to continue or click **Skip** to ignore these settings.



**Step 4: Set Device Information**


The fields below allow your NAS device to join your Windows workgroup so that computers on your network can discover the device through the network map. The name and description field allow you to customize what your device is called on the network. Click **Next** to continue.

Workgroup: workgroup

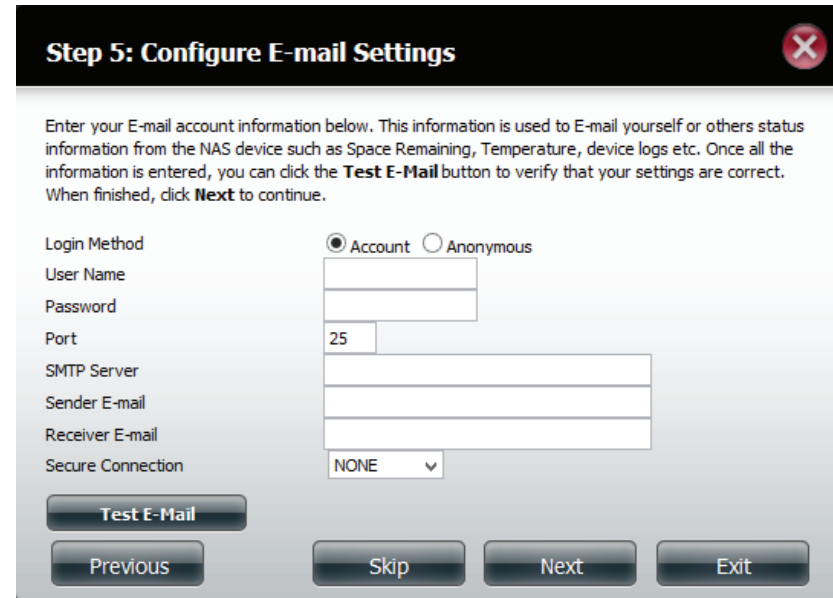
Name: DNS-327L

Description: DNS-327L

Previous Skip Next Exit

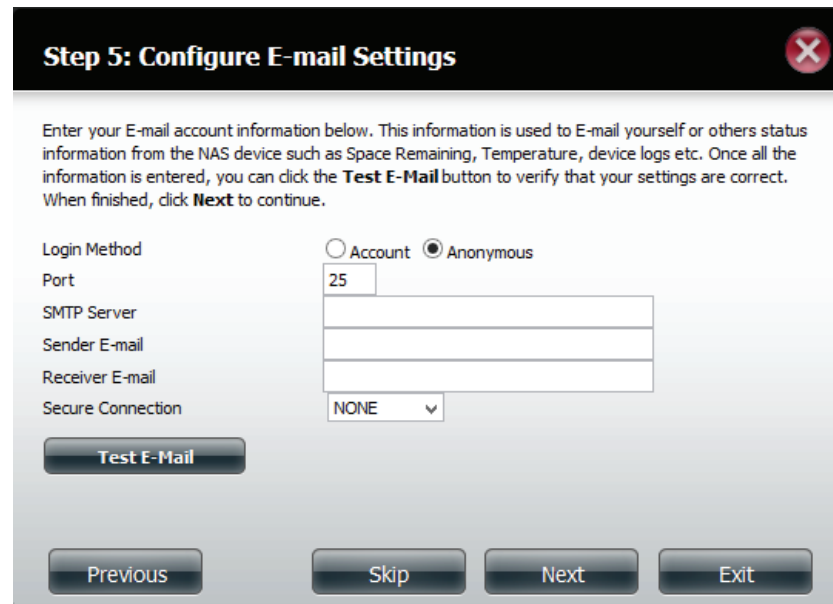
**Step 7** - Click **Account** and enter your e-mail information in the boxes provided to receive Event Alerts from the ShareCenter™. Click the  button to test your settings.

Click **Next** to continue or click **Skip** to ignore these settings.

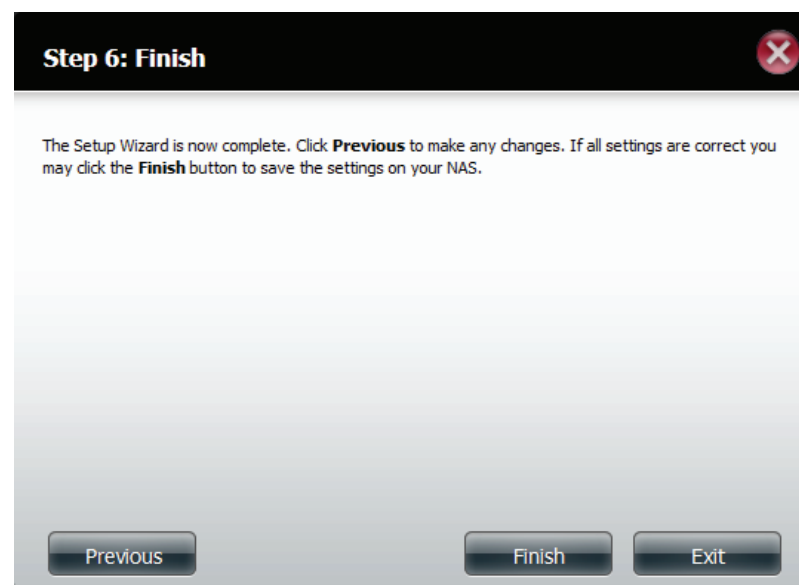


**Step 8** - Click **Anonymous** to create a random account with no specific settings. Click the Test Email button to test your settings.

Click **Next** to continue or click **Skip** to ignore these settings.



**Step 9** - Click the **Previous** button to go back and check your settings. If you are satisfied with the settings, click the **Finish** button to save and complete the wizard. Click **Exit** to end the wizard without saving the settings.



# Disk Management

## Hard Drive Configuration

To setup the Hard Drive RAID configuration of your ShareCenter™, click on the Management tab and then the **Disk Management** icon. Select the Hard Drive Configuration menu item on the left of the window. This menu will allow you to set the RAID type and format your hard drives.

**Hard Drive Configuration:** Your ShareCenter™ hard drives can be configured here and formatted in various RAID configurations.

**Current Raid Type:** If the drives are already formatted the RAID configuration will be displayed here.

**Set RAID type and Reformat:** Click on this button to launch a wizard that allows you to select the RAID configuration and format the drives.

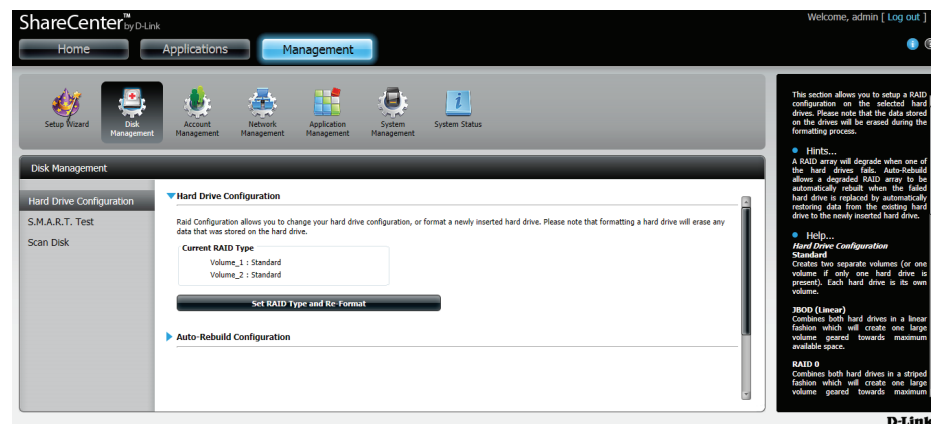
**Auto-Rebuild Configuration:** If you have chosen RAID 1 as the configuration option, then set the Auto-Rebuild function here using the radio buttons.

**Enable Auto-Rebuild:** Enabling Auto-Rebuild will rebuild a failed RAID 1 drive when a new drive has replaced the degraded one.

**Disable Auto-Rebuild:** If you do not want to automatically rebuild drives after a failure when using the RAID 1 functionality then you can check this option.

**Note:** You can still rebuild a drive using the RAID 1 functionality however you must initiate the rebuild manually.

**Manual Rebuild Now:** If Auto-Rebuild is disabled then you can use the Manual Rebuild option by clicking this button.



## Hard Drive Configuration Wizard

When you click on the **Set RAID type and Re-Format** button in the Disk Management-Hard Drive Configuration menu a wizard will start, allowing you to format your drives and create the volume RAID format. The following is an example of a standard volume configuration:

The Hard Drive Configuration page displays the current RAID configuration under 'Current RAID Type'.

### Current RAID Type

Volume\_1 : Standard

Volume\_2 : Standard

Click **Set RAID Type and Re-Format**.

Set RAID Type and Re-Format

The Setup Wizard begins.

### Step 1 :Physical Disk Information

Change the hard drive configuration and format the new hard drive(s). All data stored on this drive will be erased when you format the drive(s). Click **Next** to continue.

This wizard will guide you through the following settings:

- 1.Physical Disk Information
- 2.Select A RAID Type
- 3.Volume Configuration Summary
- 4.Formatting Hard Drive(s)
- 5.System Is Updating
- 6.Setup Completed



Next

Exit

The 'Physical Disk Information' page displays all of the hard drives on the DNS-320L. It shows the array number, vendor, model, serial number, and drive capacity.

Click **Next** to continue.

**Step 1 :Physical Disk Information**

This section provides information on your hard drives. It shows the disk array sequence, the manufacturer, the model and serial number, and disk capacity.

Disk	Vendor	Model	Serial Number	Size
Disk1	WDC	WD5000AACS-00ZUB	WD-WCASU1826715	465.8 GB
Disk2	Hitachi	HCS721010CLA332	JP2940HD2V7HKC	931.5 GB

Previous

Next

Exit

Select the format you want by clicking on the RAID type box (highlight in blue). In this example, it is Standard.

Click **Next** to continue.

**Step 2 :Select A RAID Type**

Select your RAID type.

**Standard**  
Creates separate volumes (or one volume if only one hard drive is present). Each hard drive is its own volume.

**JBOD**  
Supports any number of disks in an array. Each of these disks are accessed directly as an independent drive and maximizes available disk space.

**RAID 0**  
Stripes data across 2 or more drives increasing performance.

**RAID 1**  
Copies exactly one of the data disks and produces a mirrored copy on another disk.

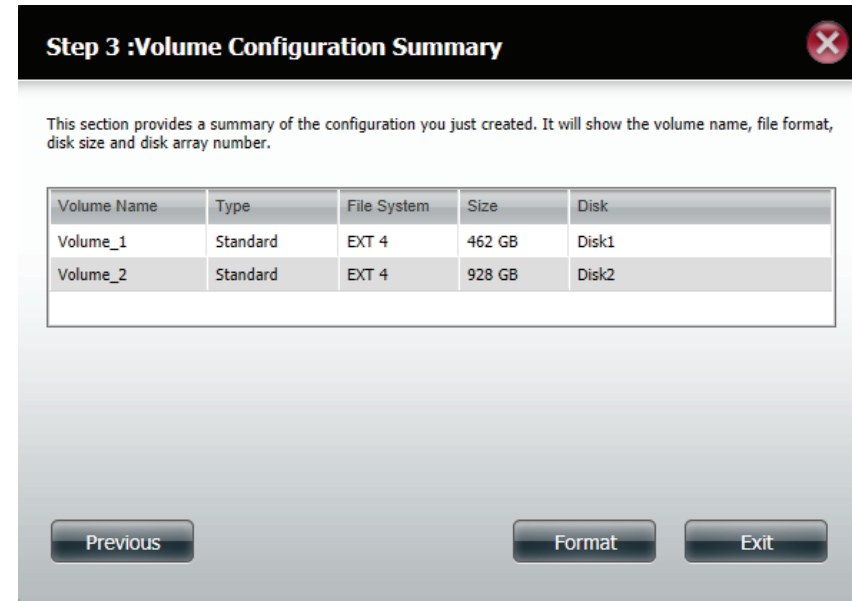
Previous

Next

Exit

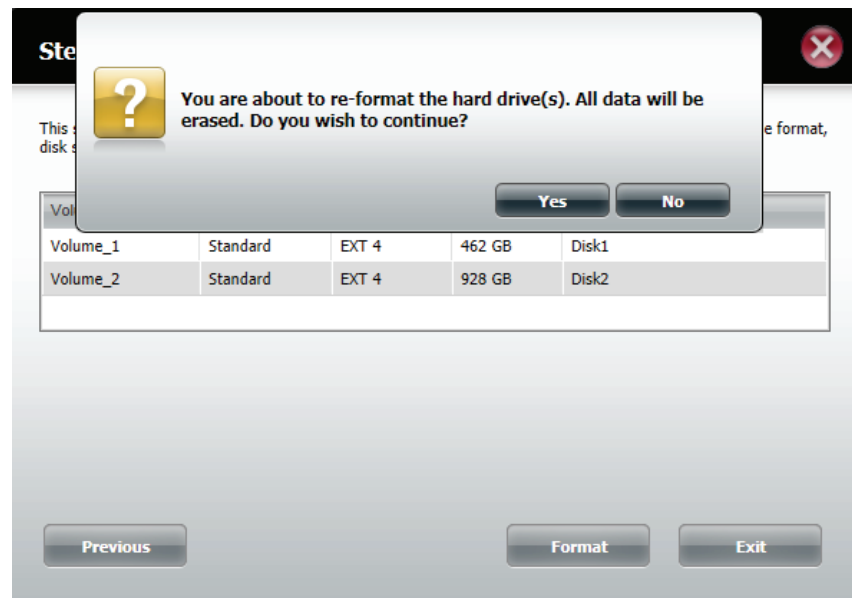
Step 3 shows the Volume Configuration Summary - the Volume Name, Disk Type, File System, Disk Size, and Disk.

Click **Format** to continue.

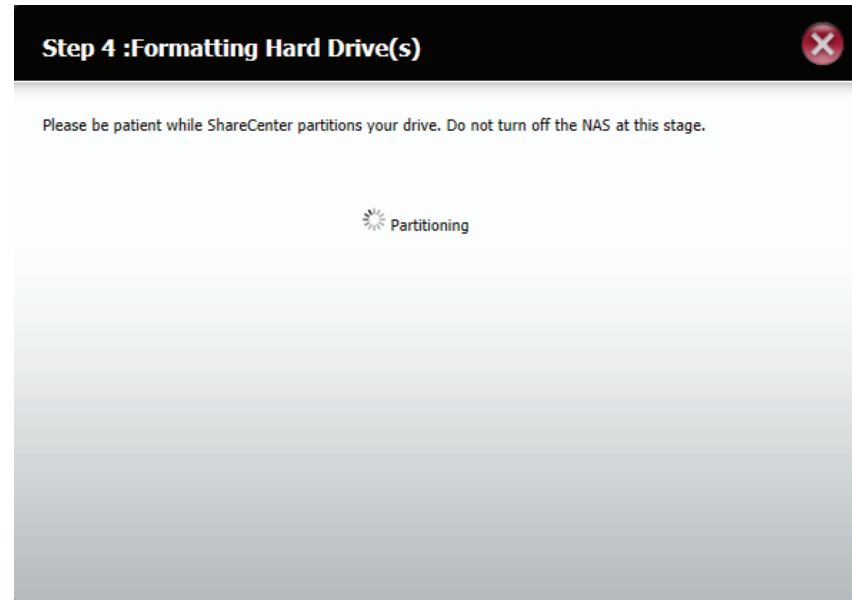


A warning message will appear to inform you that all volumes and data will be formatted and erased.

Click **Yes** to continue.

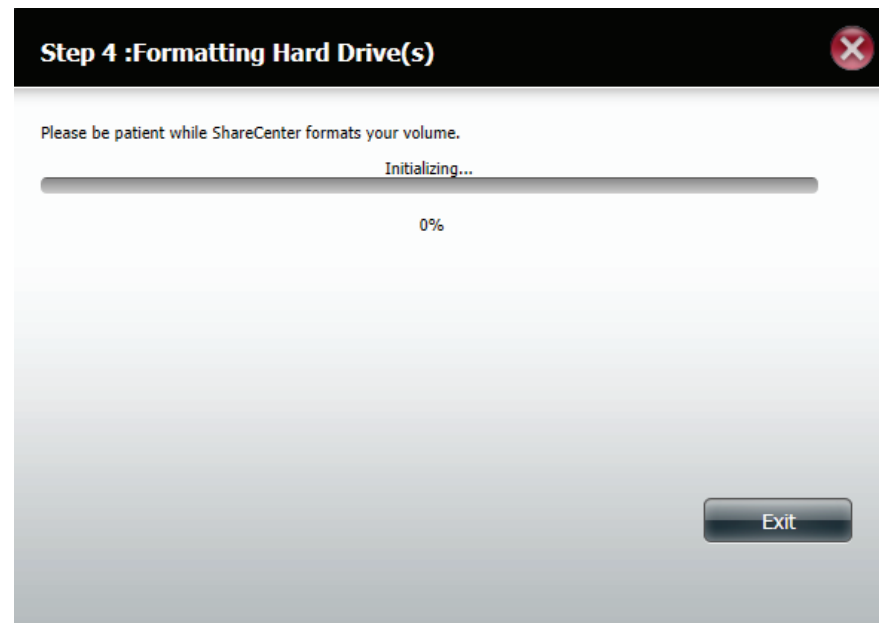


Partitioning will now begin. Please be patient while this process takes place. Do not turn off your NAS during this process.



Once the partition is completed, the system initializes and format of the first drive starts. Do not turn off your NAS during this process.

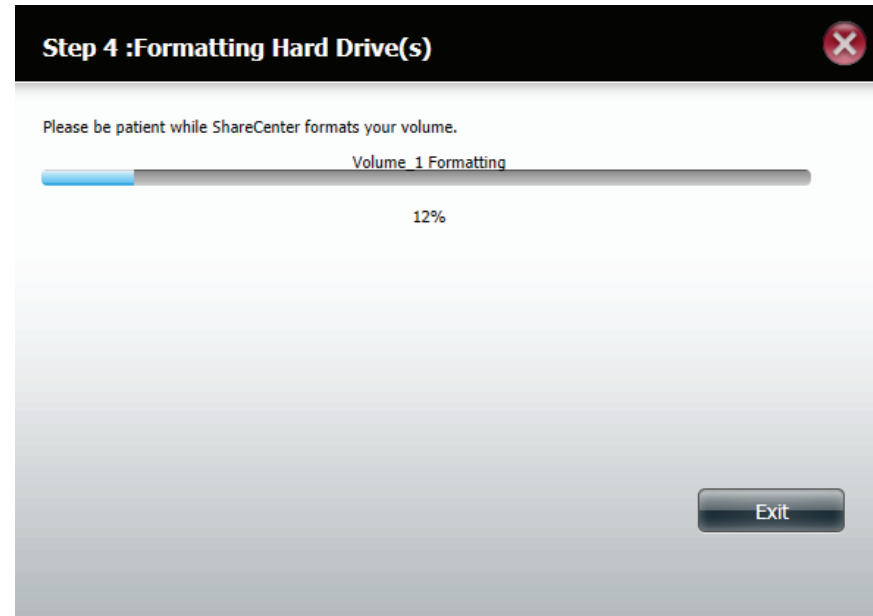
If you would like to change your settings at this stage, click **Exit**.





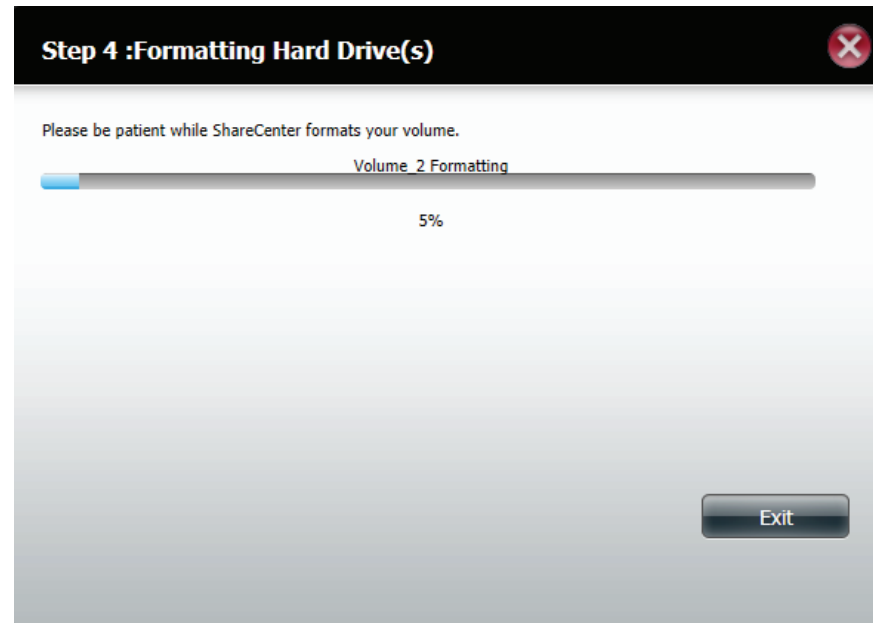
The wizard starts to format the first Volume.

If you would like to change your settings at this stage, click **Exit**.



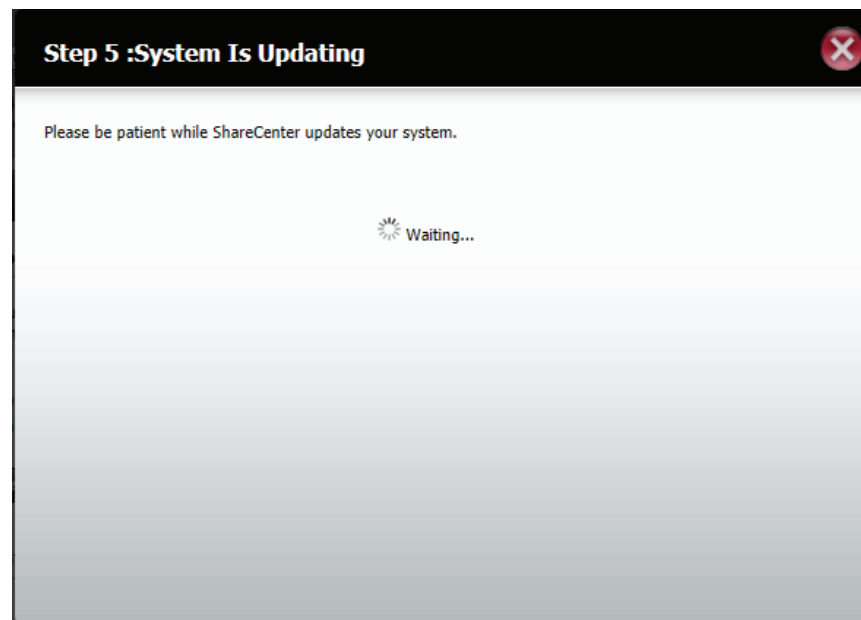
The wizard starts to format the second Volume.

If you would like to change your settings at this stage, click **Exit**.



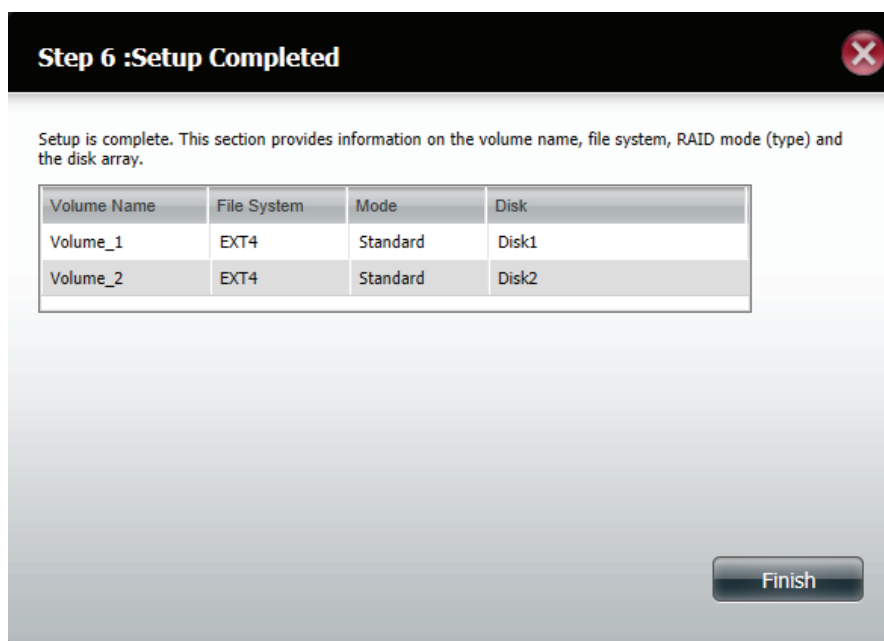
The system will now update all of the changes made.

Please be patient during this process. Do not turn off your NAS during this process.

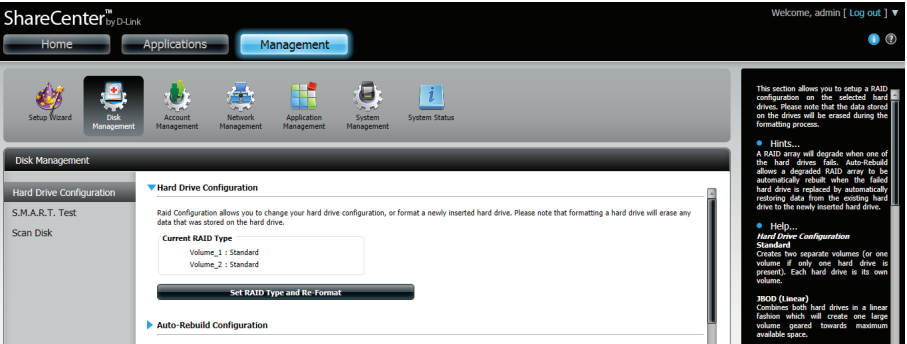


The wizard is now complete. It shows the **Volume number(s)**, **file system** selected, the type of **RAID**, and the **disk formation** in the RAID.

Click **Finish** to complete the process and start using your DNS-320L.



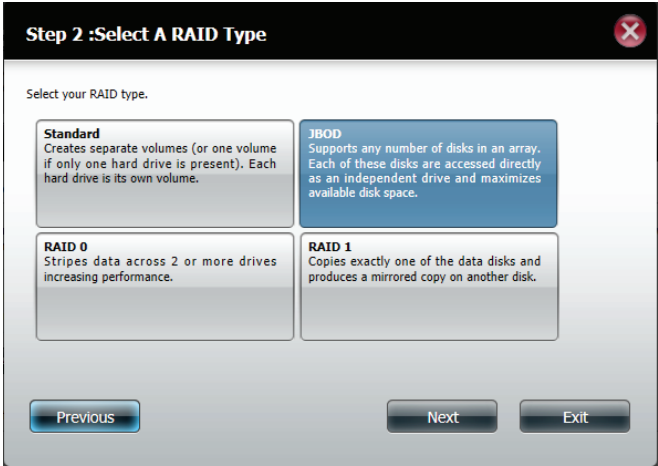
On completion, you are redirected back to the main Disk Management GUI.



# JBOD

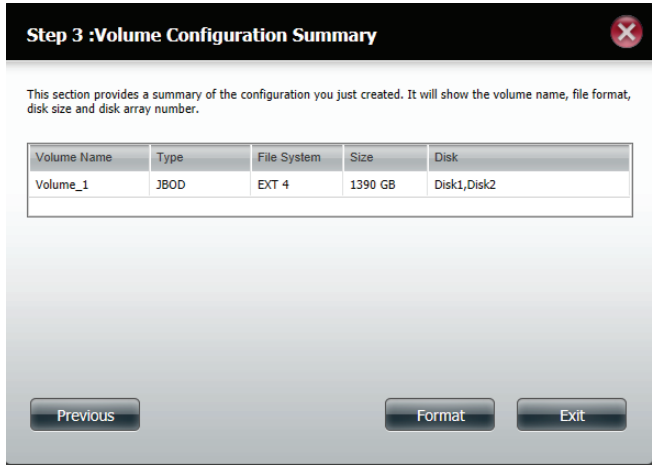
Select **JBOD** to create a single volume from all of the drives.

Click **Next** to continue.



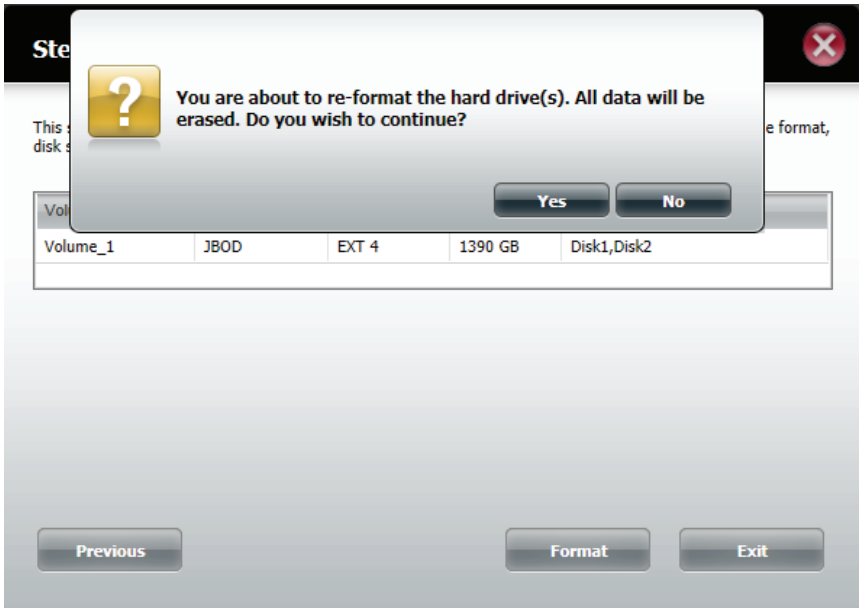
Step 3 displays the **Volume Configuration Summary** before enabling JBOD. On display is the **Volume Name**, the **Type - JBOD**, the **File System**, the size of the combined drive, and the **Disks** participating in the JBOD.

Click **Format** to continue.

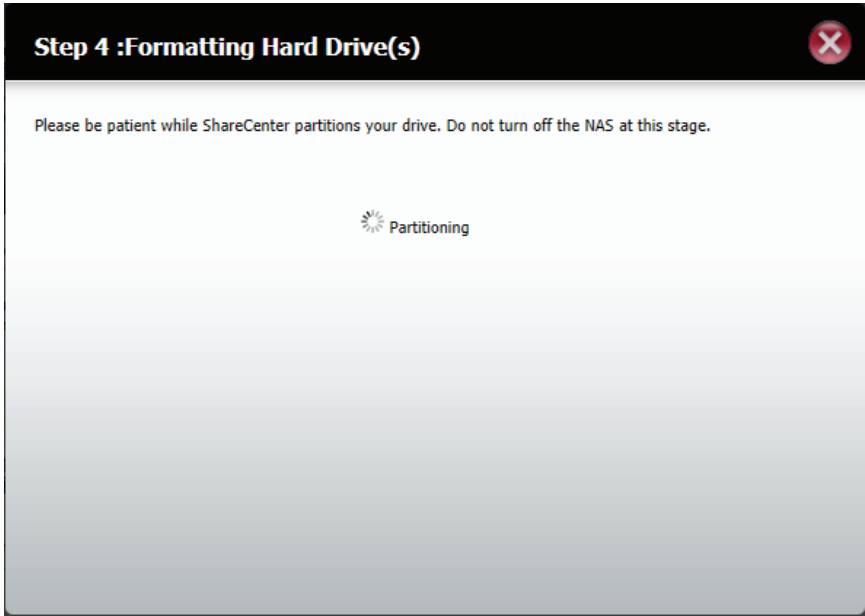


A warning message appears indicating that you will format the disk.

Click **Yes** to continue.

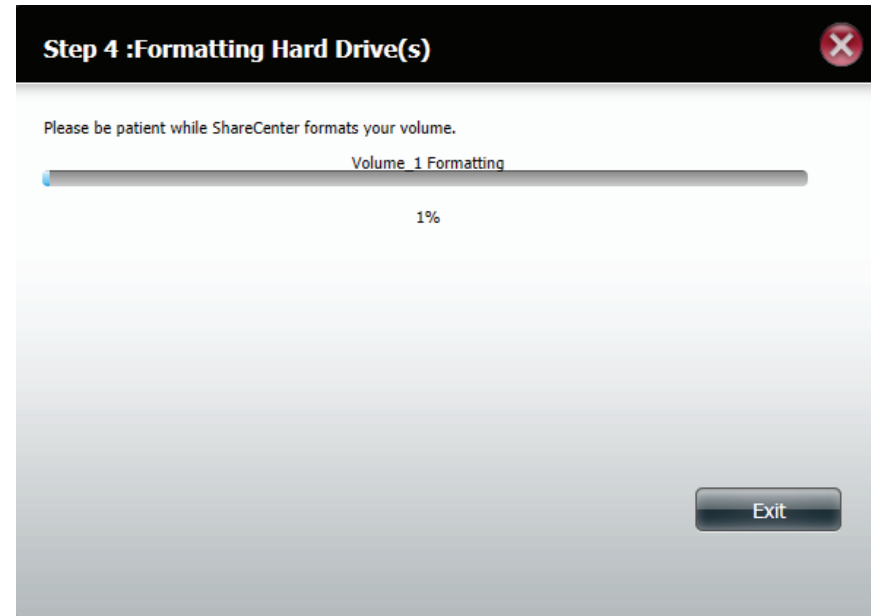


The Wizard starts to partition the drive.

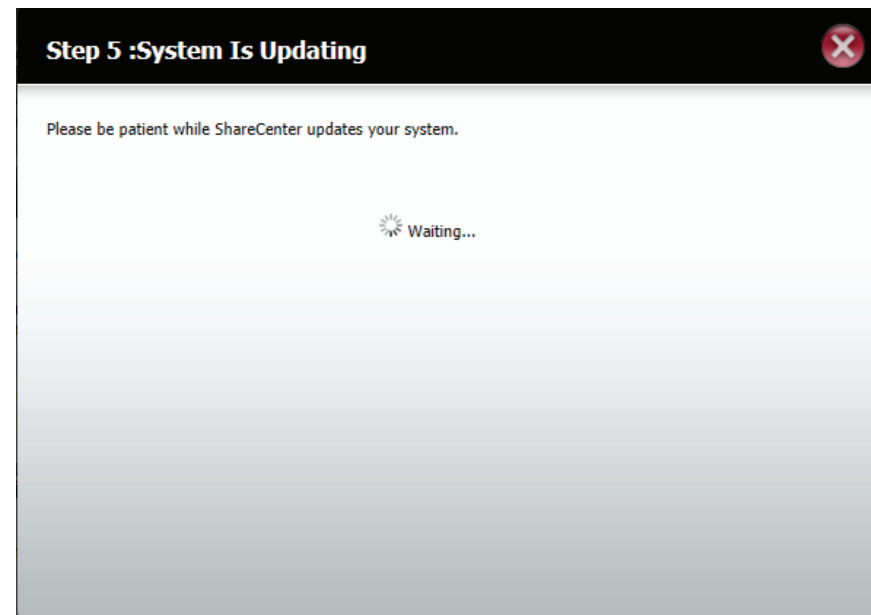


The Wizard formats the first Volume.

Click **Exit** to stop this process.

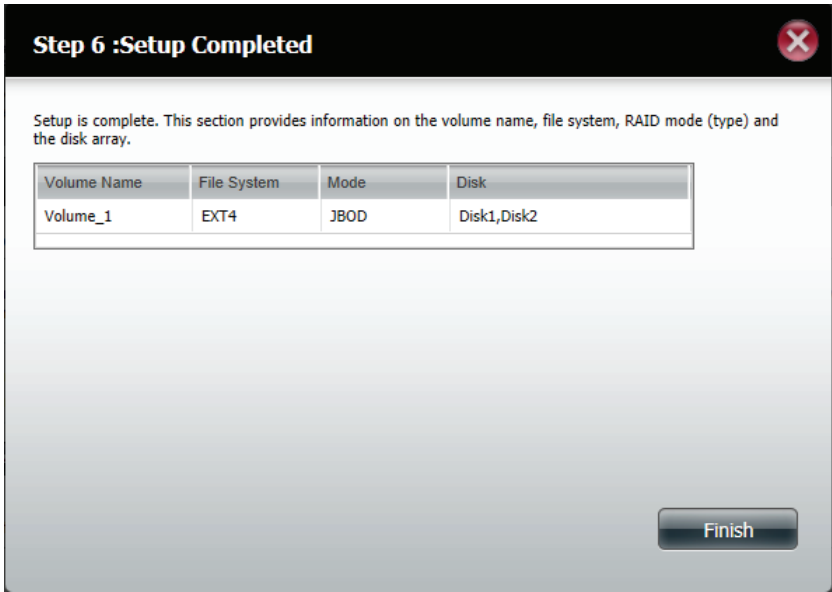


The Wizard updates the system.

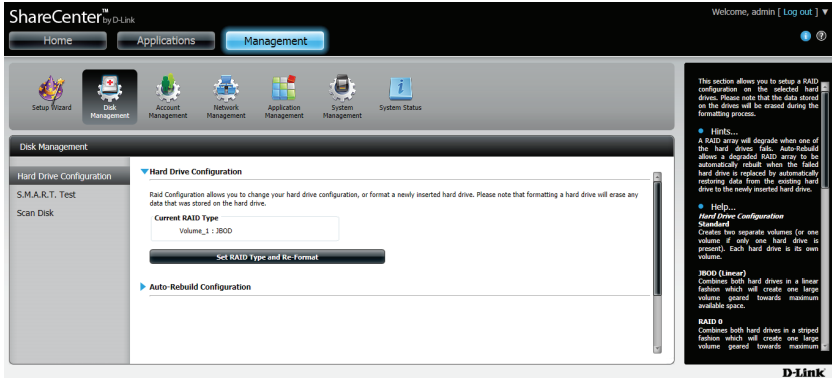


Setup is complete.

Click **Finish** to continue.



The Wizard automatically returns to the main screen and displays the JBOD.

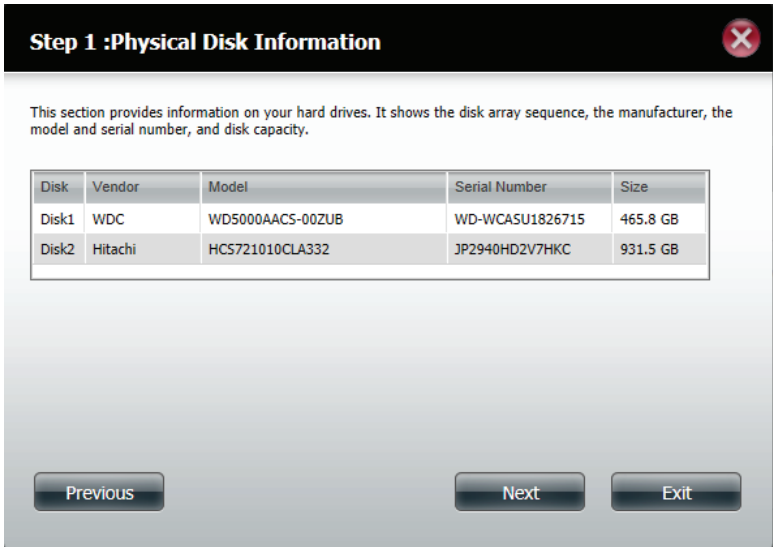


RAID 0

Start the Wizard.



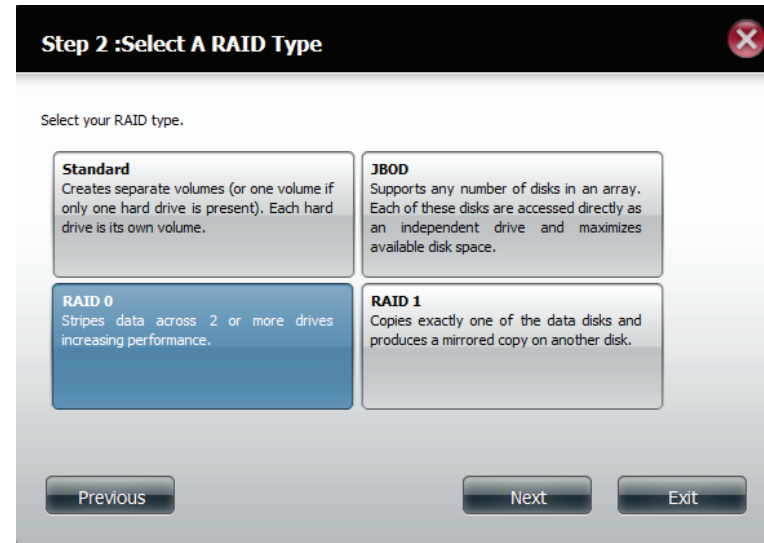
**Step 1** displays your current **Physical Disk Information**.





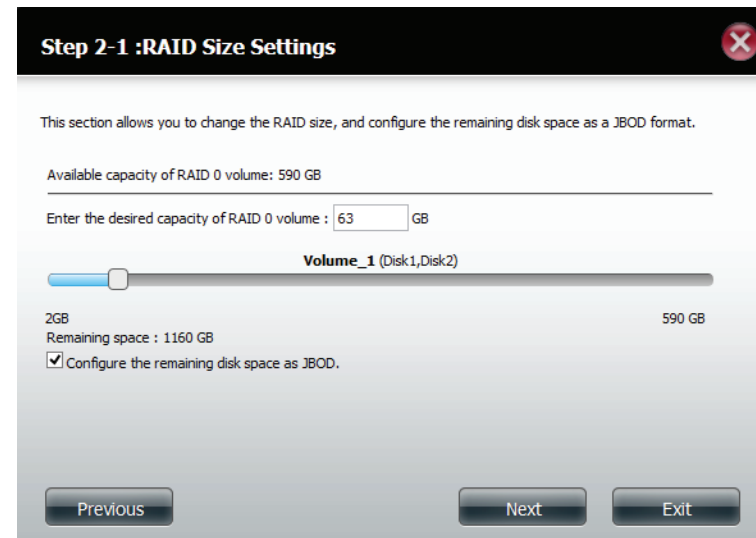
Step 2, select RAID 0 (stripes all of the drives).

Click **Next** to continue.



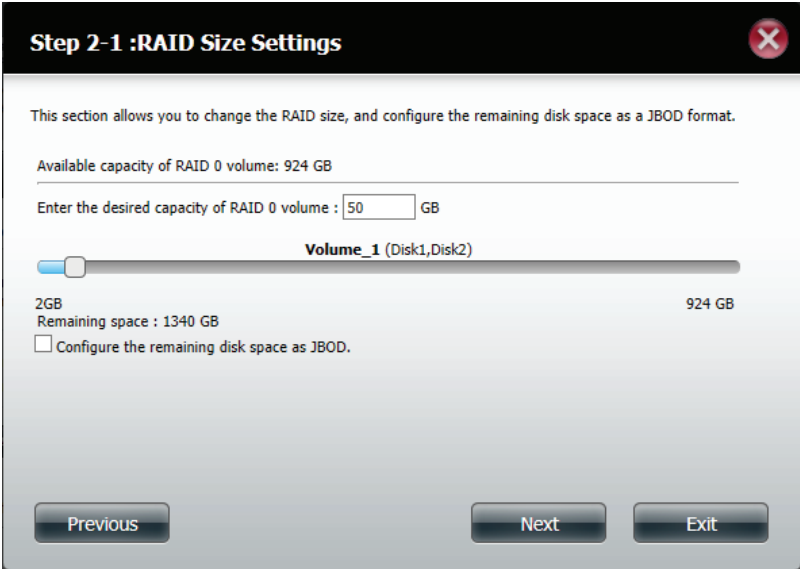
**RAID Size Settings** allows you to tweak the size of the **RAID Volume**. Use the slider to change the RAID size or enter an amount in the field provided. Click the “**Configure the remaining disk space as JBOD**” if you wish to use the remaining space for another RAID configuration.

Click **Next** to continue.



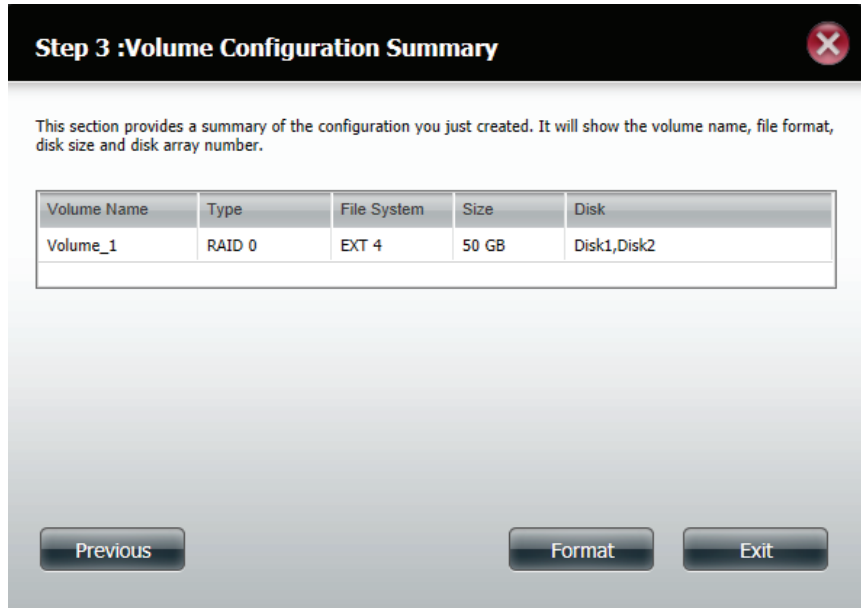
You can also deselect the “Configure the remaining disk space as JBOD”.

Click **Next** to continue.



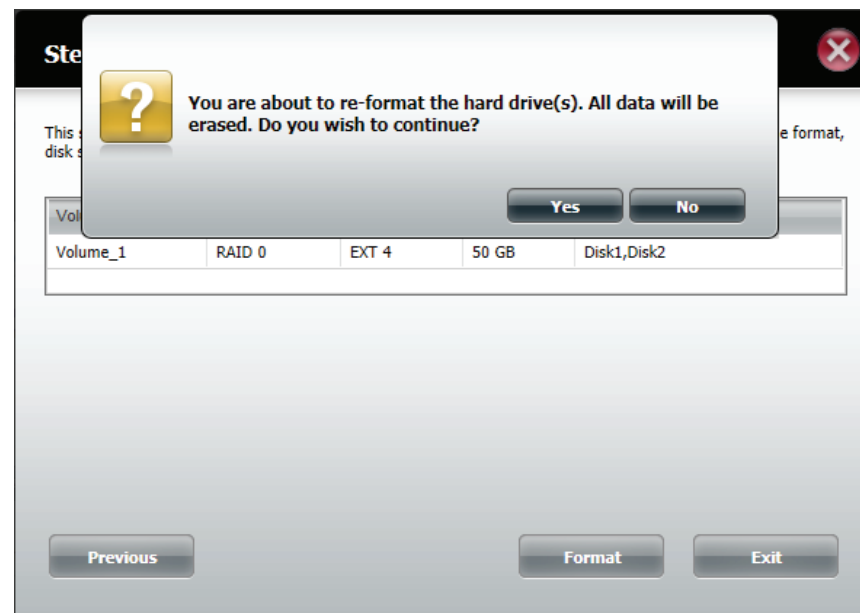
**Step 3**, it displays the **Volume Configuration Summary**.

Click **Format** to continue.

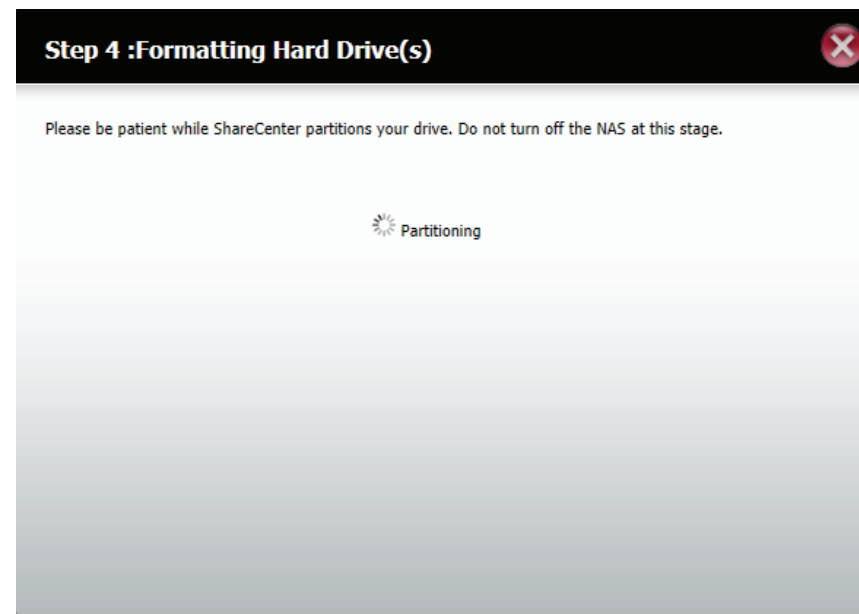


A pop-up screen displays a warning message that your disk will be formatted.

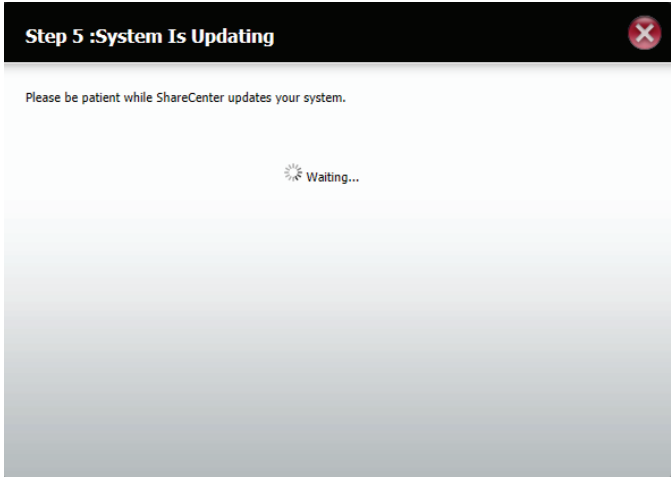
Click **Yes** to continue.



**Step 4**, the **Wizard** starts to format and partition the drive.

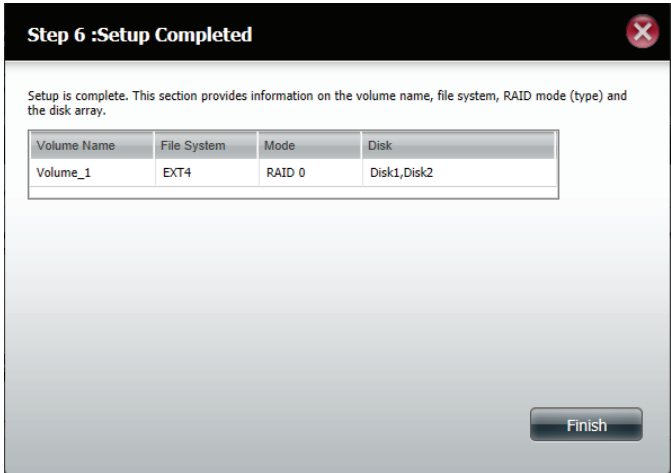


**Step 5**, the Wizard updates the system.



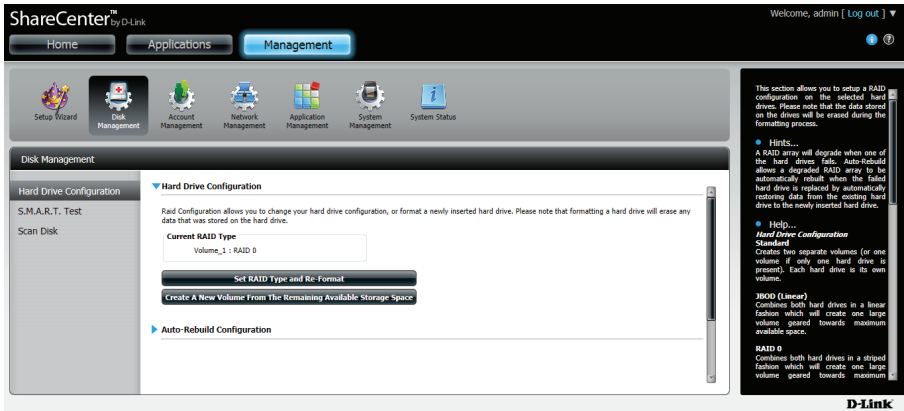
**Step 6**, the **Wizard** and **Setup** is complete. View the **Volume Name, File System, Mode and Disk**.

Click **Finish** to continue.



The wizard returns you to main **Hardware Configuration** page.

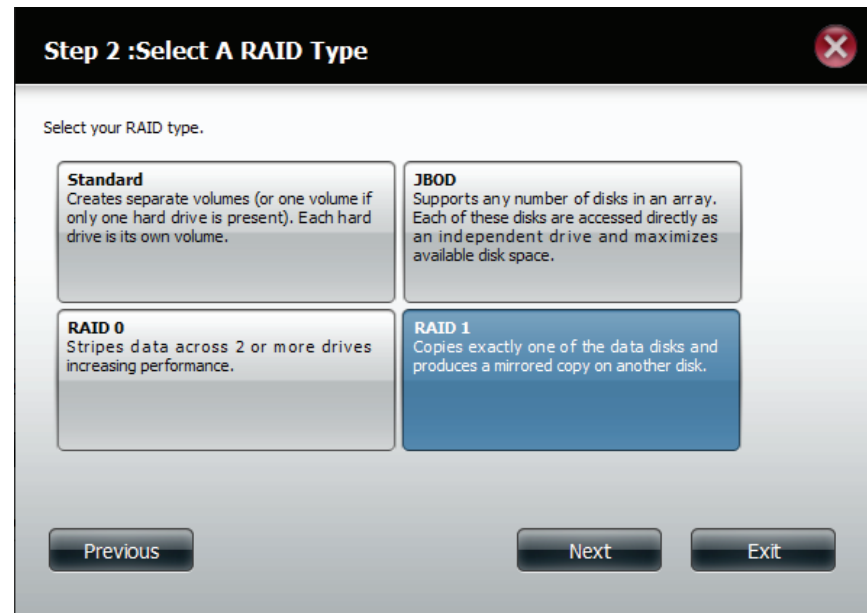
Under **Current RAID Type**, you can view your changes.





Select the **RAID TYPE** you want

Click **Next** to continue.



**Step 2 :Select A RAID Type**

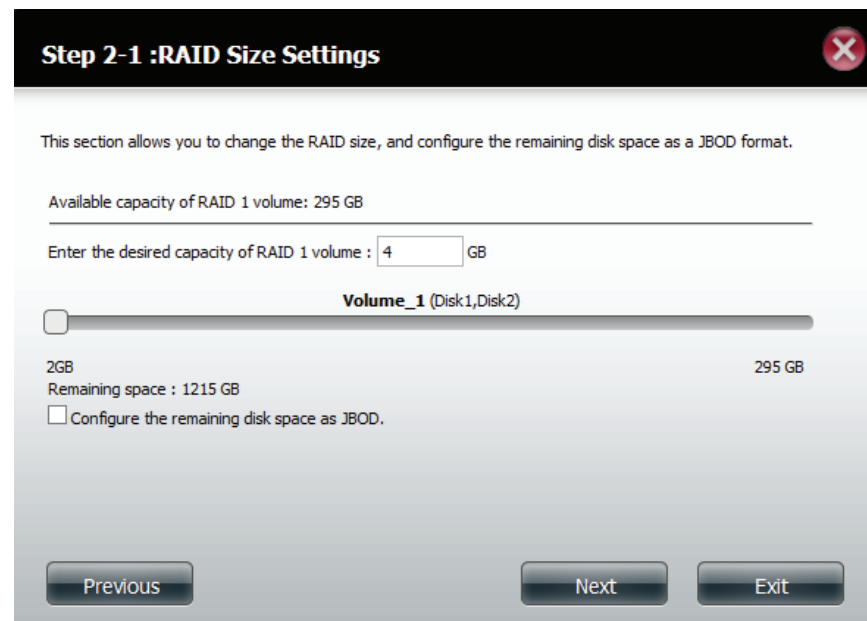
Select your RAID type.

<b>Standard</b> Creates separate volumes (or one volume if only one hard drive is present). Each hard drive is its own volume.	<b>JBOD</b> Supports any number of disks in an array. Each of these disks are accessed directly as an independent drive and maximizes available disk space.
<b>RAID 0</b> Stripes data across 2 or more drives increasing performance.	<b>RAID 1</b> Copies exactly one of the data disks and produces a mirrored copy on another disk.

Previous Next Exit

**RAID Size Settings** allows you to tweak the size of the **RAID Volume**. Use the slider to change the RAID size or enter an amount in the field provided. Click the “**Configure the remaining disk space as JBOD**” if you wish to use the remaining space for another RAID configuration.

Click **Next** to continue.



**Step 2-1 :RAID Size Settings**

This section allows you to change the RAID size, and configure the remaining disk space as a JBOD format.

Available capacity of RAID 1 volume: 295 GB

Enter the desired capacity of RAID 1 volume : 4 GB

☐ **Volume\_1** (Disk1,Disk2)

2GB 295 GB

Remaining space : 1215 GB

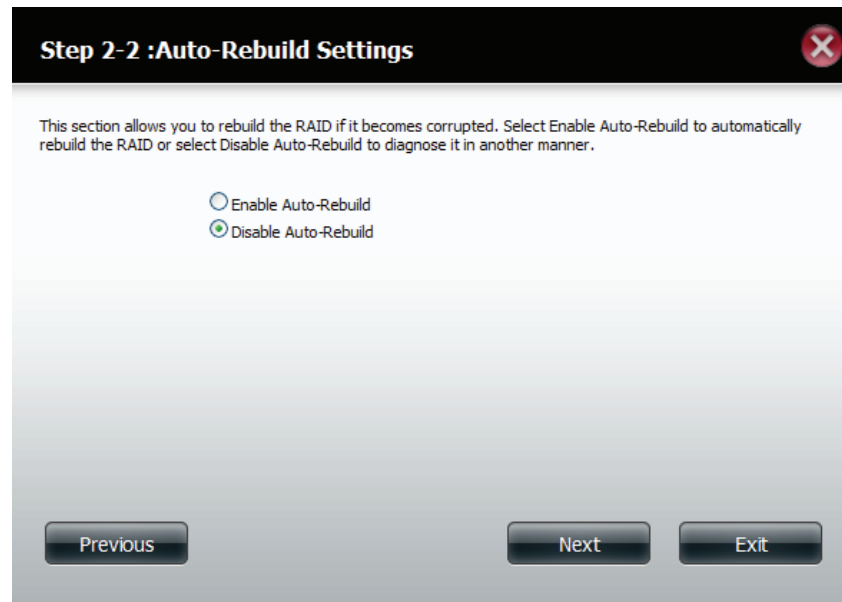
☐ Configure the remaining disk space as JBOD.

Previous Next Exit

Click **Enable Auto-Rebuild** to automatically rebuild a failed drive if it has been replaced with a new one.

Select **Disable Auto-Rebuild** if you want to start the rebuild process manually after replacing a failed drive.

Click **Next** to continue.



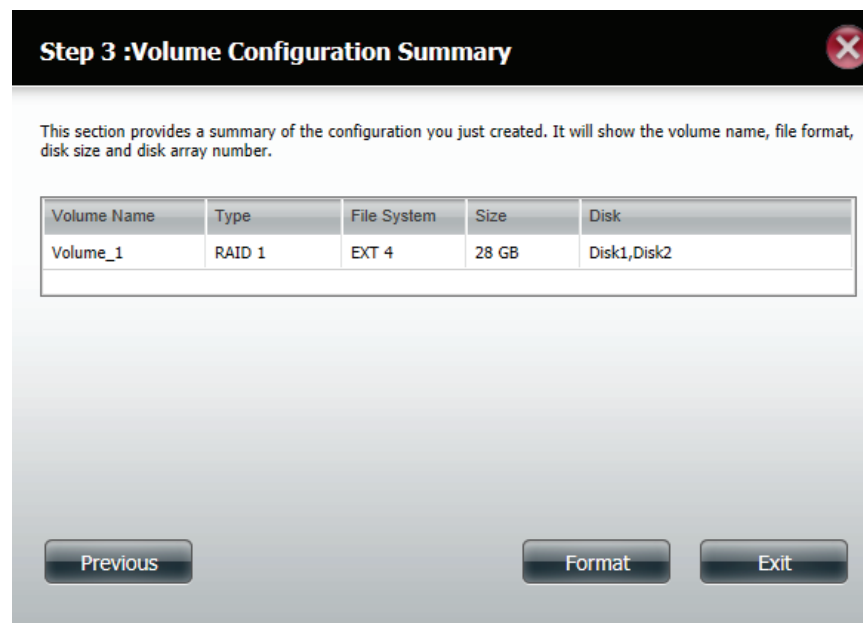
**Step 2-2 :Auto-Rebuild Settings**

This section allows you to rebuild the RAID if it becomes corrupted. Select Enable Auto-Rebuild to automatically rebuild the RAID or select Disable Auto-Rebuild to diagnose it in another manner.

☐ Enable Auto-Rebuild  
☒ Disable Auto-Rebuild

Previous Next Exit

The 'Volume Configuration Summary' shows details on all of the configured drives. Check the details on the list and click **Format** to continue or click **Previous** to make changes.



**Step 3 :Volume Configuration Summary**

This section provides a summary of the configuration you just created. It will show the volume name, file format, disk size and disk array number.

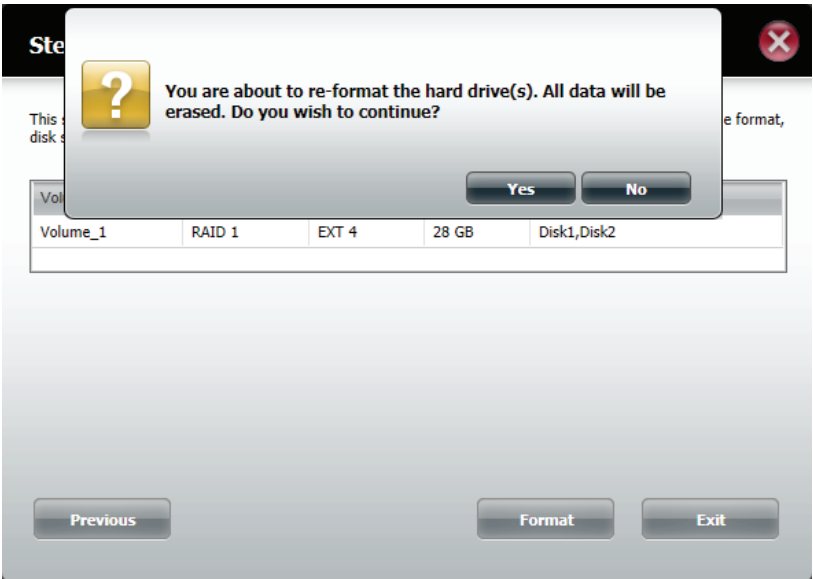
Volume Name	Type	File System	Size	Disk
Volume_1	RAID 1	EXT 4	28 GB	Disk1,Disk2

Previous Format Exit

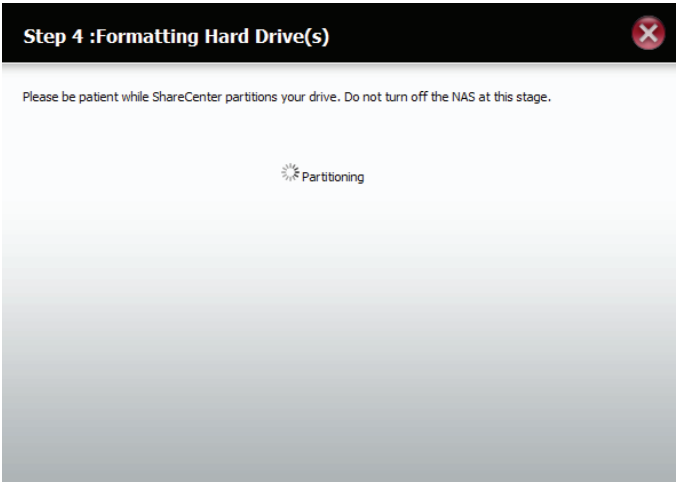


A pop-up screen displays a warning message that your disk will be formatted.

Click **Yes** to continue.

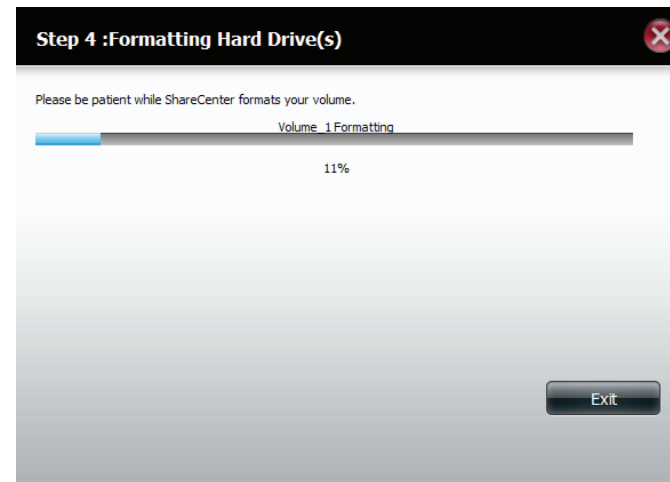


Partitioning will now begin. Please be patient while this process takes place. Do not turn off your NAS during this process.

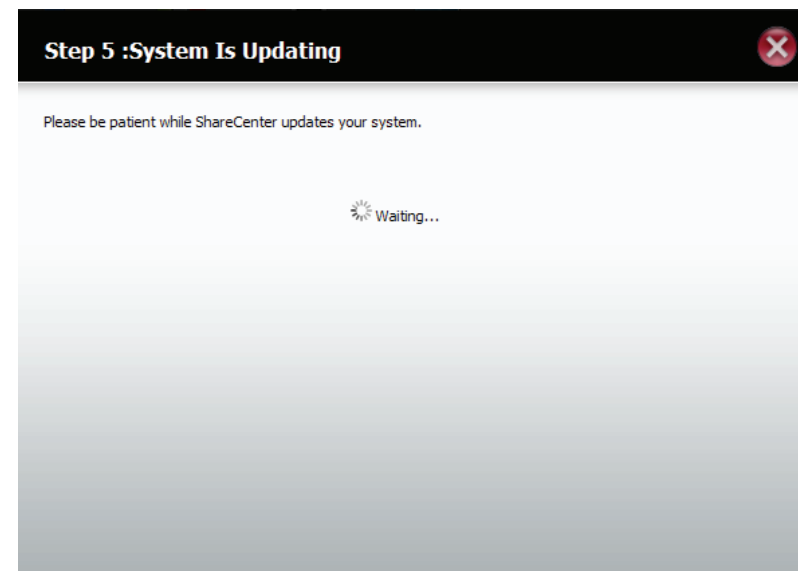


The system formats the Volume.

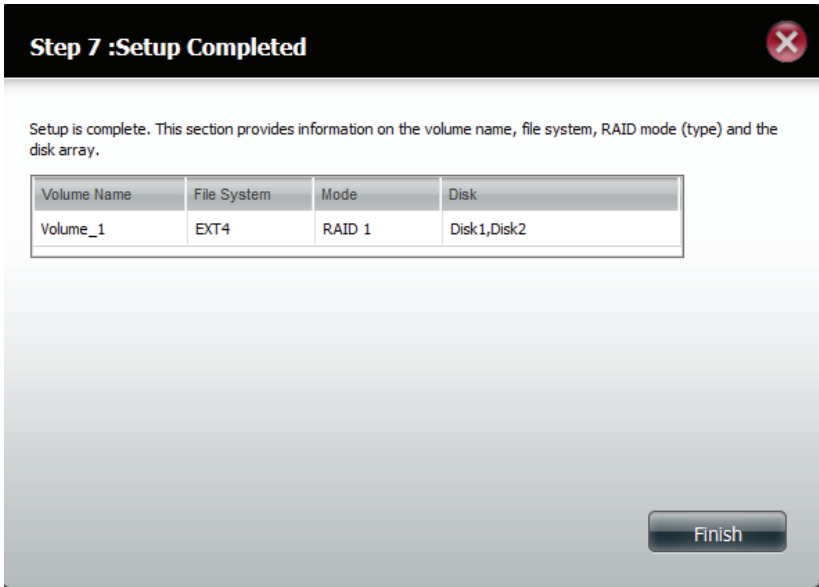
If you would like to change your settings at this stage, click **Exit**.



The system updates.

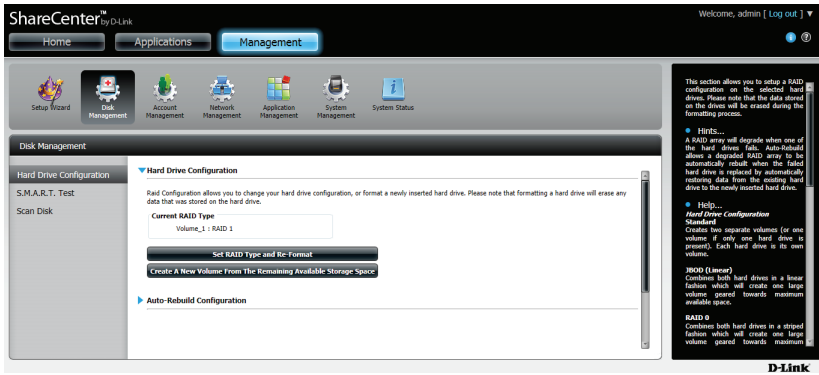


Setup is complete. Setup provides a **Volume Name, File System, and Mode.**



Once you have completed the wizard. ShareCenter™ will return to the main screen.

The RAID 1 configuration you just set will be displayed.



### Hot Swapping to Migrate from Standard Mode to RAID 1

You can add a second hard drive and migrate it from Standard mode to RAID 1 without shutting down the DNS-320L. Standard Mode doesn't offer any redundancy and security of data. It is best then to migrate from Standard Mode to RAID 1. To do this follow these instructions:

**Step 1** - Insert a second hard drive into the DNS-320L.



**Step 2** - Check the second HDD LED status. If the HDD LED is blinking, please wait for the blinking to stop before proceeding.

**Step 3** - Go to Management, Disk Management, Hard Drive Configuration. There are two options available: **Set RAID Type and Re-Format** or **Format the new drive as Standard type**. If you select the latter option your **Hard Drive Configuration Wizard** shows six procedures but if you select the **Set RAID Type and Re-Format**, the **Hard Drive Configuration Wizard** only has four procedures. Take a look at the two images below to compare.

Click **Next** to continue.



**Format the new drive as Standard type.**



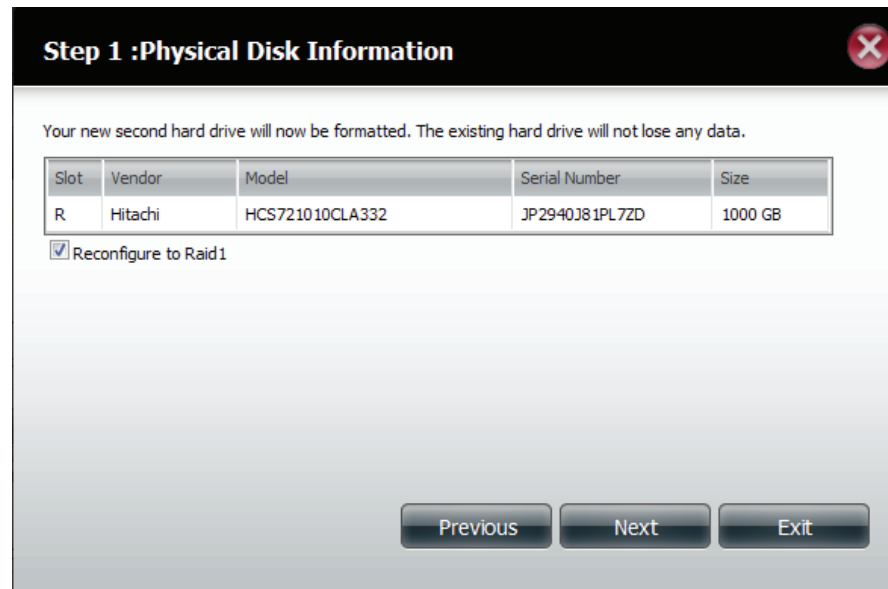
**Set RAID Type and Re-Format.**

## Section 4 - Configuration

**Step 4** - Under **Physical Disk Information**, you will be able to see the drive you just installed. It provides the **slot location**, **vendor**, **model number**, serial number, and **disk size**.

Just below this informational box is a **checkbox** that offers you the option to **Reconfigure** the drive to **RAID 1**. Click the checkbox to proceed.

Click **Next** to continue.



**Step 1 :Physical Disk Information**

Your new second hard drive will now be formatted. The existing hard drive will not lose any data.

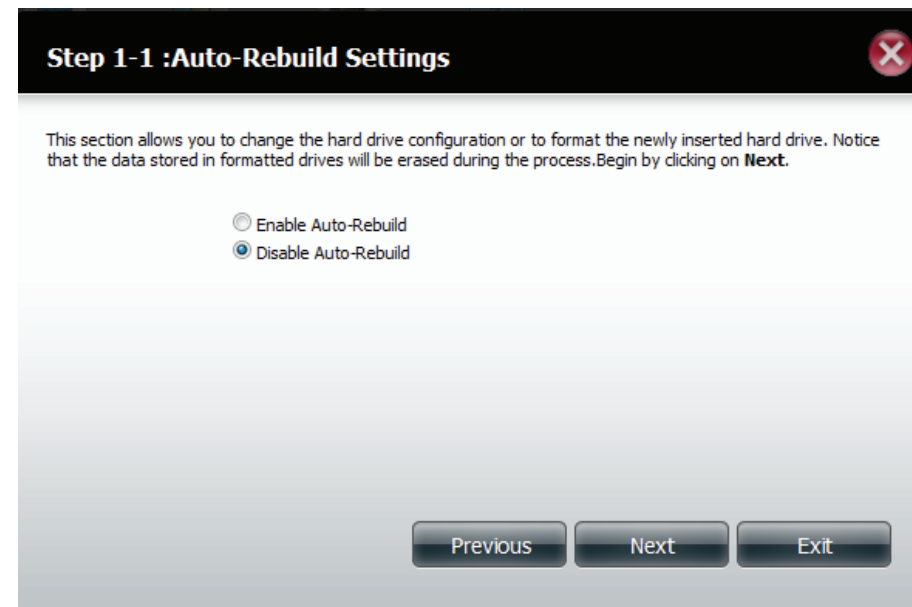
Slot	Vendor	Model	Serial Number	Size
R	Hitachi	HCS721010CLA332	JP2940381PL7ZD	1000 GB

☒ Reconfigure to Raid1

Previous Next Exit

**Step 5** - Under **Auto-Rebuild Settings**, select whether you want to **enable auto rebuild** or **disable auto rebuild**.

Click **Next** to continue.



**Step 1-1 :Auto-Rebuild Settings**

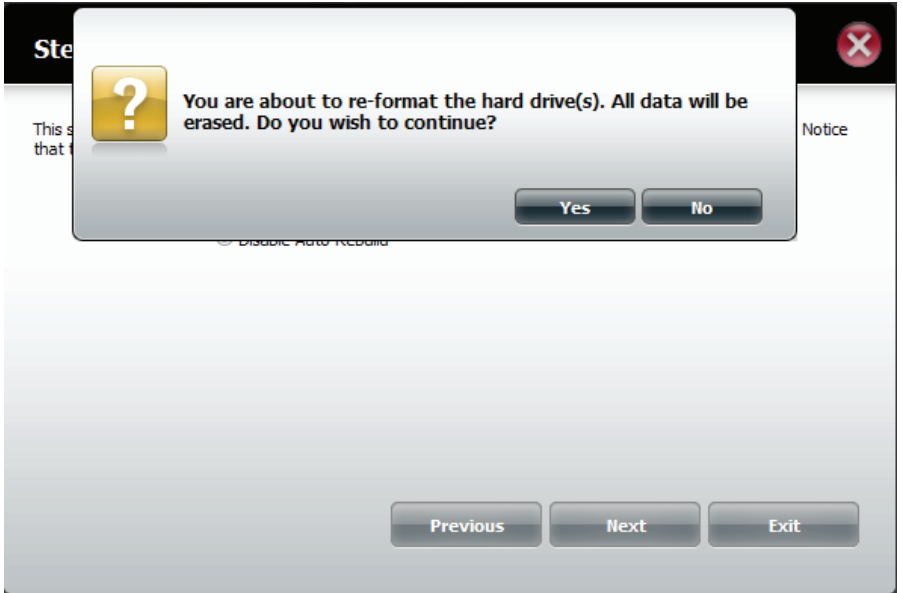
This section allows you to change the hard drive configuration or to format the newly inserted hard drive. Notice that the data stored in formatted drives will be erased during the process.Begin by clicking on **Next**.

☐ Enable Auto-Rebuild  
☒ Disable Auto-Rebuild

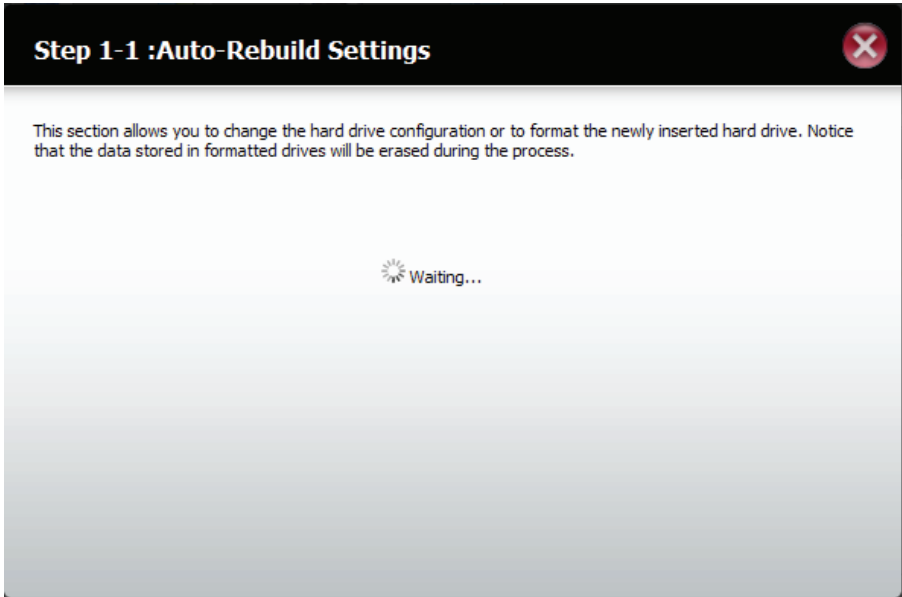
Previous Next Exit

**Step 6** - A warning message will appear prompting you to confirm whether you want to format your hard drive. Click **Yes** to continue or **No** to exit.

Click **Next** to continue.

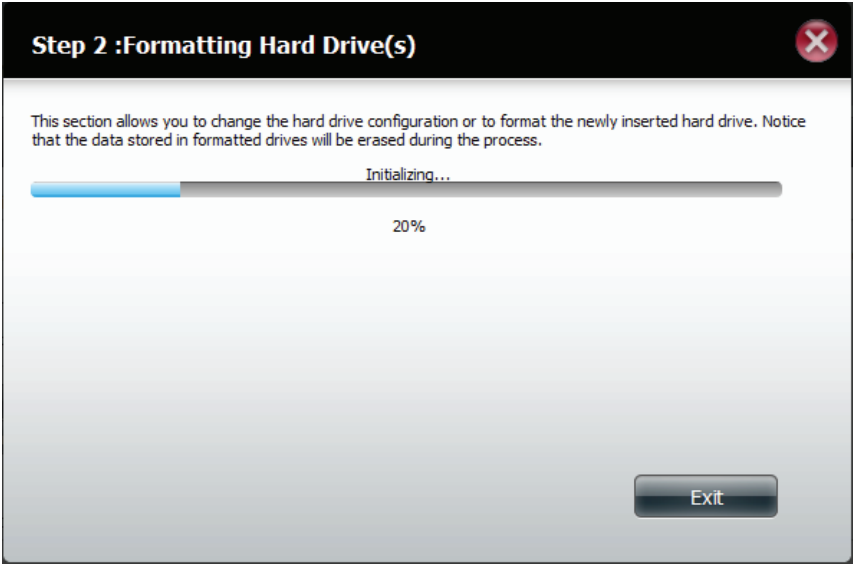


**Step 7** - The software communicates with the hardware to build a list.



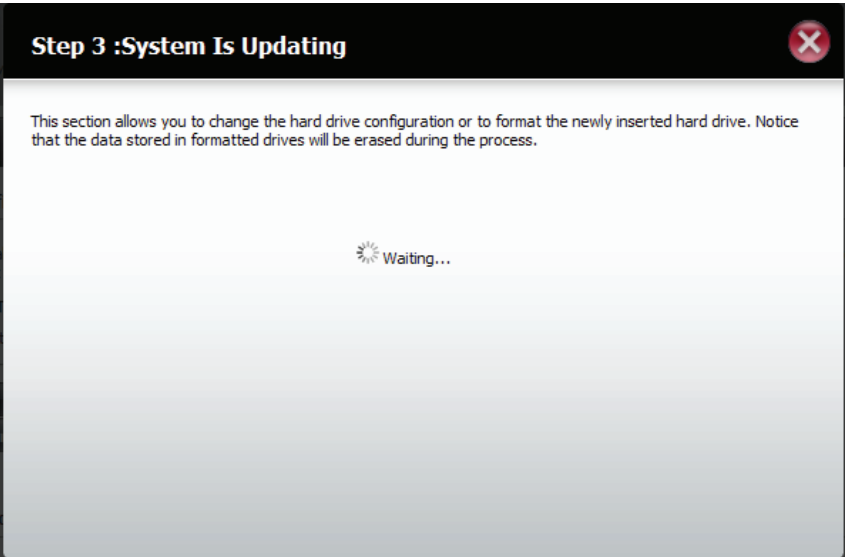
**Step 8** - The Wizard formats the hard drive.

Click **Next** to continue.



**Step 9** - The System updates.

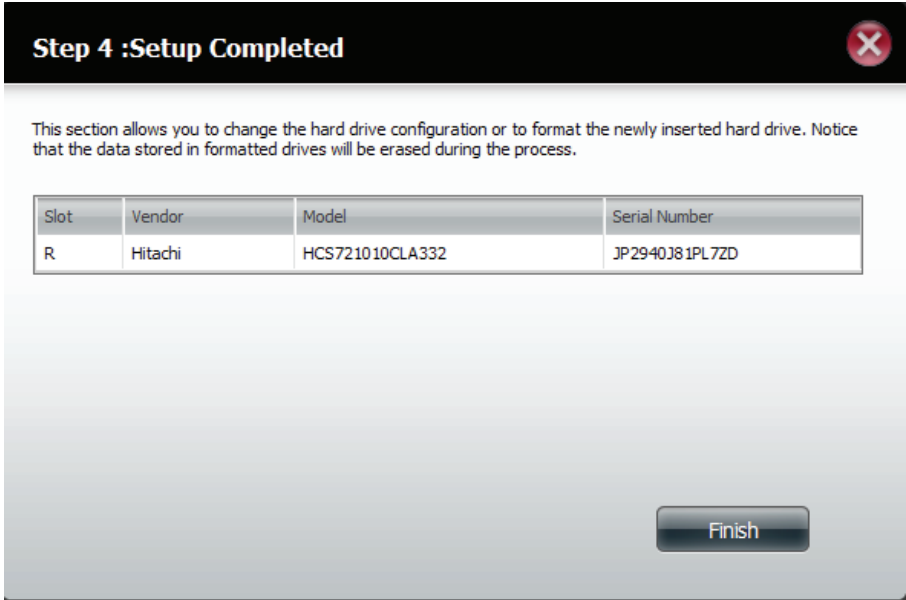
Click **Next** to continue.



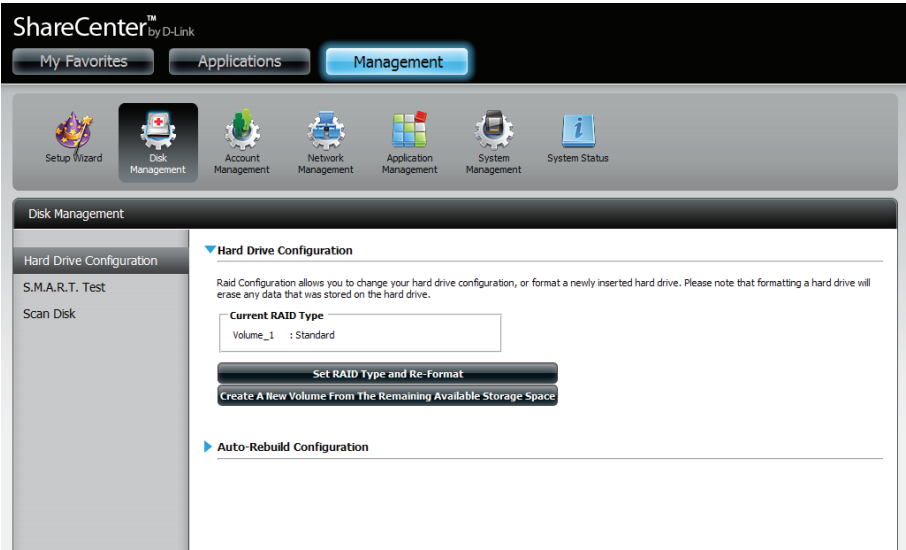


**Step 10-** Setup is completed when it shows final information on the slot, vendor, model number, and serial number.

Click **Finish** to continue.



**Step 11 -** The wizard returns to the main Hard Drive Configuration .



**Step 12** - In this example, the current RAID type is " RAID 1 (Degraded)

### ▼ Hard Drive Configuration

Raid Configuration allows you to change your hard drive configuration, or format a newly inserted hard drive. Please note that formatting a hard drive will erase any data that was stored on the hard drive.

#### Current RAID Type

Volume\_1 : RAID 1(Degraded)

**Set RAID Type and Re-Format**

**Step 13** - Select **Auto-Rebuild Configuration** then click **Manually Rebuild Now** to rebuild the RAID.

### ▼ Auto-Rebuild Configuration

Auto-Rebuild Configuration allows you to enable or disable the Auto-Rebuild feature. You can also manually rebuild by clicking the Manually Rebuild Now button. Please note that rebuilding will erase all data on the newly inserted drive.

- ☐ Enable Auto-Rebuild  
☒ Disable Auto-Rebuild

**Manually Rebuild Now**

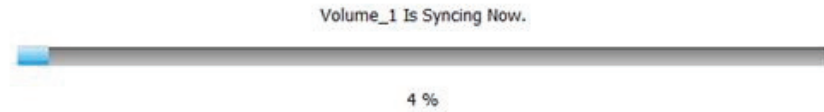
**Step 14** - The DNS-320L wizard starts to rebuild the RAID and both HDD LED's blink during this rebuild process.

**Note:** The rebuild duration is dependant on the size of hard drive.

**Step 15** - Once the RAID process is finished, the **Current RAID Type** changes to RAID 1.

### ▼ Hard Drive Configuration

Auto-Rebuild Configuration allows you to enable or disable the Auto-Rebuild feature. You can also manually rebuild by clicking the Manually Rebuild Now button. Please note that rebuilding will erase all data on the newly inserted drive.



### ▼ Hard Drive Configuration

Raid Configuration allows you to change your hard drive configuration, or format a newly inserted hard drive. Please note that formatting a hard drive will erase any data that was stored on the hard drive.

#### Current RAID Type

Volume\_1 : RAID 1

**Set RAID Type and Re-Format**

## S.M.A.R.T. Test

S.M.A.R.T stands for “Self-Monitoring, Analysis, and Reporting Technology”. This is a system on a hard drive used to monitor and report on the health of the drive. If the HD is grayed out, then it does not support S.M.A.R.T.

To run the S.M.A.R.T test, select the hard drive you wish to perform the S.M.A.R.T test on. Select whether to run a Quick or Extended S.M.A.R.T test. Then click **Start** to run the test. Click the **Create Schedule** button to run the test at a pre-determined time and date.

The Quick Test usually takes less than 10 minutes. This test will check the electrical, mechanical, and read performance of the hard drive. The results are displayed as Passed/Failed on the web UI and can also be sent as an e-mail alert.

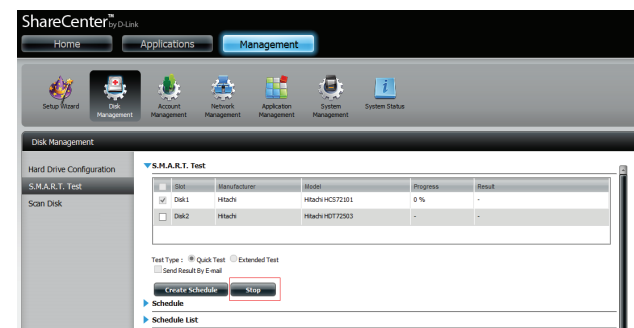
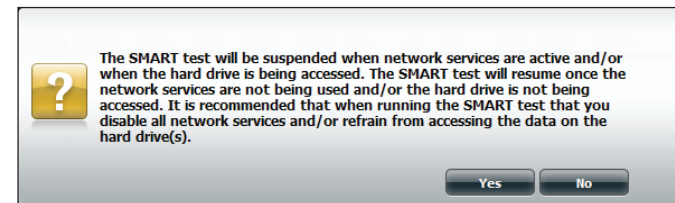
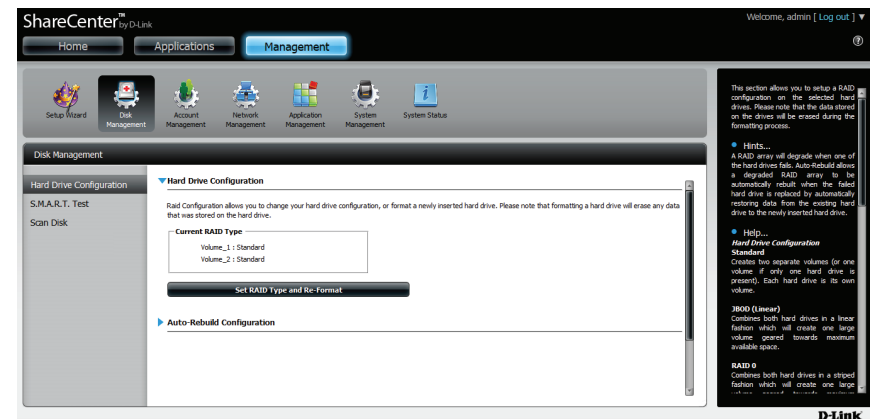
The Extended Test requires a lot more time to complete. However, it is a more thorough when compared to the Quick Test

A warning message will prompt you to stop all services and network activity.

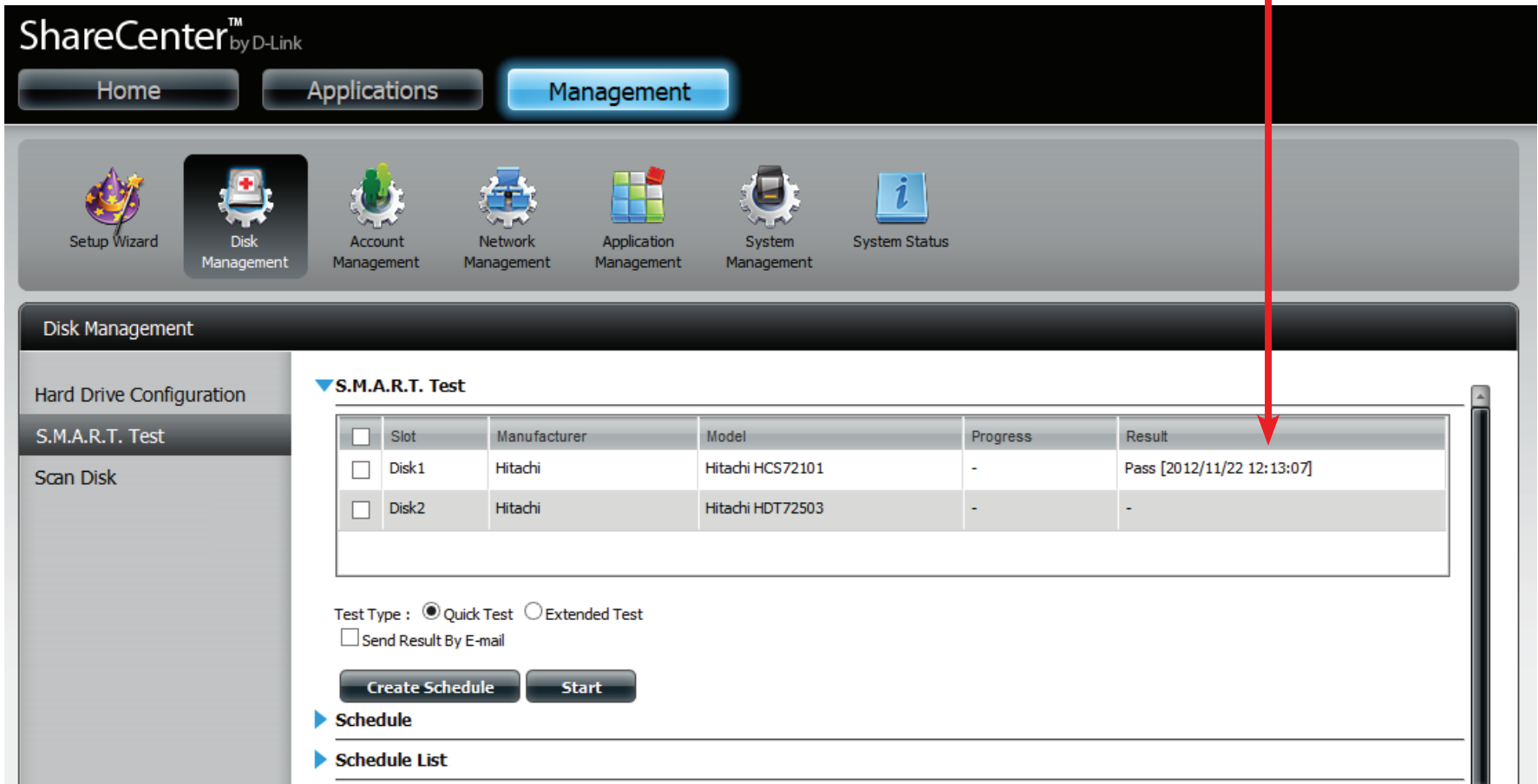
Click **Yes** to continue the **Quick S.M.A.R.T.** test.

The test will run and a percentage completed will display under the Progress Tab.

The Start button will change to a Stop button.



When the test is complete, the results will be displayed in the **Result** column.



The screenshot shows the ShareCenter™ by D-Link Management interface. The top navigation bar includes 'Home', 'Applications', and 'Management' (highlighted). Below this is a row of icons for Setup Wizard, Disk Management, Account Management, Network Management, Application Management, System Management, and System Status. The main content area is titled 'Disk Management' and contains a sidebar with 'Hard Drive Configuration', 'S.M.A.R.T. Test' (selected), and 'Scan Disk'. The 'S.M.A.R.T. Test' section displays a table with the following data:

<input type="checkbox"/>	Slot	Manufacturer	Model	Progress	Result
<input type="checkbox"/>	Disk1	Hitachi	Hitachi HCS72101	-	Pass [2012/11/22 12:13:07]
<input type="checkbox"/>	Disk2	Hitachi	Hitachi HDT72503	-	-

Below the table, there are options for 'Test Type' (Quick Test selected, Extended Test unselected) and a checkbox for 'Send Result By E-mail'. There are also 'Create Schedule' and 'Start' buttons. At the bottom, there are links for 'Schedule' and 'Schedule List'. A red arrow points from the text above to the 'Result' column header in the table.

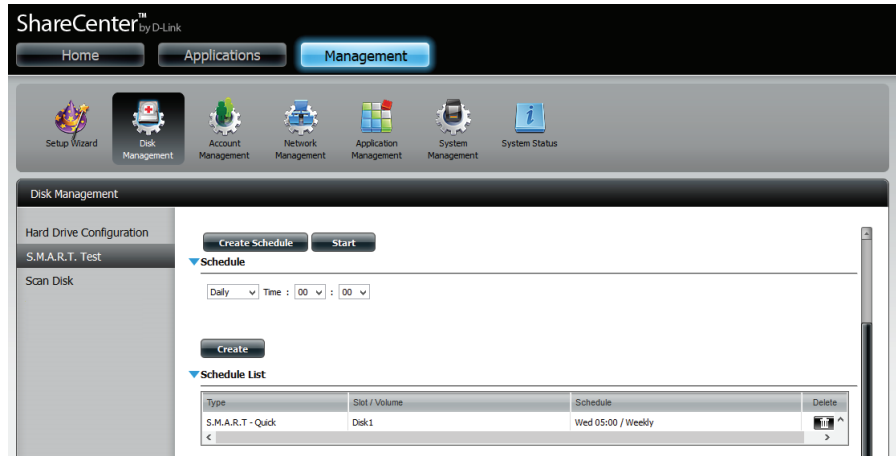
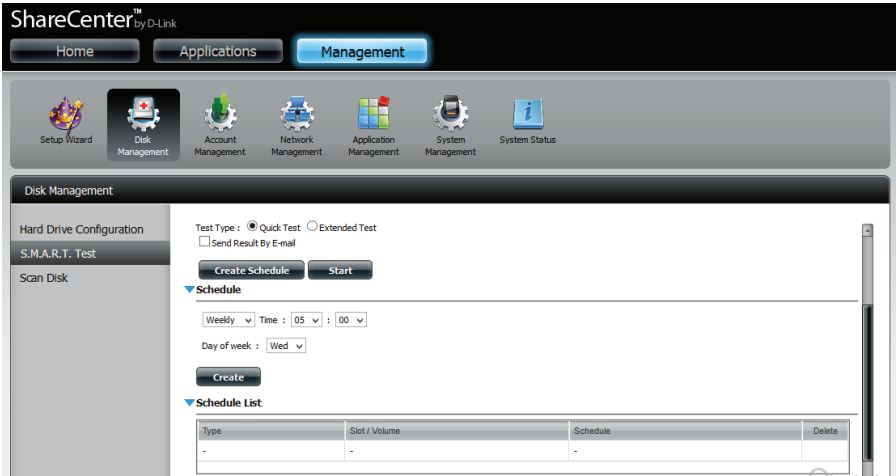
## Creating a Schedule

To create a schedule, select the disks/volumes to run the test on. Under Schedule, select the period (Daily/Weekly/Monthly) and then select the time from the drop-down menu.

Click **Create**

To view the Schedule List, click on the **Schedule List** arrow. A new table will appear showing details of the new schedule created.

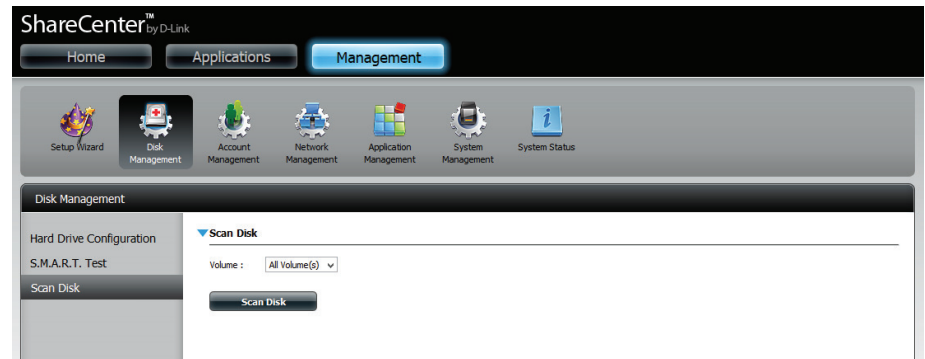
To delete a schedule, click on the **Trash Can**.



### Scan Disk

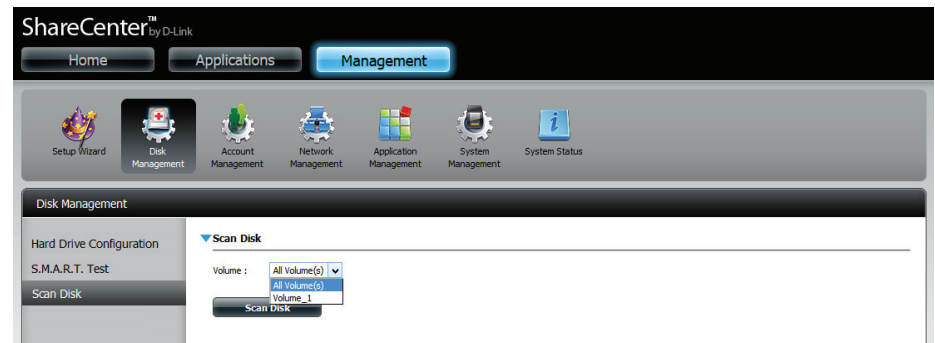
Scan Disk provides a method to test the disk's file system on your ShareCenter™. Scan Disk scans your disks file system for errors and/or corruption.

Click **Management**, **Disk Management**, and then **Scan Disk**.



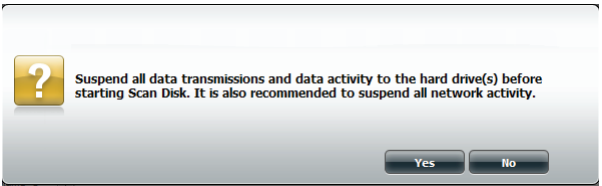
Select the volume from the drop-down list you wish to scan.

Click **Scan Disk**



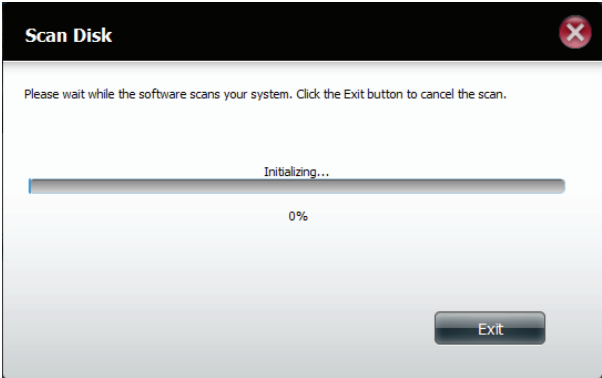
A warning message will prompt you to stop running all services (hard drive and network activity).

Click **Yes** to proceed or **No** to cancel.



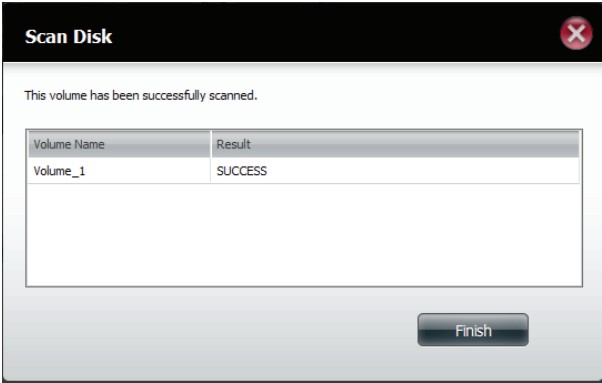
The DNS-320L will initialize the volume(s) and begin scanning.

Please wait while the software scans the volume(s) or click **Exit** to cancel the scan.



When the scan is complete, the table will either display **Success** or **Failure**.

Click **Finish** to exit.





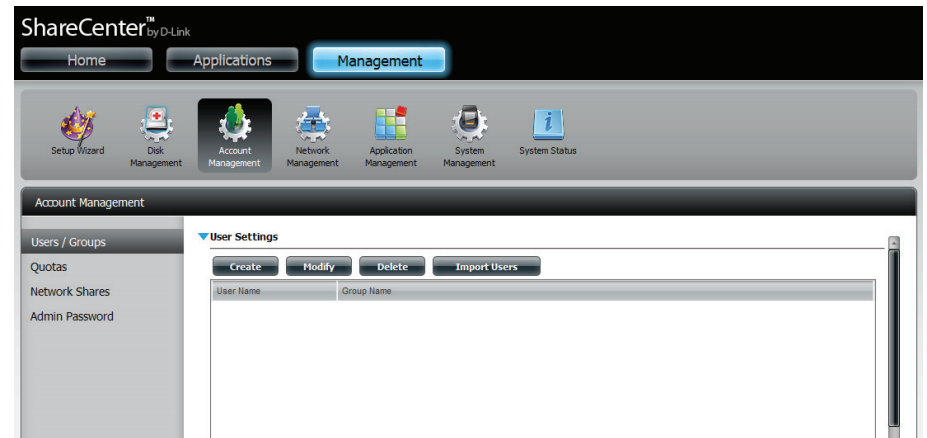
## Account Management Users / Groups

### Creating a Single User

The Users/Groups menu is used to create and manage user and group accounts. Up to 256 users and 32 groups can be created. By default, all users have read and write access to all folders. However access rules can be created and edited in the Network Shares menu.

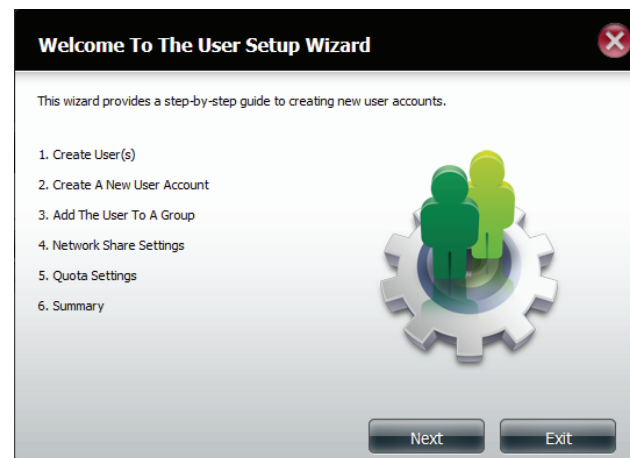
Click **Management > Account Management**.

Click **Users/Groups** on the left side and then click **Create**.

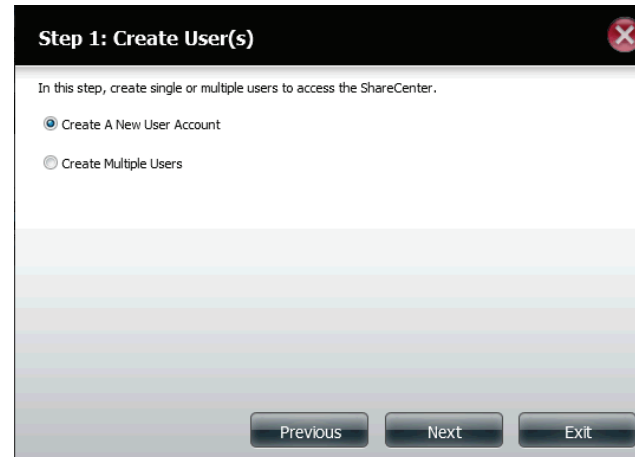


The **User Setup Wizard** will appear.

Click **Next** to continue.

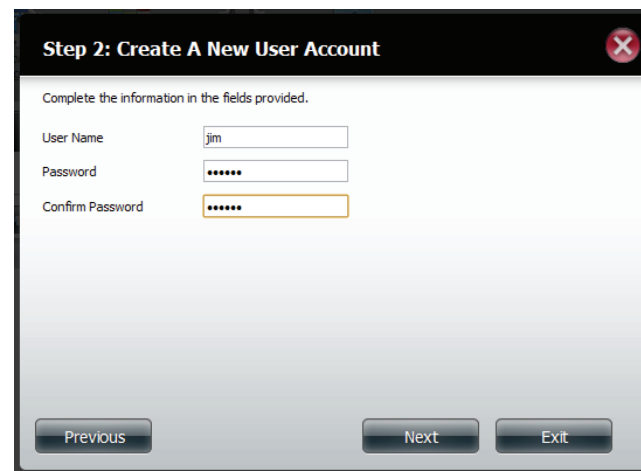


**Step 1** - Select **Create A New User Account** and then click **Next** to continue.



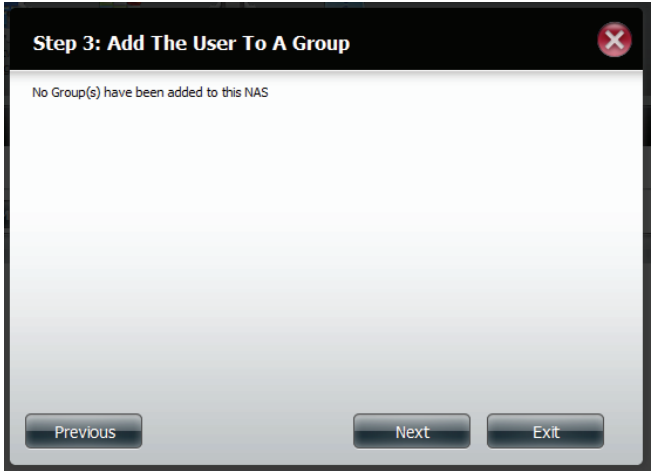
The dialog box titled "Step 1: Create User(s)" has a red close button in the top right corner. Below the title bar, it says "In this step, create single or multiple users to access the ShareCenter." There are two radio button options: "Create A New User Account" (which is selected) and "Create Multiple Users". At the bottom, there are three buttons: "Previous", "Next", and "Exit".

**Step 2** - Enter the user name and password for the new user and then click **Next** to continue.

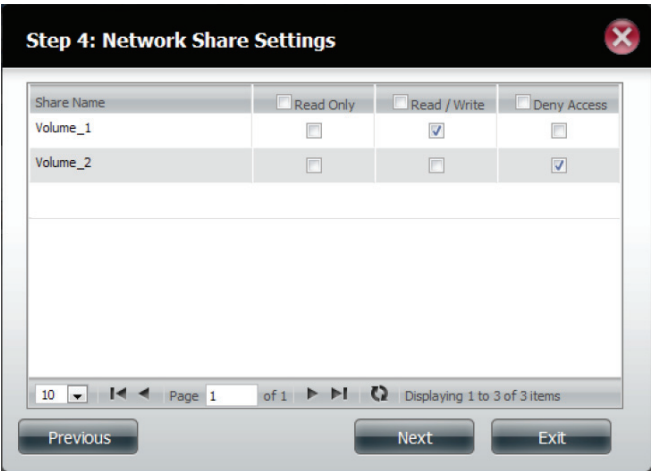


The dialog box titled "Step 2: Create A New User Account" has a red close button in the top right corner. Below the title bar, it says "Complete the information in the fields provided." There are three input fields: "User Name" with the text "jim", "Password" with six dots, and "Confirm Password" with six dots. At the bottom, there are three buttons: "Previous", "Next", and "Exit".

**Step 3** - Add the user to a group by clicking the Group checkbox. Click **Next** to continue.



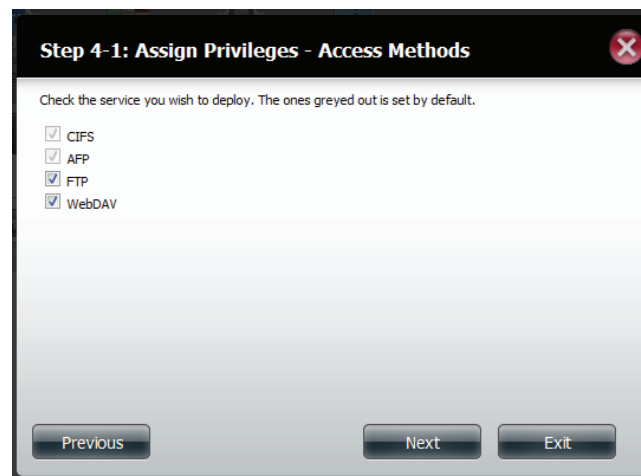
**Step 4** - Select the network share settings. Select **Read Only**, **Read/Write**, or **Deny Access**. Click **Next** to continue.



Assign Privileges/Access Methods to the user. Select either **FTP** or **WebDAV**. CIFS and AFP are set as default.

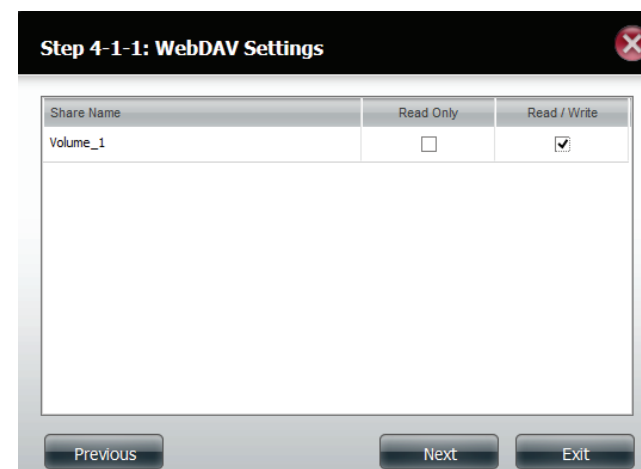
- **CIFS** is short for Common Internet File System.
- **AFP** is short for Apple Filing Protocol.
- **FTP** is short for File Transfer Protocol.
- **WebDAV** is short for Web-based Distribution, Authoring, and Versioning.

Click **Next** to continue.



Select the volumes the user can have WebDAV access to and then select whether to give **Read Only** or **Read/Write** rights.

Click **Next** to continue.



**Step 5** - Enter the amount of disk space you wish to assign the user on each volume. Enter zero to provide unlimited disk space to the user. Click **Next** to continue.

Step 5: Quota Settings

Enter the amount of hard drive space you wish to assign these users. Entering "0" into this field denotes the quota as unlimited.

Volume\_1 Quota Amount

20

MB

Volume\_2 Quota Amount

20

MB

Use zero for unlimited space.

Previous

Next

Exit

**Step 6** - The final step is a summary of all the configurations you made. Click **Finish** to accept the changes or click **Exit** to cancel the changes.

Step 6: Summary

This completes the wizard. Click **Previous** to review your settings. Click **Finish** to save the settings.

User Name

Group Name

Read Only

Read / Write

Deny Access

Application List

jim

Volume\_1,

Volume\_2

FTP,Webdav

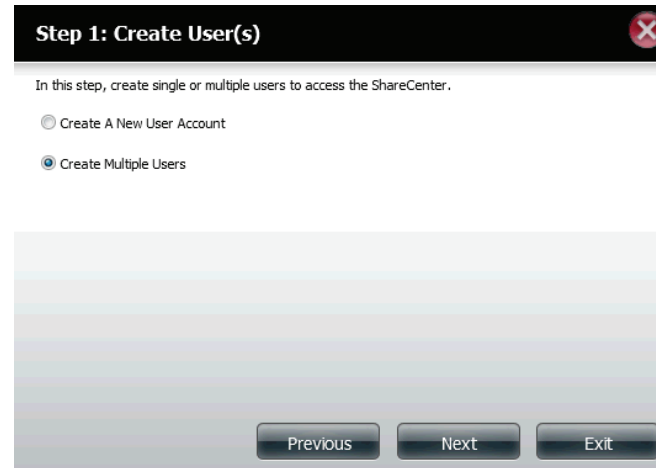
Previous

Finish

Exit

## Creating Multiple Users

**Step 1** - Select **Create Multiple Users** and then click **Next** to continue.



**Step 1: Create User(s)**

In this step, create single or multiple users to access the ShareCenter.

☐ Create A New User Account

☒ Create Multiple Users

Previous Next Exit

**Step 2** - Enter the following information:

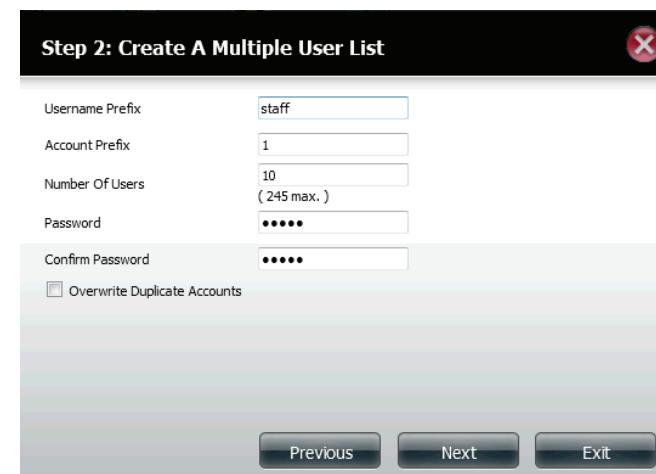
Enter a username.

Enter the account prefix. The Account Prefix is a starting number (Eg. 1, no alphabet letters are allowed) you select for the user list.

Enter the amount of users you want to create. Next to the input field is the remaining amount of users you can add to the NAS.

Enter a password and confirm it.

Click **Next** to continue.



**Step 2: Create A Multiple User List**

Username Prefix: staff

Account Prefix: 1

Number Of Users: 10 ( 245 max. )

Password: •••••

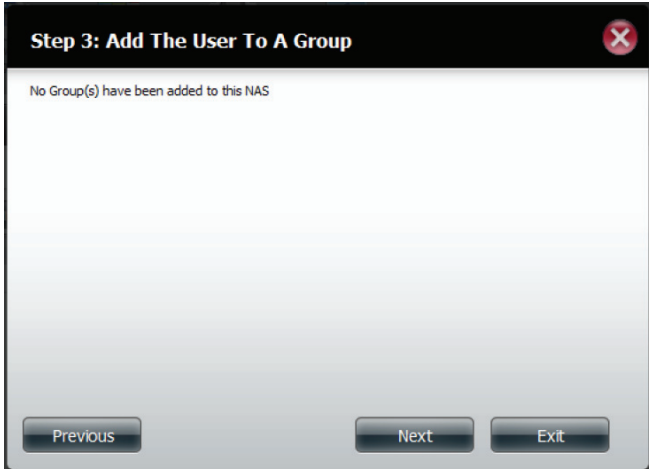
Confirm Password: •••••

☐ Overwrite Duplicate Accounts

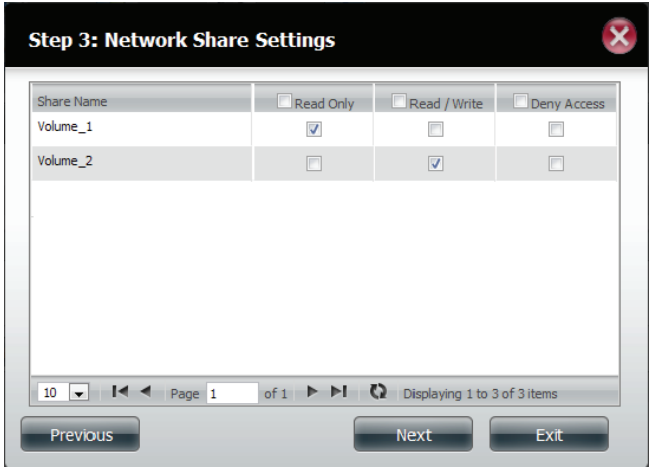
Previous Next Exit

**Step 3** - Add the user(s) to a group by clicking the **Group** checkbox.

Click **Next** to continue.



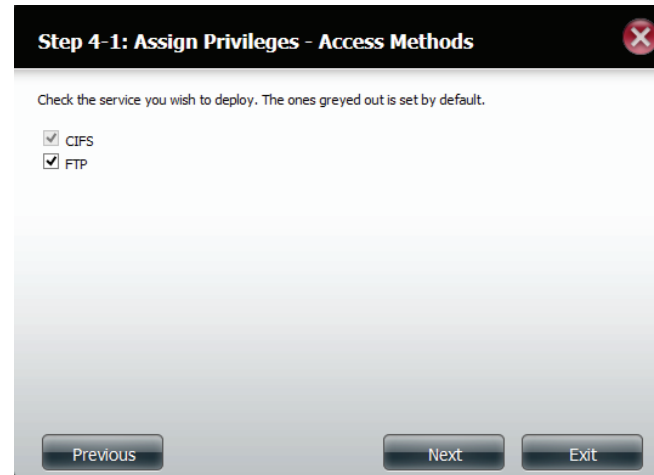
**Step 4** - Select the network share settings. Select **Read Only**, **Read/Write**, or **Deny Access**. Click **Next** to continue.



Assign Privileges/Access Methods to the user(s). Select FTP. CIFS and AFP are set as default.

- **CIFS** is short for Common Internet File System.
- **FTP** is short for File Transfer Protocol.

Click **Next** to continue.



**Step 4-1: Assign Privileges - Access Methods**

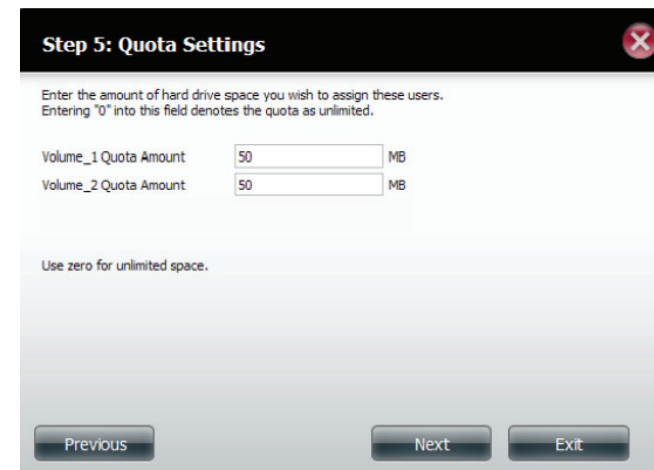
Check the service you wish to deploy. The ones greyed out is set by default.

☒ CIFS  
☒ FTP

Previous Next Exit

**Step 5** - Enter the amount of disk space you wish to assign the user(s) on each volume. Type **0** to provide unlimited disk space to the user(s).

Click **Next** to continue.



**Step 5: Quota Settings**

Enter the amount of hard drive space you wish to assign these users.  
Entering "0" into this field denotes the quota as unlimited.

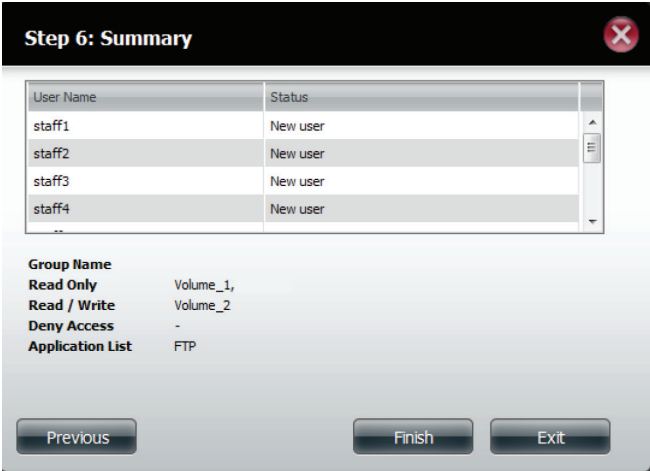
Volume\_1 Quota Amount  MB  
Volume\_2 Quota Amount  MB

Use zero for unlimited space.

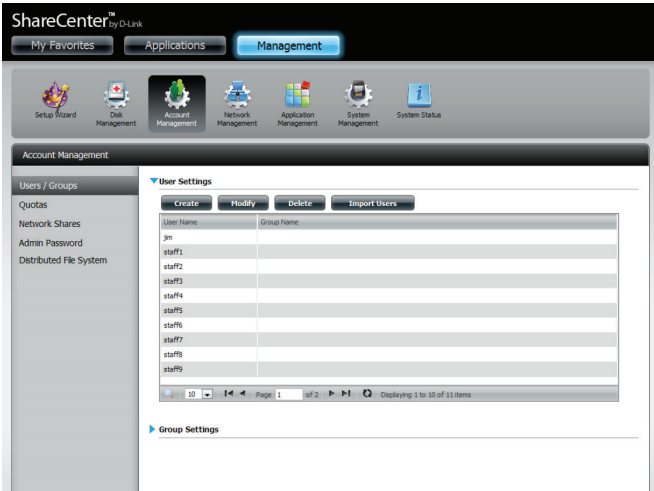
Previous Next Exit



**Step 6** - The final step is a summary of all the configurations you made. Click **Finish** to accept the changes or click **Exit** to cancel the changes.



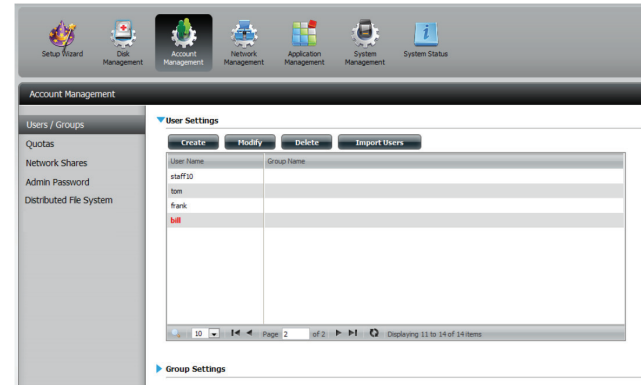
The User Settings window will show a list of the users created.



## Modify Users

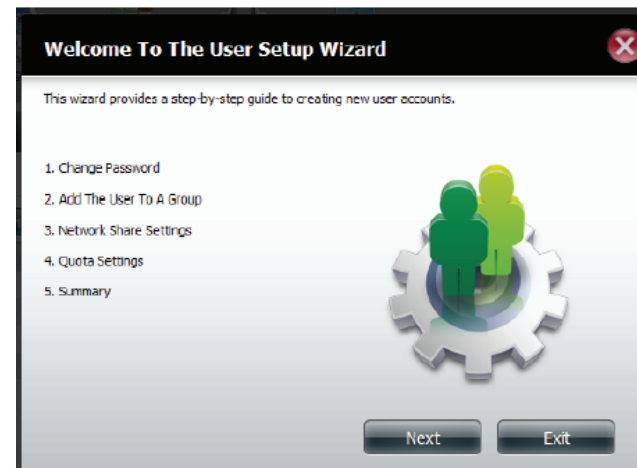
**Step 1** - Click the user you wish to modify. The user will be highlighted in red.

Click **Modify** to continue.



**Step 2** - The User Setup Wizard will appear.

Click **Next** to continue.



**Step 3** - Change the username or password. Click **Next** to continue.

Step 1: Change Password

User Name

bill

Password

\*\*\*\*\*

Confirm Password

\*\*\*\*\*

Previous

Next

Skip

Exit

**Step 4** - Change the Network Share Settings. Click **Next** to continue.

Step 3: Network Share Settings

Share Name	<input type="checkbox"/> Read Only	<input type="checkbox"/> Read / Write	<input type="checkbox"/> Deny Access
Volume_1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Volume_2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10

Page 1 of 1

Displaying 1 to 3 of 3 items

Previous

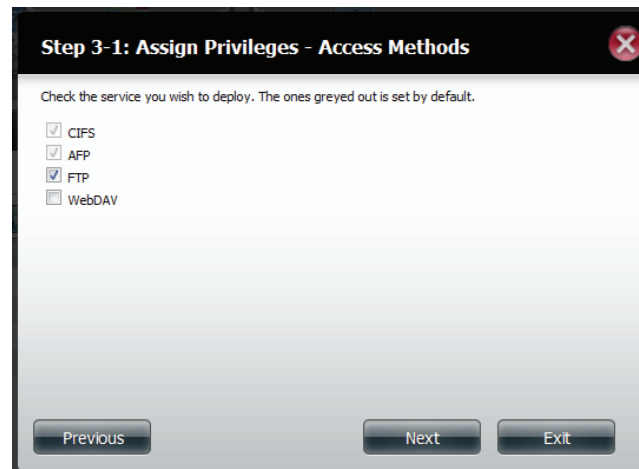
Next

Exit

**Step 5** - Assign Privileges/Access Methods for the user. Select either FTP or WebDAV. CIFS and AFP are set as default.

- **CIFS** is short for Common Internet File System.
- **AFP** is short for Apple Filing Protocol.
- **FTP** is short for File Transfer Protocol.
- **WebDAV** is short for Web-based Distribution, Authoring, and Versioning.

Click **Next** to continue.



**Step 3-1: Assign Privileges - Access Methods**

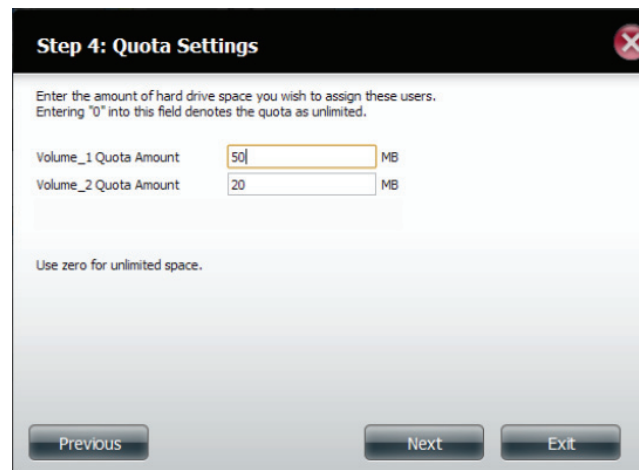
Check the service you wish to deploy. The ones greyed out is set by default.

- ☒ CIFS
- ☒ AFP
- ☒ FTP
- ☐ WebDAV

Previous Next Exit

**Step 6** - Enter the re-assigned amount of disk space you wish to assign the user on each volume. Type 0 to provide unlimited disk space to the user.

Click **Next** to continue.



**Step 4: Quota Settings**

Enter the amount of hard drive space you wish to assign these users.  
Entering "0" into this field denotes the quota as unlimited.

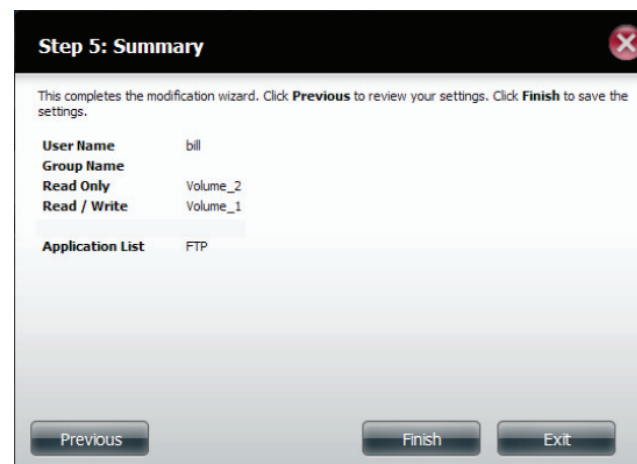
Volume\_1 Quota Amount  MB

Volume\_2 Quota Amount  MB

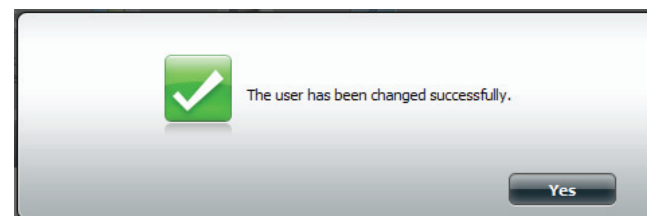
Use zero for unlimited space.

Previous Next Exit

**Step 7** - The final step is a summary of all the configurations you made. Click **Finish** to accept the changes or **Exit** to cancel the changes.

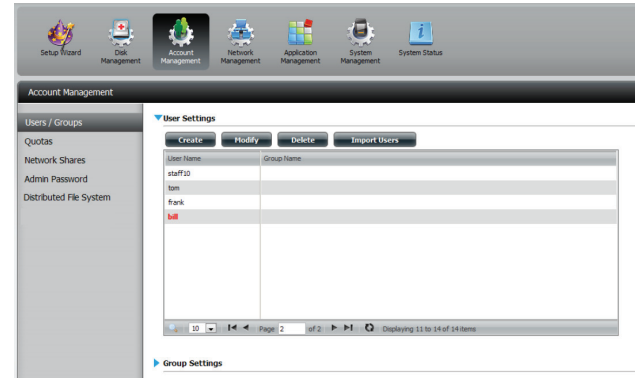


**Step 8** - A message will appear stating the user details have been changed successfully. Click **Yes** to exit the wizard.



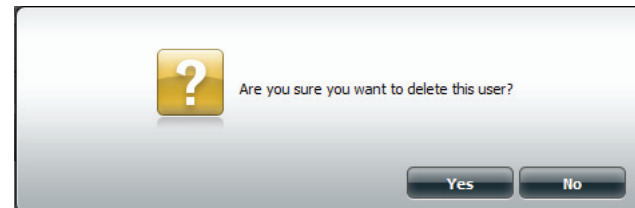
## Deleting Users

**Step 1** - Click the user you wish to delete. The user will be highlighted in red. Click **Delete** to continue.



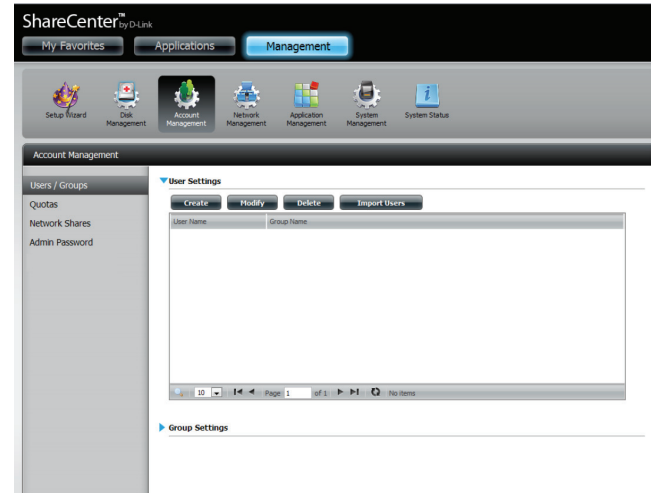
**Step 2** - A message will appear prompting you to confirm deleting the user. Click **Yes** to confirm.

The user is now removed from the list.

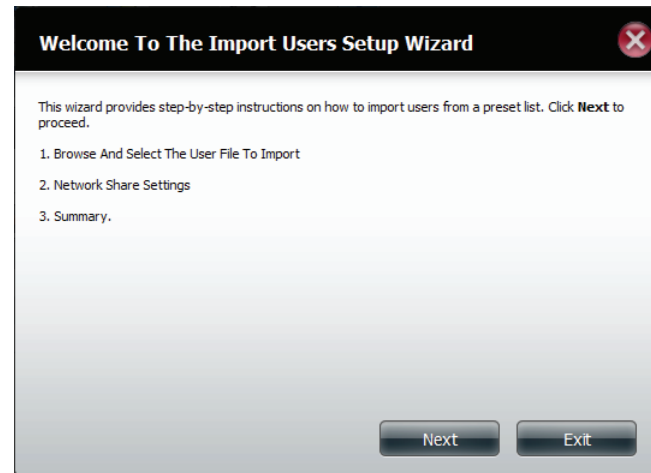


## Importing Users

**Step 1** - Click **Account Management > Users/Groups > Import Users**.



**Step 2** - The Import Users Wizard will start. Click **Next** to continue.



**Step 3** - Click **Download** to see a sample file. (import\_file.txt)

**Format:** user name/user password/user groups/shared folder(rw)/shared folder(ro)/shared folder(deny)/user quota

**Ex:** staff3/staff3/Group\_Staff2/Folder\_RW1///100

**Note:** You must create the user groups and share folders first before importing the users file

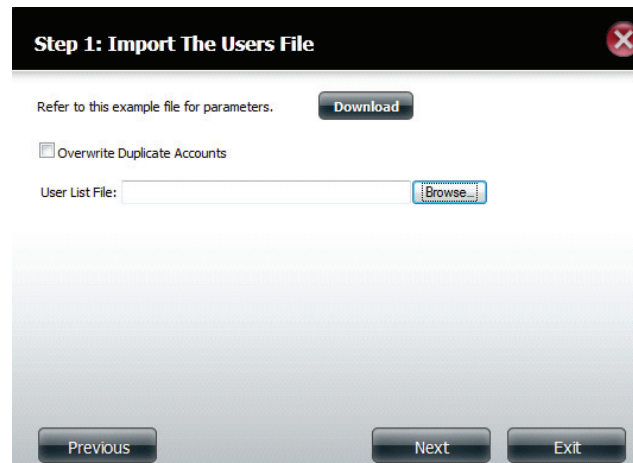
Check the **Overwrite Duplicate Accounts** box if this is necessary.

Click **Browse** to select the file you want to import.

Click **Next** to continue

**Step 4** - Assign the privileges and access methods.

Click **Next** to continue.



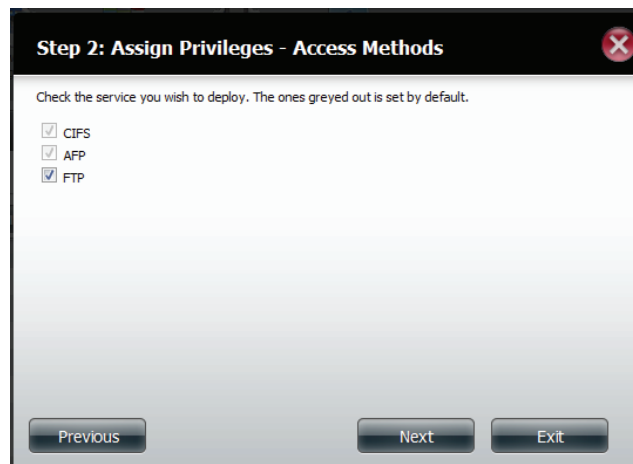
Step 1: Import The Users File

Refer to this example file for parameters. [Download](#)

☐ Overwrite Duplicate Accounts

User List File:  [Browse...](#)

[Previous](#) [Next](#) [Exit](#)



Step 2: Assign Privileges - Access Methods

Check the service you wish to deploy. The ones greyed out is set by default.

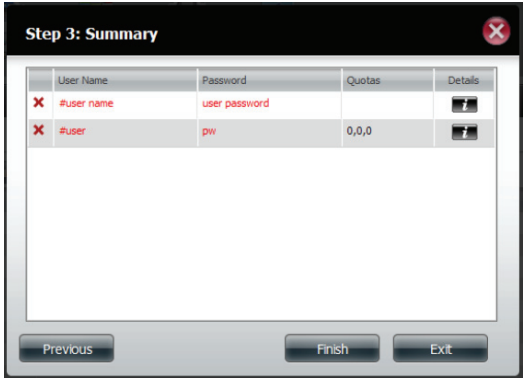
☒ CIFS  
☒ AFP  
☒ FTP

[Previous](#) [Next](#) [Exit](#)

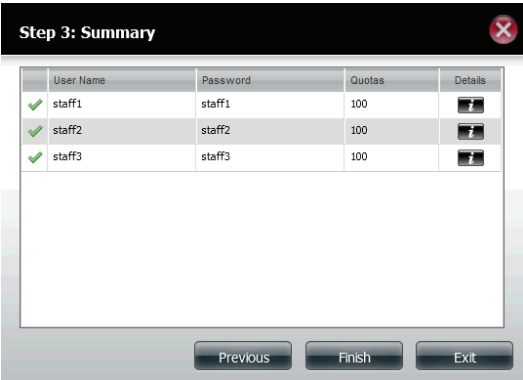


**Step 5** - The Summary will show a list of the imported users. If there are problems with the user list, the wizard will show the errors in red on the table.

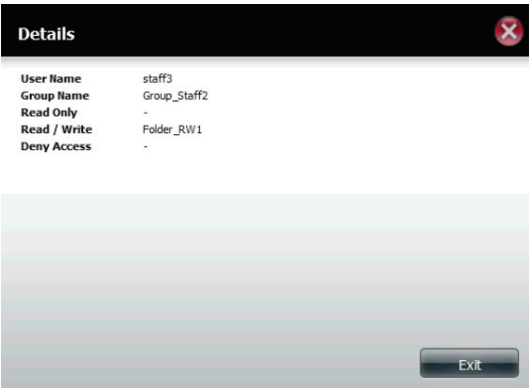
Click **Finish** to close the wizard or go back to change the imported file.



Click the “i” icon to see details of each user.



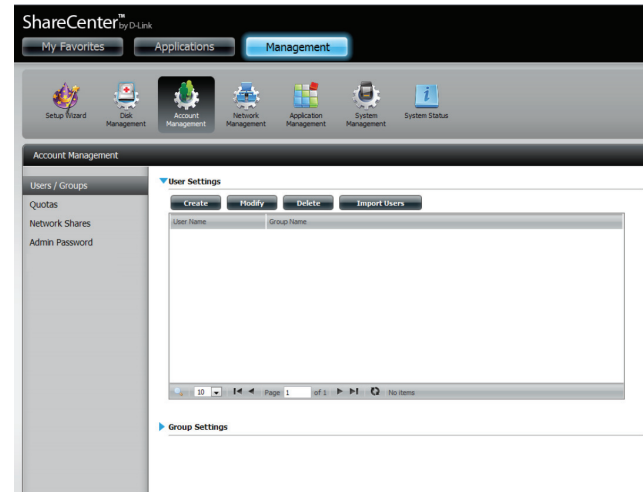
Each user’s details are provided in a list according to username, group name, read/write priveledges, or access control



## Creating a Group

**Step 1** - Click **Account Management > Users/Groups**.

Click the blue arrow next to Group Settings and settings window will appear. Click **New** to create a new Group.



**Step 2** - The Group Setup Wizard will now start. Click **Next** to continue.



**Step 3** - Enter a Group Name. Click **Next** to continue

Step 1: Create A New Group

Group Name

tech\_lab

Previous

Next

Exit

**Step 4** - Click the checkbox to select the user(s) you wish to add to the group and then click **Next** to continue.

Step 2: Join User To Group

User Name	<input type="checkbox"/>
staff5	<input type="checkbox"/>
staff6	<input type="checkbox"/>
staff7	<input checked="" type="checkbox"/>
staff8	<input type="checkbox"/>
staff9	<input type="checkbox"/>
staff10	<input type="checkbox"/>
tom	<input checked="" type="checkbox"/>
bill	<input type="checkbox"/>

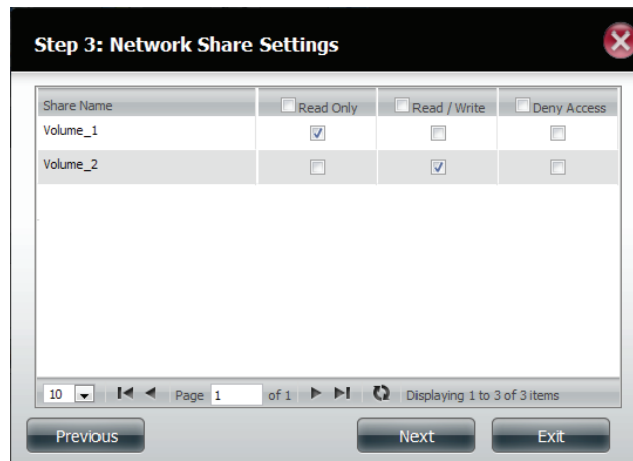
Previous

Next

Exit

**Step 5** - Select the Network Share Settings (read, read/write, deny access) for the corresponding disk volume for the group.

Click **Next** to continue.

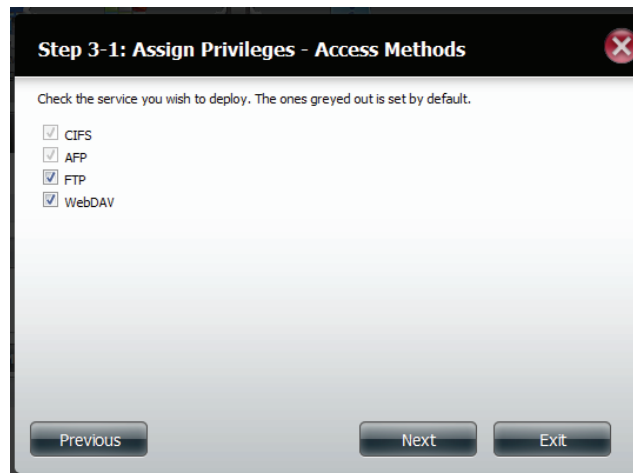


The screenshot shows a window titled "Step 3: Network Share Settings". It contains a table with three columns: "Share Name", "Read Only", "Read / Write", and "Deny Access". The table has two rows: "Volume\_1" and "Volume\_2". In the "Volume\_1" row, the "Read Only" checkbox is checked, while "Read / Write" and "Deny Access" are unchecked. In the "Volume\_2" row, the "Read / Write" checkbox is checked, while "Read Only" and "Deny Access" are unchecked. Below the table is a pagination bar showing "Page 1 of 1" and "Displaying 1 to 3 of 3 items". At the bottom are three buttons: "Previous", "Next", and "Exit".

Share Name	<input type="checkbox"/> Read Only	<input type="checkbox"/> Read / Write	<input type="checkbox"/> Deny Access
Volume_1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Volume_2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Step 6** - Select the Privileges/Access Methods you want to assign to the group. The greyed out selections are assigned by default.

Click **Next** to continue.



The screenshot shows a window titled "Step 3-1: Assign Privileges - Access Methods". It contains a list of services with checkboxes: CIFS, AFP, FTP, and WebDAV. All four checkboxes are checked. Above the list is a note: "Check the service you wish to deploy. The ones greyed out is set by default." At the bottom are three buttons: "Previous", "Next", and "Exit".

Check the service you wish to deploy. The ones greyed out is set by default.

- ☒ CIFS
- ☒ AFP
- ☒ FTP
- ☒ WebDAV

**Step 7** - Select the appropriate WebDAV settings and click **Next** to continue.

Step 3-1-1: WebDAV Settings

Share Name	Read Only	Read / Write
Volume_1	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Volume_2	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Previous

Next

Exit

**Step 8** - Enter the amount of space you want to assign to the group for each volume. Enter zero to give unlimited disk space to the group. Click **Next** to continue.

Step 4: Quota Settings

Enter the amount of hard drive space you wish to assign these users.  
Entering "0" into this field denotes the quota as unlimited.

Volume\_1 Quota Amount

50

MB

Volume\_2 Quota Amount

50

MB

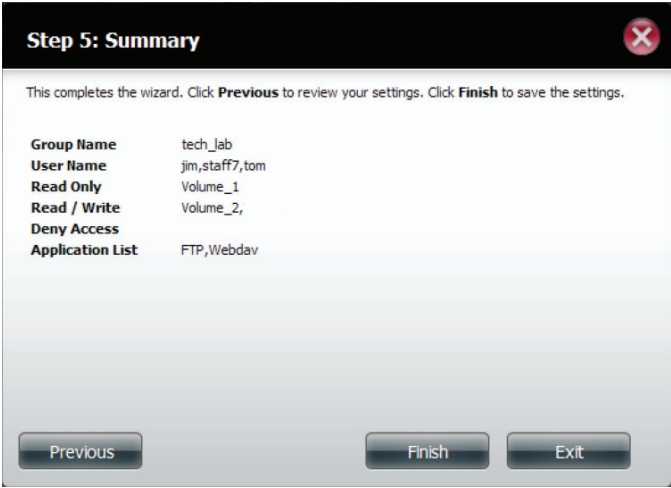
Use zero for unlimited space.

Previous

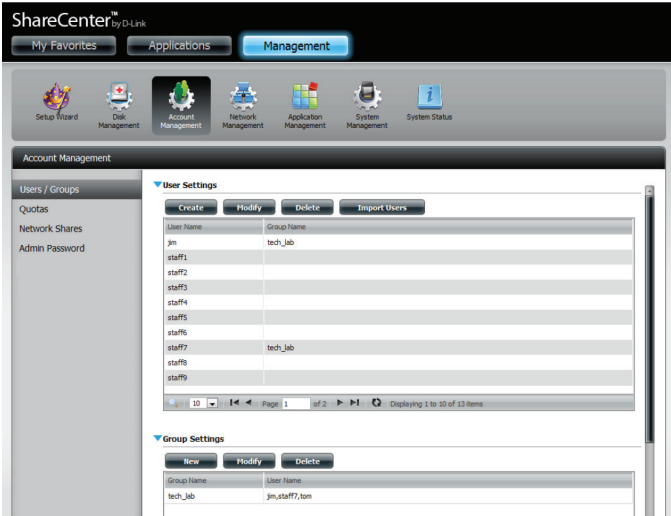
Next

Exit

**Step 9** - The wizard is now complete. The last step shows a summary of the group you created. Click **Previous** to change your settings or **Finish** to end the wizard.



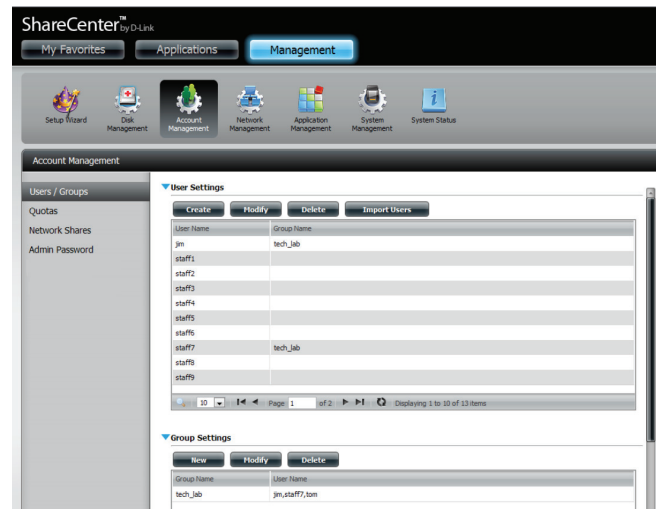
**Step 10** - Under Group Settings, a table will display the group you just created.



## Modifying a Group

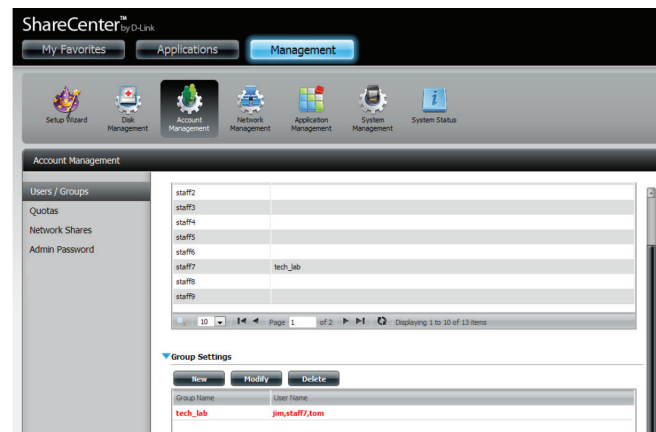
### Step 1 - Click **Account Management** > **Users/Groups**.

Click the blue arrow next to Group Settings and the Group Settings table will appear.



### Step 2 - Select the group you want to modify. Your selection will turn red.

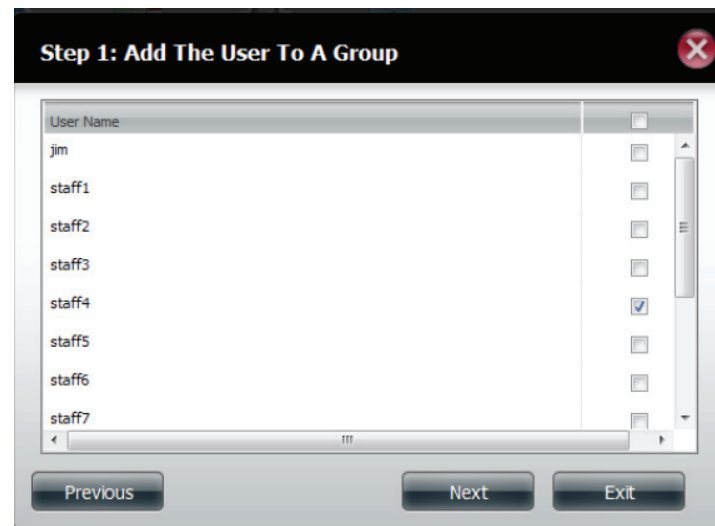
Click **Modify** to change the settings for the Group.



**Step 3** - The Group Setup Wizard will now start. Click **Next** to continue.

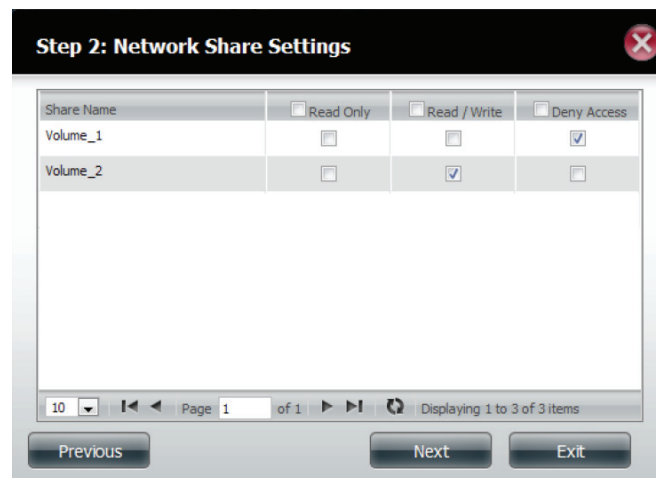


**Step 4** - Make the necessary modifications to the group and then click **Next** to continue.





**Step 5** - Select the appropriate Network Share Settings (read, read/write, deny access) for the corresponding disk volume for the group. Click **Next** to continue.



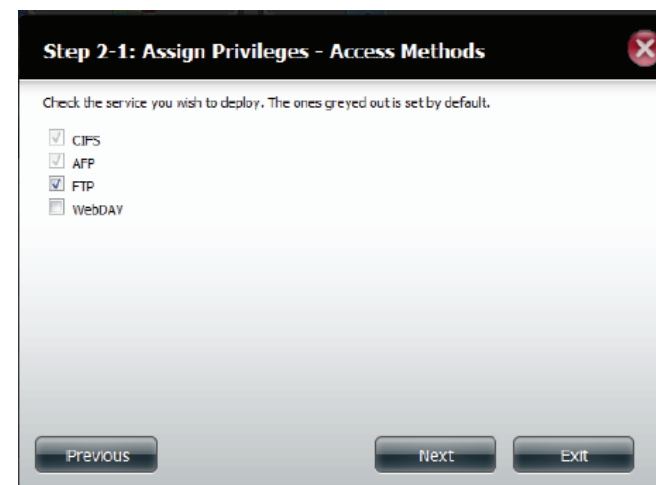
The screenshot shows a window titled "Step 2: Network Share Settings" with a close button in the top right. It contains a table with columns for "Share Name", "Read Only", "Read / Write", and "Deny Access".

Share Name	<input type="checkbox"/> Read Only	<input type="checkbox"/> Read / Write	<input type="checkbox"/> Deny Access
Volume_1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Volume_2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Below the table is a pagination bar showing "Page 1 of 1" and "Displaying 1 to 3 of 3 items". At the bottom are "Previous", "Next", and "Exit" buttons.

**Step 6** - Select the appropriate privileges you want to assign to the group. The greyed out selections are assigned by default and cannot be modified.

Click **Next** to continue.



The screenshot shows a window titled "Step 2-1: Assign Privileges - Access Methods" with a close button in the top right. It contains a list of services with checkboxes. The text above the list says "Check the service you wish to deploy. The ones greyed out is set by default."

- ☒ CIFS
- ☒ AFP
- ☒ FTP
- ☐ WebDAV

At the bottom are "Previous", "Next", and "Exit" buttons.

**Step 7** - Select either Read Only or Read/ Write privileges for WebDav Settings.

Click **Next** to continue.

Step 2-1-1: WebDAV Settings

Share Name	Read Only	Read / Write
Volume_1	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Previous

Next

Exit

**Step 8** - Edit the amount of space you want to assign to the group for each volume. Enter zero to give unlimited disk space to the group.

Click **Next** to continue.

Step 3: Quota Settings

Enter the amount of hard drive space you wish to assign these users.  
Entering "0" into this field denotes the quota as unlimited.

Volume\_1 Quota Amount

100

MB

Volume\_2 Quota Amount

20

MB

Use zero for unlimited space.

Previous

Next

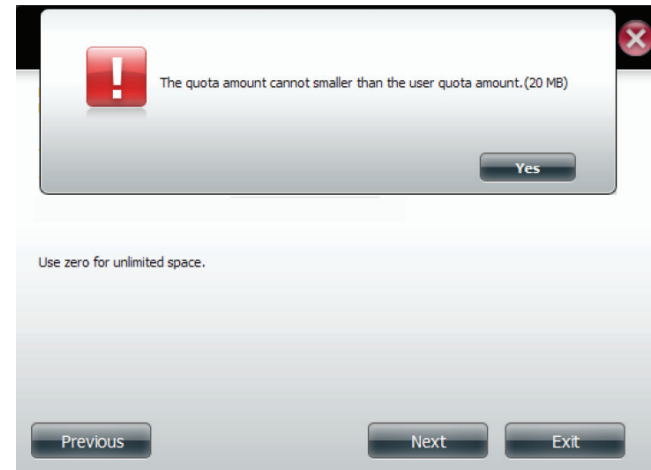
Exit

D-Link ShareCenter™ DNS-320L User Manual

151

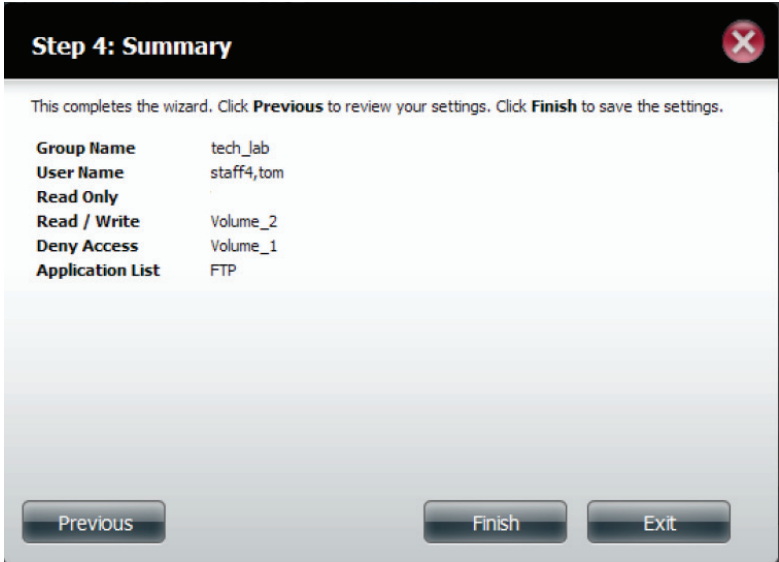
**Step 9** - When editing the quota, make sure the size is not smaller than the user quota on his/her account.

Click **Yes** to change the quota.



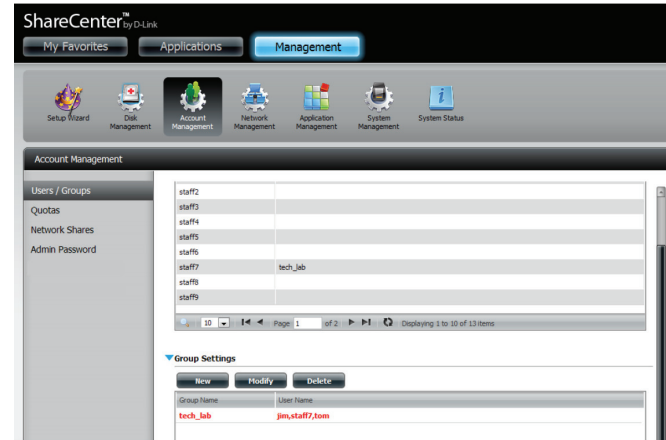
**Step 9** - The wizard is now complete and will display a summary of the group you edited.

Click **Previous** to change your settings or **Finish** to end the wizard. **Exit** will cancel all changes you made.

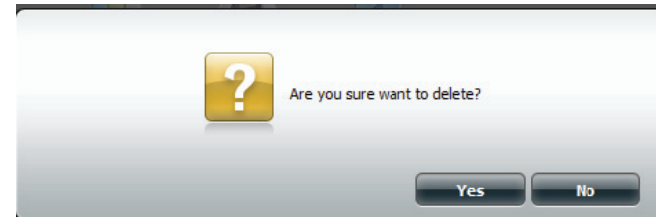


## Deleting a Group

**Step 1** - Select the Group you want to delete and click **Delete**.



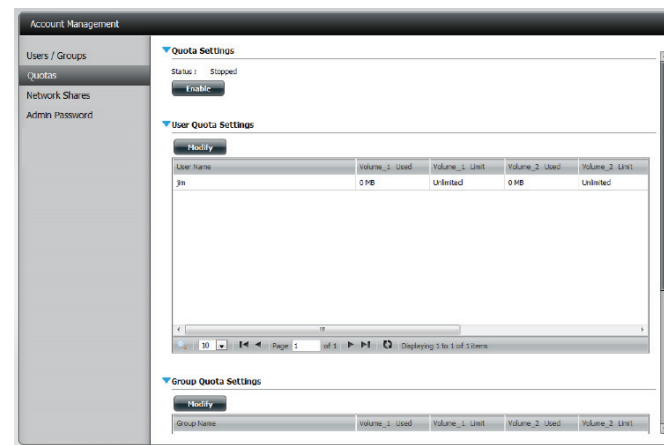
**Step 2** - A warning message will appear asking you to verify if you want to delete the Group. Click **Yes** to delete the Group or **No** to cancel your decision.



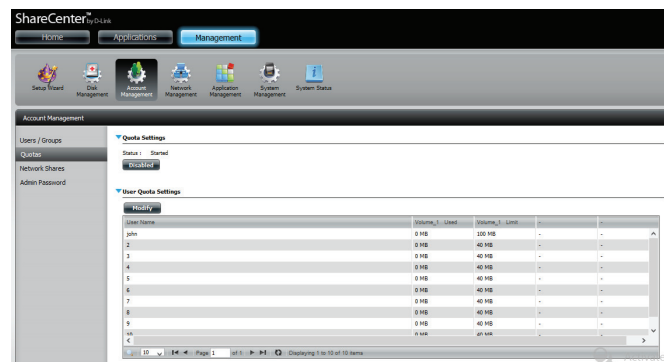
## Quotas

The ShareCenter™ supports storage quotas for both groups and individuals. Assigning a quota to a group or user will limit the amount of storage allocated. By default, users and groups do not have a quota. Click **Account Management** and then **Quotas** on the left side.

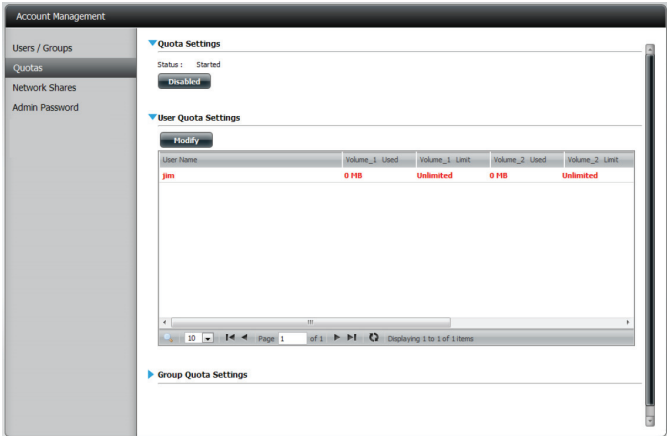
Click **Enable** to activate Quota Settings. The status will now display 'Started' notifying you that the Quota Settings are enabled.



To Modify a User's Quota Settings, click the blue arrow next to User Quota Settings to reveal a table of users.

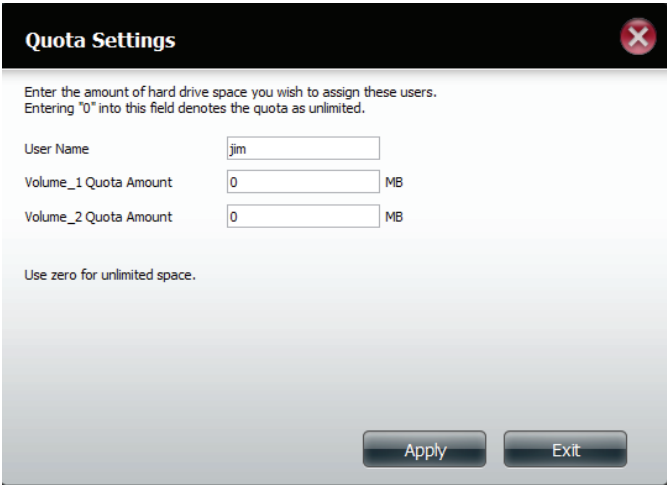


Select the User you want to modify. Your selection will turn red.  
Click **Modify** to change the user's settings.

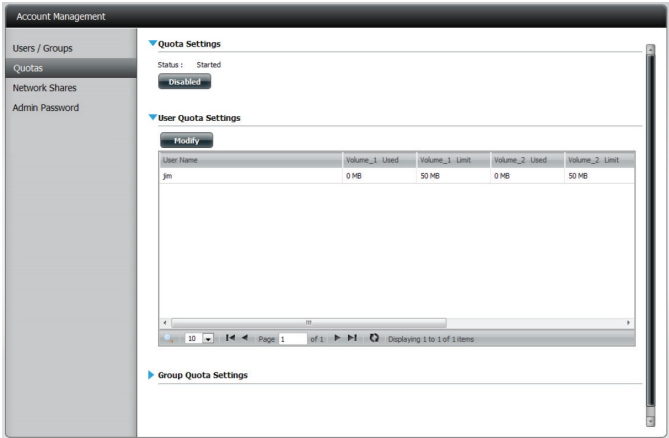


The Quota Settings configuration box will display the user account you want to modify. Enter a new quota amount for each volume.

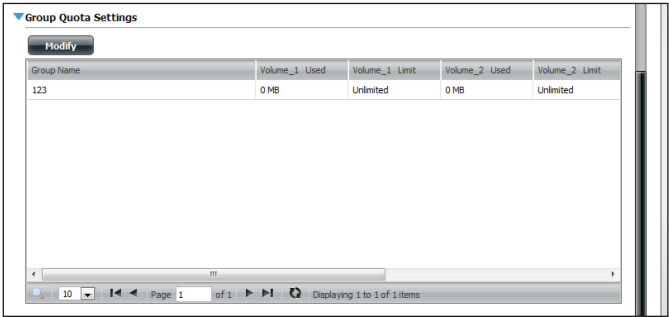
Click **Apply** to confirm your settings.



The modified quota settings will be displayed in the table.

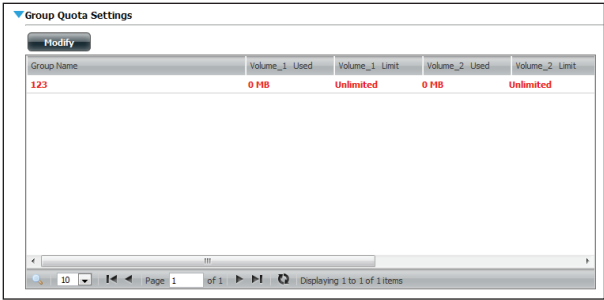


For Group Quota Settings, click the blue drop-down arrow next to Group Quota Settings to view the group quota table.

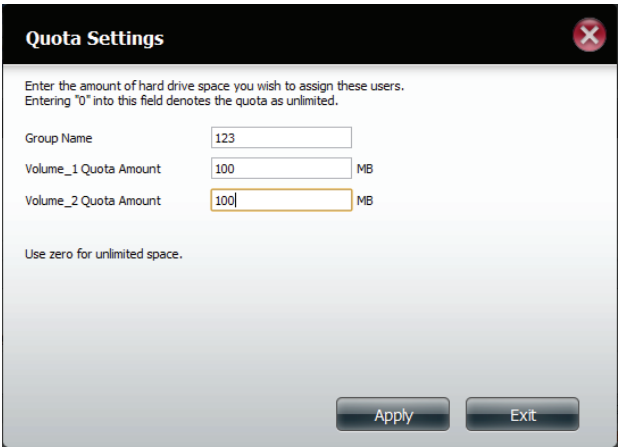




Select the group you want to modify. Your selection will turn red. Click **Modify**.



The Group Quota Settings screen will display the group you want to modify. Enter a new quota amount for each volume for the current group and click **Apply**.



The modified quota settings will be displayed in the table.

Group Quota Settings

Modify

Group Name	Volume_1 Used	Volume_1 Limit	Volume_2 Used	Volume_2 Limit
123	0 MB	100 MB	0 MB	100 MB

10 Page 1 of 1 Displaying 1 to 1 of 1 items

# Network Shares

The Network Shares page allows the user to configure shared folders and rights to specific users and groups. You can also mount .iso files in the ISO Mount Shares settings. When a user has access to a mounted .iso, he/she will also have access to all the files on it.

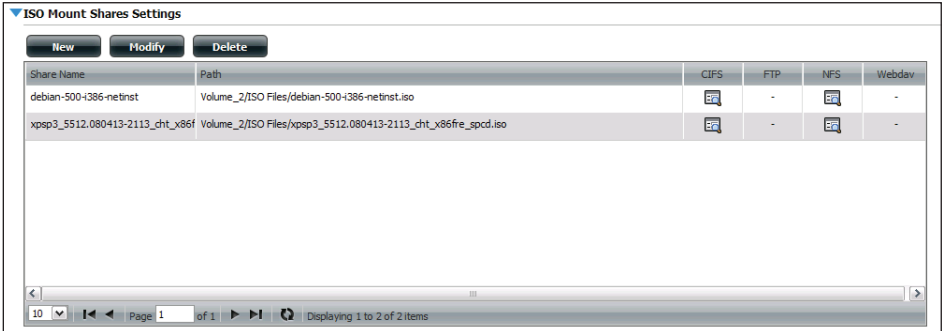
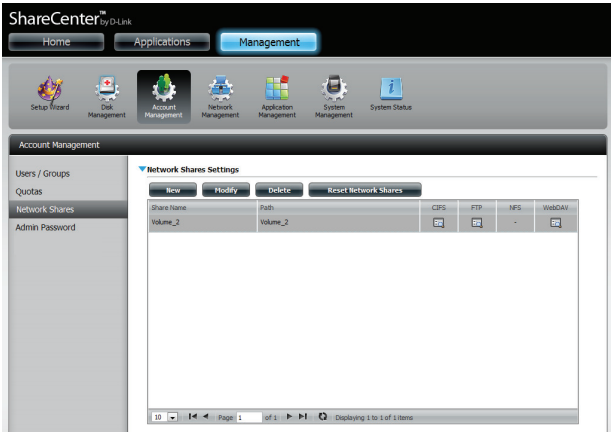
**Network Share/ISO Mount Shares:** The Network Shares Settings window allows the user to add, modify, and remove both new and existing Network Share and ISO Mount Share Settings.

To add a rule click on the **New** button. To modify an existing rule click on the **Modify** button. To remove a rule click on the **Delete** button.

To select a rule, simply click on the rule. Your selection will turn red, indicating it is selected for use.

At the bottom of the table, the user can navigate through pages and also refresh the window by click on the **Refresh** button.

Click on the **Reset Network Shares** button to reset the network access list to the default configuration.



## Add/Modify Network Shares Wizard

The following section will describe how to add a new Network Share on the ShareCenter™. To add a Network Share click on the **New** button. An easy to configure wizard will launch.

**Step 1** - This window welcomes the user to the setup wizard for creating a new network share.

In this wizard the user will be able to:

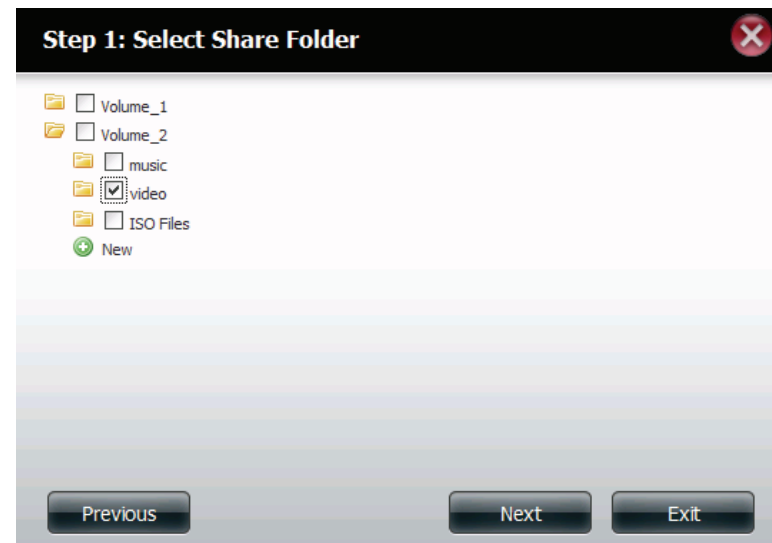
- 1) Select share folders.
- 2) Configure shared folder access rights.
- 3) Configure network access settings.
- 4) View a summary of the configuration before completing.

Click **Next** to continue.



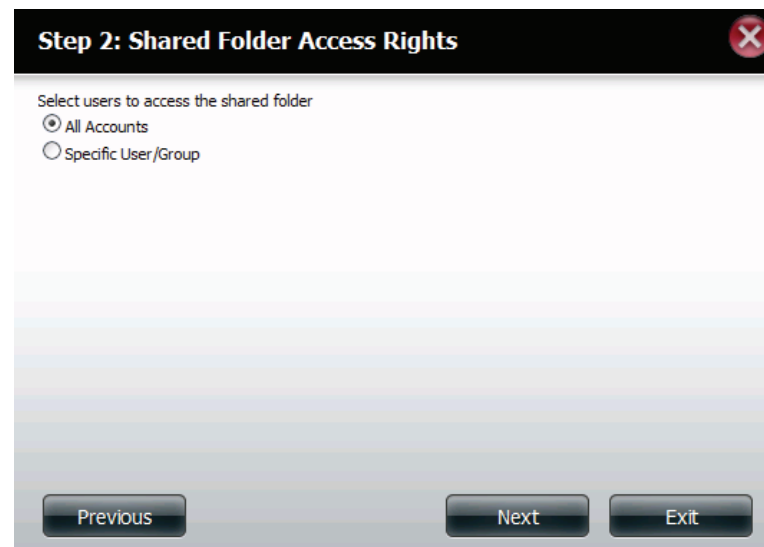
**Step 2** - Select the Share Folder from one of the volumes.

Click **Next** to continue.



**Step 3** - Select the user accounts or group which are allowed to access this folder(s). Select **All Accounts** to allow access to this folder to all the accounts. Select **Specific User/Group** to only allow certain users or groups access to this folder.

Click **Next** to continue.



**Step 4** - Select the appropriate access rights for the share. Options to select from are Read Only, Read/Write, and Deny Access.

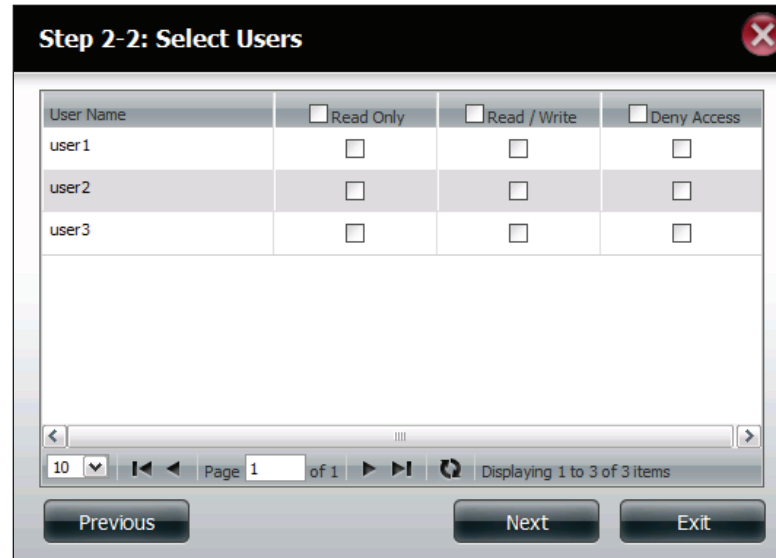
This procedure can also be used to block certain users from accessing certain folders.

Click **Next** to continue.



**Step 5** - If you selected **Specific User/Group** in Step 3, then this step allows you to set the access rights for each User configured on the ShareCenter™.

Click **Next** to continue.



The screenshot shows a configuration window titled "Step 2-2: Select Users" with a close button (X) in the top right corner. It contains a table with columns: "User Name", "Read Only", "Read / Write", and "Deny Access". The table lists three users: "user 1", "user 2", and "user 3". Each user has three checkboxes corresponding to the access rights. Below the table is a scroll bar and a pagination control showing "Page 1 of 1" and "Displaying 1 to 3 of 3 items". At the bottom are three buttons: "Previous", "Next", and "Exit".

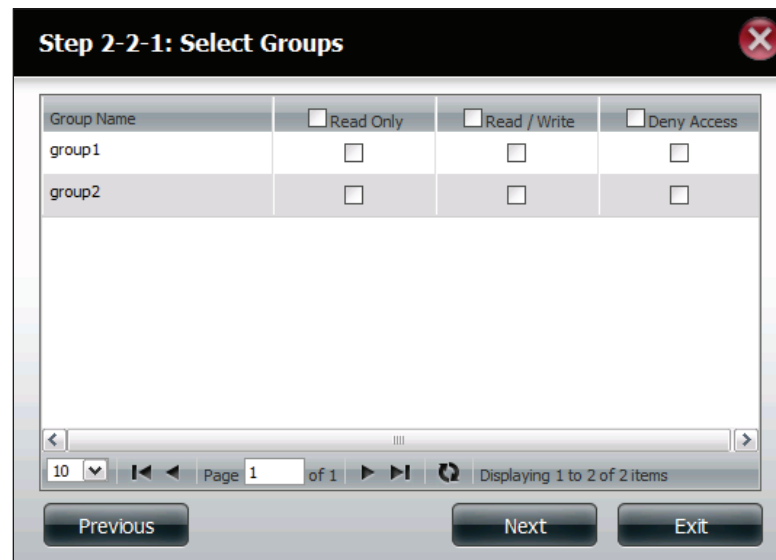
User Name	<input type="checkbox"/> Read Only	<input type="checkbox"/> Read / Write	<input type="checkbox"/> Deny Access
user 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
user 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
user 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Page 1 of 1 | Displaying 1 to 3 of 3 items

Previous Next Exit

**Step 6** - If you selected **Specific user/Group** in Step 3, then this step allows you to set the access rights for each Group configured on the ShareCenter™.

Click **Next** to continue.



The screenshot shows a configuration window titled "Step 2-2-1: Select Groups" with a close button (X) in the top right corner. It contains a table with columns: "Group Name", "Read Only", "Read / Write", and "Deny Access". The table lists two groups: "group1" and "group2". Each group has three checkboxes corresponding to the access rights. Below the table is a scroll bar and a pagination control showing "Page 1 of 1" and "Displaying 1 to 2 of 2 items". At the bottom are three buttons: "Previous", "Next", and "Exit".

Group Name	<input type="checkbox"/> Read Only	<input type="checkbox"/> Read / Write	<input type="checkbox"/> Deny Access
group1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
group2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Page 1 of 1 | Displaying 1 to 2 of 2 items

Previous Next Exit

**Step 7** - Here you can assign privileges to this share.

Opportunistic locks (oplocks) are a characteristic of the LAN Manager networking protocol implemented in the 32-bit Windows family.

Oplocks are guarantees made by a server for a shared logical volume to its clients. These guarantees inform the Client that a file's content will not be allowed to be changed by the server, or if some change is imminent, the client will be notified before the change is allowed to proceed.

Oplocks are designed to increase network performance when it comes to network file sharing. However it is recommended to set the share oplocks to No (off) when using file-based database applications. When enabled "Map Archive", the file attribute will be copied as the file is being stored on the ShareCenter™.

Click **Next** to continue.

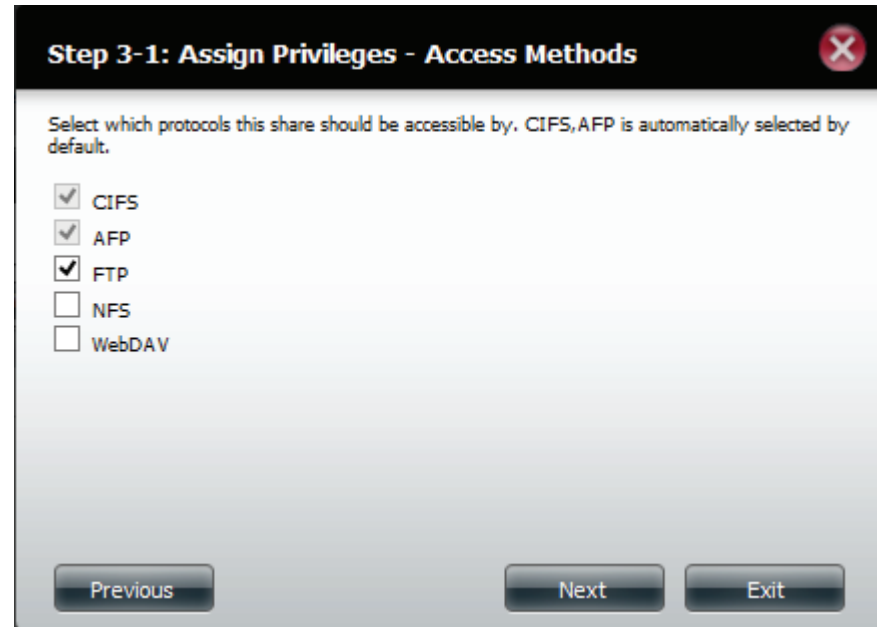
Share Name	Oplocks	Map Archive	Comment	Recycle
video	<input type="checkbox"/>	<input checked="" type="checkbox"/>	movies	<input checked="" type="checkbox"/>

Previous Next Exit

**Step 8** - Here you can assign more protocol privileges that a user can use to access this share. Options to choose from are FTP, NFS, and WebDAV. CIFS and AFP are set as default.

- CIFS is short for Common Internet File System.
- AFP is short for Apple Filing Protocol.
- FTP is short for File Transfer Protocol
- NFS is short for Network File System.
- WebDAV is short for Web-based Distributed Authoring and Versioning.

Click **Next** to continue.

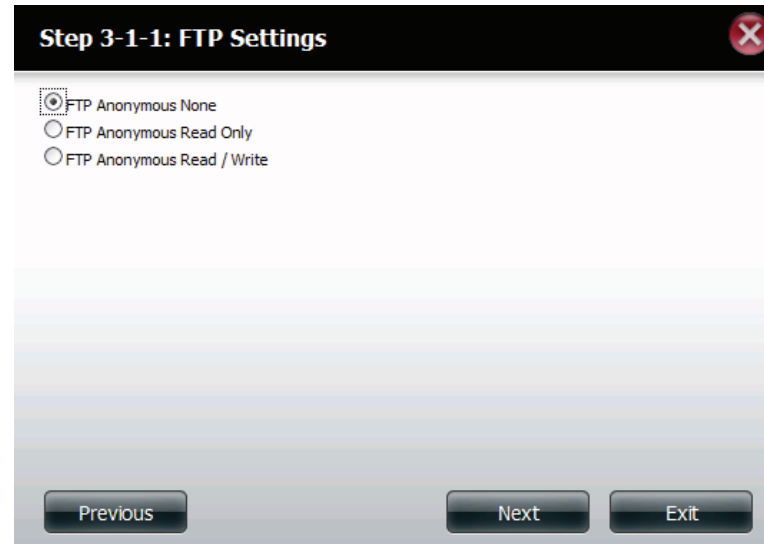




**Step 9** - Here you can configure the FTP settings for this share. FTP access can be:

- 1) FTP Anonymous None (No Access).
- 2) FTP Anonymous Read Only (Limited Access).
- 3) FTP Anonymous Read/Write (Full Access).

Click **Next** to continue.

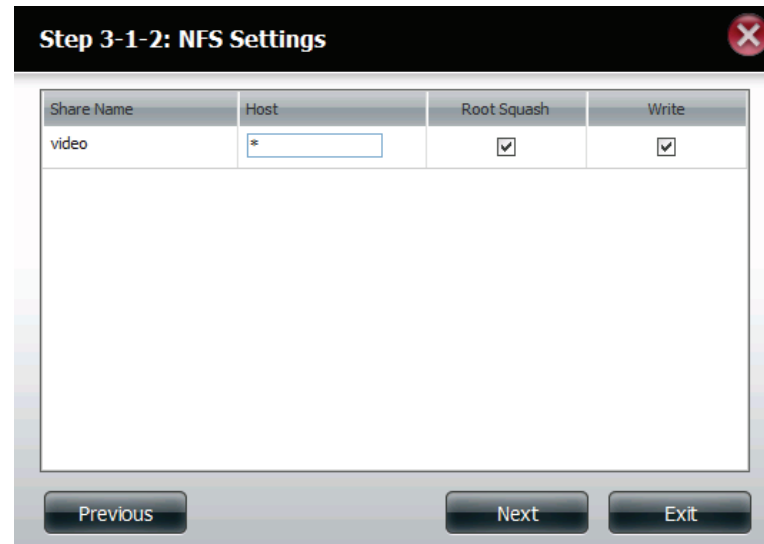


The dialog box titled "Step 3-1-1: FTP Settings" has a close button (X) in the top right corner. It contains three radio button options: "FTP Anonymous None" (selected), "FTP Anonymous Read Only", and "FTP Anonymous Read / Write". At the bottom, there are three buttons: "Previous", "Next", and "Exit".

If you checked NFS as an access method to your network share then this step allows you to set the parameters below:

- **Host** - Allowable host address that can access using NFS (\*indicates all hosts)
- **Root Squash** - Disables writing to the Root owned directories and files on the system when the user has root access privileges.
- **Write** - provide write permission to the file system.

Click **Next** to continue.



The dialog box titled "Step 3-1-2: NFS Settings" has a close button (X) in the top right corner. It contains a table with the following data:

Share Name	Host	Root Squash	Write
video	*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Below the table is a large empty text area. At the bottom, there are three buttons: "Previous", "Next", and "Exit".

If you checked WebDAV as an access method, then this step will allow you to set the access parameters.

Click **Next** to continue.

Step 3-1-3: WebDAV Settings

	Share Name	Read Only	Read / Write	Summary
<input checked="" type="checkbox"/>	video	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Read Only: - Read / Write: All Accounts

Previous

Next

Exit

**Step 10** - Here a summary of the created shares will be displayed.

Click **Finish** to save your settings.

Step 4: Finish

Your settings are now complete. Review your settings below and then click the **Finish** button below to save the settings to your NAS.

Share Name

video

Read Only

Read / Write

All Accounts

Deny Access

Application List

FTP,NFS,WebDAV

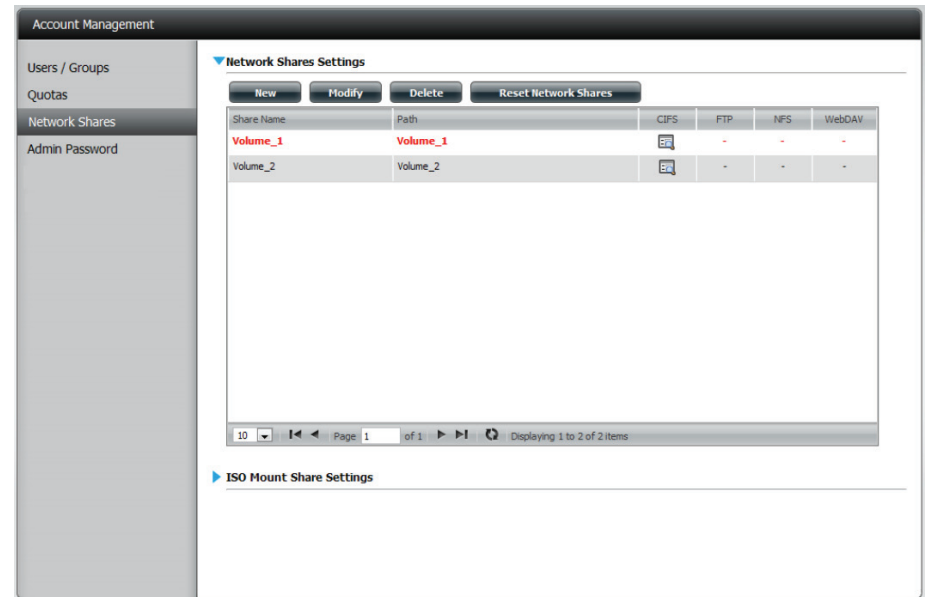
Previous

Finish

Exit

## Deleting a Network Share

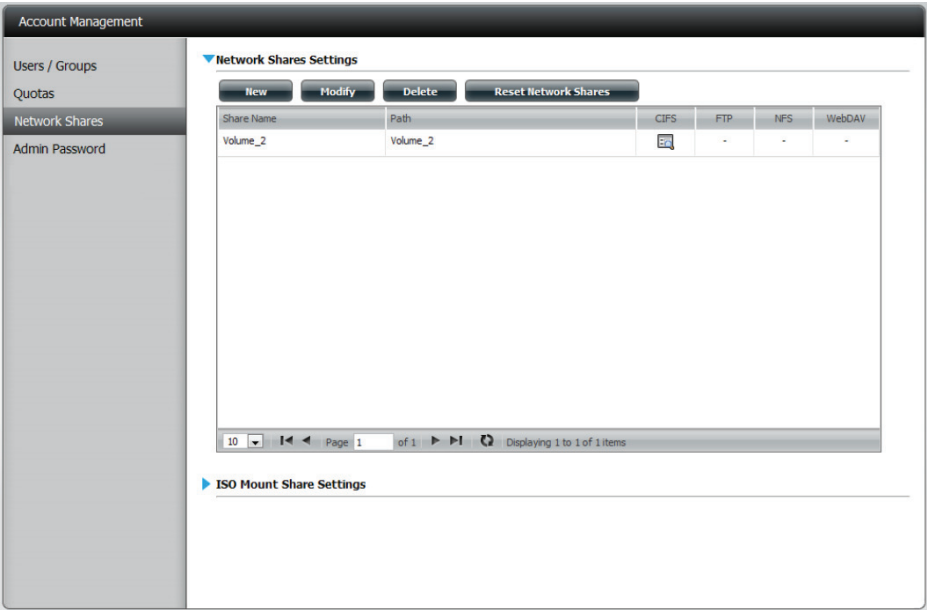
Select the Network Share you wish to delete. Your selection will turn red. Click **Delete** to remove the share.



A warning message will appear prompting you to verify if you wish to delete the Share. Click **Yes** to delete or **No** to Cancel.



The deleted **Share** will be removed from the **Network Share List**.



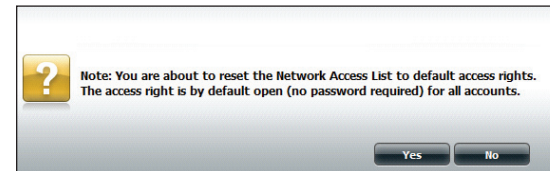
## Resetting the Network Shares

Click the **Reset Network Shares** button.



A warning message will prompt you to confirm your selection.

Click **Yes** to confirm or **No** to cancel.



## ISO Shares Setup Wizard

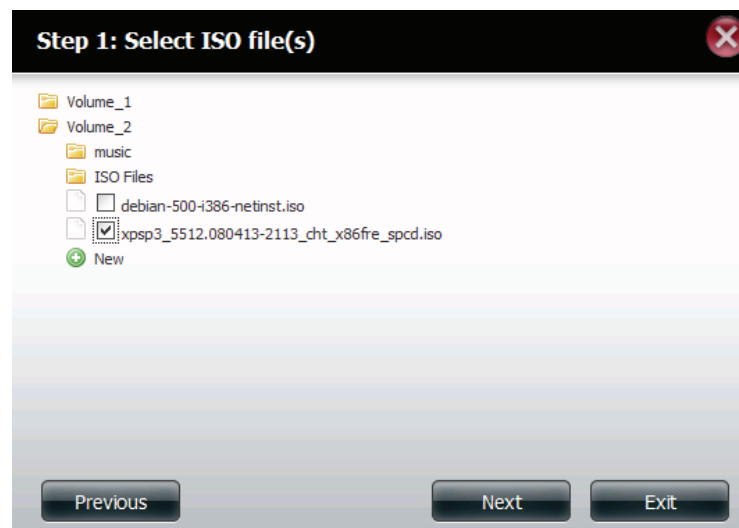
The following section will describe how to add a new ISO mount on the ShareCenter™. To add an ISO Mount, click on the **New** button. An easy to configure wizard will launch.

Click **Next** to continue.



Select the ISO file to mount.

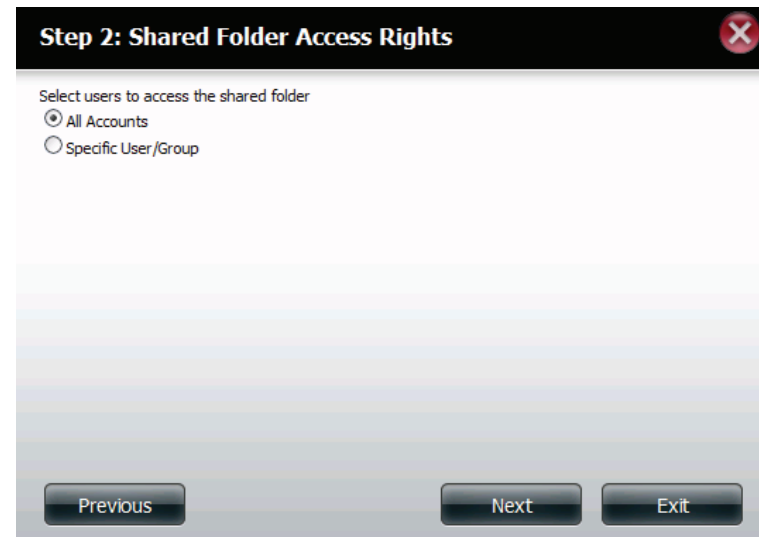
Check the box to the left of the .iso file to select it and click **Next** to continue.



Assign access privileges to this ISO Mount share.

- Select **All Accounts** to assign the ISO Mount share read/deny privileges to all users.
- Select **Specific User/Group** in order to assign read/deny privileges to individual users and groups.

Click **Next** to continue.



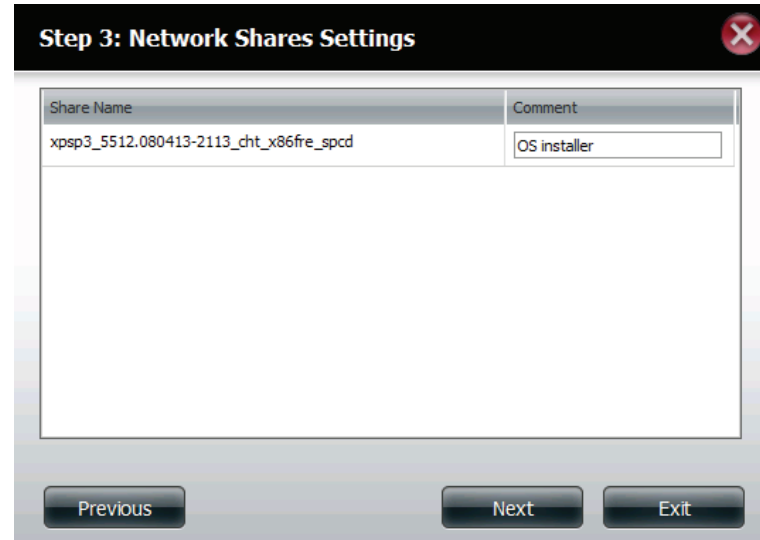
You can assign **Read Only** or **Deny Access** privileges to the ISO Mount share here. Click on the appropriate radio button for the privileges you would like to assign.

Click **Next** to continue.



Add a comment that describes the ISO Mount Share.

Click **Next** to continue.



Step 3: Network Shares Settings

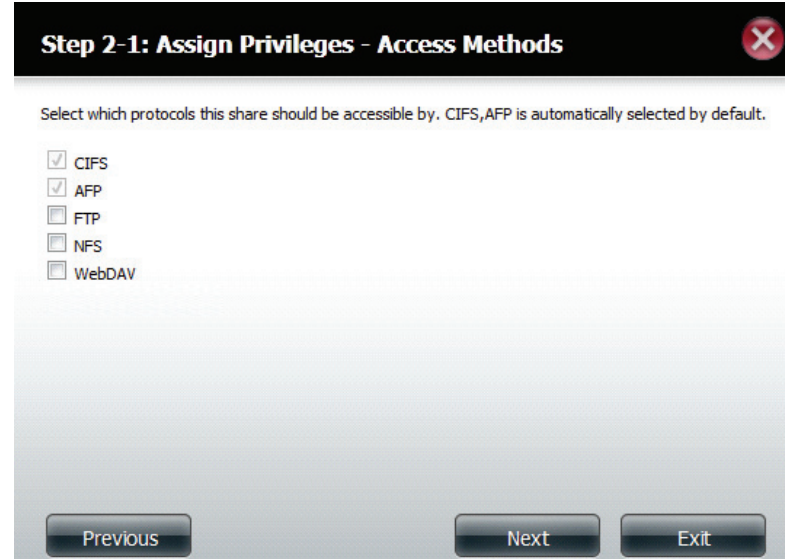
Share Name	Comment
xpsp3_5512.080413-2113_dht_x86fre_spcd	OS installer

Previous Next Exit

Assign more protocol privileges that a user can use to access this share. Options to choose from are FTP, NFS and WebDAV. CIFS and AFP are set as default.

- CIFS is short for Common Internet File System.
- AFP is short for Apple Filing Protocol.
- FTP is short for File Transfer Protocol
- NFS is short for Network File System.
- WebDAV is short for Web-based Distributed Authoring and Versioning.

Click **Next** to continue.



Step 2-1: Assign Privileges - Access Methods

Select which protocols this share should be accessible by. CIFS, AFP is automatically selected by default.

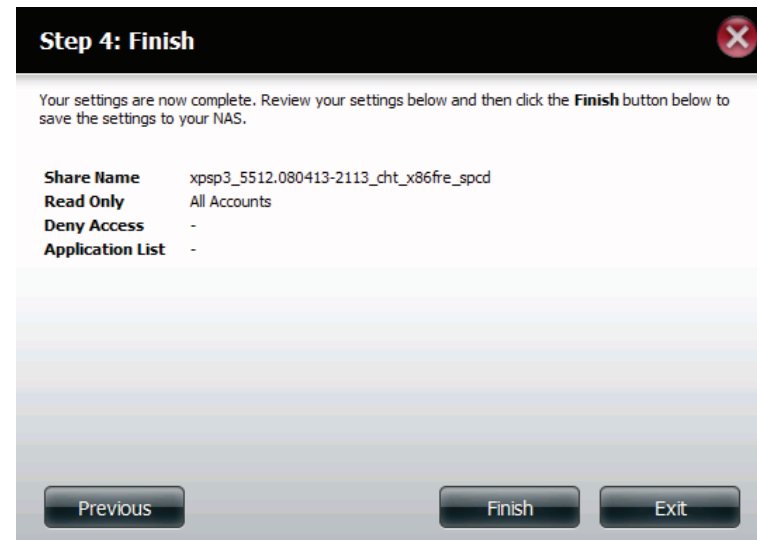
- ☒ CIFS
- ☒ AFP
- ☐ FTP
- ☐ NFS
- ☐ WebDAV

Previous Next Exit

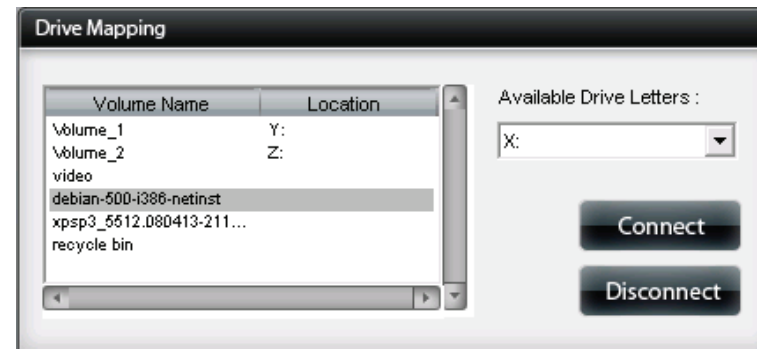


A summary of the share will be displayed.

Click on the **Finish** button to accept the change and complete the wizard.



Through the D-Link Storage Utility, the ISO Mount Share can now be mapped to your computer as a normal network share.



## Creating an ISO Image

The following section will describe how to create an ISO image from your NAS, export the data out to your PC.

Click **Account Management** > **Network Shares** > **ISO Mount Share Settings**.

Click on the **Create ISO Image** button at the bottom.

The screenshot displays the web interface of a D-Link ShareCenter DNS-320L. At the top, there is a navigation bar with icons for Setup Wizard, Disk Management, Account Management (selected), Network Management, Application Management, System Management, and System Status. Below this, the 'Account Management' section is active, showing a sidebar with 'Users / Groups', 'Quotas', 'Network Shares' (selected), and 'Admin Password'. The main content area is titled 'Network Shares' and contains a table with columns: Share Name, Path, CIFS, FTP, NFS, and WebDAV. The table has one row with 'Volume\_1' in both the Share Name and Path columns. Above the table are buttons for 'New', 'Modify', 'Delete', and 'Reset Network Shares'. Below the table is a pagination bar showing 'Page 1 of 1' and 'Displaying 1 to 1 of 1 items'. At the bottom, there is a section titled 'ISO Mount Share Settings' with buttons for 'New', 'Modify', 'Delete', and 'Create ISO Image'. Below these buttons is another table with the same columns as the one above, but it is currently empty.

Share Name	Path	CIFS	FTP	NFS	WebDAV
Volume_1	Volume_1				

10 | Page 1 of 1 | Displaying 1 to 1 of 1 items

ISO Mount Share Settings

Share Name	Path	CIFS	FTP	NFS	WebDAV
------------	------	------	-----	-----	--------

## ISO image Creation Wizard

The ISO image wizard helps you create an ISO image on your ShareCenter™.

Read the instructions for the **ISO Image Creation Wizard** and then click **Next** to continue.

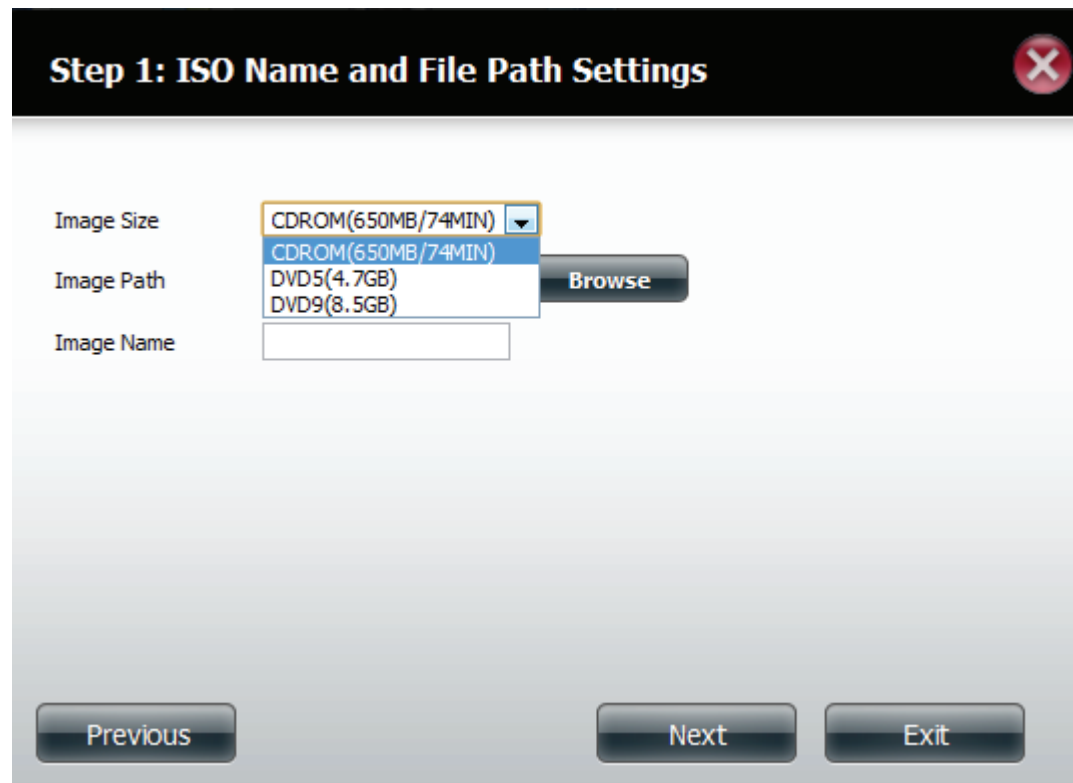


## ISO Name and File Path Settings

Select the **Image Size**.

There are three Image Size choices:

- CDROM (650MB/74MIN) - This creates an ISO file 650MB in size ready for burning onto a CDROM at a later stage.
- DVD5 (4.7GB) - This creates an ISO file 4.7GB in size ready for burning onto a single-layer DVD at a later stage.
- DVD9 (8.5GB) - This creates an ISO file 8.5GB in size ready for burning onto a double-layer DVD at a later stage.



**Step 1: ISO Name and File Path Settings**

Image Size: CDROM(650MB/74MIN) ▼

Image Path: DVD5(4.7GB) **Browse**

Image Name:

CDROM(650MB/74MIN)

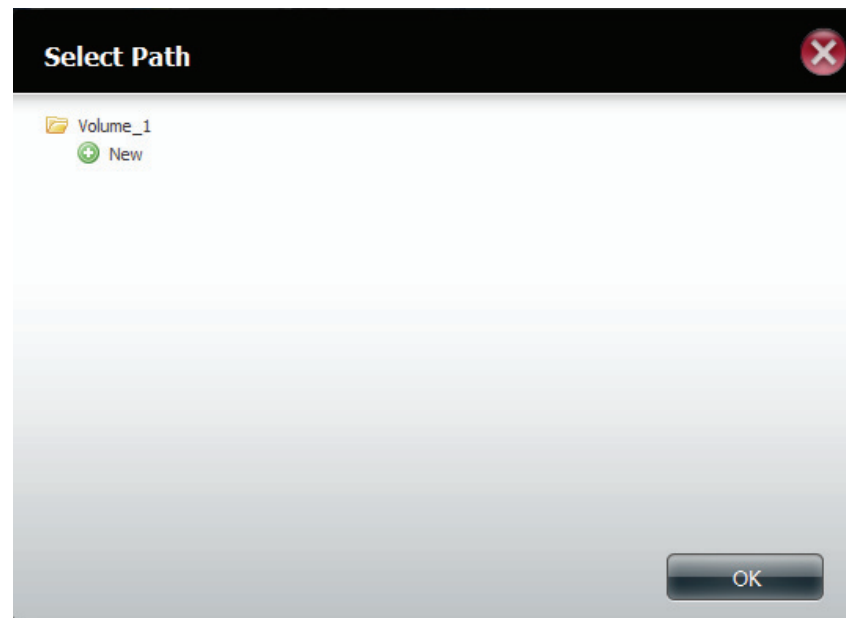
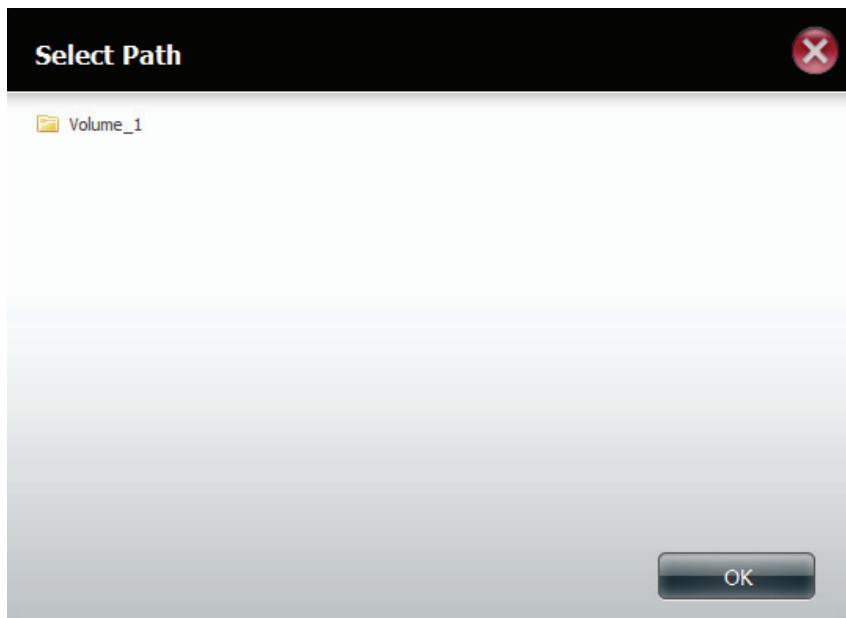
DVD5(4.7GB)

DVD9(8.5GB)

**Previous** **Next** **Exit**

Select the **Image Path**.

Click the **Browse** button to select the destination folder on your NAS. Click the **Volume** to save it there or click **New** to create a new directory.

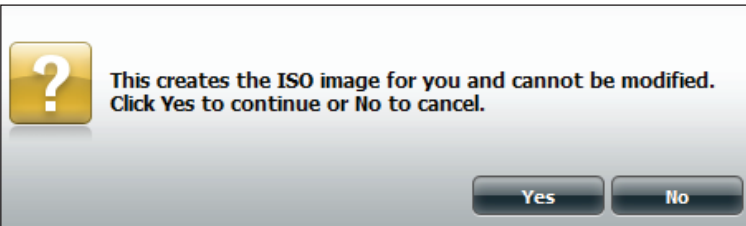


Enter a name that resembles the ISO file you are writing. Click **Next**.



The dialog box is titled "Step 1: ISO Name and File Path Settings" with a red close button in the top right corner. It contains three input fields: "Image Size" with a dropdown menu showing "CDROM(650MB/74MIN)", "Image Path" with a text box and a "Browse" button, and "Image Name" with a text box. At the bottom, there are three buttons: "Previous", "Next", and "Exit".

A warning message appears asking you to confirm your decision. Click **Yes** to continue or click **No** to cancel.



The dialog box features a yellow question mark icon on the left. The text reads: "This creates the ISO image for you and cannot be modified. Click Yes to continue or No to cancel." At the bottom right, there are two buttons: "Yes" and "No".

## ISO Tree Editing

On the left side of the **ISO Tree Editing** window you have the option to **Overwrite** a previous ISO file or **Skip** it. It also displays the main directory on your NAS. Select the file(s) and click the --> button to add the file(s) to the ISO image. On the right side of the window it displays the total available space of the ISO file and the used space of the ISO. At the bottom of the window it shows the **path** where the ISO file will be saved.

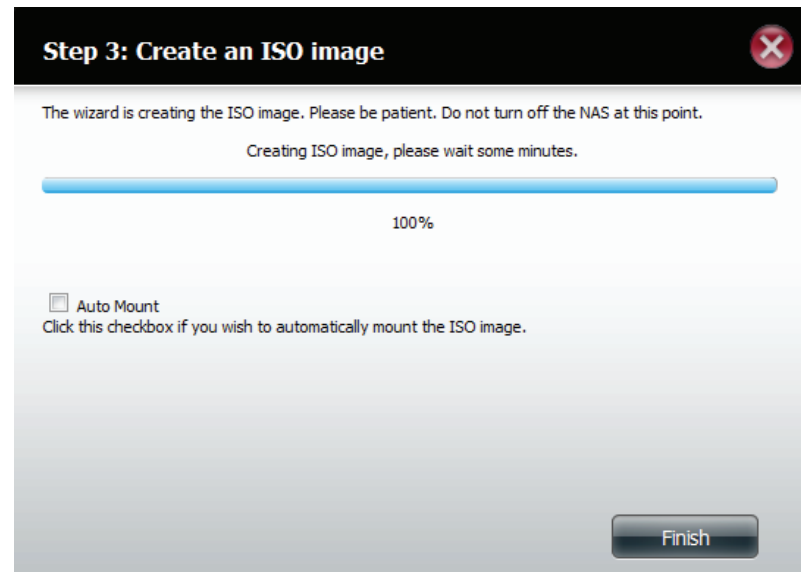
Click **Next** to continue.



The wizard will create the ISO image.

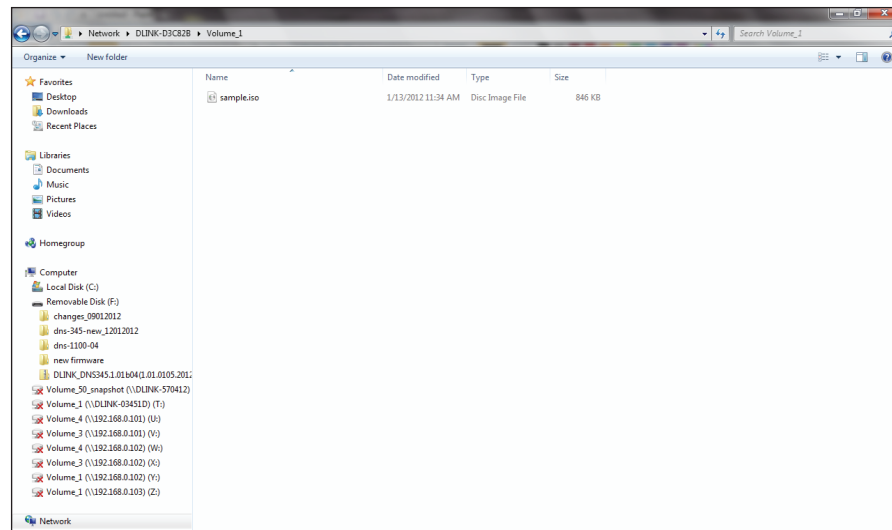
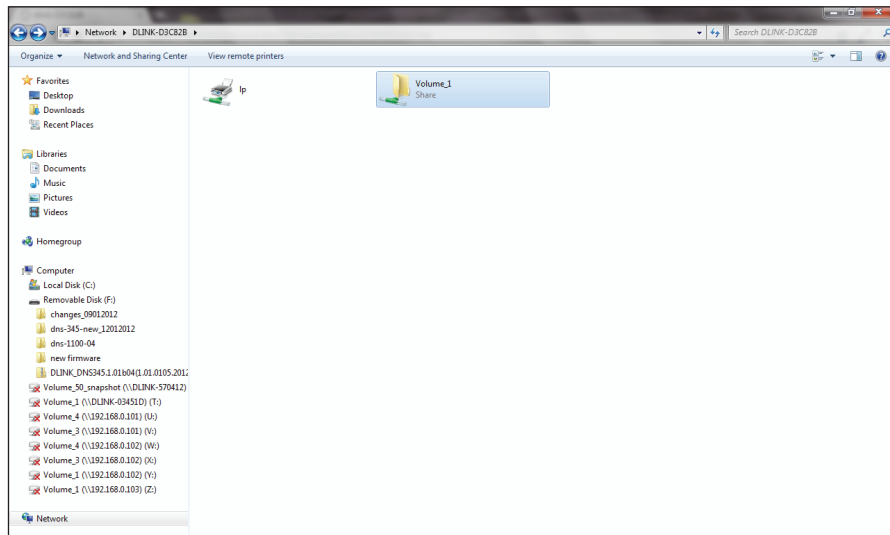
Click the **Auto Mount** checkbox if you want the ISO file to be mounted automatically.

Click **Finish** to close the wizard.



### Verifying the ISO image

Open your **Windows Explorer**, click the **Network** icon, **double-click** your **ShareCenter™ NAS**. Double-click the **volume** you saved the ISO. Your **ISO** image should be there.





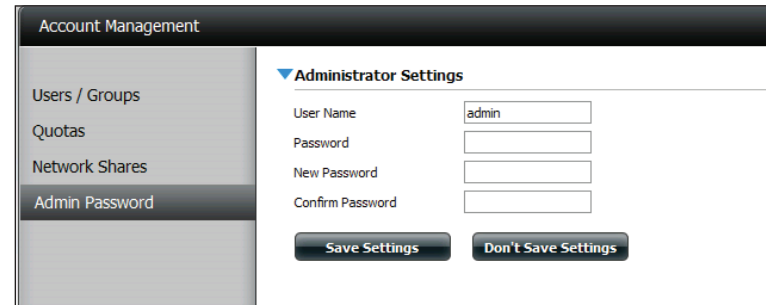
### Admin Password

Changes to the administrator username and password can be made here.

The Administrator Settings allows you to change the Username and Password settings.

1. Enter a new **Username**
2. Type the **original Password**
3. Enter a **New Password**
4. Confirm the **New Password**

Click **Save Settings** to accept the changes or **Don't Save Settings** to cancel changes.



The screenshot shows a web interface titled "Account Management". On the left is a sidebar menu with the following items: "Users / Groups", "Quotas", "Network Shares", and "Admin Password" (which is highlighted). The main content area is titled "Administrator Settings" with a blue downward arrow icon. It contains four input fields: "User Name" (with the text "admin" inside), "Password", "New Password", and "Confirm Password". At the bottom of the form are two buttons: "Save Settings" and "Don't Save Settings".

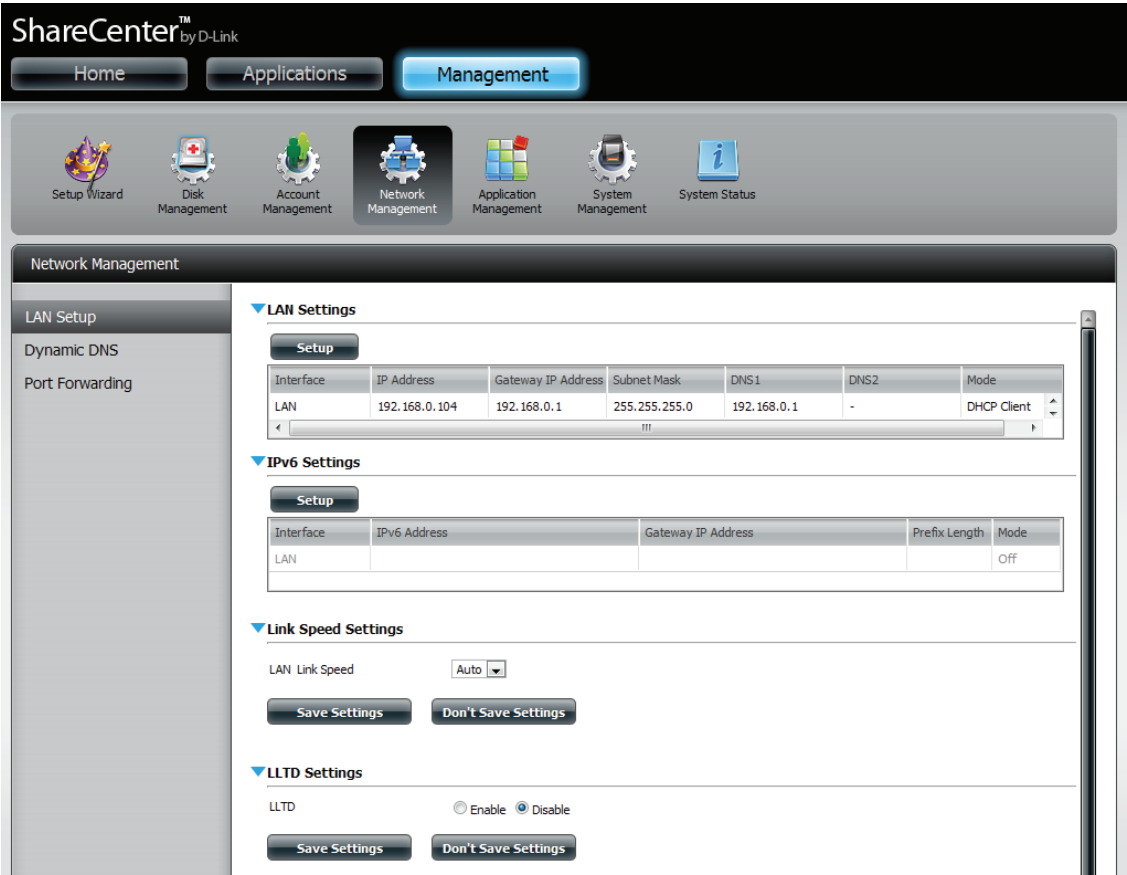
# Network Management

## LAN Setup

Network Management controls and manages all issues referring to LAN settings. Even though your LAN settings were configured in the Setup Wizard, it can still be configured here.

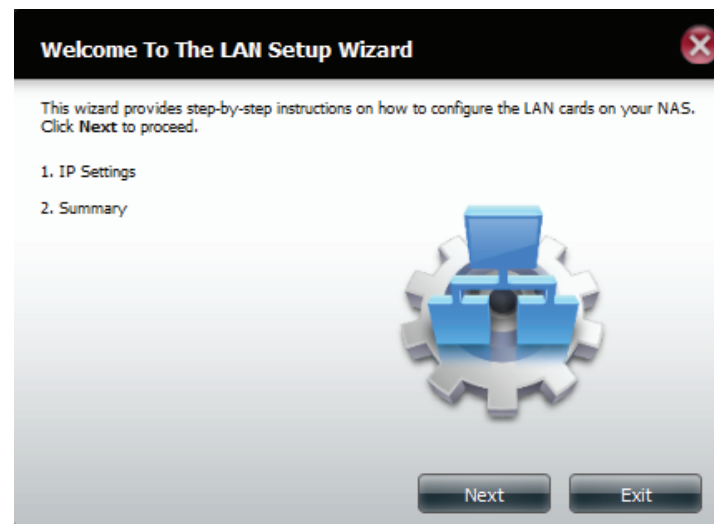
Go to **Network Management** and then **LAN Setup**.

Click **Setup**.



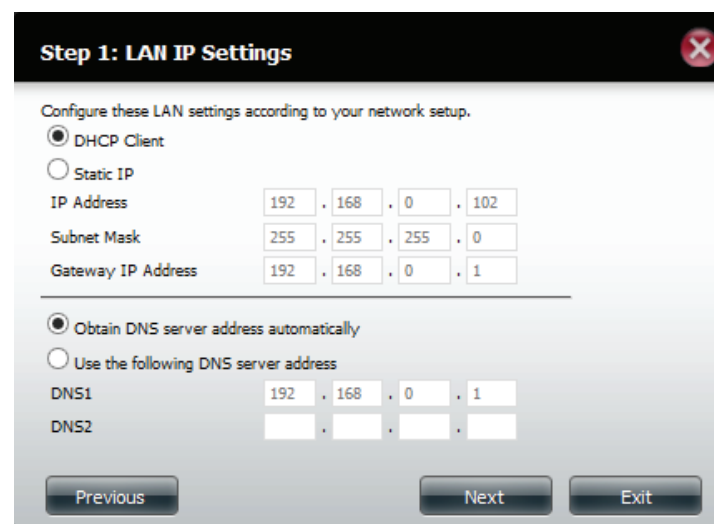
The LAN setup wizard gives you the option to configure the - IP settings.

Click **Next** to continue.



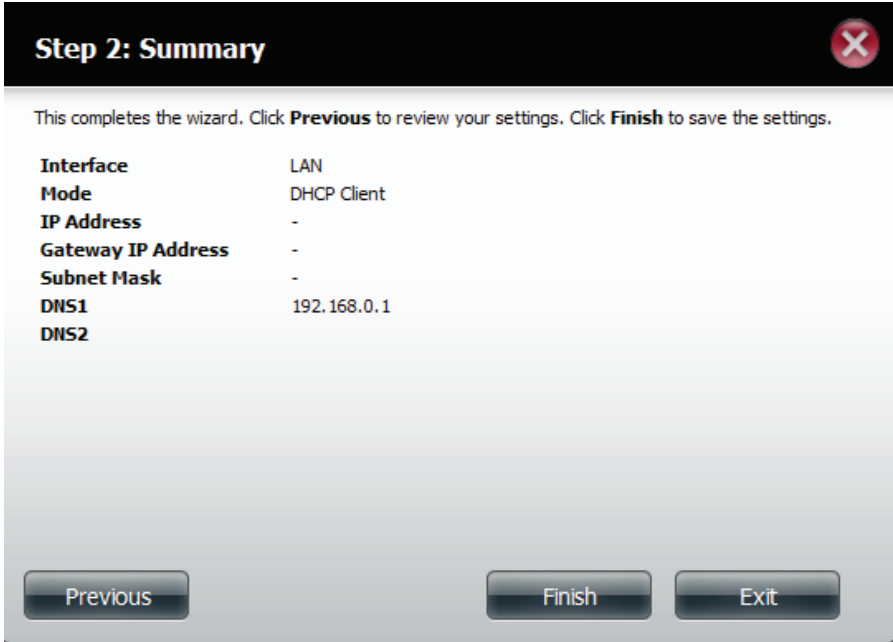
This step allows you to configure your LAN settings. Here you can choose between **DHCP Client** or **Static IP**. If you select Static IP, you will need to manually configure your own IP settings.

Click **Next** to continue.



A summary of what you just configured will be displayed.

Click **Finish** to exit the wizard.



## IPv6 Settings

Go to **Management > Network Management > LAN Setup > IPv6 Settings** and click the **Setup** button. An IPv6 setup window will appear.

The screenshot displays the ShareCenter™ by D-Link Network Management web interface. The top navigation bar includes 'Home', 'Applications', and 'Management' (which is highlighted). Below this, a row of icons represents various management functions: Setup Wizard, Disk Management, Account Management, Network Management (selected), Application Management, System Management, and System Status.

The main content area is titled 'Network Management' and features a left-hand sidebar with 'LAN Setup', 'Dynamic DNS', and 'Port Forwarding'. The 'LAN Setup' section is expanded, showing a 'Setup' button and a table of network settings for the 'LAN' interface.

**LAN Settings**

Interface	IP Address	Gateway IP Address	Subnet Mask	DNS1	DNS2	Mode
LAN	192.168.0.102	192.168.0.1	255.255.255.0	192.168.0.1	-	DHCP Client

**IPv6 Settings**

Setup

Interface	IPv6 Address	Gateway IP Address	Prefix Length	Mode
LAN				Off

**Link Speed Settings**

**LLTD Settings**

## IPv6 Setup

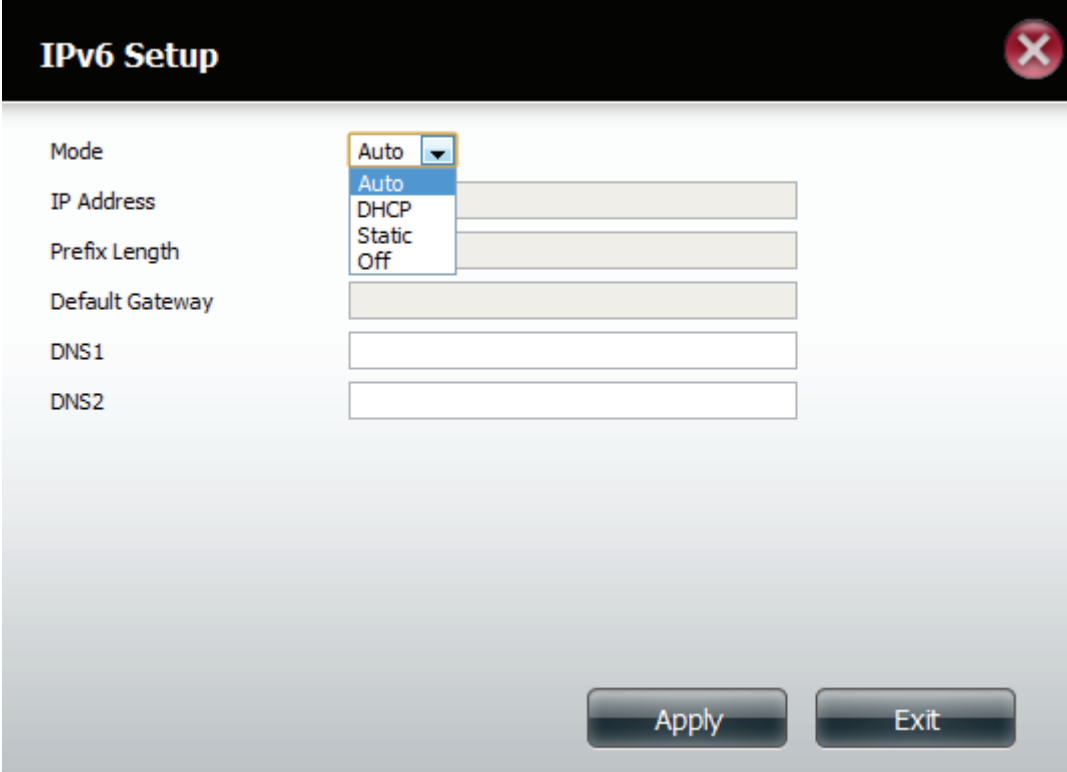
There are four connection modes to select from: **Auto**, **DHCP**, **Static** and **Off**.

**Auto** - Requests information specifically from an IPv6-enabled router and automatically configure your settings.

**DHCP** - Requests information from a DHCP server.

**Static** - Enter your own IP configuration

**Off** - Do not use IPv6



The image shows a screenshot of the 'IPv6 Setup' configuration window. The window has a black title bar with the text 'IPv6 Setup' and a red close button. The main area is light gray and contains several configuration fields. The 'Mode' field is a dropdown menu with 'Auto' selected. Below it are text input fields for 'IP Address', 'Prefix Length', 'Default Gateway', 'DNS1', and 'DNS2'. At the bottom right, there are two buttons: 'Apply' and 'Exit'.

Field	Value
Mode	Auto
IP Address	
Prefix Length	
Default Gateway	
DNS1	
DNS2	

Buttons: Apply, Exit

## Section 4 - Configuration

When configuring IPv6 with Static Mode, enter the IP address provided by your system administrator. The prefix length for an IPv6 subnet will always be 64; no more, no less. Enter the Default Gateway, and DNS settings. Click **Apply** when complete. The IPv6 Settings table will now display the settings in table format.

In order for the changes to take effect, you are prompted to re-login. Click **OK** and log in.

You need to re-login to have these settings take effect.

OK

The screenshot displays the D-Link ShareCenter Management web interface. At the top, there are navigation tabs: Home, Applications, and Management (which is selected). Below these are icons for various management functions: Setup Wizard, Disk Management, Account Management, Network Management (selected), Application Management, System Management, and System Status.

The main content area is titled "Network Management" and contains a sidebar with "LAN Setup", "Dynamic DNS", and "Port Forwarding". The "LAN Setup" section is expanded, showing "LAN Settings" and "IPv6 Settings".

**LAN Settings**

Interface	IP Address	Gateway IP Address	Subnet Mask	DNS1	DNS2	Mode
LAN	192.168.0.102	192.168.0.1	255.255.255.0	192.168.0.1	-	DHCP Client

**IPv6 Settings**

Interface	IPv6 Address	Gateway IP Address	Prefix Length	Mode
LAN				Auto

## Link Speed and LLTD Settings

**Link Speed:** Select either **Auto (Auto-Negotiate)**, **100Mbps**, or **1000Mbps** from the drop-down menu. Click the **Save Settings** button to save the new settings.

**LLTD:** The device supports LLTD (Link Layer Topology Discovery) and is used by the Network Map application that is included in Windows Vista® and Windows® 7.

Select to enable or disable LLTD.

The screenshot shows the D-Link ShareCenter Management web interface. The top navigation bar includes 'Home', 'Applications', and 'Management' (which is highlighted). Below this is a row of icons for various management functions: Setup Wizard, Disk Management, Account Management, Network Management (selected), Application Management, System Management, and System Status. The main content area is titled 'Network Management' and contains a sidebar on the left with 'LAN Setup', 'Dynamic DNS', and 'Port Forwarding'. The 'LAN Setup' section is active, displaying a table with network configuration details:

Interface	IPv6 Address	Gateway IP Address	Prefix Length	Mode
LAN				Auto

Below the table, there are two sections for configuration:

**Link Speed Settings**

LAN Link Speed:

**LLTD Settings**

LLTD: ☐ Enable ☒ Disable



## DDNS

The DDNS feature allows the user to host a server (Web, FTP, Game Server, etc...) using a domain name that you have purchased (www.whateveryournameis.com) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. Using a DDNS service provider, your friends can enter your domain name to connect to your server regardless of your IP address.

Go to **Network Management** and then **Dynamic DNS**.

**DDNS:** Select Enable or Disable.

**Server Address:** Select a DDNS Server from the combo box on the right hand-side, or type in the server address manually.

**Host Name:** Enter your DDNS host name.

**Username or Key:** Enter your DDNS username or key.

**Password or Key:** Enter your DDNS password or key.

**Verify:** Re-enter your password or key.

**Status:** Displays your DDNS status.

When the user clicks on the "Sign up for D-Link's Free DDNS service at [www.DLinkDDNS.com](http://www.DLinkDDNS.com) link, the user will be re-directed to the D-Link DDNS page.

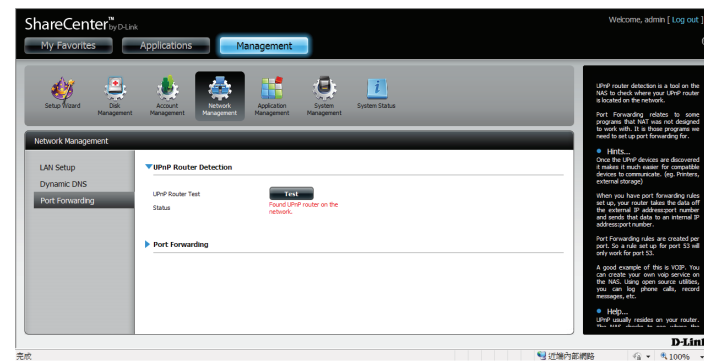
Here the user can create or modify a D-Link DDNS account to use in this configuration.

# Port Forwarding

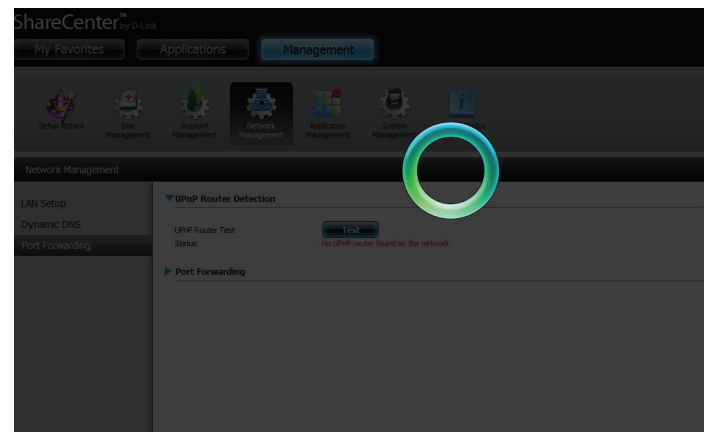
The DNS-320L supports UPnP port forwarding which configures port forwarding automatically on your UPnP-enabled router.

**Note:** *You will need a UPnP router on your network.*

Log in and click **Network Management > Port Forwarding**.  
Click **Test** to run a search.



The DNS-320L is searching for a UPnP router. Do not turn off your NAS.

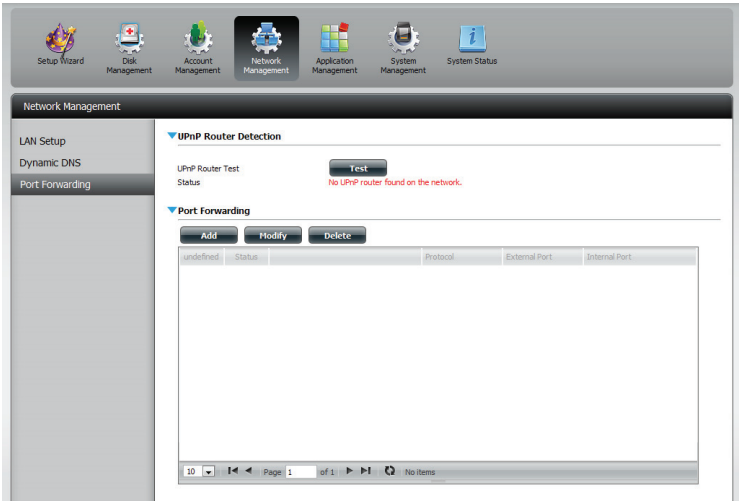


A message will notify you that the wizard has found a UPnP router on the network.

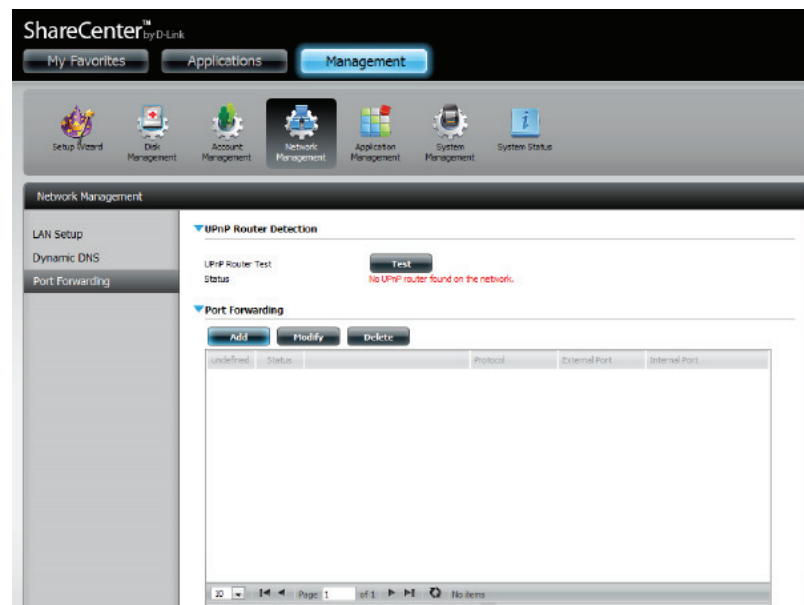
Note that you have to enable UPnP on your router.



Click the blue arrow next to port forwarding to reveal the Port Forwarding options.

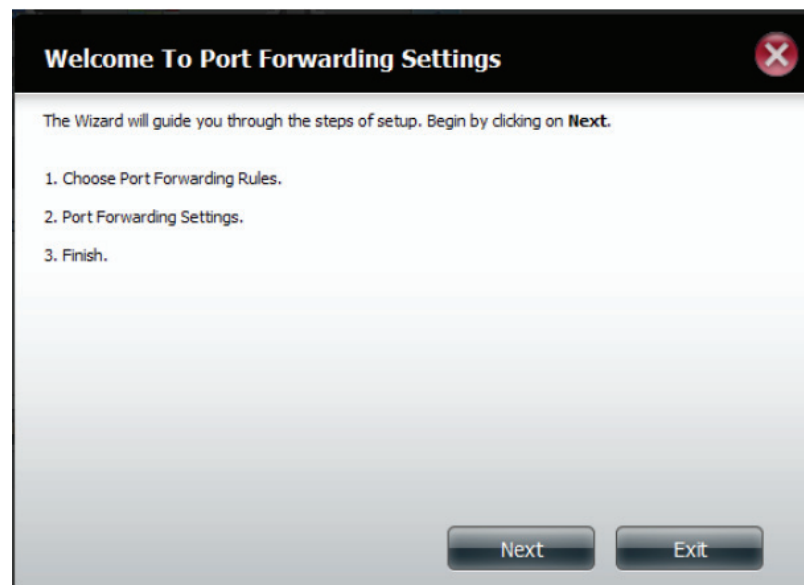


Click **Add**.



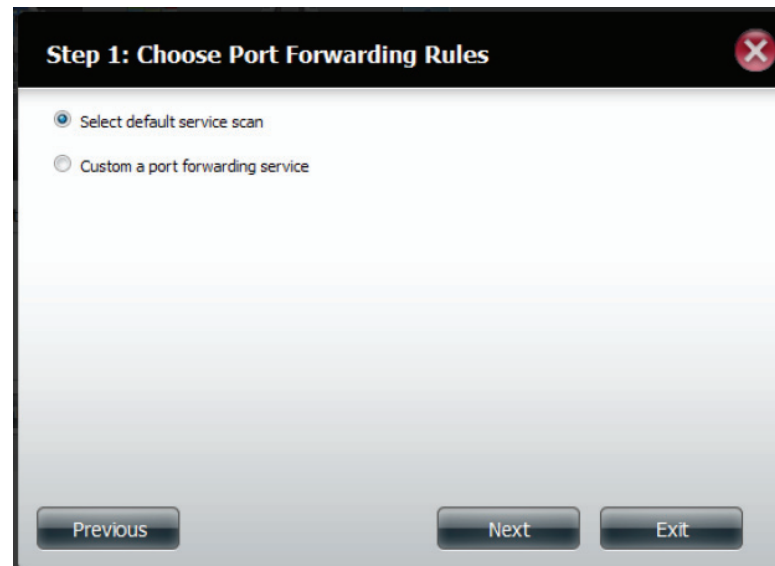
The Port Forwarding wizard will start.

Click **Next** to continue.



Select **Select default service scan** to select the port forwarding services from a list or select **Custom a port forwarding service** to manually configure your own settings.

Click **Next** to continue.



Step 1: Choose Port Forwarding Rules

☒ Select default service scan

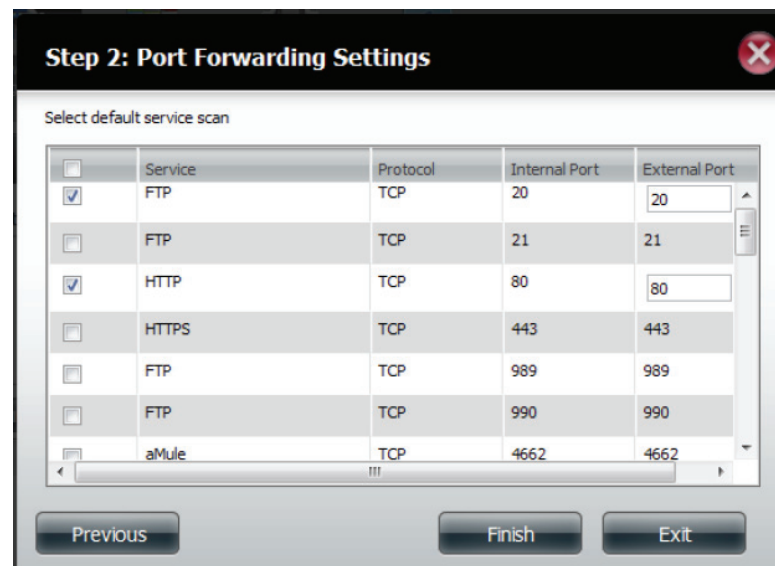
☐ Custom a port forwarding service

Previous Next Exit

If you select default service scan, choose the service(s) to be allowed for remote access from the Internet via your UPnP-enabled router.

**Note:** You can select more than one port.

Click **Previous** to change the Port Forward Rule or **Finish** to configure the port forwarding on the UPnP router automatically.



Step 2: Port Forwarding Settings

Select default service scan

<input type="checkbox"/>	Service	Protocol	Internal Port	External Port
<input checked="" type="checkbox"/>	FTP	TCP	20	20
<input type="checkbox"/>	FTP	TCP	21	21
<input checked="" type="checkbox"/>	HTTP	TCP	80	80
<input type="checkbox"/>	HTTPS	TCP	443	443
<input type="checkbox"/>	FTP	TCP	989	989
<input type="checkbox"/>	FTP	TCP	990	990
<input type="checkbox"/>	aMule	TCP	4662	4662

Previous Finish Exit

# Application Management

## FTP server

The Application Management section allows you to configure many services for your DNS-320L. The server and service settings include: FTP server, Add-ons, AFP, NFS, and multimedia services. Let's begin by looking at configuration options for the FTP server.

**Max User:** Set the maximum amount of users that can connect to the FTP server.

**Idle Time:** Set the amount of time a user can remain idle before being disconnected.

**Port:** Set the FTP port. Default is 21. If you are behind a router, you will need to forward the FTP port from the router to the device. Additional filtering and firewall settings may need to be modified on your router to allow FTP Access to the device from the Internet. Once the port has been forwarded on the router, users from the Internet will access the FTP server through the WAN IP address of the router.

**Passive Mode:** In situations where the device is behind a firewall and unable to accept incoming TCP connections, passive mode must be used.

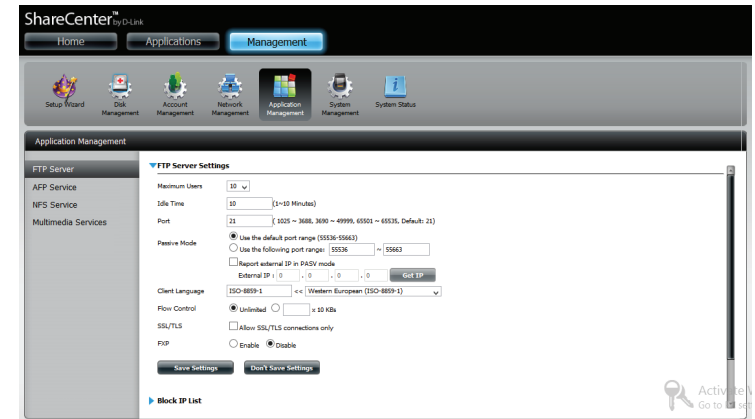
**Client Language:** Most standard FTP clients like Windows FTP, only support Western European code page when transferring files. Support has been added for non standard FTP clients that are capable of supporting these character sets.

**Flow Control:** Allow you to limit the amount of bandwidth available for each user.

**SSL/TLS:** Here the user can enable the SSL/TLS connection only.

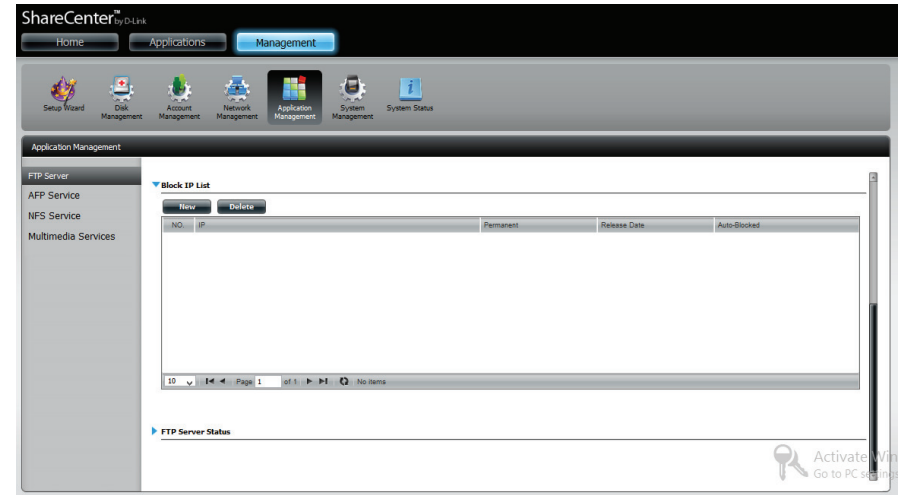
**FXP:** Enable or Disable File eXchange Protocol to transfer files from one FTP server to another.

**Note:** In order to use FXP (File Exchange Protocol) for server-to-server data transfer, make sure to change the port from 21 to some other port as listed in the Port section of the Web UI. Also, make sure to open the corresponding port on your router and forward that port from your router to the device.



### Block IP List

Block IP List allows you to block IP address that you consider threatening to your network. Click the blue arrow to open the configuration window.

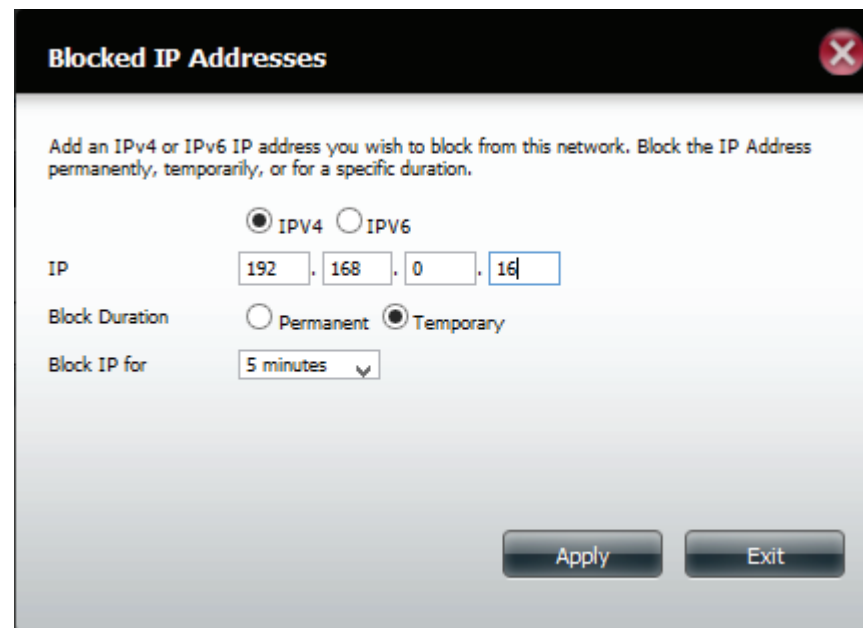


The window expands to include a Blocked IP list and a FTP Server Status report. Click the blue arrow to see the drop-down list.

Click **New** to block a specific IP address.

Select **IPv4** or **IPv6** and then enter the IP address of a machine you wish to block. Select **Permanent** if you wish to block the IP address permanently or **Temporary** if you wish to set a time frame.

If you selected permanent, click **Apply** and continue.



**Blocked IP Addresses**

Add an IPv4 or IPv6 IP address you wish to block from this network. Block the IP Address permanently, temporarily, or for a specific duration.

☒ IPv4 ☐ IPv6

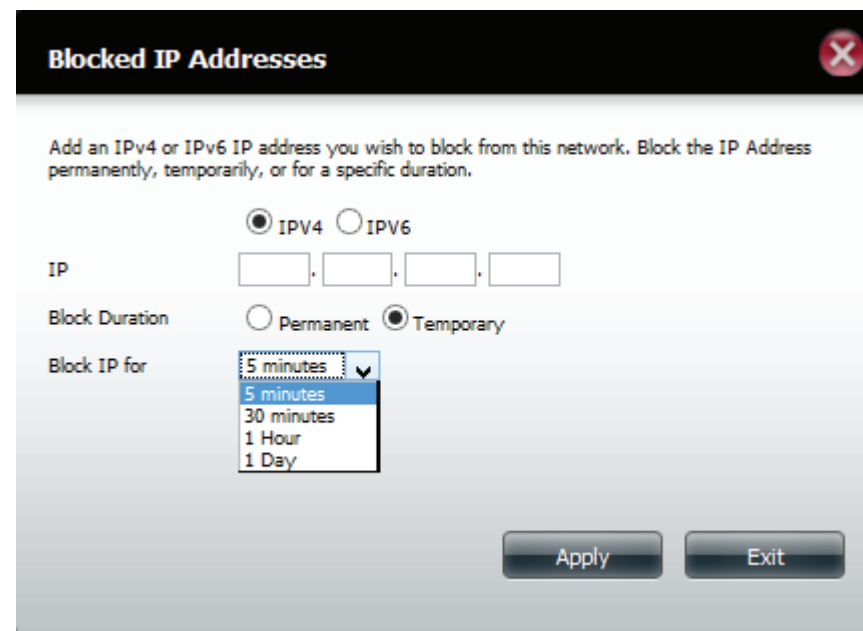
IP: 192 . 168 . 0 . 16

Block Duration: ☐ Permanent ☒ Temporary

Block IP for: 5 minutes

Apply Exit

If you selected **Temporary**, then select a time frame and click **Apply** to continue.



**Blocked IP Addresses**

Add an IPv4 or IPv6 IP address you wish to block from this network. Block the IP Address permanently, temporarily, or for a specific duration.

☒ IPv4 ☐ IPv6

IP: . . .

Block Duration: ☐ Permanent ☒ Temporary

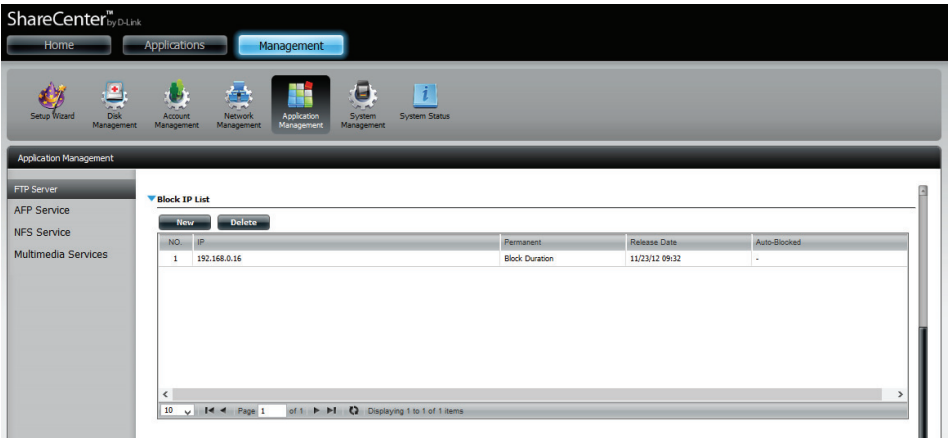
Block IP for: 5 minutes

5 minutes  
30 minutes  
1 Hour  
1 Day

Apply Exit

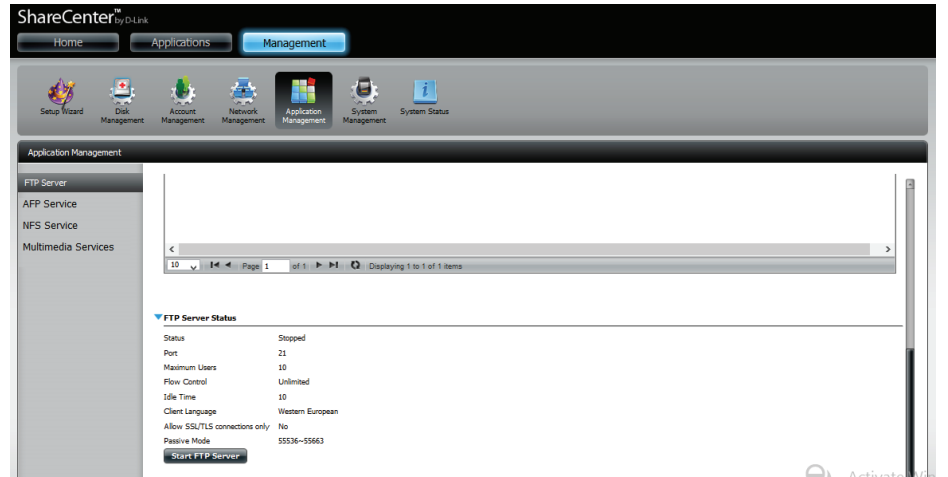


The **Blocked IP** list will display the IP addresses you blocked.

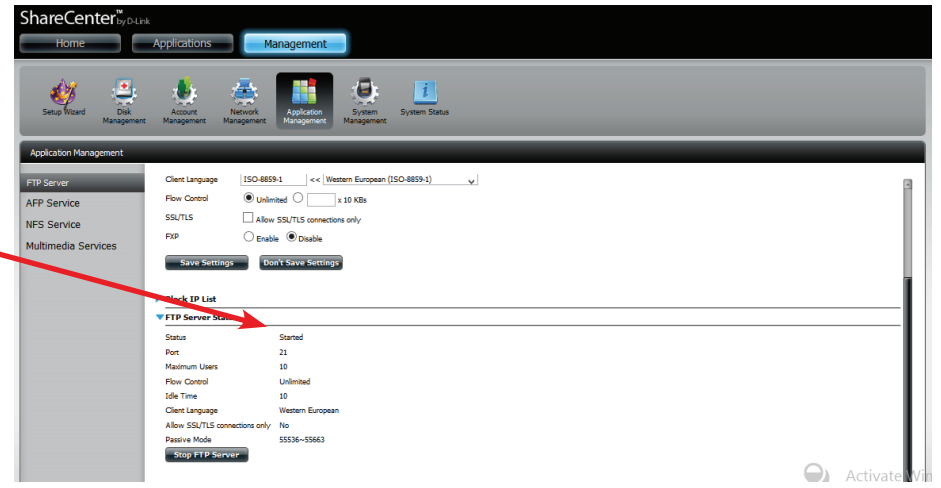


Click the blue arrow next to **FTP Server Status** to reveal the FTP details.

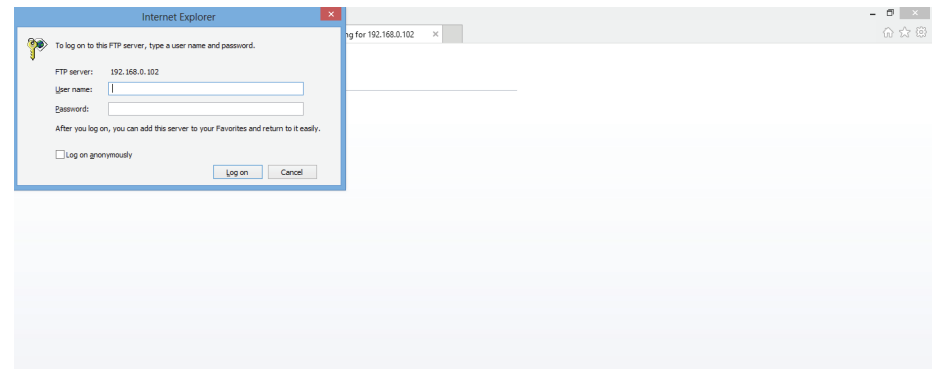
The FTP server is stopped by default. Click **Start FTP Server** to run the process.



After you have clicked the **Start** button, the **Status** shows **Started**.



Open your default browser or FTP application and log-in to your FTP server.



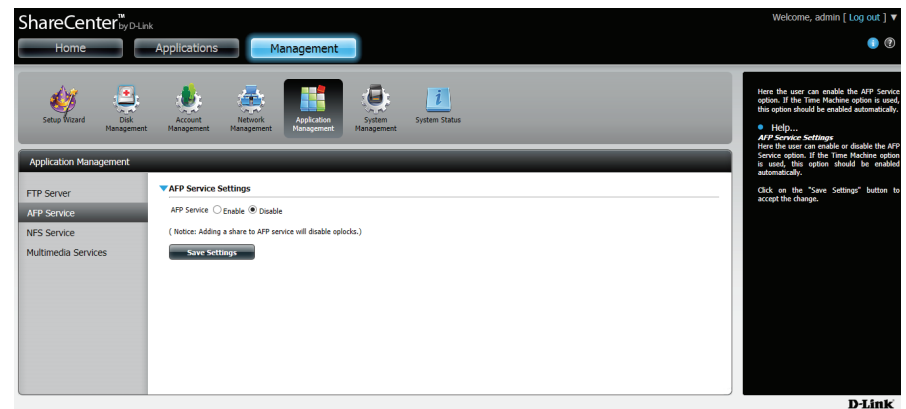
### AFP Service

The ShareCenter™ supports Apple Filing Service for connectivity with Mac OS® based computers. If you need to use AFP service enable it here otherwise leave it disabled to reduce CPU resource overhead.

Click **Application Management > AFP Service**.

Click the **Enable** radio button to turn AFP service on.

Click **Save Settings**.



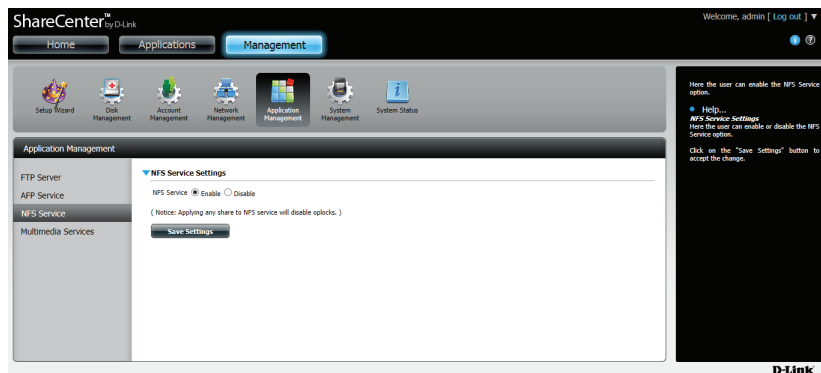
### NFS Service

The ShareCenter™ supports Network File System (NFS) service. To enable this multi-platform file system on your ShareCenter™ enable it here. Otherwise disable the option to prevent unnecessary CPU overhead.

Click **Application Management > NFS Service**.

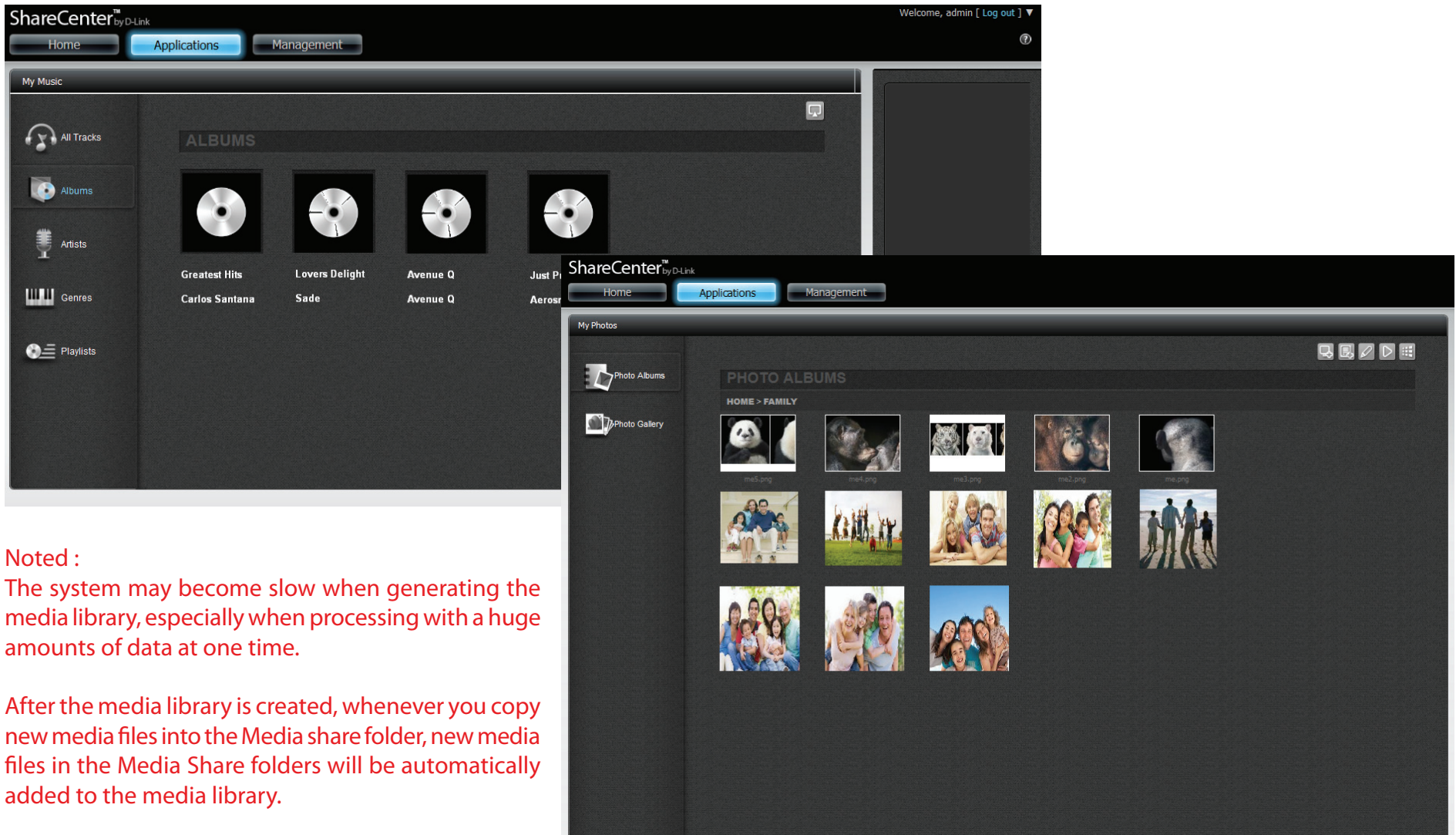
Click the **Enable** radio button to turn NFS service on.

Click **Save Settings**.



## Multimedia Services

The Multimedia Share Settings creates a media library from the photos, videos, and audio files. Users can upload files to the designated “Media Share” folders on the DNS-320L and have the multimedia services collate, organize and publish the data in one library. Once these photos, videos, and music files are uploaded to the “Media Shares” folders, the system will generate the media library. Users can see thumbnail views from the MyMusic and MyPhoto panel. The My Music service provides detailed information on the genres, file size and cover art. My Photo creates automatic albums and collates them according to your collection.

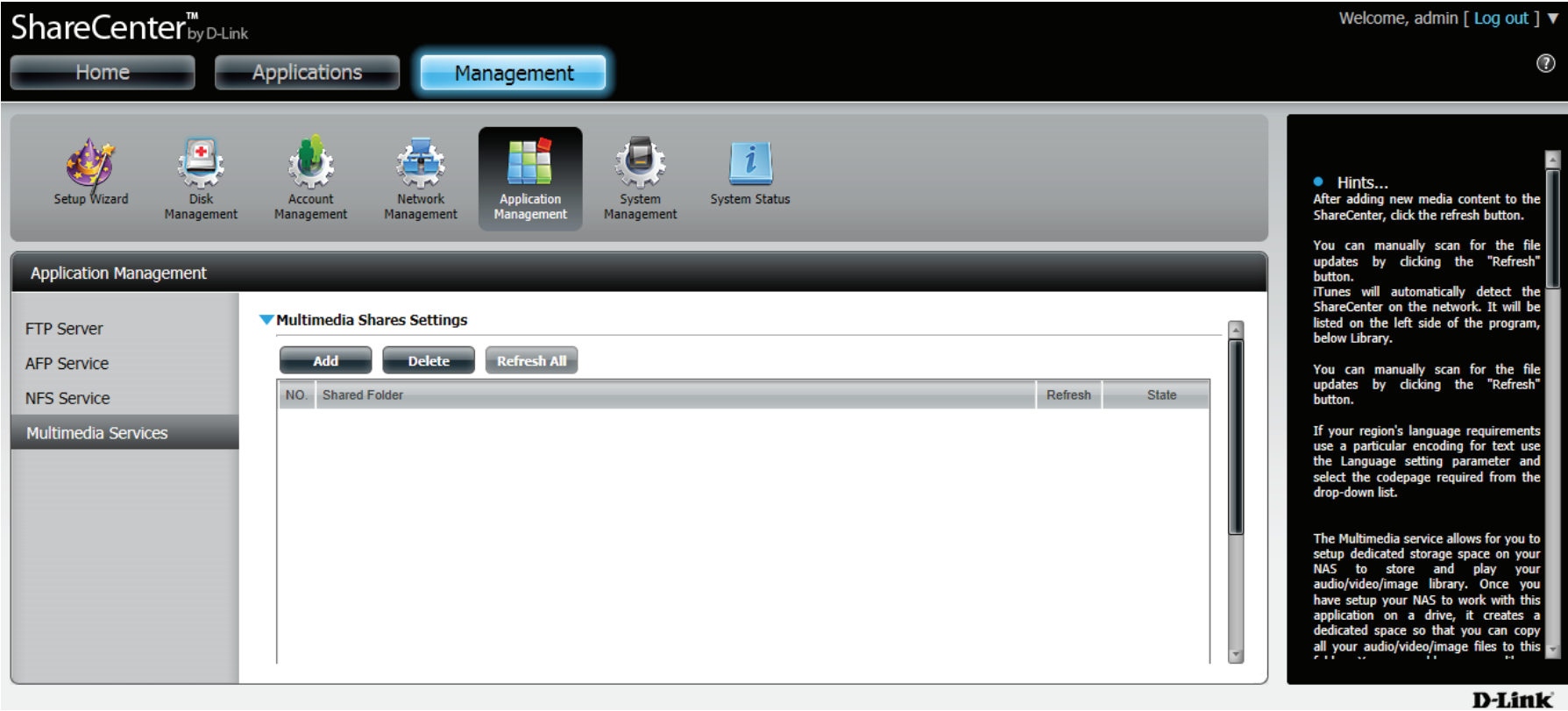


**Noted :**

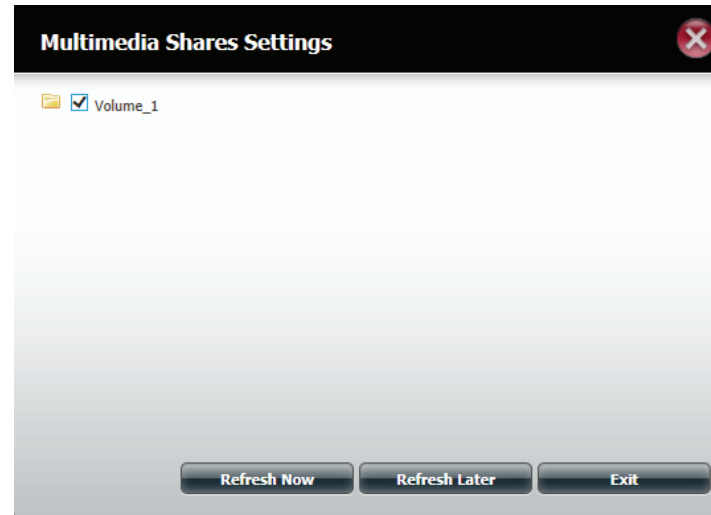
The system may become slow when generating the media library, especially when processing with a huge amounts of data at one time.

After the media library is created, whenever you copy new media files into the Media share folder, new media files in the Media Share folders will be automatically added to the media library.

Go to Application Management, Multimedia Services.

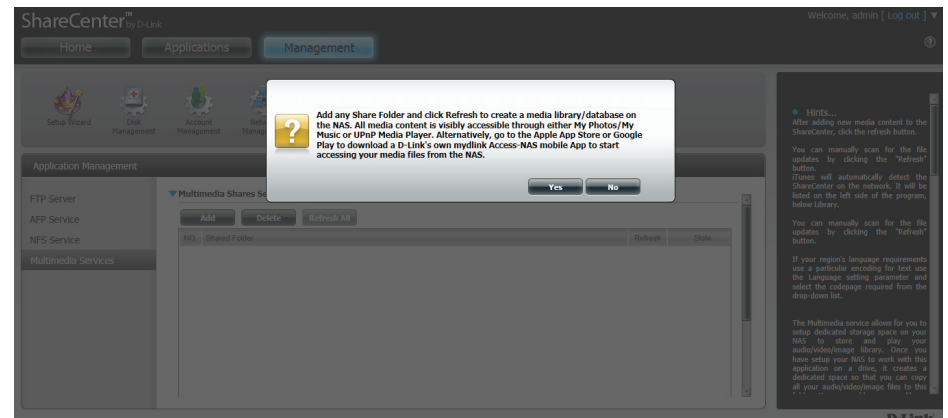


Under Multimedia Shares Settings, click the Volume you wish to use. Then click Refresh Now, Refresh Later, or Exit.

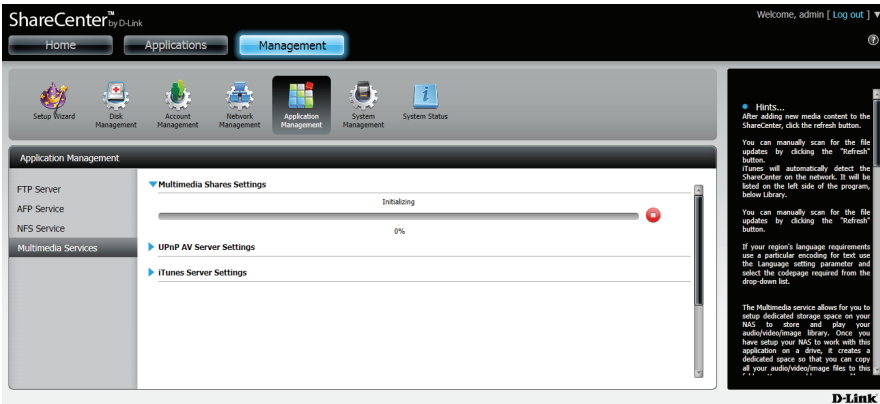


Once you click Refresh now, the following message appears:

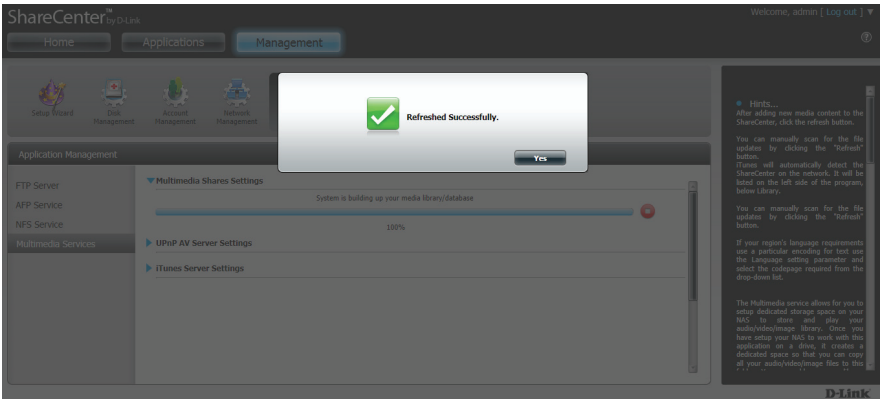
Click **Yes** to continue.



The Multimedia settings are initialized.

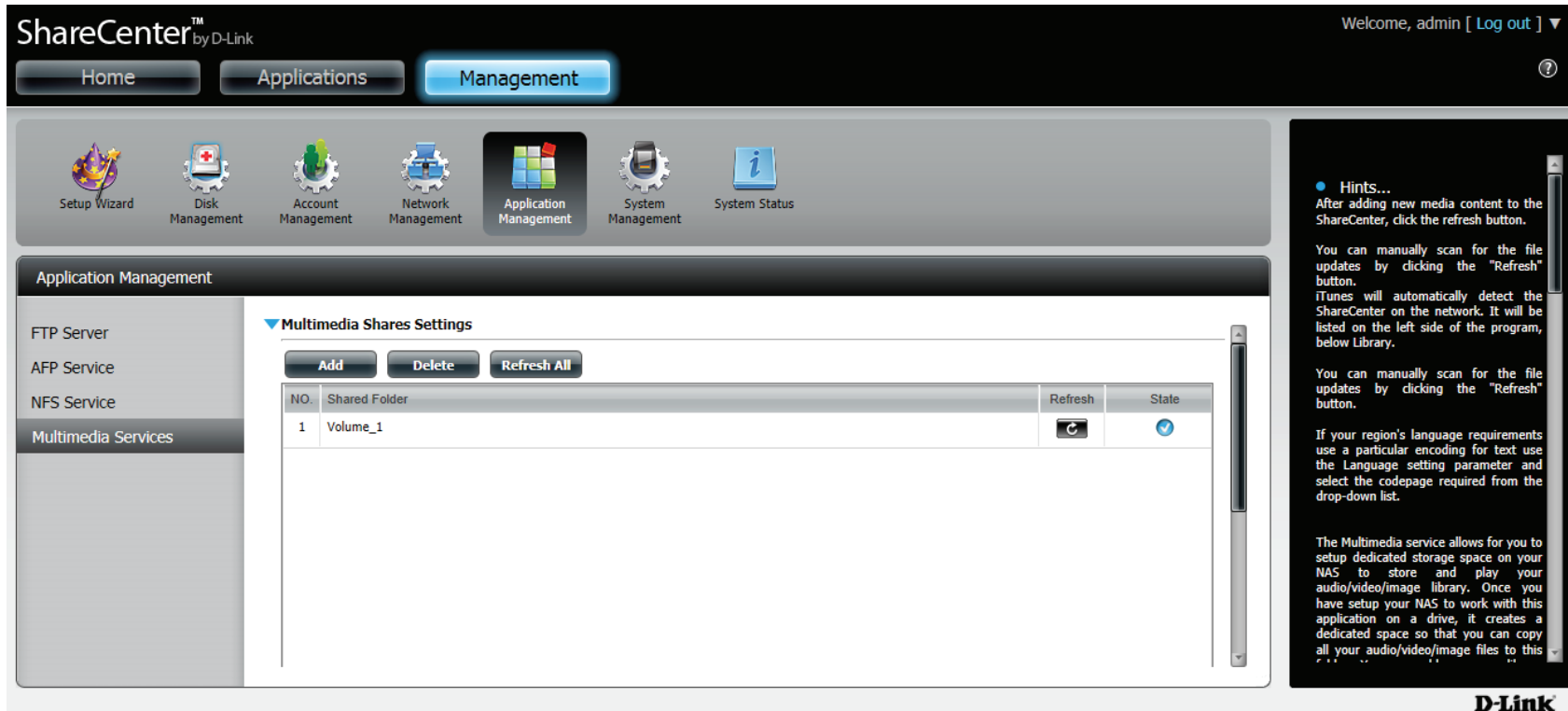


The process is successfully refreshed.





ShareCenter builds the library automatically



When the system has finished building the media library, a success message will appear.

Click **Yes** to continue.





### UPnP AV Server

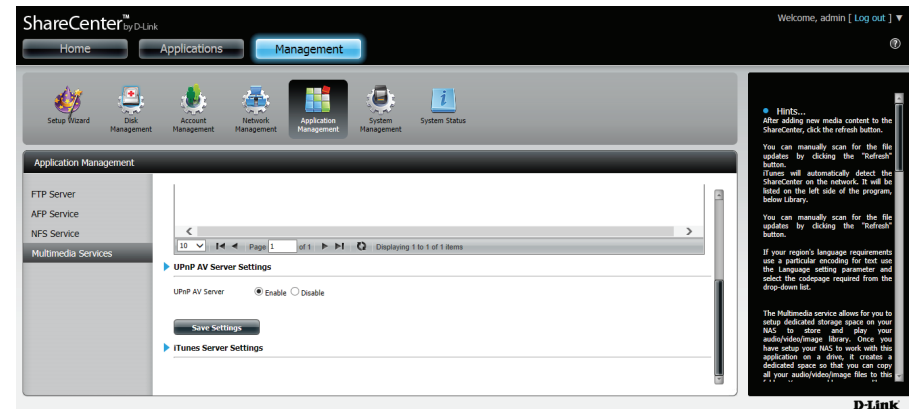
The ShareCenter™ features a UPnP AV Server. This server provides the ability to stream photos, music and videos to UPnP AV compatible network media players. If the server is enabled, the ShareCenter™ will be automatically detected by UPnP AV compatible media players on your local network. Click the **Refresh All** button to update all the shared files and folder lists after adding new files/folders.

Click **Application Management, Multimedia Services**, then **UPnP AV Server**.

Click the **Enable** radio button to enable the UPnP AV server.

Click **Save Settings** to configure the UPnP AV share.

Click **Refresh** to build up media library



# iTunes Server

The DNS-320L features an iTunes Server. This server provides the ability to share music to computers on the local network running iTunes. If the server is enabled, the device will be automatically detected by the iTunes program and the music contained in the specified directory will be available to stream over the network. Click the **Refresh** button to update all the shared files and folder lists.

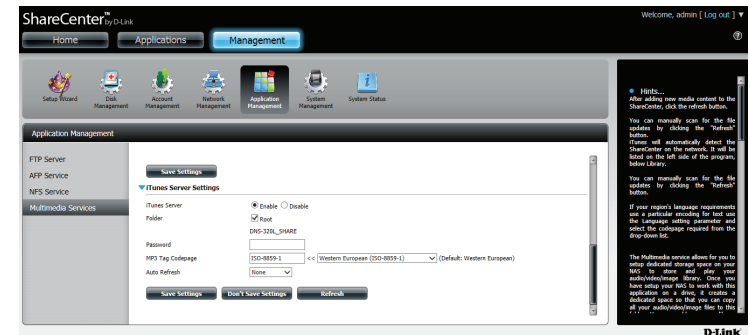
**iTunes Server:** Select to enable or disable the iTunes Server.

**Folder:** Specifies the folder or directory that will be shared by the iTunes server. Select root to share all files on all volumes, or click **Browse** to select a specific folders.

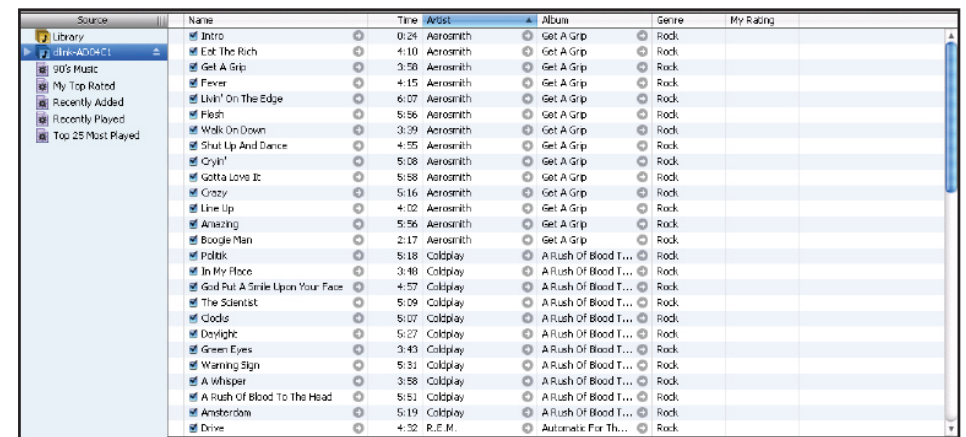
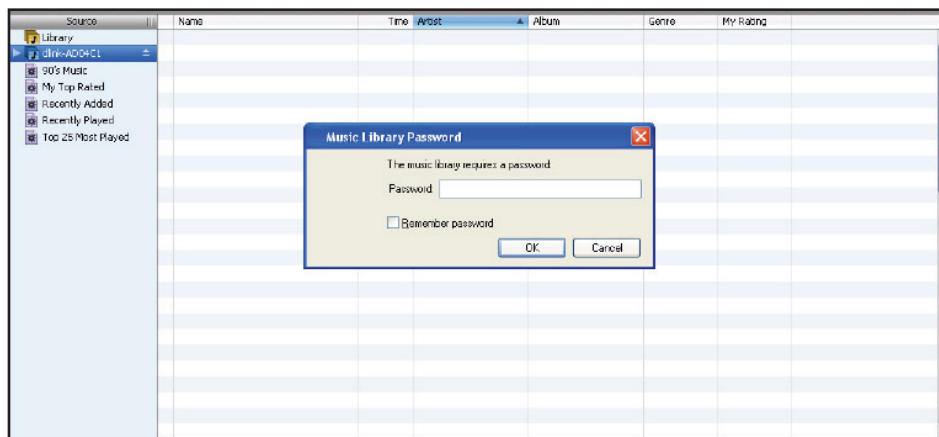
**Password:** Sets password for the iTunes server. (Optional)

**MP3 Tag Codepage:** Here the user can select the MP3 Tag Codepage used by this device. Currently the Codepage is set to Western European.

**Auto Refresh:** Here the user can select the Automatically Refresh time.



After enabling the iTunes server on the ShareCenter™, launch iTunes. In your iTunes utility, select the ShareCenter™ and enter the iTunes server password if required.



Select the ShareCenter™. When prompted, enter in the iTunes server password. Click **OK**.

Media stored on the ShareCenter™ will then be available for use in iTunes.

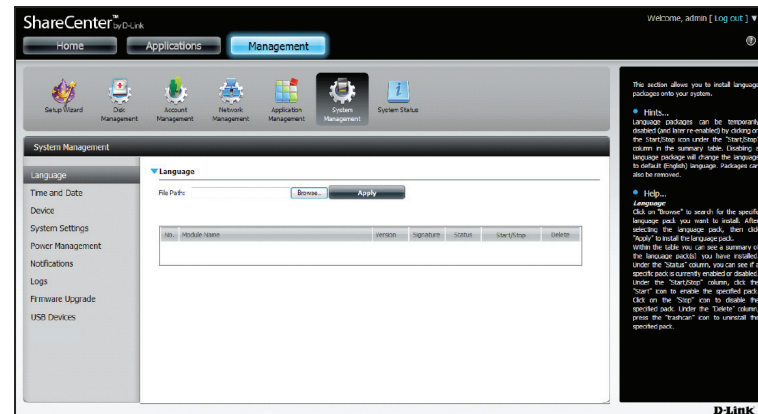
# System Management

## Language

The language packs help users customize the DNS-320L to their specific region. Download your language pack from the D-Link website or the CD and follow the instructions below. When you disable the language pack, the GUI will return to English.

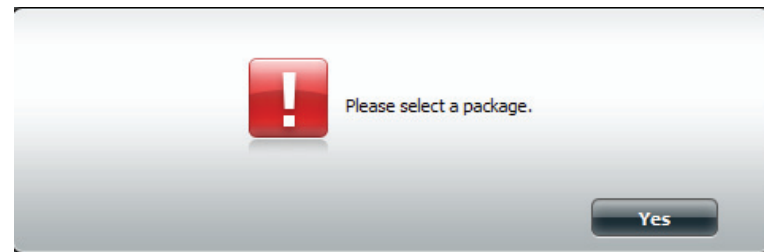
Click **System Management** and then **Language** to install a new language.

Click on **Browse** to search for the specific language pack you want to install. After selecting the language pack, click **Apply** to install the language pack.



If you have not selected a language package, a message will prompt you to locate one.

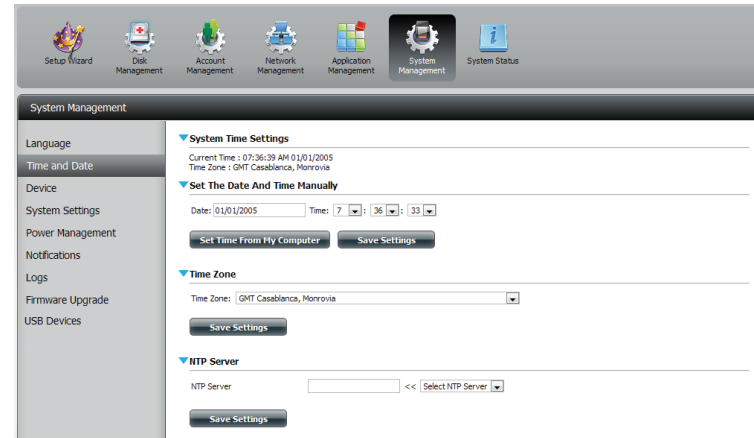
Click **Yes** to continue.



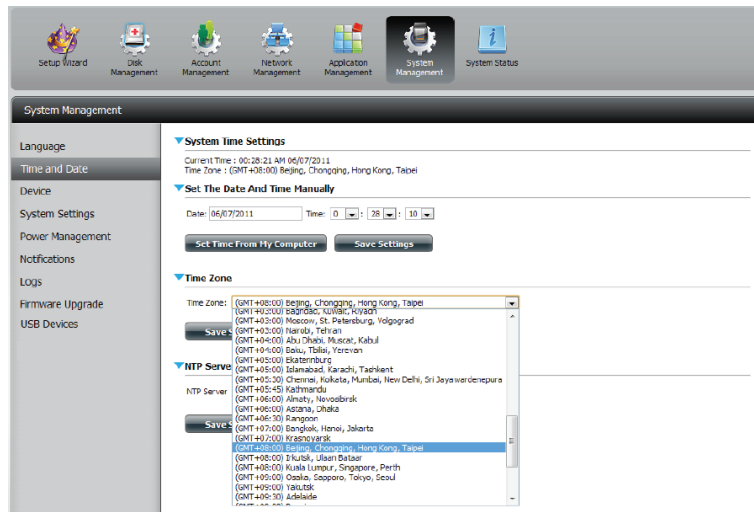
## Time and Date

The Time and Date configuration option allows you to configure, update, and maintain the correct time and date on the internal system clock. In this section you can set the time zone that you are in, and set the NTP (Network Time Protocol) Server in order to periodically update your system time from the NTP Server. You can also sync the time and date of your computer as the system time.

Click **System Management**, then **Time and Date**. Select the **Set Time from My Computer** button if you want to use the time and date of your computer. When a confirmation message appears, click **Yes** to continue.



Select your time zone from the drop-down menu. Click **Save Settings**.



You can also select a NTP server from the drop-down menu to sync the time and date with an online server. Then click **Save Settings**.

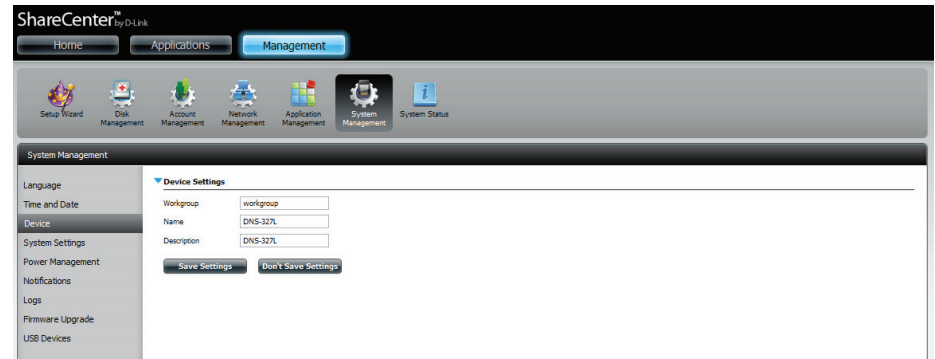
### Device

The device settings page allows you to assign a workgroup, name and description to the device. You can access this device by typing the host name in the URL section of your web browser. For example: `http://dlink-d10001`.

**Workgroup:** Enter your Workgroup name here. The workgroup name should be the same as the computers on the network. Devices using the same workgroup will have additional file sharing methods available.

**Name:** Enter your device name here. This name is what the device will appear as on the network. By default, the device name is `dlink-xxxxxx`, where `xxxxxx` is the last six digits of the MAC address.

**Description:** Assign a device description to the device.



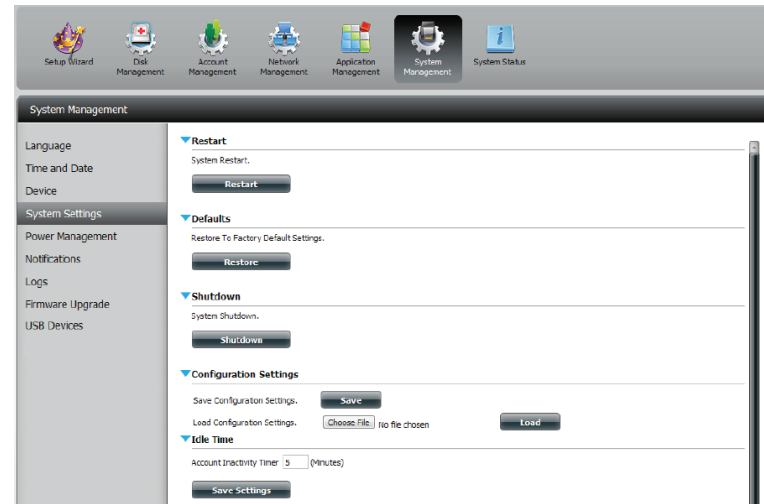
## System Settings

System Settings provides features to control your DNS-320L. Users can restart the NAS, restore the system to it's original state, set idle times, shutdown the system, configure settings, and configure system temperature settings.

**Restart:** Click to reboot the DNS-320L.

**Default:** Click to restore the device back to the factory default settings. All previous settings that have been configured will be erased.

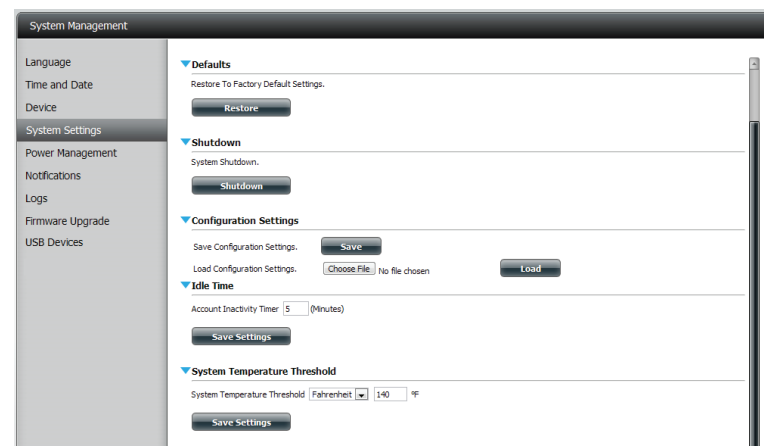
**Shutdown:** Click to turn off the DNS-320L.



**Configuration Settings:** Click on the **Save** button to save the current configuration settings to a file on your computer. If at a later time you need to reload this configuration after a system reset, browse to the file and click **Load**.

**Idle Time:** Enter the time (in minutes) that the administrator and users will be allowed to remain idle while accessing the web UI.

**System Temperature Threshold:** Here you can configure the system temperature threshold value. This value can be set in Fahrenheit or Celsius. The device will automatically shutdown when it reaches the temperature set here.



## Power Management

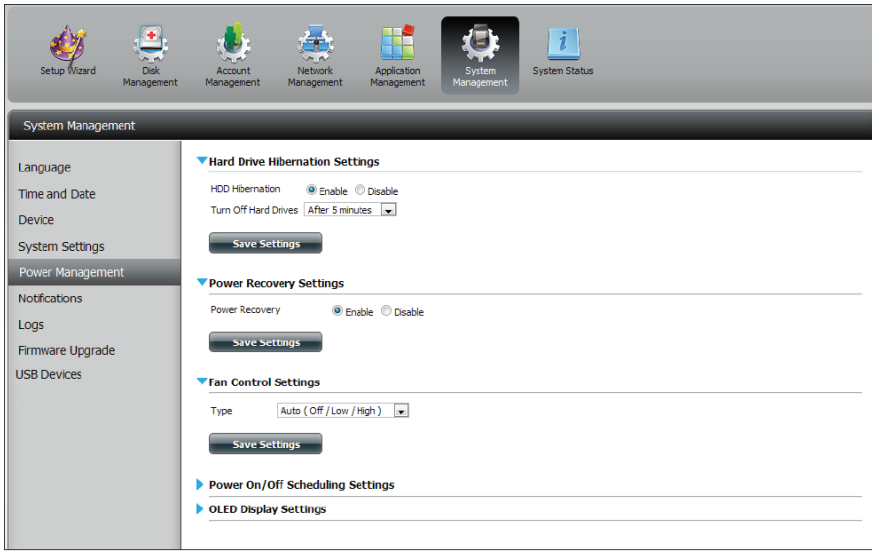
The device Power Management feature allows you to configure the drives to shut down while power remains constant to the device. The drives will power up again when data is accessed.

- HDD  
Hibernation:

Click **Enable** or **Disable**.
- Turn Off Hard  
Drives:

Set the amount of idle time before the drives go into hibernation.
- Power  
Recovery  
Settings:

Click **Enable** or **Disable**. The Power Recovery feature will automatically restart your device from a previously unexpected shutdown due to a power failure.



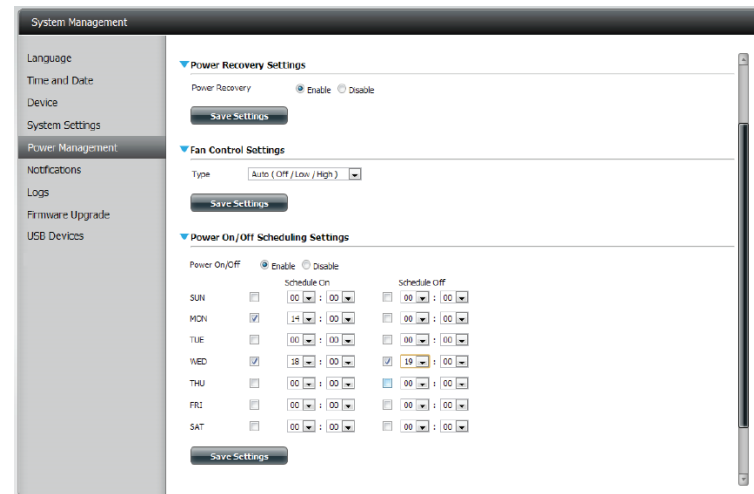
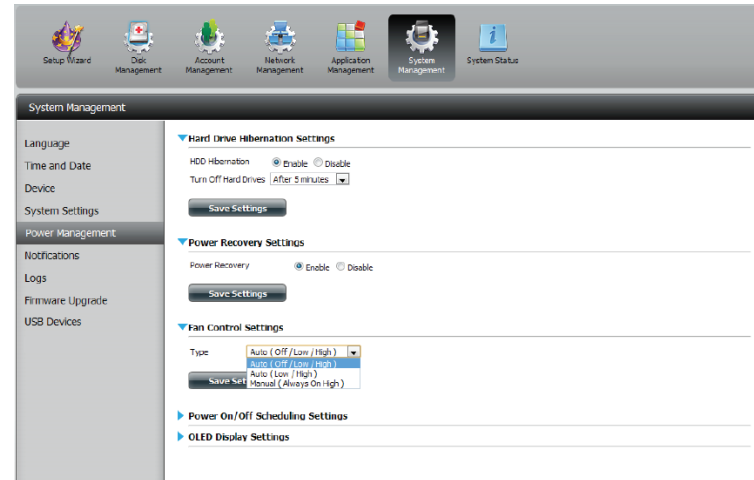
You can control the speed of the fan using three different settings and you can power off the device at scheduled times for each day of the week.

**Fan Control:** The speed of the fan can be controlled from this section.

If you select **Auto** mode, the speed of the fan will change (Off/Low/High) depending on the internal temperature of the enclosure.

**Power On/Off Scheduling:** Click **Enable** to turn on this function.

Enable or disable the power on/off days using the check box and configure the time for each day that the power on/off will occur.





## Notifications

### Email Settings

**Login Method:** Select either **Account** or **Anonymous**. Choosing Anonymous does not require a User Name or Password.

**Username:** Enter the appropriate user name for your e-mail account.

**Password:** Enter the appropriate password for your e-mail account.

**Port:** Enter the SMTP port number used here.

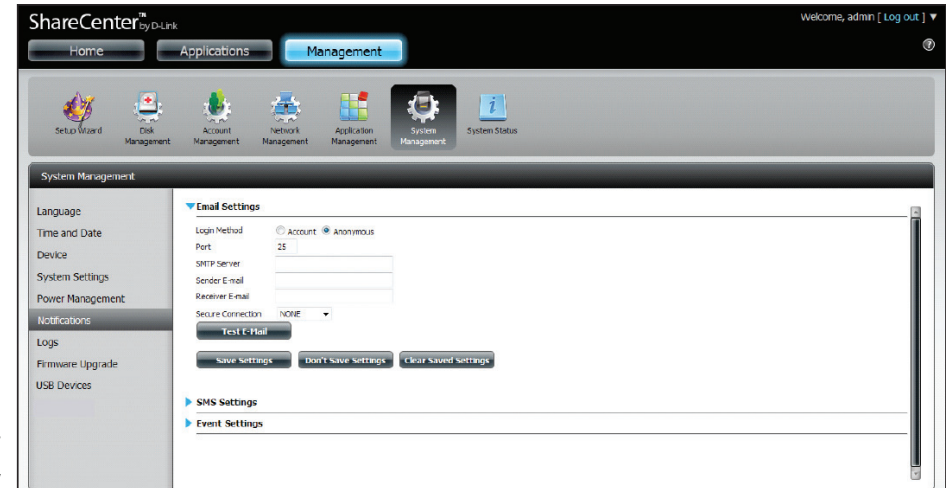
**SMTP Server:** Enter the IP address or domain name of your outgoing mail server. If you are unsure of this value, contact your e-mail provider.

**Sender E-mail:** Enter the "from" e-mail address (e.g. alerts@share.com). This field does not require a valid e-mail address. However, if your e-mail client is filtering spam, make sure you allow this address to be received.

**Receiver E-mail:** Enter the e-mail address you want to send the alerts to. This address must correspond with the SMTP server configured above.

**Secure Connection:** Select **STARTTLS** or **SSL** from the drop-down menu if it is required by your SMTP server, or select **NONE**.

**Test E-Mail:** Click the **Test E-Mail** button to send a test alert and confirm your settings are correct.



## SMS Settings

The same alerts of system conditions that can be sent to an email box can also be sent to a mobile phone or by SMS text messages. You need to have an agreement with a SMS service gateway that the device can then be configured to send the alerts to. The service provider then sends the received alerts to the configured mobiles as text messages.

**Enable SMS Notifications:** Check this box to enable SMS alerts to be sent to your mobile phone.

**SMS Service Provider:** Select from the drop-down list your SMS service provider you would like to use (these are added with the **Add** button)

**Add button:** Click on the **Add** button and enter the information into the appropriate fields that your provider has given you to use for the configuration.

**Delete button:** Remove the selected Service Provider from the configuration.

**URL:** The specific service provider URL provided and added in the Add procedure.

**Replace space character with:** If required by your service provider enter a character that will be used for the space.

**Phone Number 1:** Automatically populated from the **Add** button function.

**Phone Number 2:** Enter a second mobile telephone number. Verify that the number input is according to the configuration instructions from your Mobile Service Provider.

**Test SMS button:** Click this button to send a test message to your mobile phone to verify the settings are correct and the API URL is functioning with your provider.

The screenshot displays the 'System Management' interface of a D-Link ShareCenter DNS-320L. The top navigation bar includes icons for Setup Wizard, Disk Management, Account Management, Network Management, Application Management, System Management (selected), and System Status. The left sidebar lists various system settings: Language, Time and Date, Device, System Settings, Power Management, Notifications, Logs, Firmware Upgrade, and USB Devices. The main content area is titled 'System Management' and contains the following sections:

- SMTP Settings:** Includes input fields for SMTP Server (mail.company.com), Sender E-mail (job@company.com), and Receiver E-mail (jim@noble.com). There is a checked checkbox for 'SMTP Authentication' and a 'Test E-Mail' button. Below these are buttons for 'Save Settings', 'Don't Save Settings', and 'Clear Saved Settings'.
- SMS Settings:** Features a checked checkbox for 'Enable SMS Notifications'. Below it is a dropdown menu for 'SMS service provider' with 'Add' and 'Delete' buttons. A text field for 'URL' is present. A note states: 'Enter the required special character from your service provide'. There are radio buttons for 'Use default' and an empty field. Below are input fields for 'Phone number1()' and 'Phone number2()'. A 'Test SMS' button is located below these fields. At the bottom of this section are buttons for 'Save Settings' and 'Don't Save Settings'. A red note at the bottom reads: '(Note: Click Save Settings to confirm your service provider information.)'

## Adding an SMS Service Provider

Once you have a SMS Service provide you with a HTTP API URL, enter it into the Add SMS Service Provider wizard. Enter the URL in the first window with an appropriate Provider Name. In the next window select the appropriate HTTP API URL parameter types definitions from the drop-down menus next to the parsed fields of the URL.

Enter your SMS Provider name here.

Enter the HTTP API URL provided to you.

Choose the appropriate type parameter in the drop-down menu for the parsed parameters of the URL on the left.

## Event Settings

You can limit which events are sent as alerts to the Email or SMS settings by checking the events here.

**Event Settings:** Select the information you want e-mailed to the above address or sent over SMS messages to the above mobile number. The items checked will be sent when necessary.

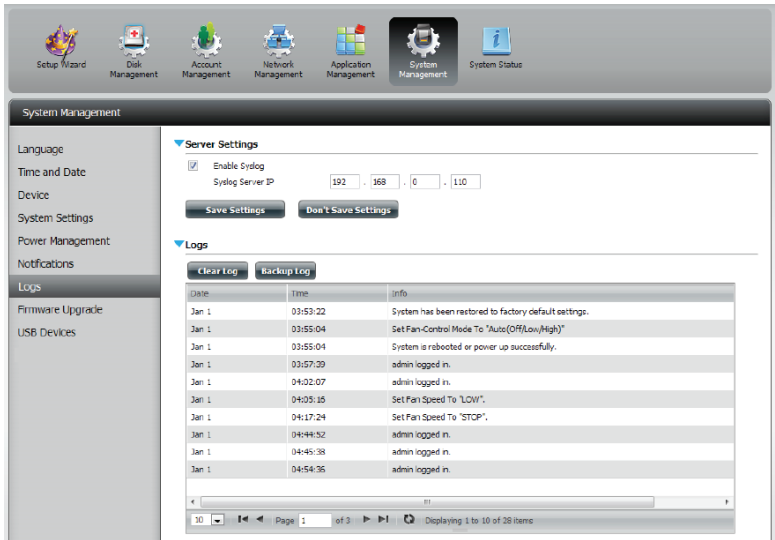
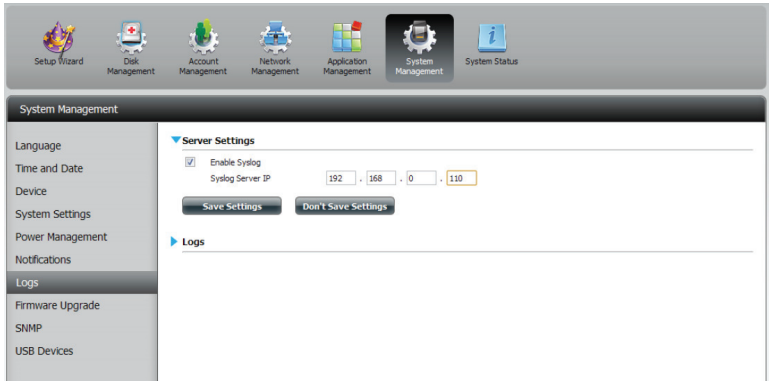
The screenshot displays the 'System Management' interface of the D-Link ShareCenter DNS-320L. The top navigation bar includes icons for Setup Wizard, Disk Management, Account Management, Network Management, Application Management, System Management (selected), and System Status. The left sidebar lists various system settings: Language, Time and Date, Device, System Settings, Power Management, Notifications (selected), Logs, Firmware Upgrade, and USB Devices. The main content area is titled 'System Management' and contains the following sections:

- URL:** A text input field for the service provider's URL.
- Special Character:** A dropdown menu with 'Use default' selected.
- Phone number 1():** A text input field.
- Phone number 2():** A text input field.
- Test SMS:** A button to test the SMS functionality.
- Note:** A red text note stating: '(Note: Click Save Settings to confirm your service provider information.)'
- Save Settings / Don't Save Settings:** Two buttons to save or discard changes.
- Event Settings:** A section with a list of events and checkboxes to select which ones to send alerts for:
  - ☐ The Administrator Password Has Been Changed
  - ☒ Space Status
    - Frequency: Daily (dropdown)
    - Time: 00 (dropdown) : 00 (dropdown)
  - ☐ One Of The Volumes Is Full
  - ☐ The Volume/Disk Status Has Been Changed
  - ☐ The System Temperature Is Over User Defined Threshold
  - ☒ The Firmware Has Been Upgraded
  - ☐ Send Log File
  - ☐ One Torrent Download Is Finished
  - ☒ Send The S.M.A.R.T. Test Result
  - ☒ Recover From Power Failure
- Save Settings / Don't Save Settings:** Two buttons to save or discard changes.

# Logs

Within the Logs menu you can setup your ShareCenter™ to send the ShareCenter's™ log events to the SysLog server. You can also view the NAS system logs and the FTP logs here.

- Enable Syslog:** Click to activate the Syslog client functionality of your device to be able to send the ShareCenter's™ log events to the Syslog server.
- Syslog Server IP:** Enter the IP address of an external Syslog server that you wish to send the logs of this device to.
- Clear Log:** Click **Clear Log** to delete all the existing logs.
- Backup Log:** Click **Backup Log** to save the existing logs to a text file on your computer.



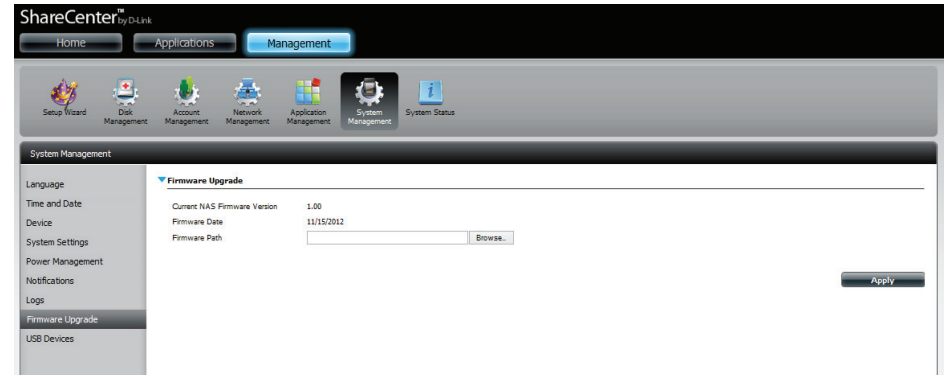
# Firmware Upgrade

The Firmware Upgrade Page makes it simple to upload new firmware releases to the device. Please check for new firmware on the D-Link support website. If new firmware is available, download the file to your local computer.

**Current Firmware Version:** Displays the current firmware version on your ShareCenter™ device.

**Firmware Date:** Displays the date of when the firmware was created.

**Firmware Upload:** When upgrading the firmware, click **Browse** to select the new firmware file on your local computer and then click **Apply** to begin the firmware upgrade process.



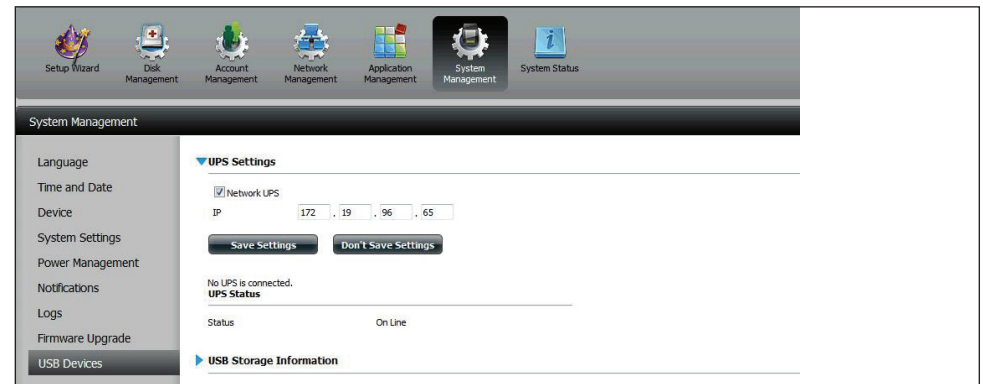
## USB Devices UPS Settings

Network UPS is a system management feature that uses a local UPS to protect your NAS from an abnormal shutdown due to a power failure.

To enable Network UPS to your NAS (Network Slave Mode):

1. Click to enable the Network UPS.
2. Enter an IP address of the Network UPS Master.
3. Click **Save Settings** to receive the critical power status from the network UPS master.

The UPS Status will display the current status of your UPS.



**Note:** Make sure that the ShareCenter™ is in the same network as the network UPS master.

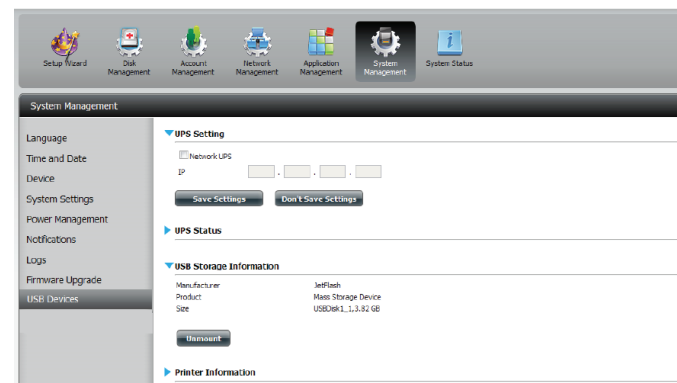
If a UPS device is connected to the USB port on your NAS, you can select either Stand-Alone or Master mode. If you select Master mode, you will have to enter the IP address(es) of the network UPS slaves to notify them in the event of a power failure. For more details, refer to the **UPS Connectivity** section.

## USB Storage Information

Click the blue arrow to reveal the USB storage Information.

It displays information on the manufacturer, product name, and size (capacity).

Click the Unmount button to eject the USB device.

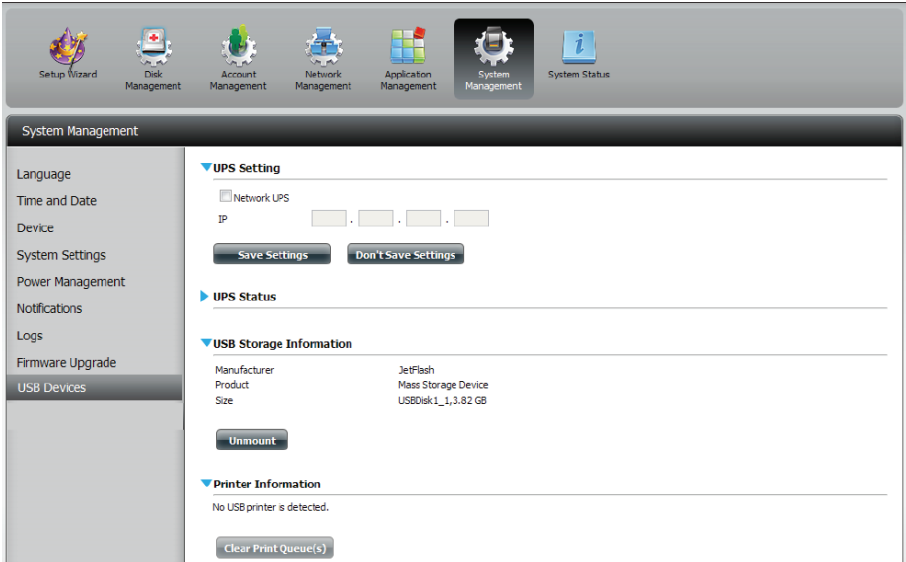


## Printer Information

Click the blue arrow to reveal Printer Information.

It displays information on the manufacturer, product type, and connection details.

Click **Clear Print Queue(s)** to remove all active print jobs.





# System Status

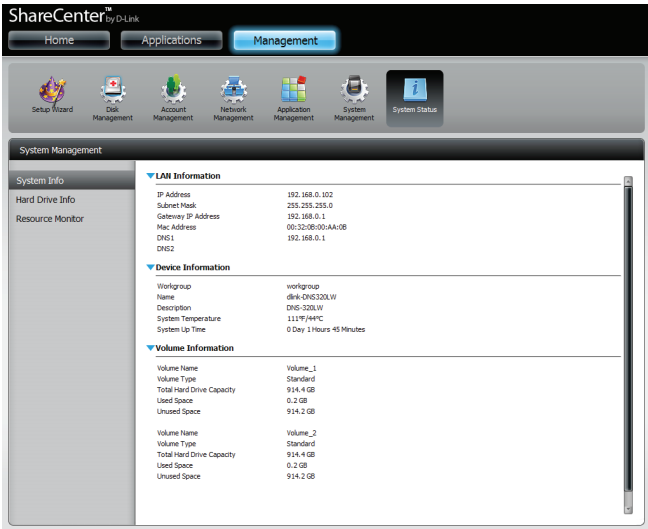
## System Info

The System Status information screen provides information on the DNS-320L. System Info provides information on the LAN port, Device Information, and Volume information. Hard Drive Info displays information on all hard drives including the manufacture details, temperatures, size, and status. Resource Monitor offers more detailed information on the CPU, Memory, Bandwidth, and Processes.

Click **System Status** and then **System Info**

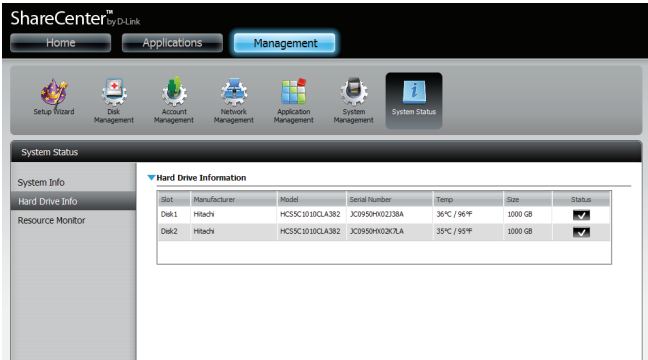
Click the blue arrow from each of the headings to reveal information on each segment.

LAN Information, Device Information, and Volume Information.



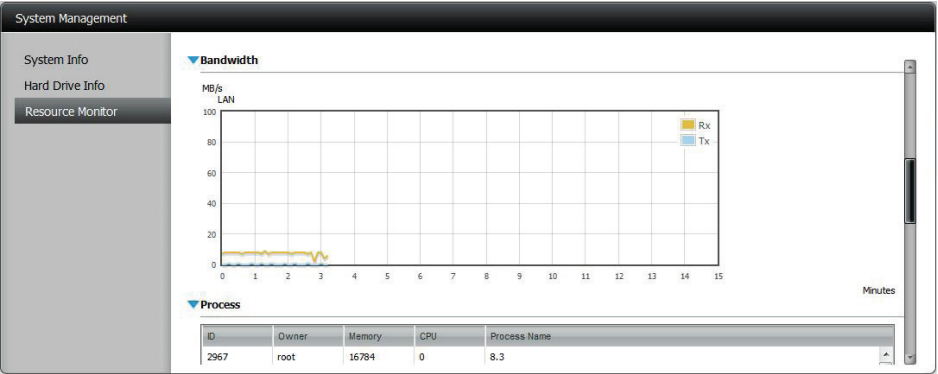
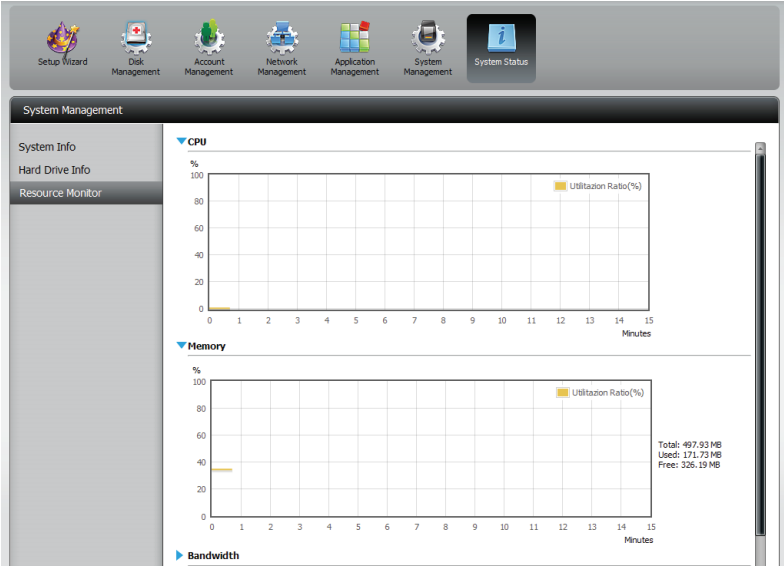
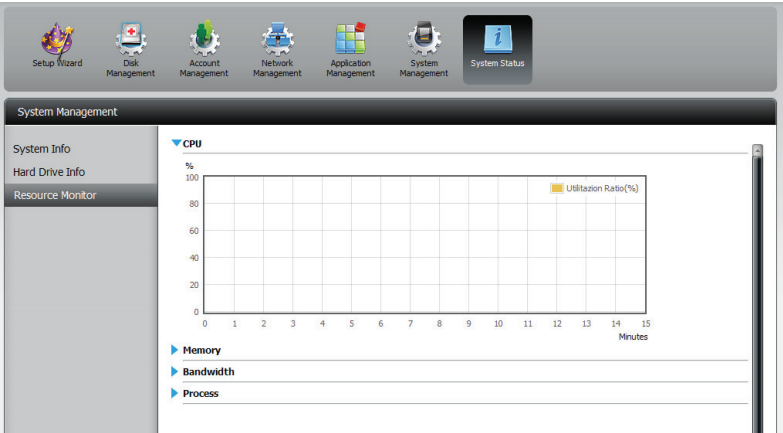
Click **System Status** and then **Hard Drive Info**.

Click the blue arrow to reveal a table of hard drive information.



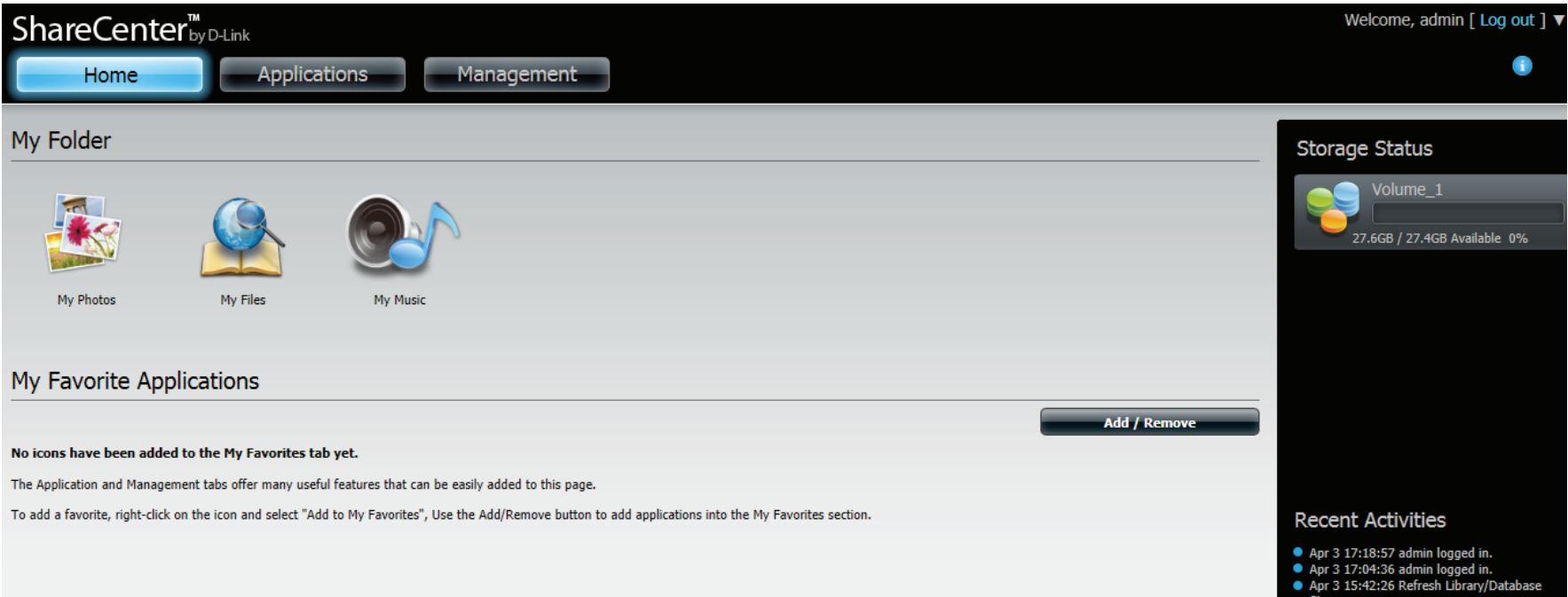
Click **System Status > Resource Monitor**, then click the blue arrow to reveal the resource details.

It provides information on the CPU, memory, bandwidth, and processes in action.



# Home

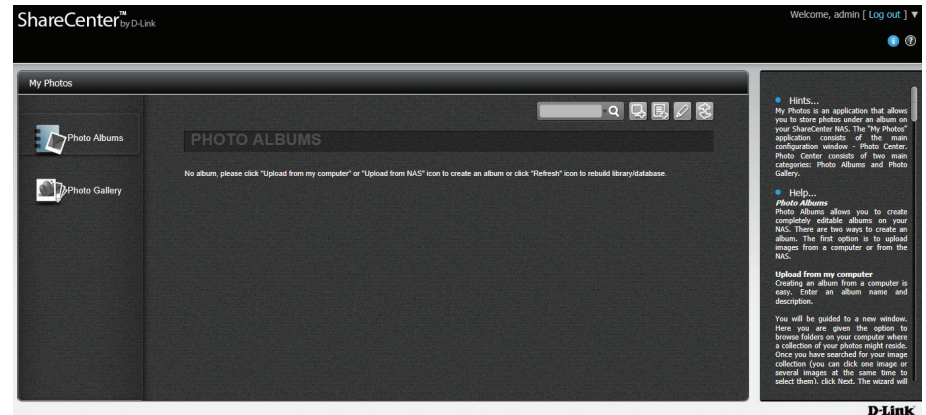
The Home tab is the center for all files on your ShareCenter™. Home is divided into one main subfolder called My Folder. Under My Folder resides four main apps, My Photos, My Files, and My Music. Let’s take a closer look at all four apps independently.



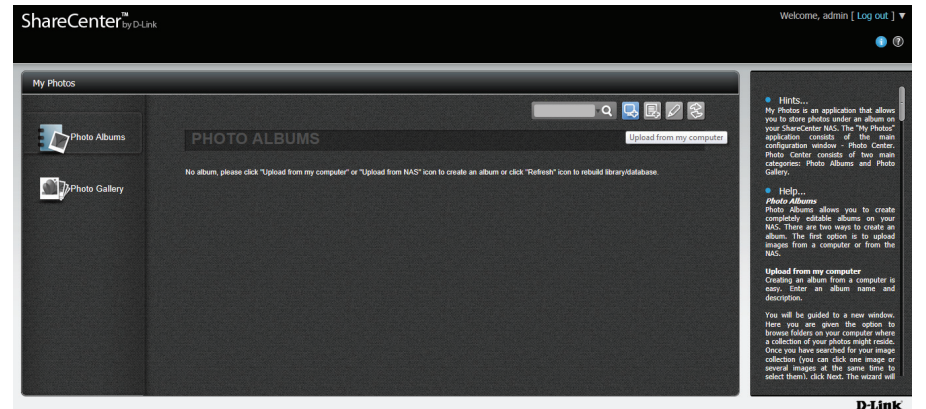
# My Photos

My Photos is an app to create albums on the ShareCenter™ and share photos via Picasa, Facebook, Flickr and Cooliris. Click the My Photos icon to open the window (displayed below).

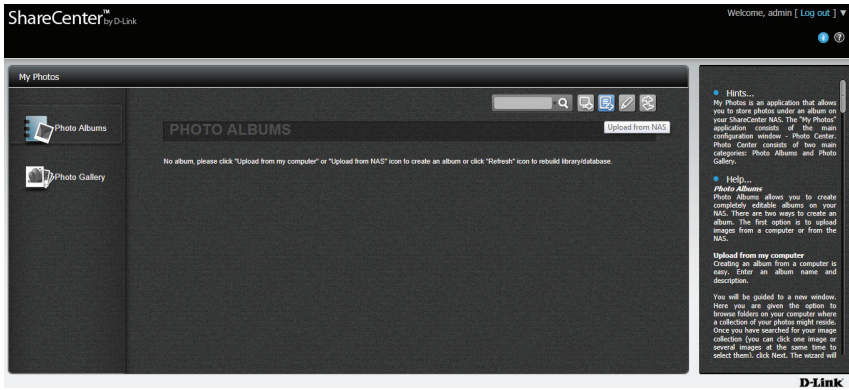
When you click the **My Photo** app, you are transferred to the **Applications** section. There are two sections in the **My Photos** app - **Photo Albums** and **Photo Gallery**.



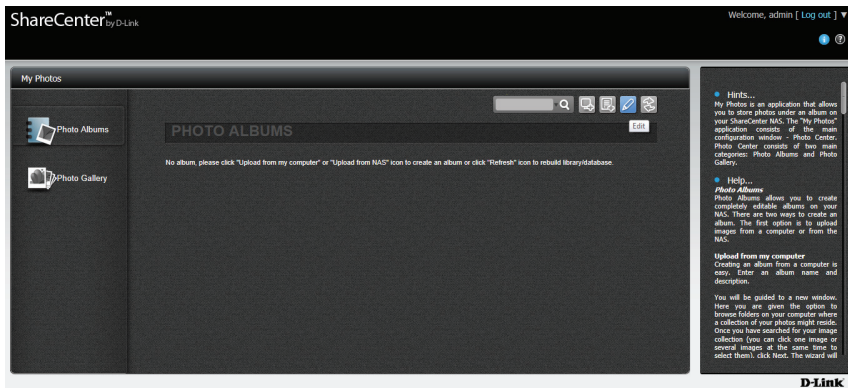
On the right-hand side of **My Photos** there are 4 main icons and a search field. The icons turn blue when you roll your mouse over it. The first icon is **"Upload from my computer"**



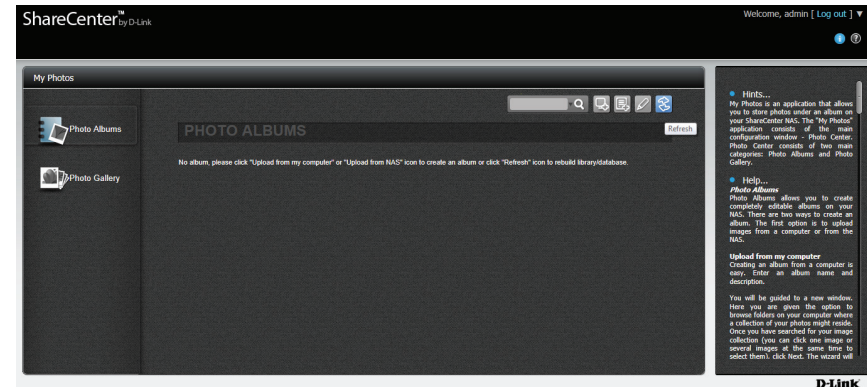
The second icon is “**Upload from NAS**”



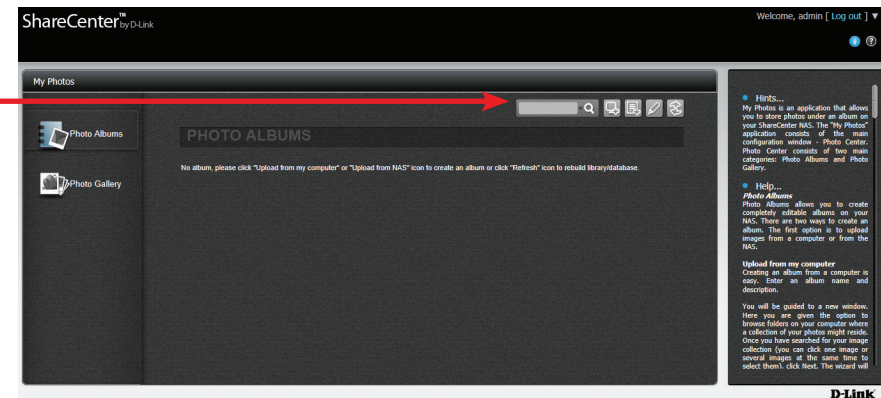
The third icon is “**Edit**”



The fourth icon is “**Refresh**”



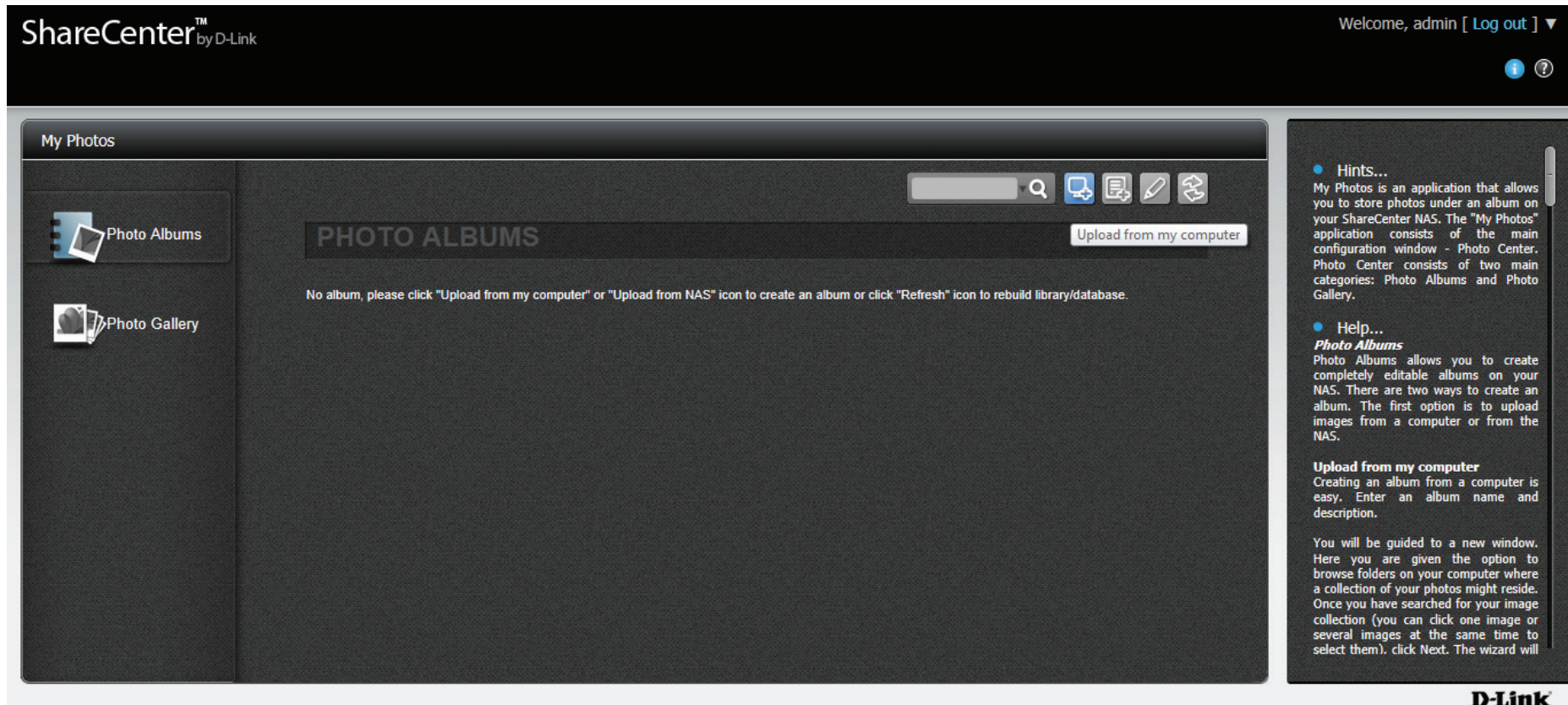
The search field can be used to search for photos and albums on the NAS. Enter your search parameter in the search field.





## Creating an Album

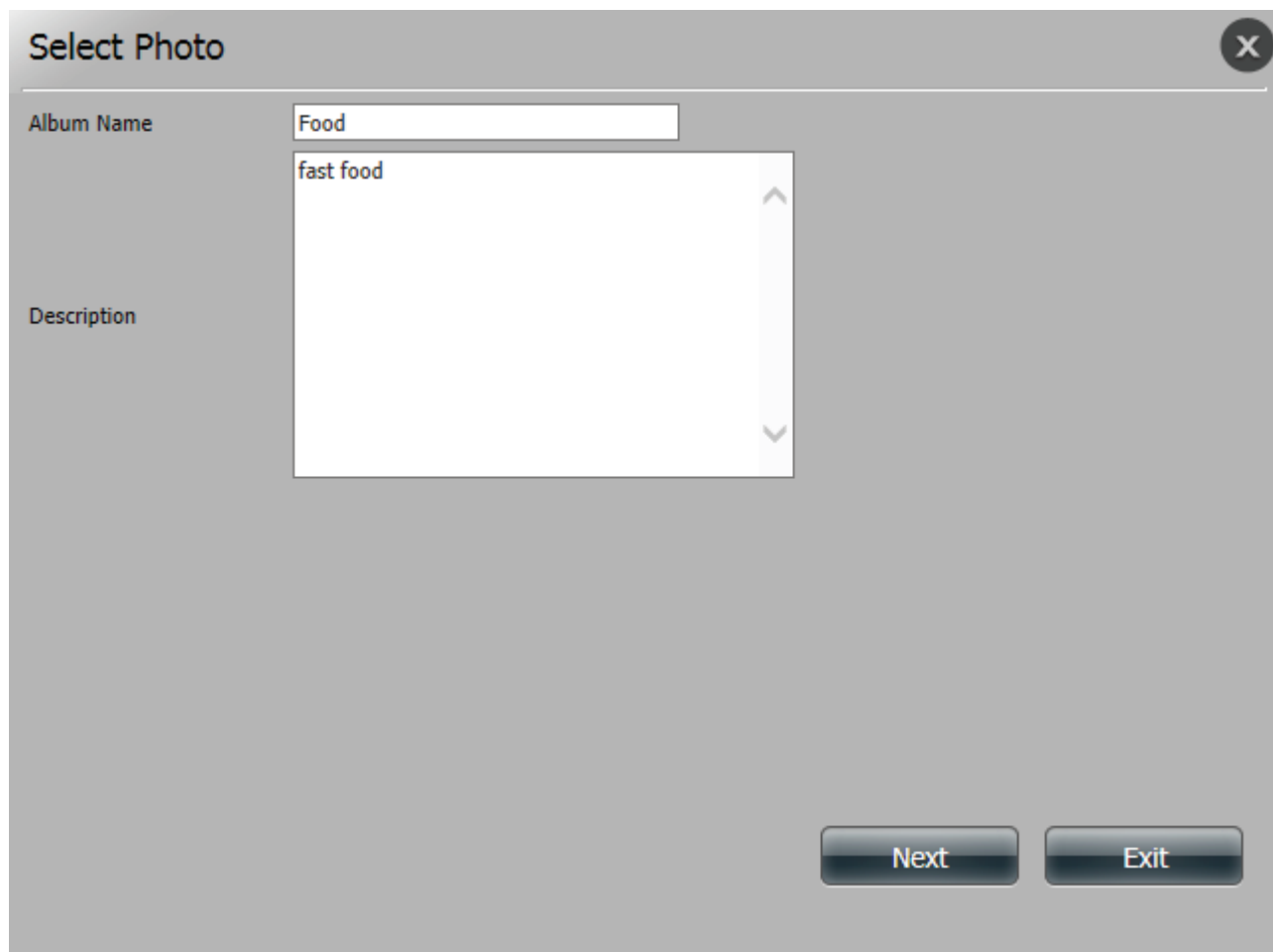
Click **Upload from my computer**. A **Create Album** window pops up.



## Photo Album Wizard

The **Photo Album Wizard** will assist you with uploading photos from your computer to the ShareCenter™. The first step is to create an **Album**.

In the **Album Name** field, enter your desired name and then enter a description in the **Description** field. Click **Next** to continue.



The screenshot shows a window titled "Select Photo" with a close button (X) in the top right corner. The window has two main input areas: "Album Name" and "Description". The "Album Name" field contains the text "Food". Below it, the "Description" field is active, showing a text area with "fast food" and a vertical scrollbar. At the bottom right of the window, there are two buttons: "Next" and "Exit".

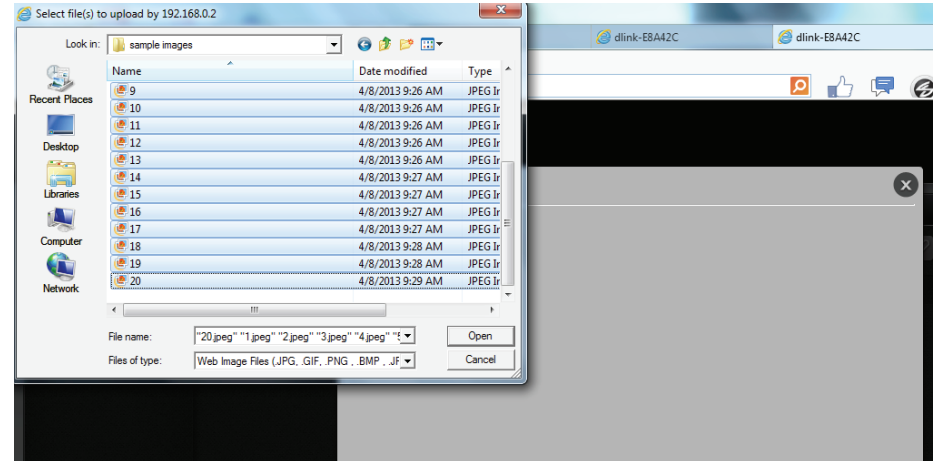
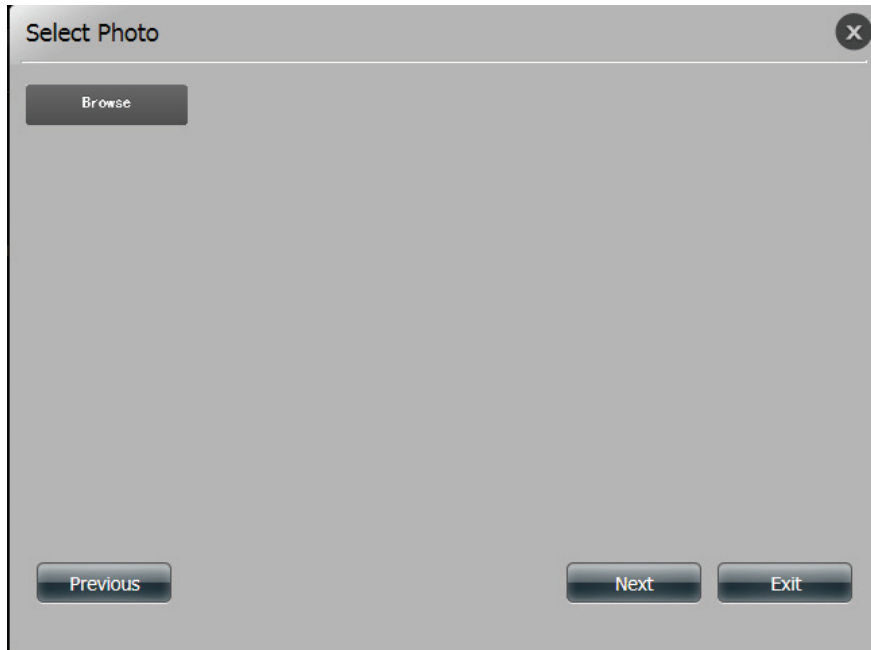


## Section 4 - Configuration

Under the **Select Photo** section, click the **browse** button to search your computer for your photos.

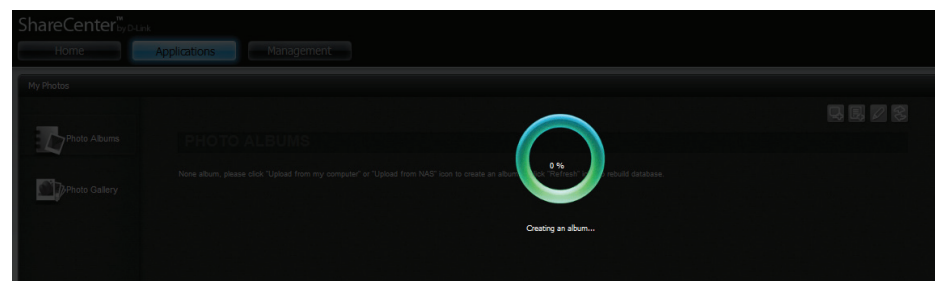
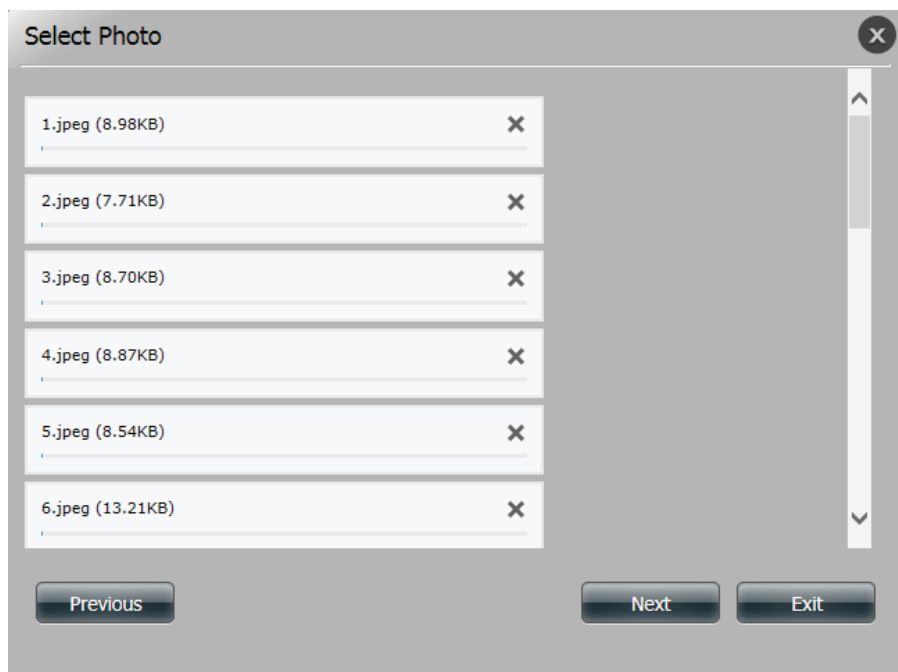
If you wish to add more than one photo repeat the process or hold the **Shift/Control** button on your keyboard and select the photos to add.

Click the **Open** button to add them to the **Album**.

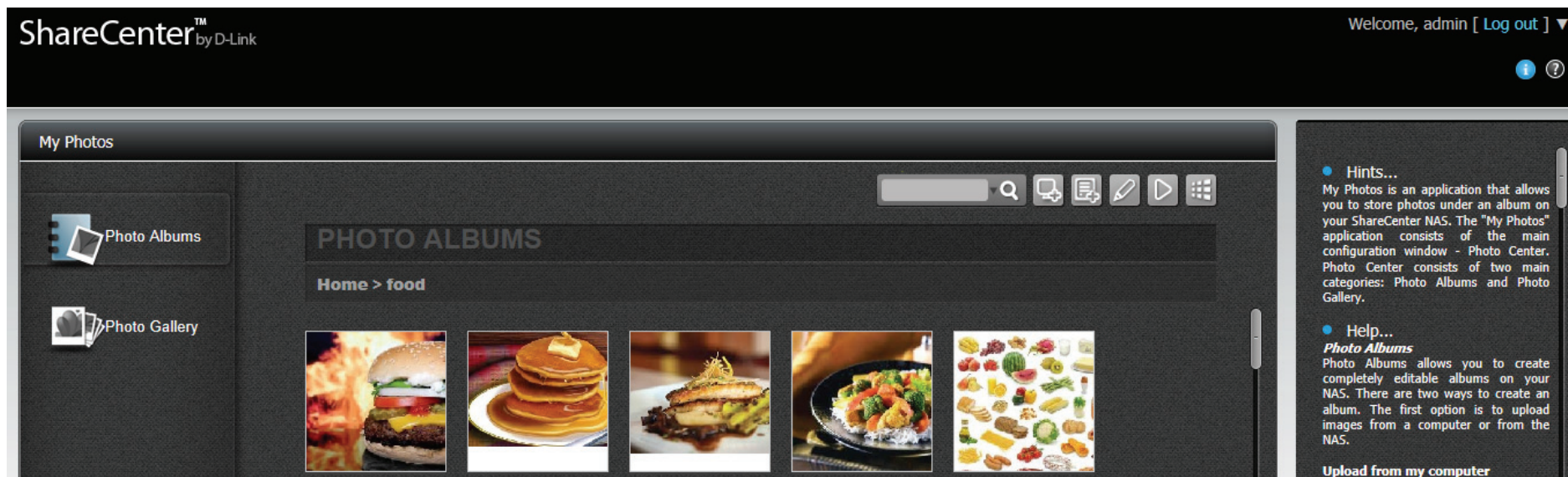


The **Photo Album Wizard** is now populated with the photos you have selected. Click **Next** to upload the photos.

ShareCenter™ automatically updates the photos to the NAS.



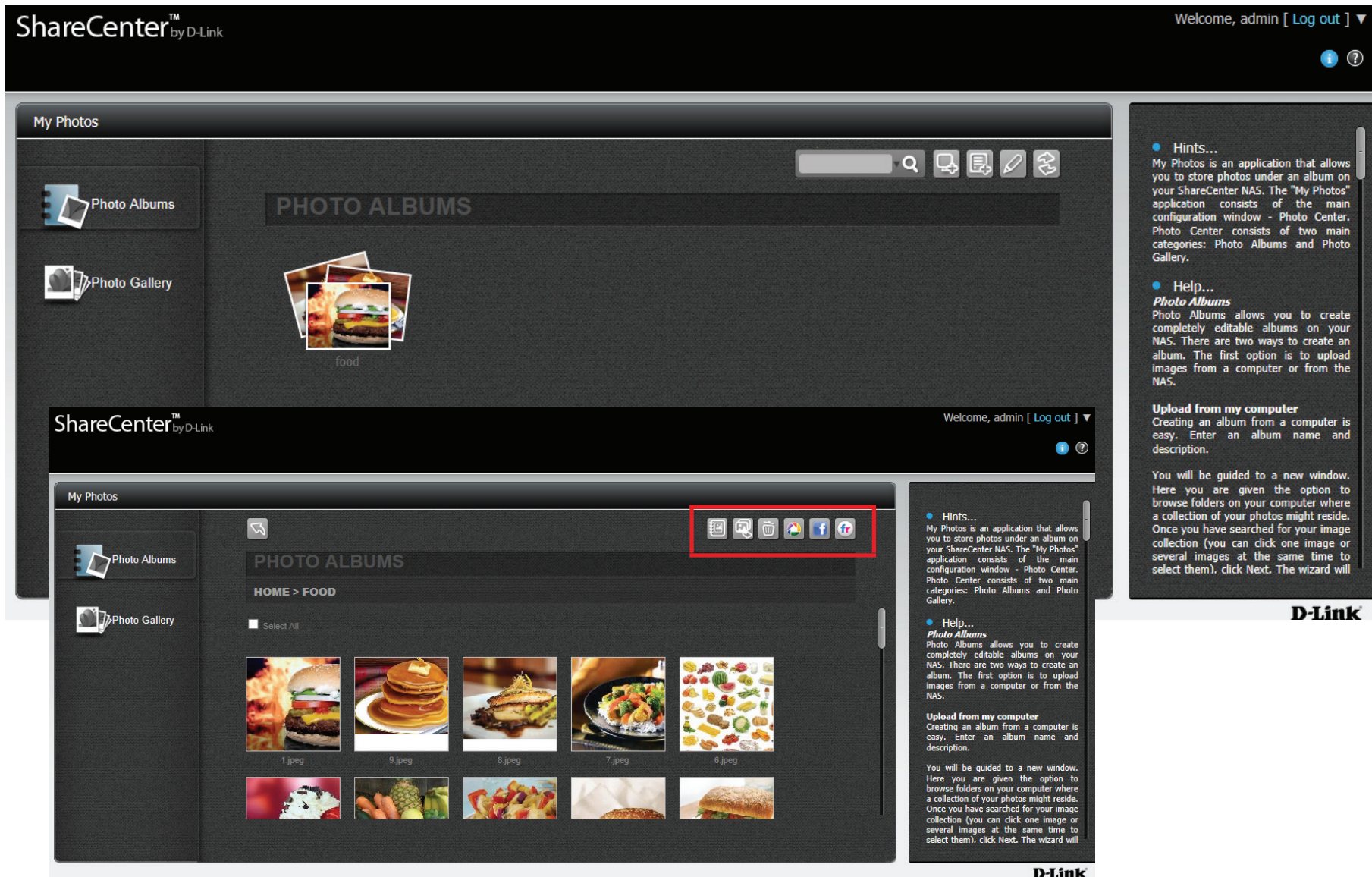
The **Photo Album** now features your Album.



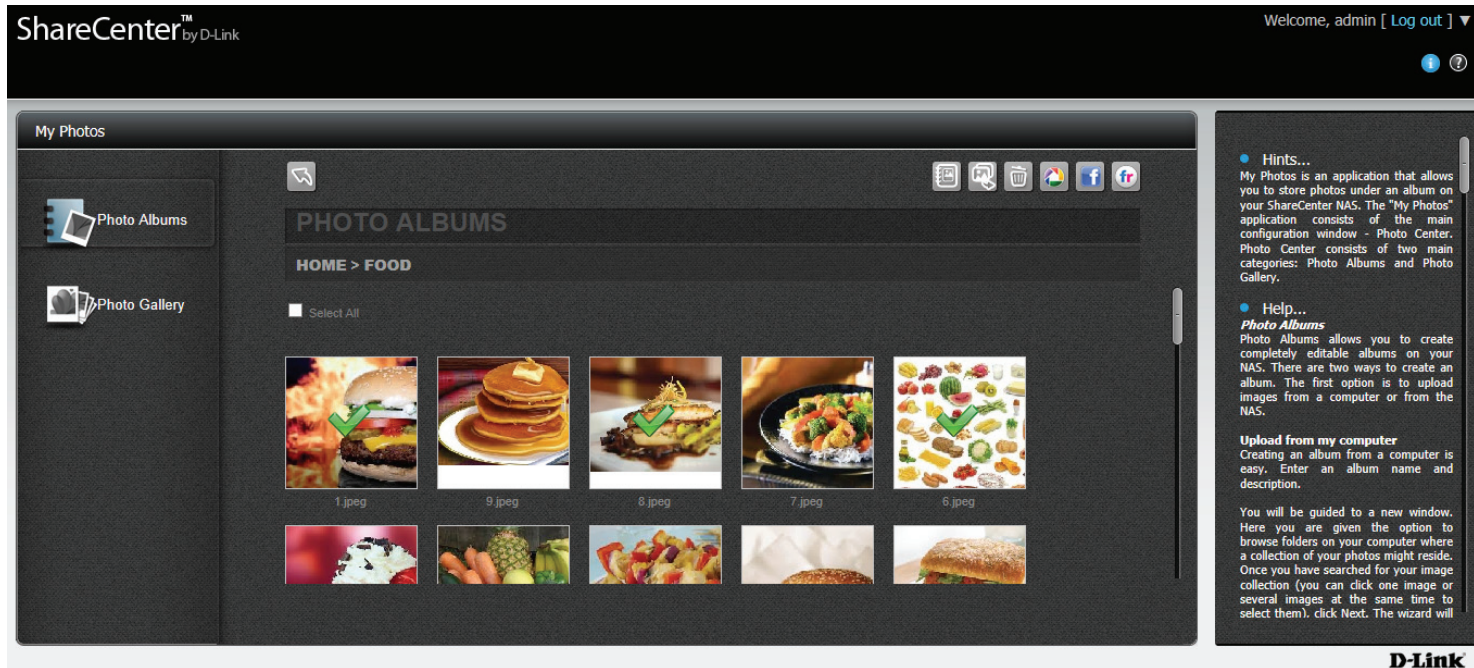


## Editing Photos in an Album

Click the **Album**. Click **Edit**. The screen changes. A **Back** button appears above **Photo Gallery**, to go back. A **Select All** checkbox appears below the **Album's** name, to select all the photos to edit. The icon panel changes on the right-hand side of the screen.

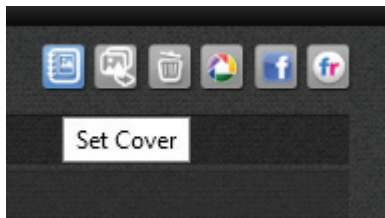


Select a **Photo** to edit. A **green check mark** emphasis that it's been selected.

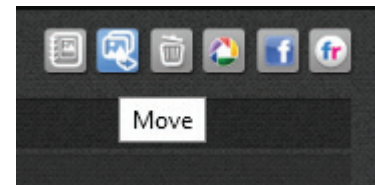




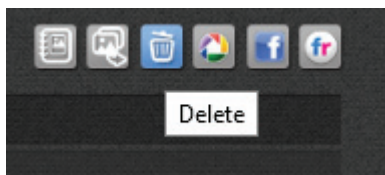
Moving your mouse over each icon presents a different action. Let's go over them.



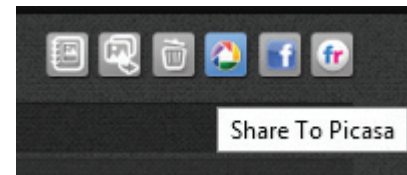
Select this icon if you wish to **set** the current photo as the **Photo Album cover**.



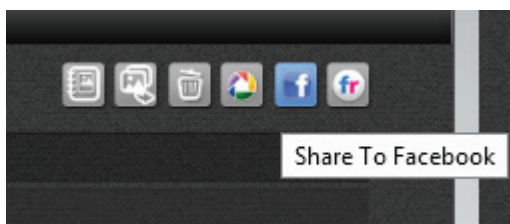
Select this icon if you wish to **Move** the current photo to a different location.



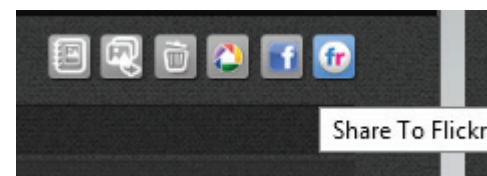
Select this icon if you wish to **Delete** the current photo from the **Photo Album**.



Select this icon if you wish to **Share** the current photo to **Picasa**.



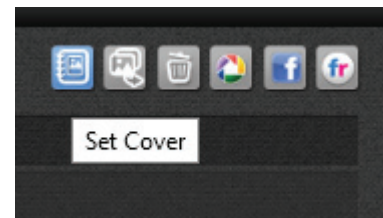
Select this icon if you wish to **Share** the current photo to **Facebook**.



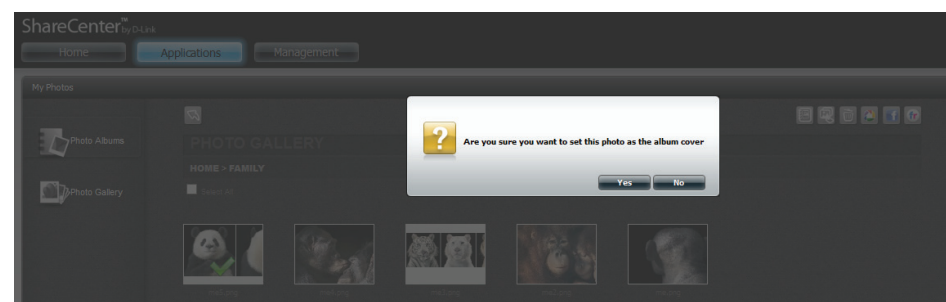
Select this icon if you wish to Share the current photo to **Flickr**.

### Select a Photo as a Cover image

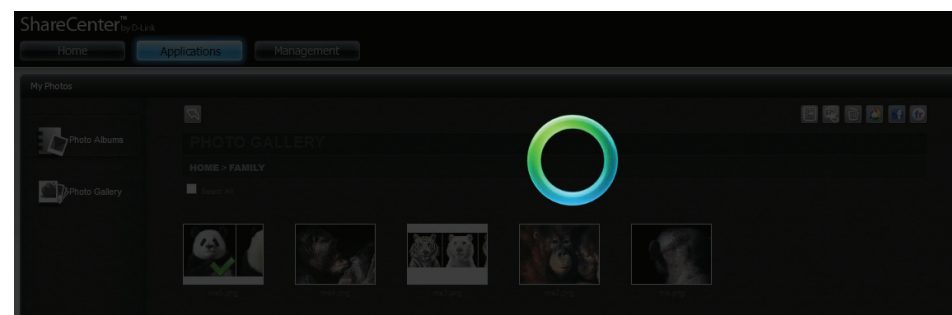
Click the **Set Cover** icon.



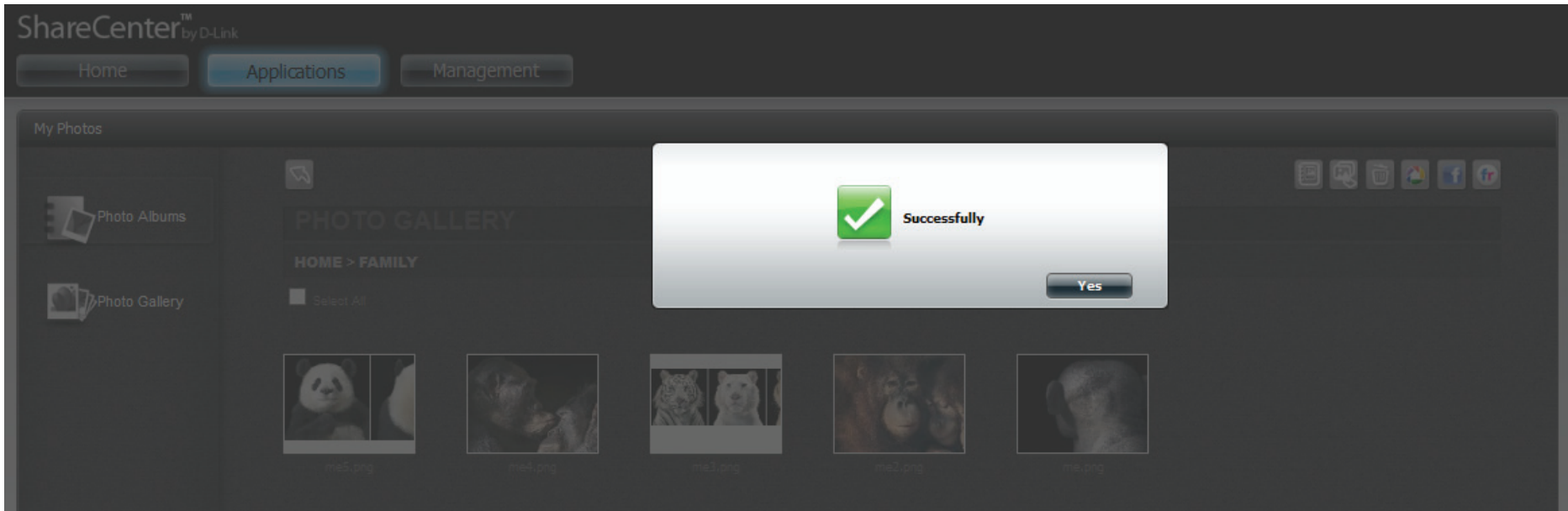
You are asked to verify your instruction. Click **Yes** to continue, **No** to exit.



The NAS configures the changes.



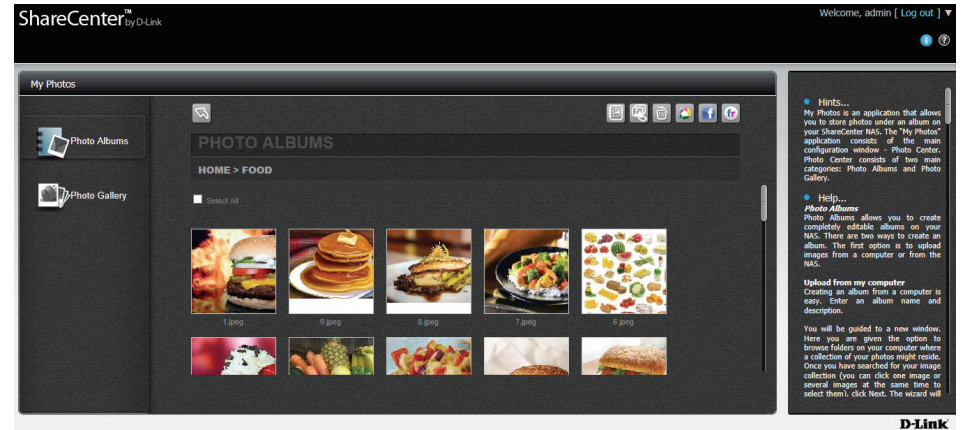
The configuration is updated and saved. Click Yes, to continue.



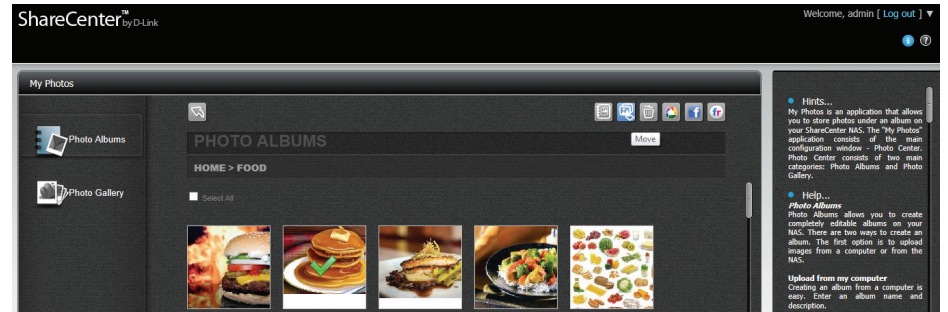


### Select a Photo to Move

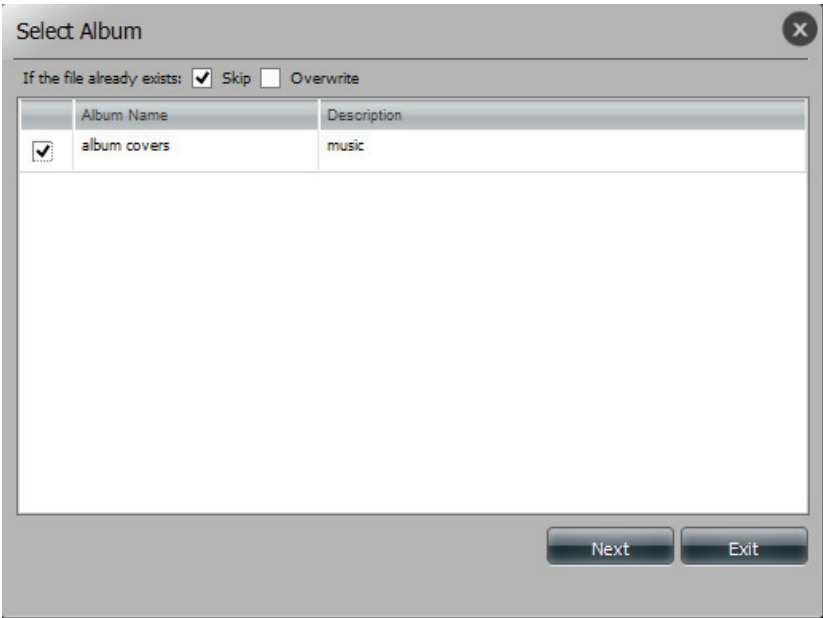
Click **My Photos**, **Photo Albums**, the **Photo Album** you wish to select the **Photo** from.



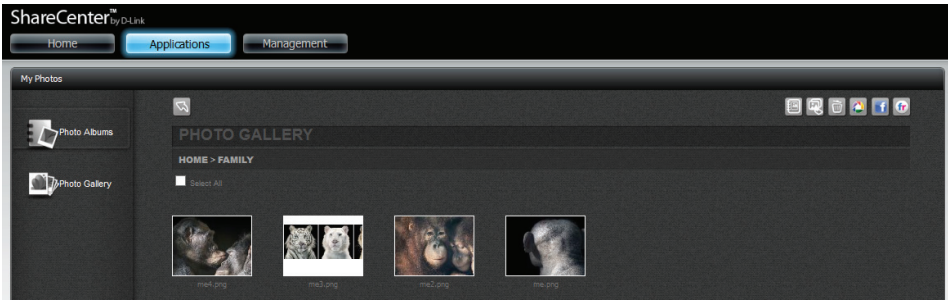
Select the **Photo** and click **Move**.



The **Select Album** window opens.

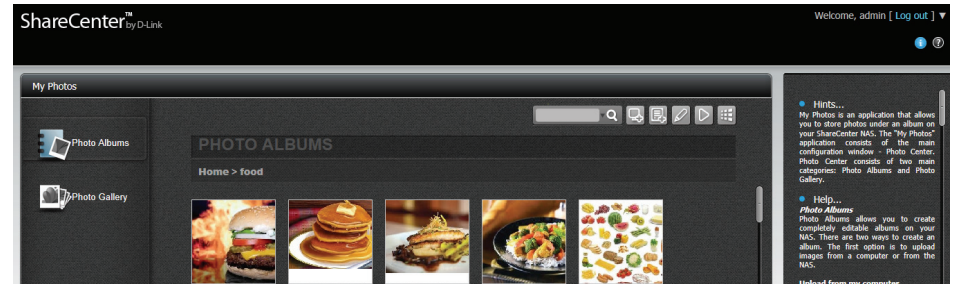


Select the **Album** you wish to transfer the Photo to. Click the checkbox. The Photo disappears from the Album.

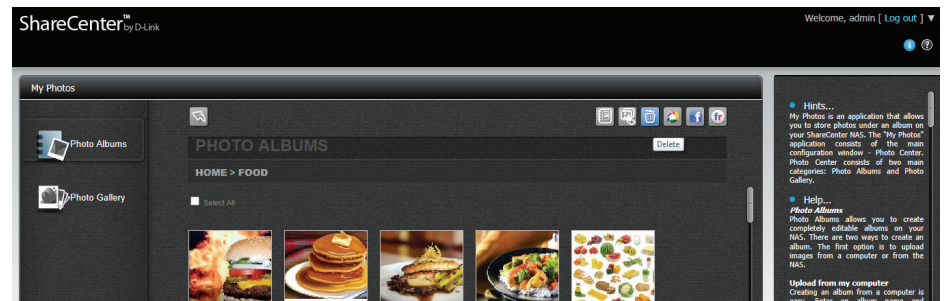


### Delete a Photo

Click **My Photos**, **Photo Albums**, the **Photo Album** you wish to select the **Photo** from.

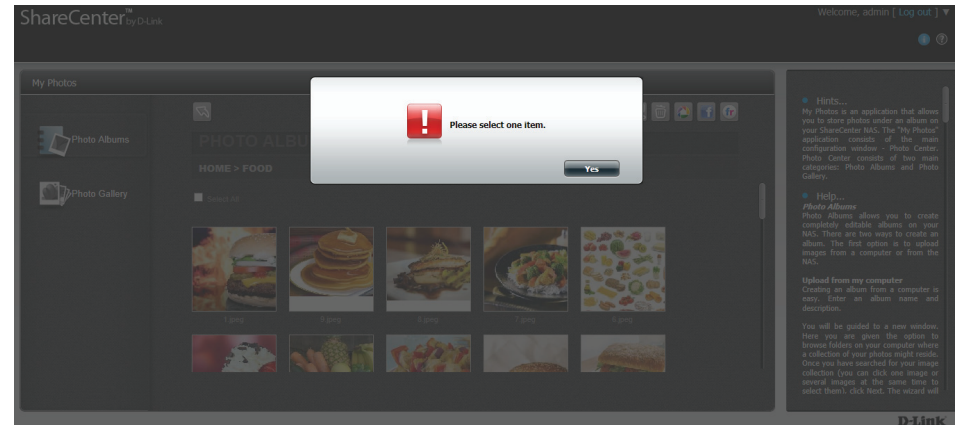


Select the **Photo** and click **Delete**.

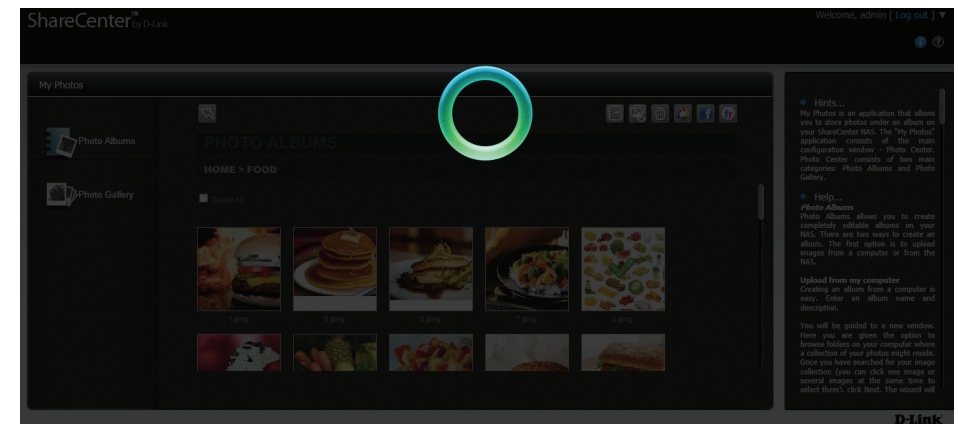


## Section 4 - Configuration

If you do not select any photo in the album, a warning message appears to indicate that you haven't selected an image. Click Yes to continue.

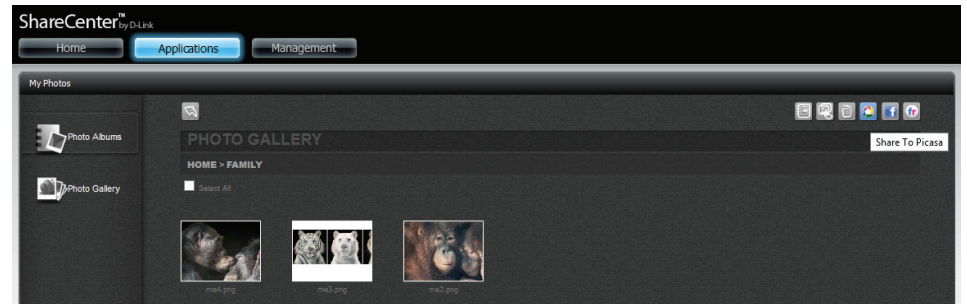


Once you have selected a photo to delete and clicked the Delete icon, the wizard processes your request. The gallery now displays the photos minus the deleted one(s).

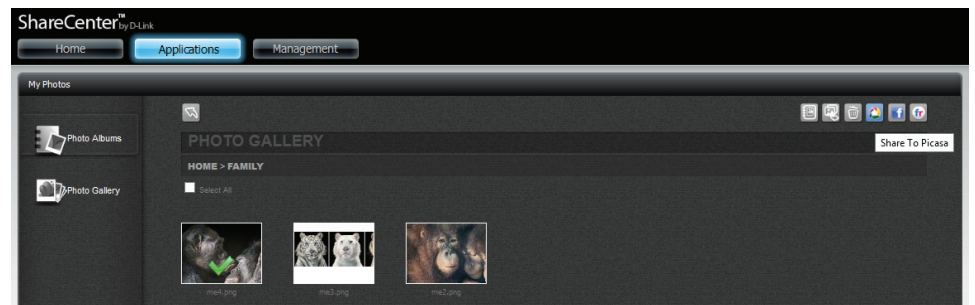


### Share a Photo to Picasa

Click **My Photos**, **Photo Albums**, the **Photo Album** you wish to select the **Photo** from.



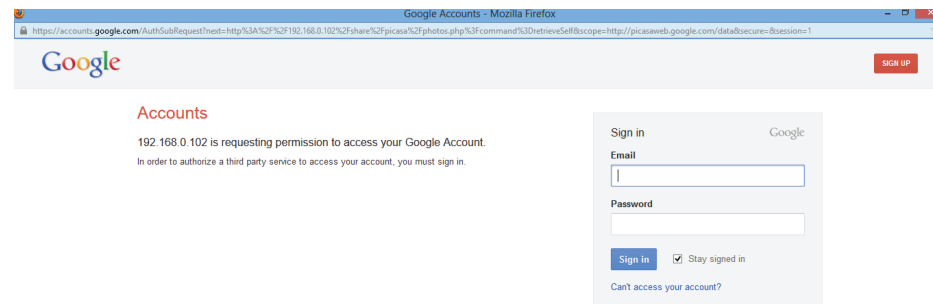
Select the Photo you wish to share on **Picasa**. A green check-mark highlights your selection and click **Share to Picasa**.



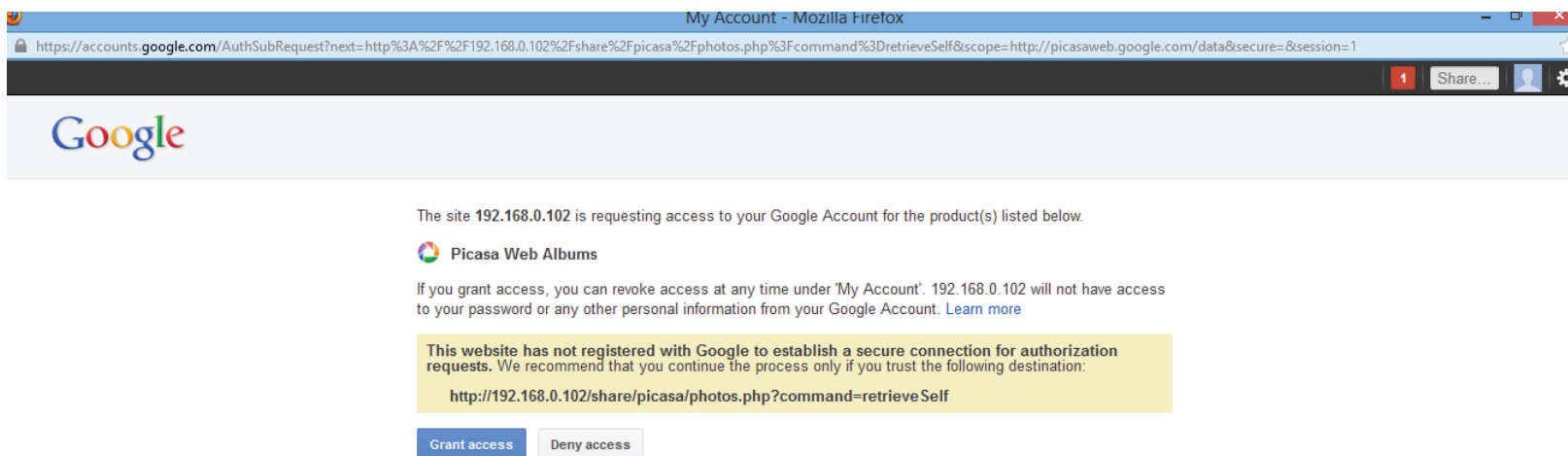


**Google** requests you log-in to your **Google account**. You are unable to use the **Picasa** feature if you do not have a Google account.

Enter your **Email Address**, **Password** and **Sign In** to proceed.

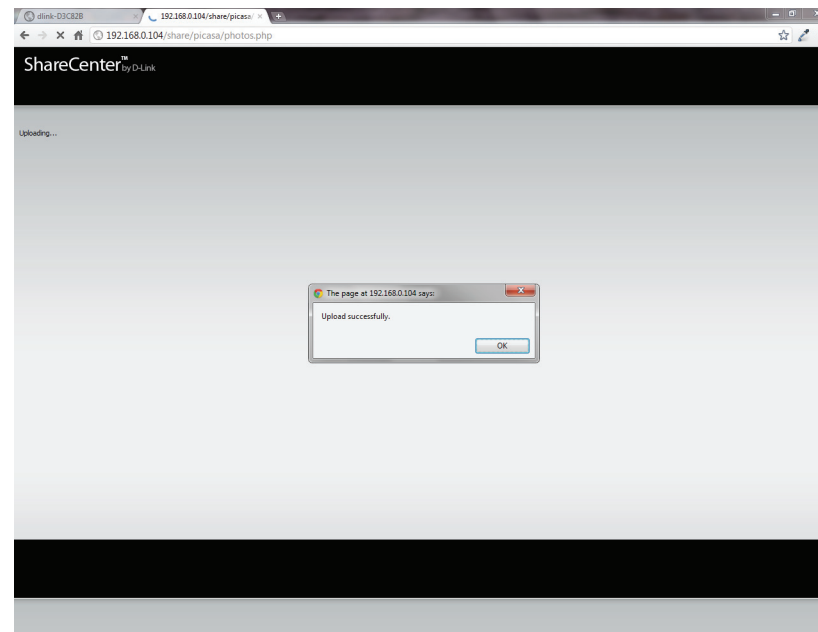
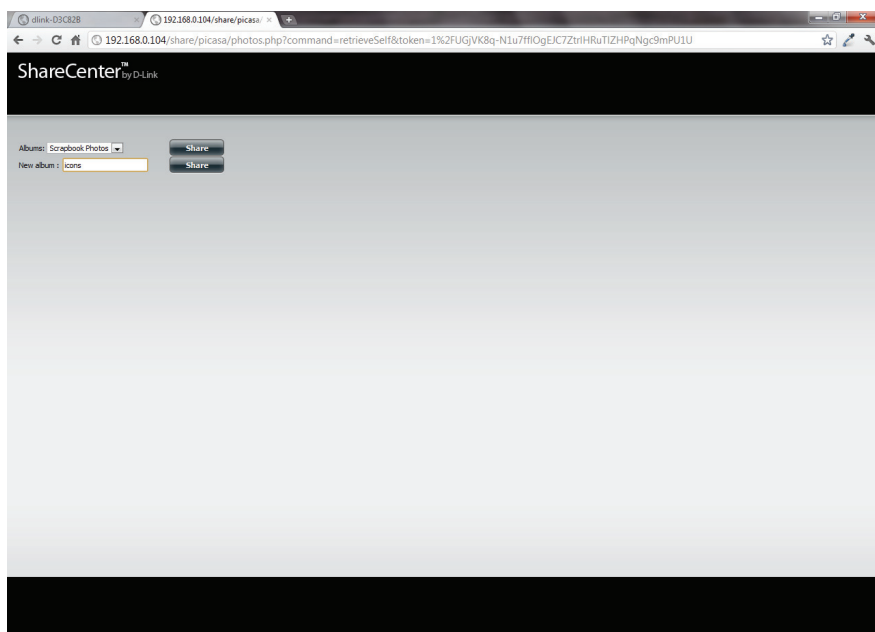


**Google** requests you to grant access to **Picasa Web Albums**. Click **Grant Access** to proceed.



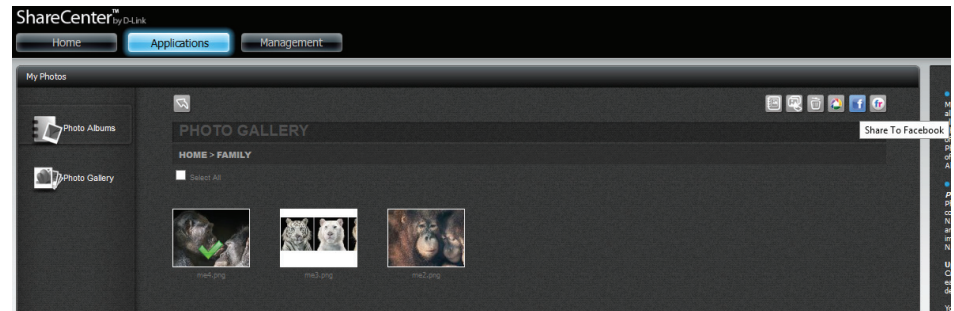
If you select **Grant access**, you will be directed to the **ShareCenter™ Photo Manager**. Here you can share photos to the album you already have in Picasa Web or create a new web album to share. **Under Albums**, select an album from the drop-down list and click **Share**. Alternatively, enter the new album name and click the **Share** button. When you click the **Share** button your files are uploaded to your Picasa Web Albums and another window will pop-up to confirm its success.

**Note:** *You will have to enable Photos (Picasa Web Albums) with your Google account.*

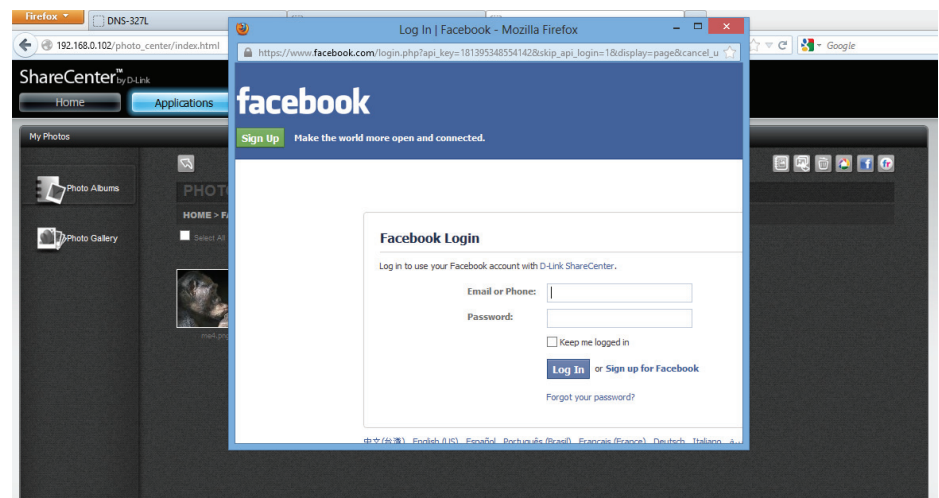


### Share a Photo to Facebook

Click **My Photos**, **Photo Albums**, the **Photo Album** you wish to select the **Photo** from.



Select the **Photo** you wish to share on **Facebook**. A green check-mark highlights your selection and click **Share to Facebook**. A pop-up window appears directing you to log-in to Facebook. Enter your details and log-in.

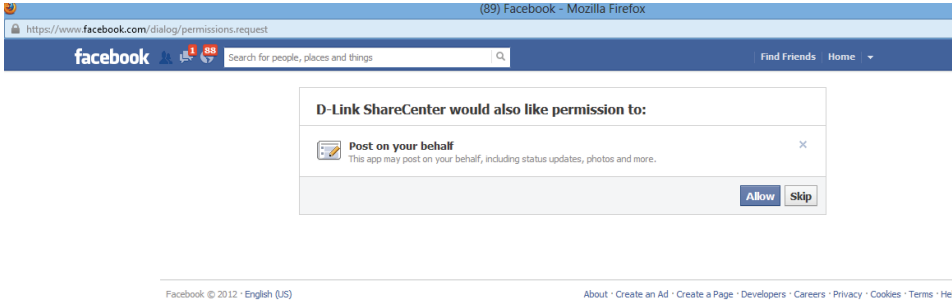




Facebook requests you to access and get their **D-Link ShareCenter™ App**. Click **Go to App** to proceed.

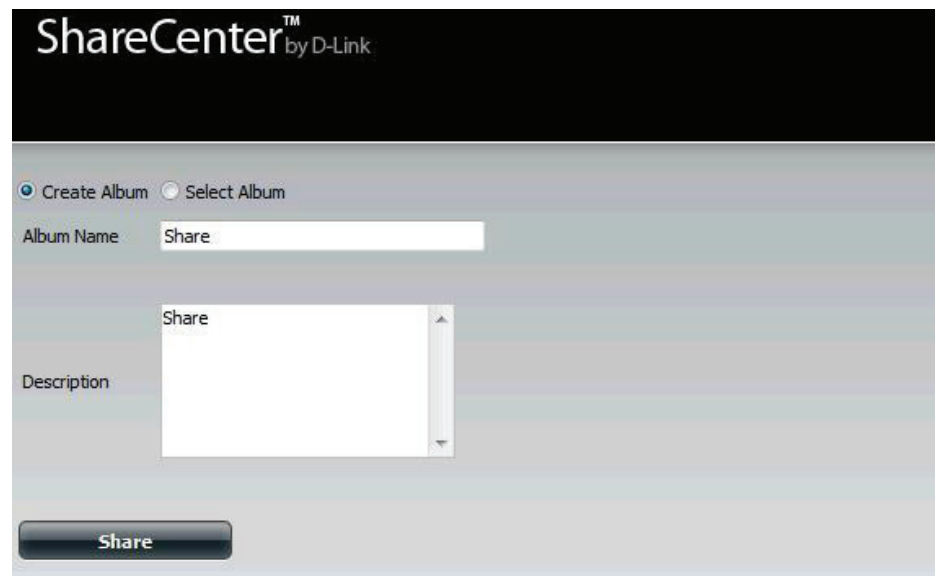


The **D-Link ShareCenter™ App** also requests permission to post images on your behalf. Click **Allow** to continue.



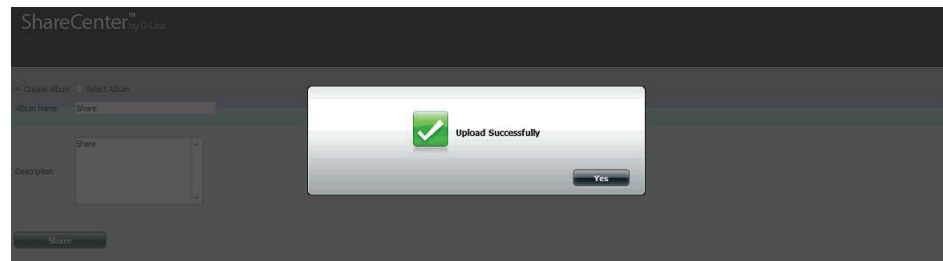
## Section 4 - Configuration

If you select **Allow**, you will be directed to the ShareCenter Photo Manager. Here you can share photos to the album you already have in Facebook or create a new web album to share. Under Album Name, select an album from the drop-down list and click **Share**. Alternatively, enter the new album name and click the **Share** button.



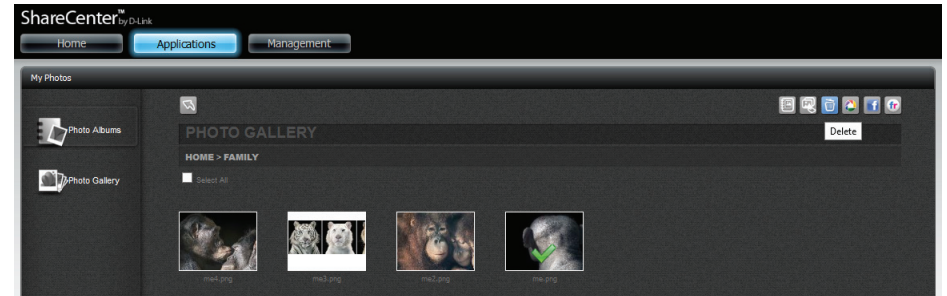
The image shows the ShareCenter™ by D-Link Photo Manager interface. At the top, there's a header with the logo. Below it, there are two radio buttons: "Create Album" (selected) and "Select Album". Under "Album Name", there's a text input field containing the word "Share". Below that, there's a description input field, also containing the word "Share". At the bottom, there's a large "Share" button.

When you click the **Share** button your files are uploaded to your Facebook account and another window will pop-up to confirm its success.

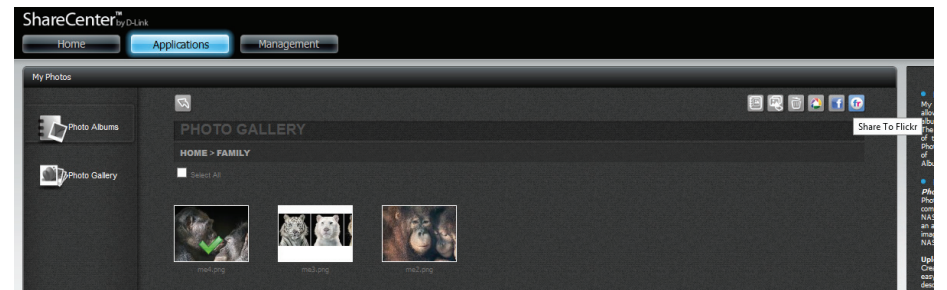


## Share a Photo to Flickr

Click **My Photos**, **Photo Albums**, the **Photo Album** you wish to select the **Photo** from.

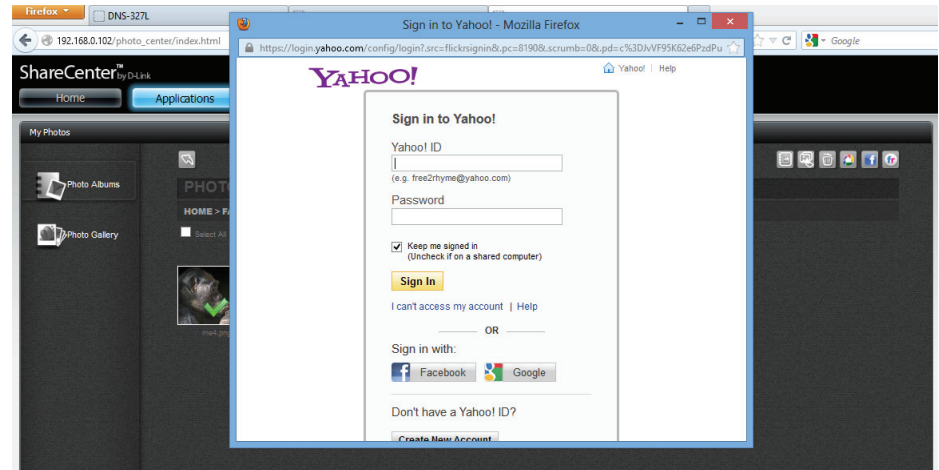


Select the **Photo** you wish to share on **Flickr**. A green check-mark highlights your selection and click **Share to Flickr**. A pop-up window appears directing you to log-in to **Yahoo Flickr**. Enter your details and log-in.

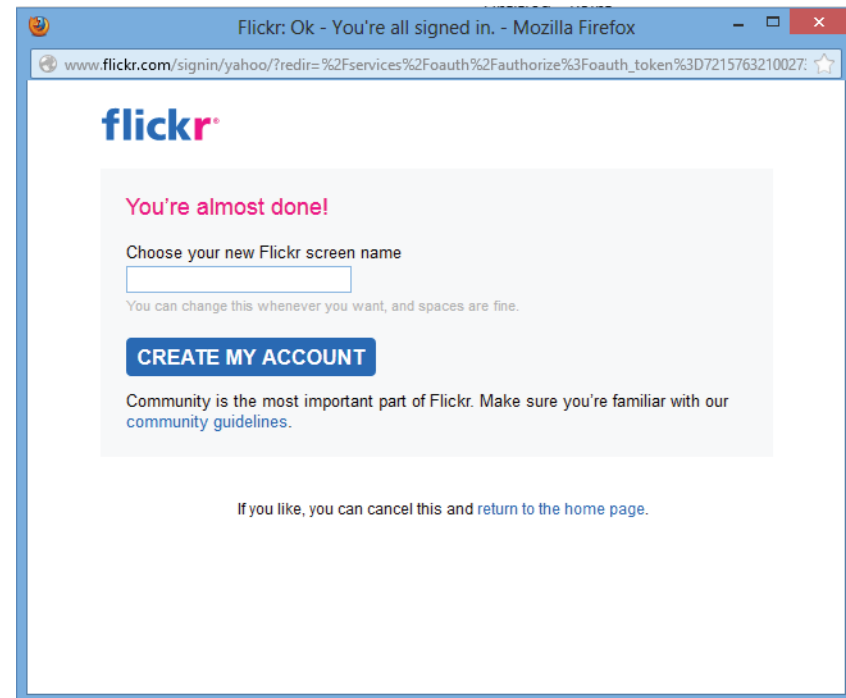


## Section 4 - Configuration

A pop-up window appears directing you to log-in to **Yahoo Flickr**. Enter your details and click Sign-in.

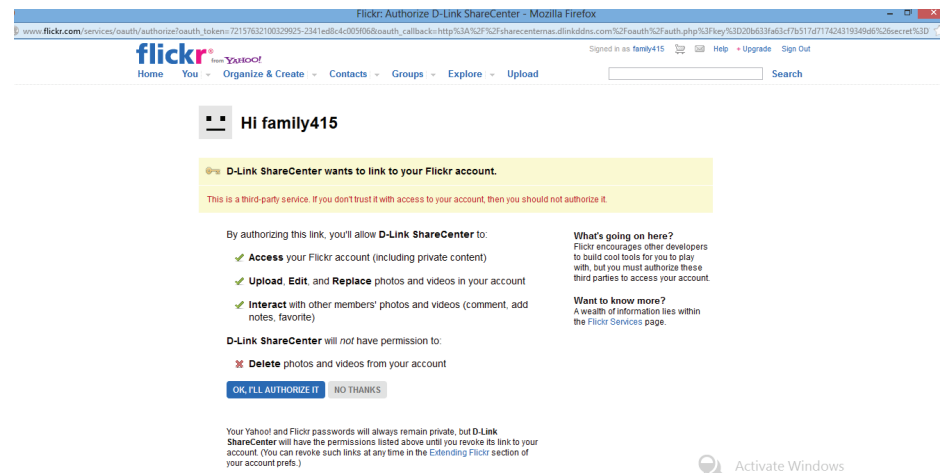


Create a name for your **Album** on **Flickr**.

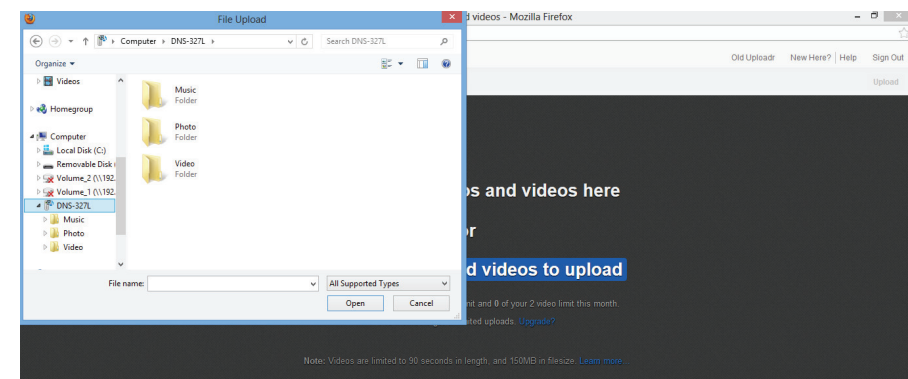


## Section 4 - Configuration

The **D-Link ShareCenter™** asks to link to the Flickr account. Click **OK, I'LL AUTHORIZE IT**, to proceed.

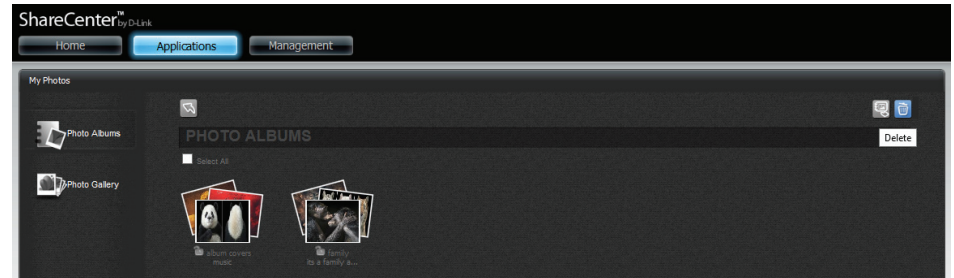


Use your **DNS-320L** to access and upload files to **Flickr**.

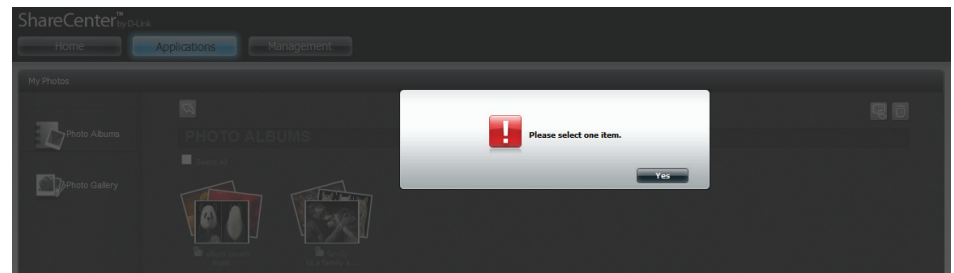


## Deleting an Album

Click the **Edit** button. Click **Delete** to delete an **Album**.

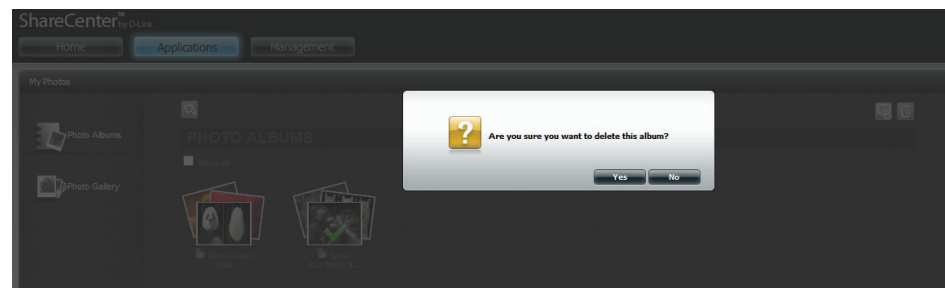


If you do not select an album, you are prompted to select an item. Click **Yes** to continue.

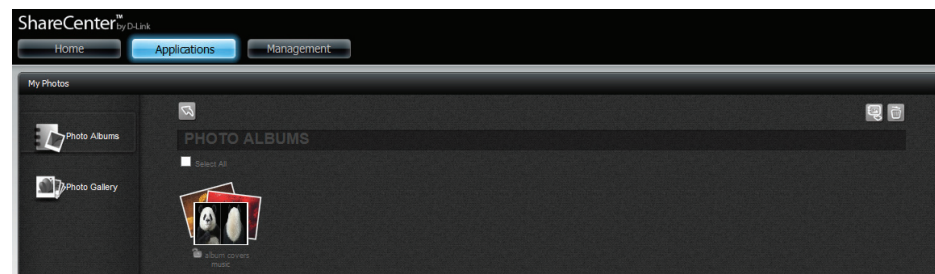


## Section 4 - Configuration

Select an **album**, a **green checkmark** will indicate the selection, click the **Delete** icon. A warning message will ask you to verify your choice. Click **Yes**, to continue or **No** to exit.

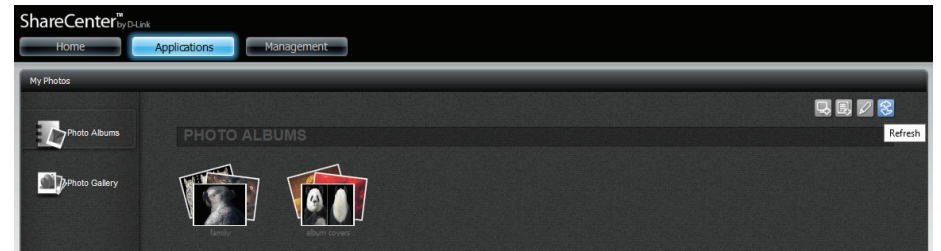


The **Album** is now deleted from the **Photo Albums** menu.

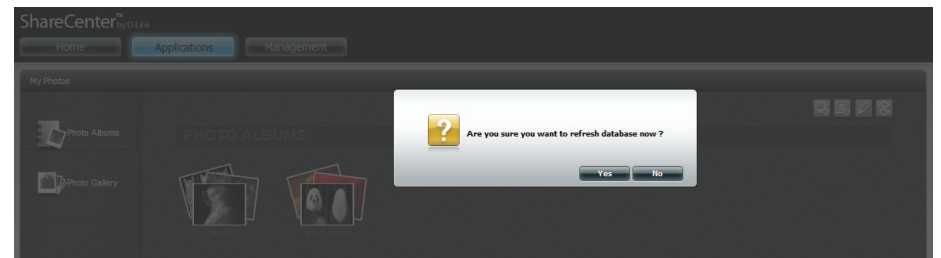


## Refreshing the Album Database

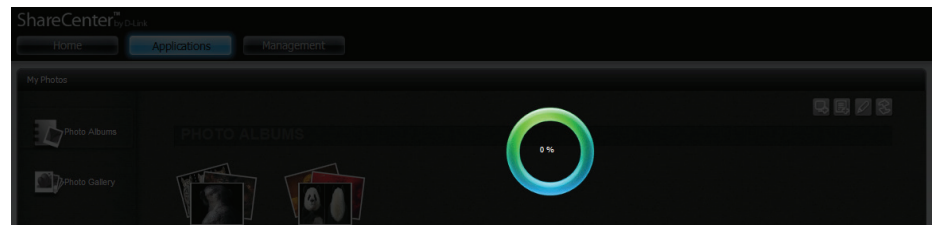
Click **My Photos**, **Photo Albums**, and click the **Refresh** icon to refresh the entire database.



Before the screen is refreshed, you are prompted to verify your decision to refresh the database. Click **Yes**, to continue, **No** to exit.



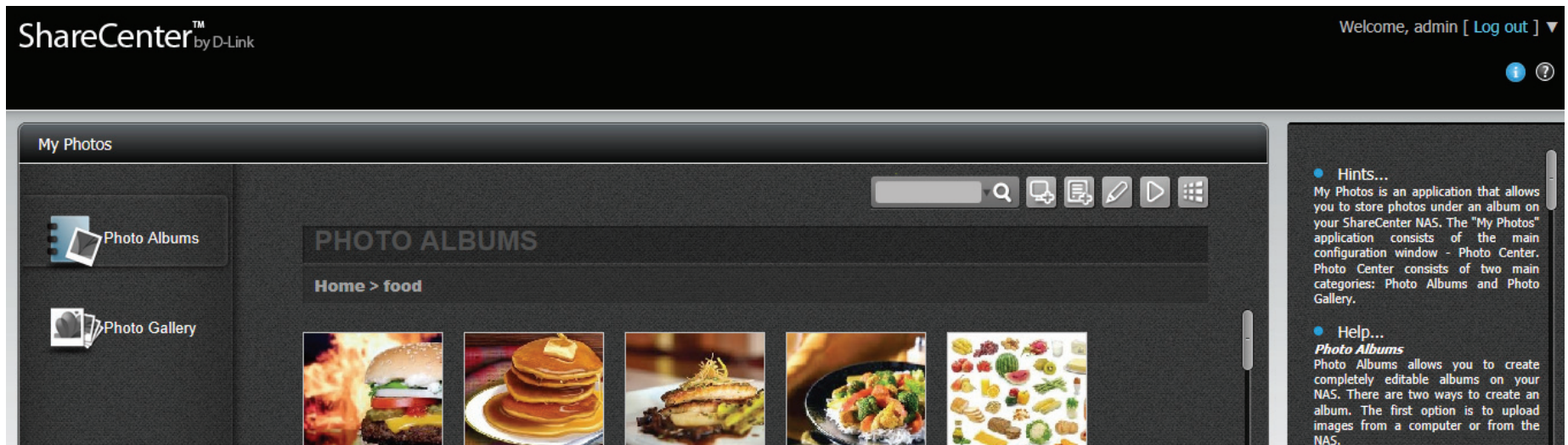
The DNS-320L refreshes the system and is ready.



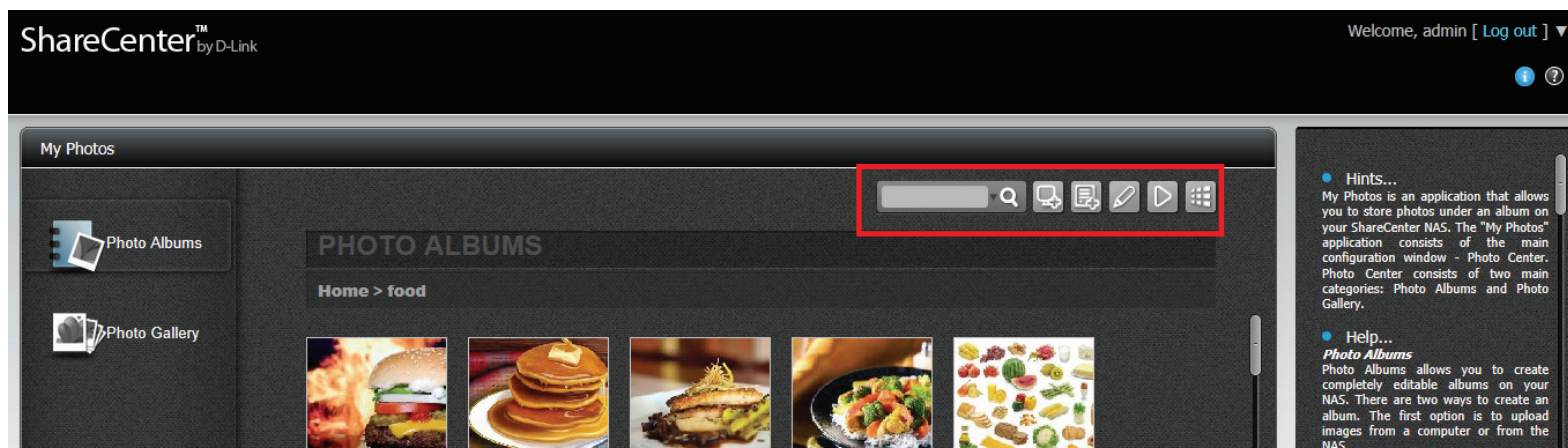


## Managing Photos

**My Photos** contains all your photos on the DNS-3270. Click **My Photos** from the **Home** panel to manage all photos.



**Management Panel:** Upload from my computer, Upload from NAS, Edit, Slideshow, Cooliris.



## Slideshow Toolbar

The **toolbar** consists of the:

**Play button:** Press this button to play the Gallery images.



**Photo information:** View the image name and file format.

1 / 6 red-battery-512x512.png

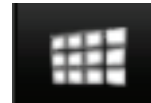
**Gallery speed slider:** Toggle the slideshow speed between slow and fast.



**GPS information:** Click this button to get GPS information about the image (if your camera supports this function).



**Cooliris link:** Click this button to display your images on the Cooliris website.



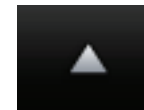
**EXIF:** View detailed information about the image (File Name, Size, Image Date, Resolution, Camera, Camera Model, ISO, Exposure Time, & Aperture).



**Rotation button:** This rotates the image at 90 degree angles.

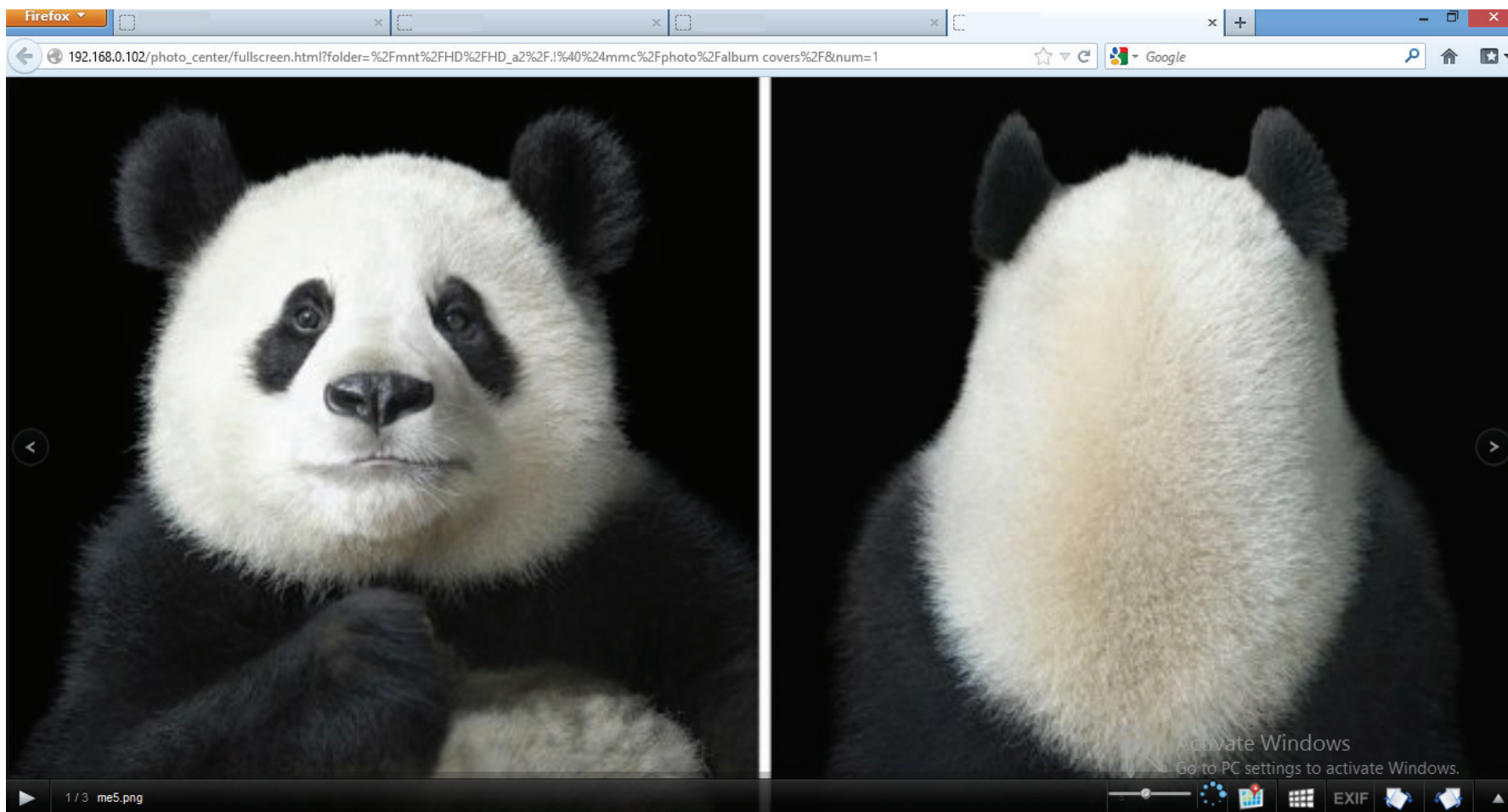


**Gallery Navigation:** This provides a pop-up display of all the images in the gallery.



## Section 4 - Configuration

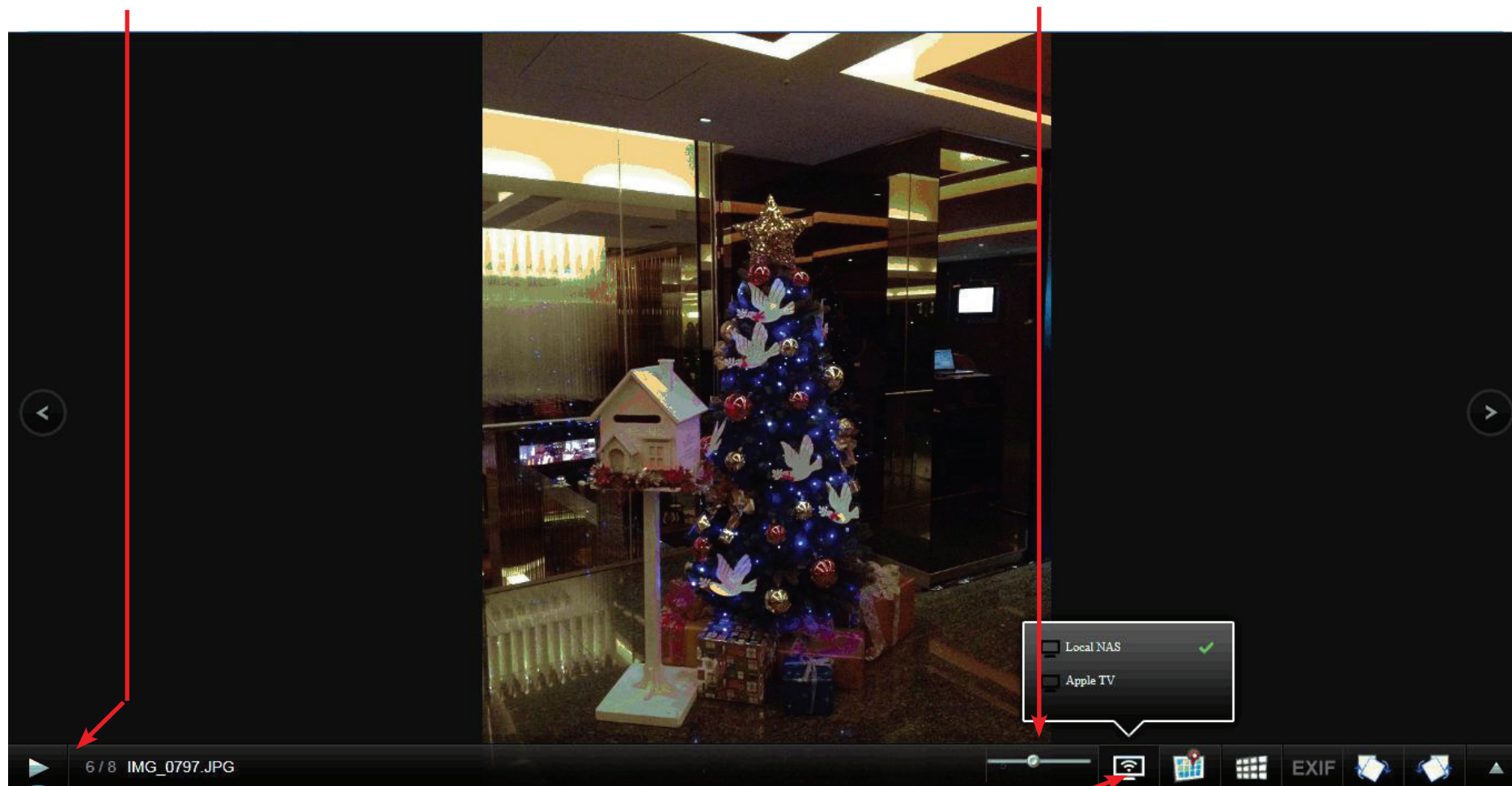
Click a photo to go in **full screen** mode. This is similar to clicking the fourth icon in the icon list, to the right, the **Slideshow** icon. The screen opens in a new tab.





This feature plays the **Slideshow**.

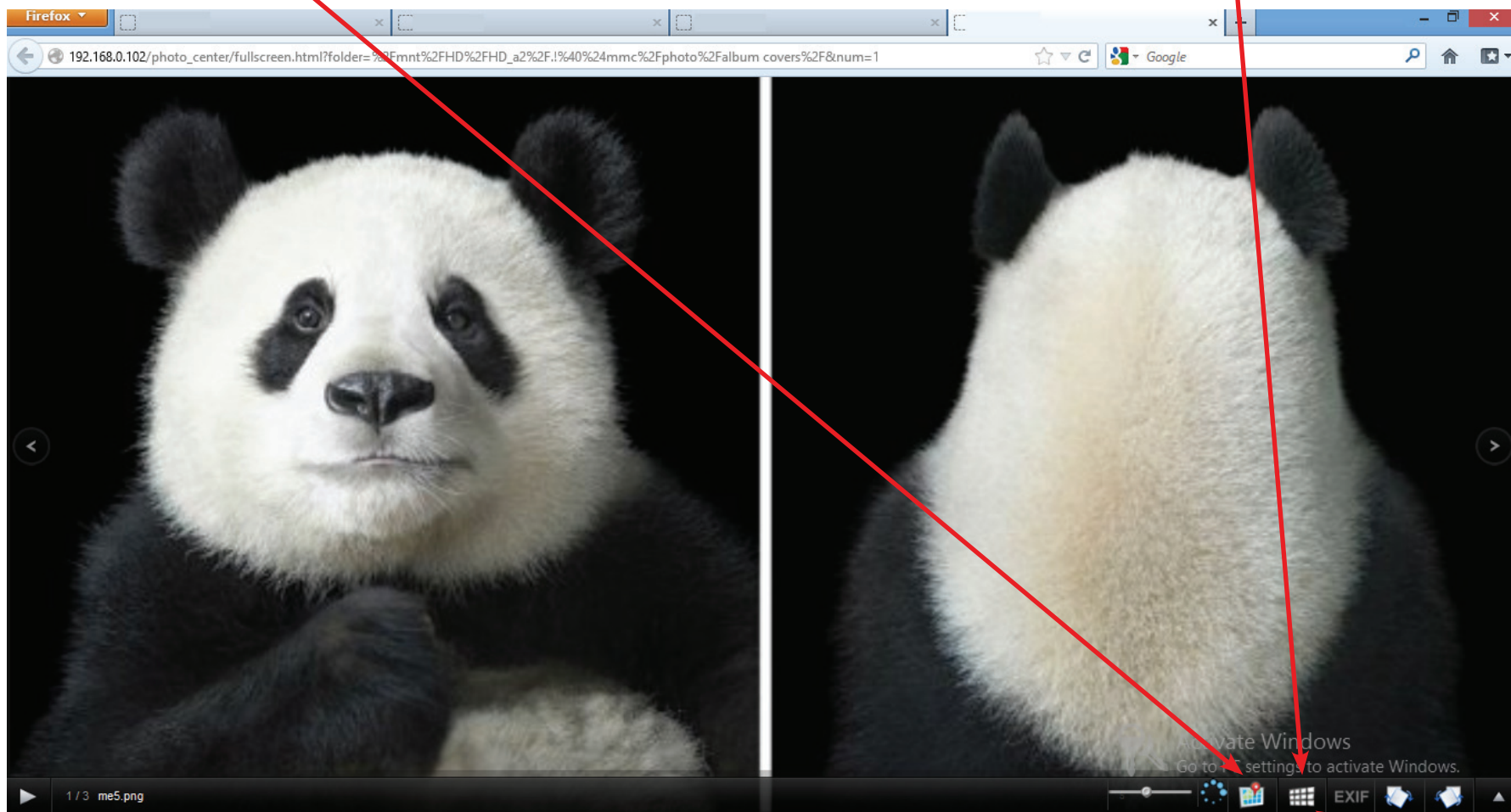
This feature adjusts the speed of the **Slideshow**.



This feature beams your Slideshow to a Local Device or to a TV via AirPlay enabled Apple Device.

This feature provides **GPS** information of the **Slideshow**.

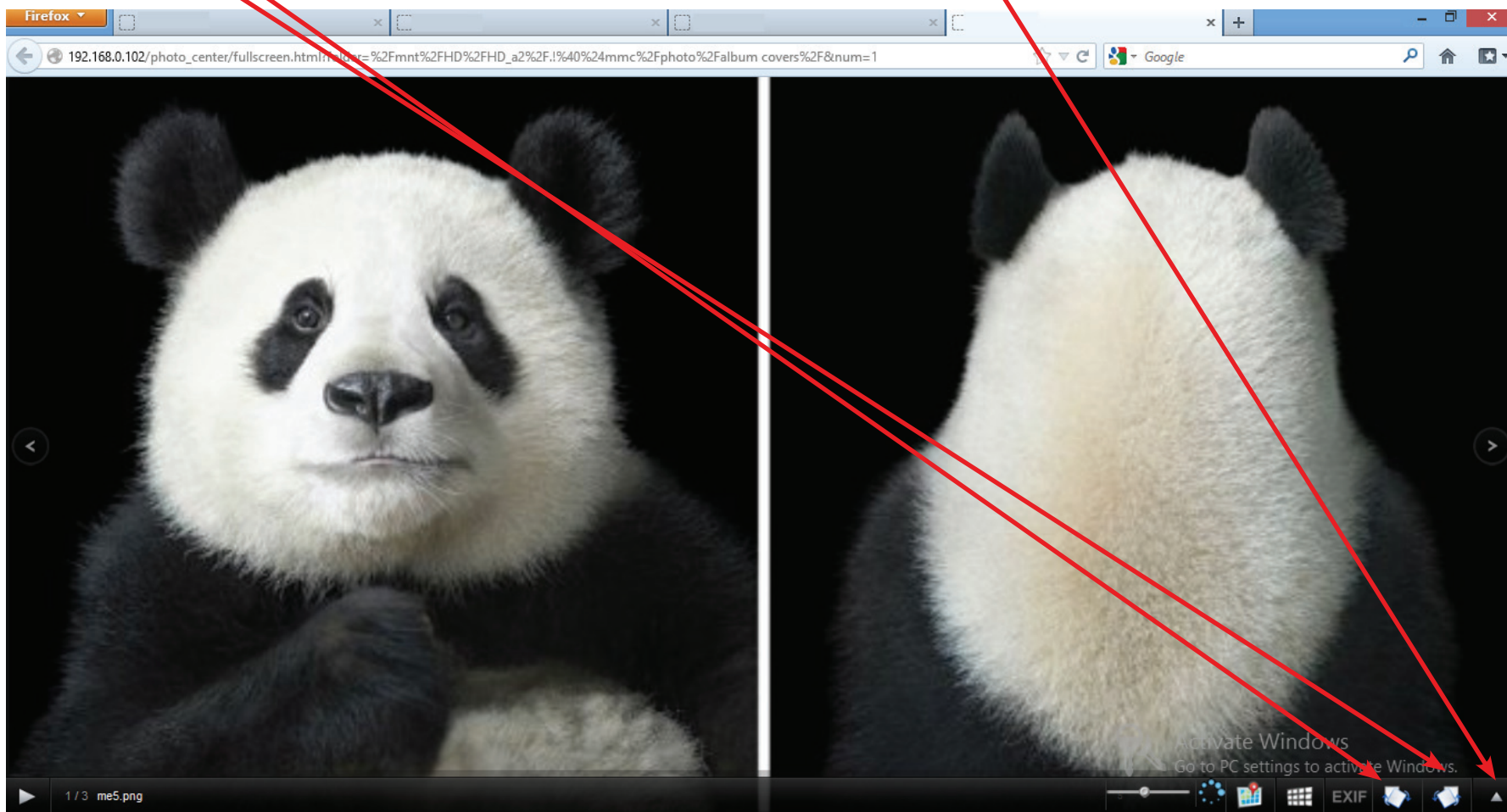
This feature transfers the **Slideshow** to **Cooliris** mode.



This feature **EXIF** information of your **Slideshow**.

This feature **rotates** the image of the **Slideshow**.

This feature pops up the browser window of the **Slideshow**.

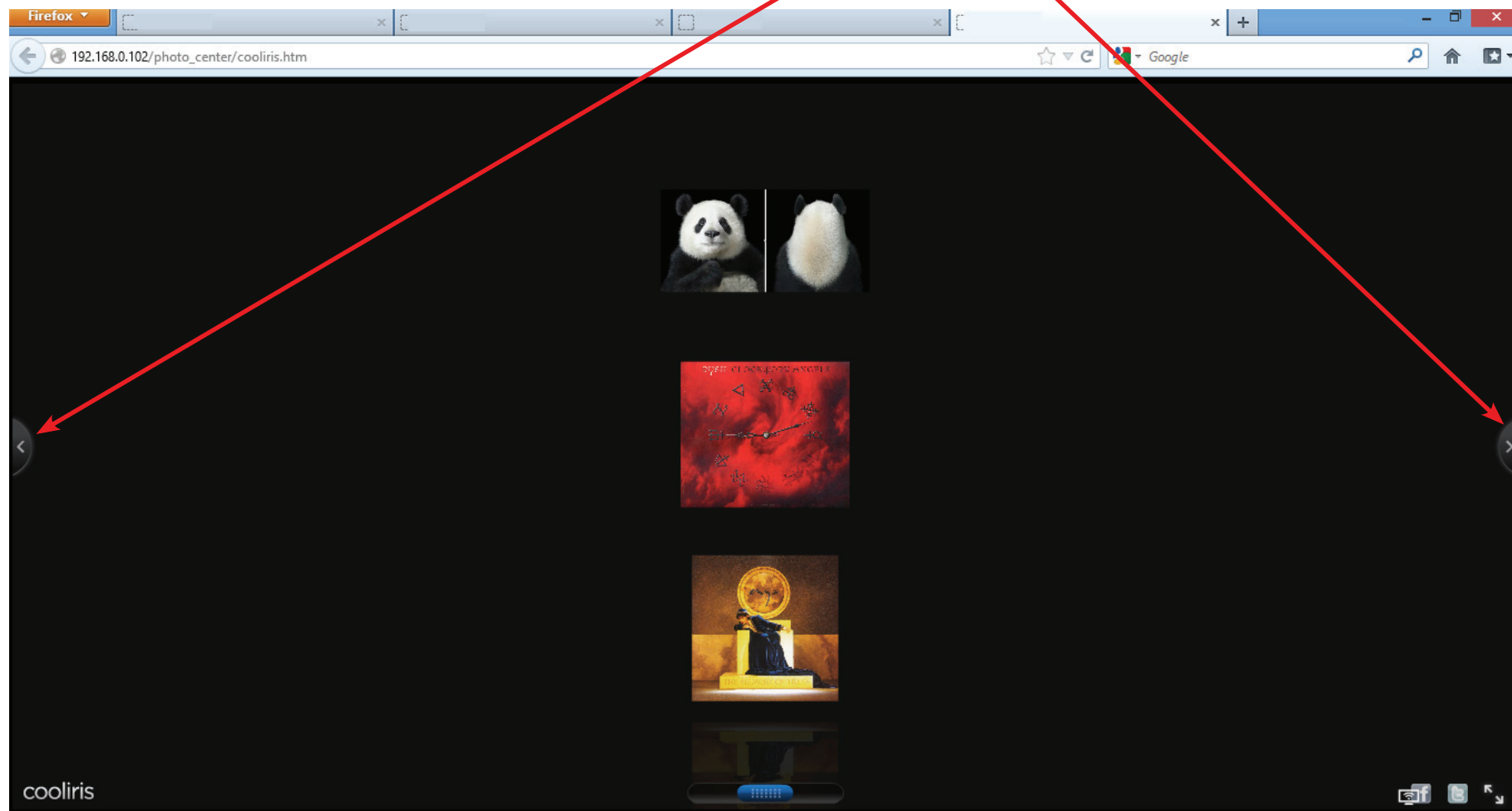


This feature **EXIF** information of your **Slideshow**.

## Section 4 - Configuration

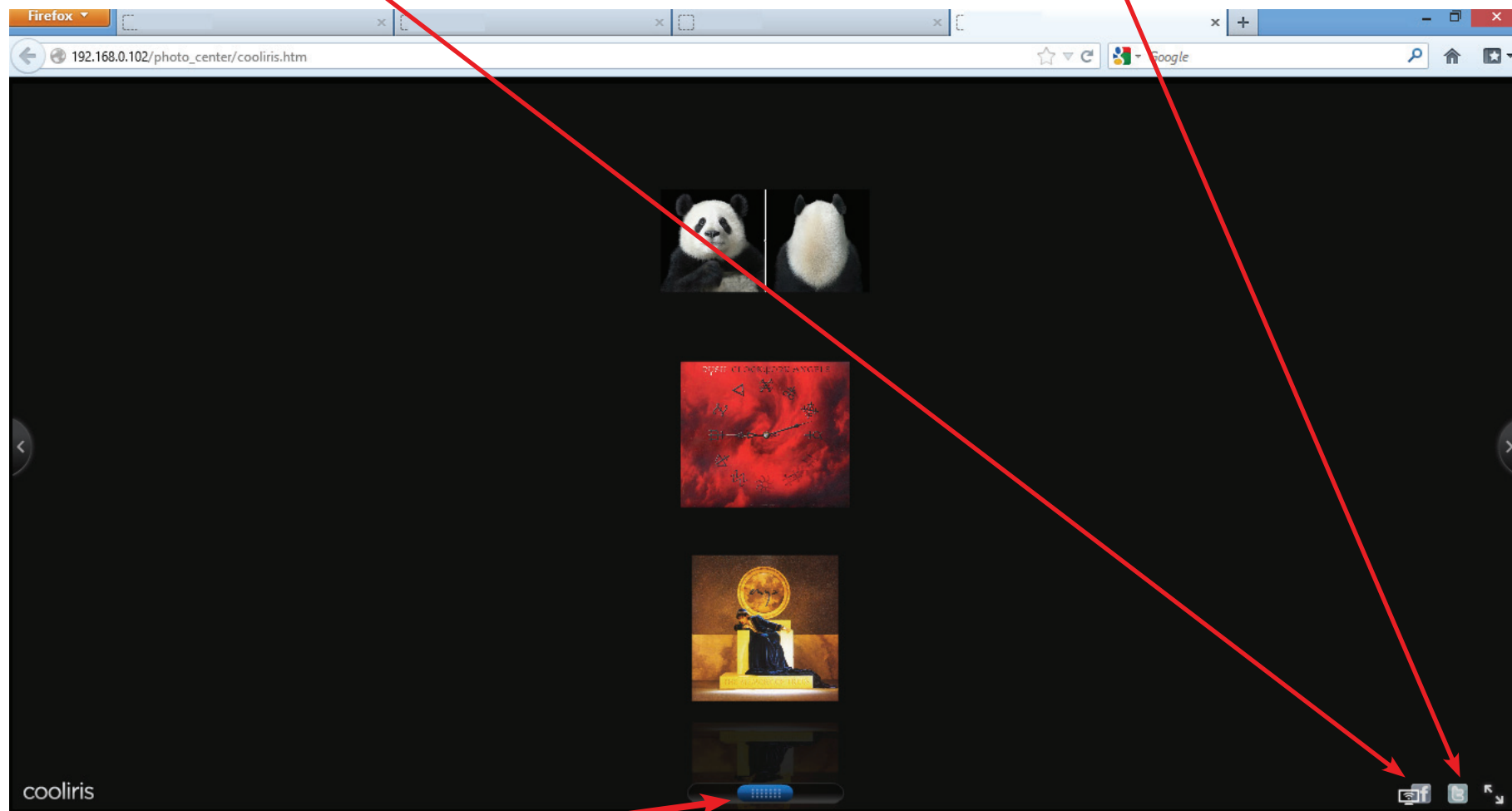
Click the **Cooliris** icon. This opens **Cooliris** in a new tab.

Click the **arrows** on each side of the **Cooliris** window to scroll between images.



Click here to activate **Facebook** in **Cooliris**.

Click here to activate **Twitter** in **Cooliris**.



Click here to **slide** between photos.

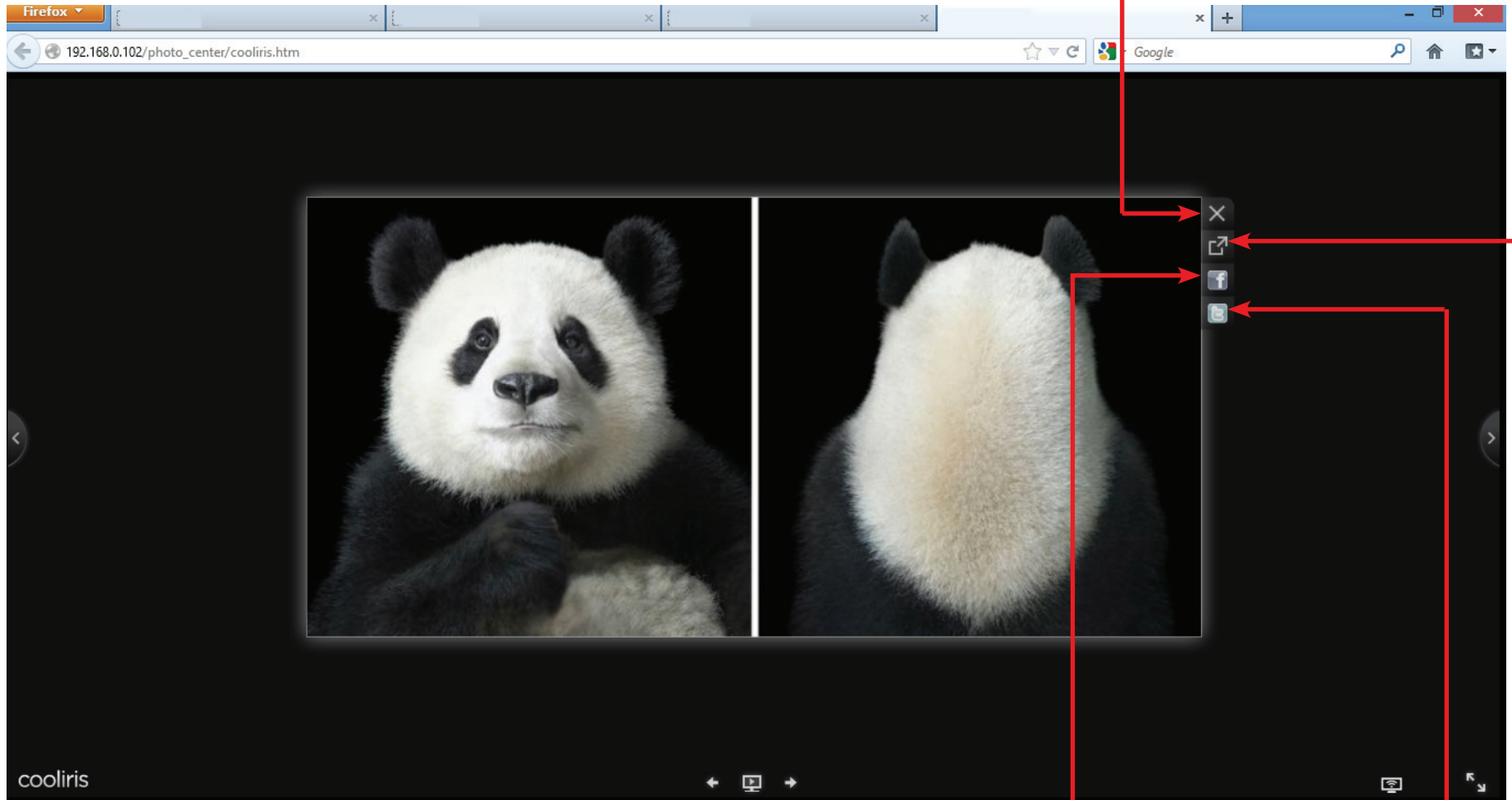
Click here to activate **Full Screen mode**.



## Section 4 - Configuration

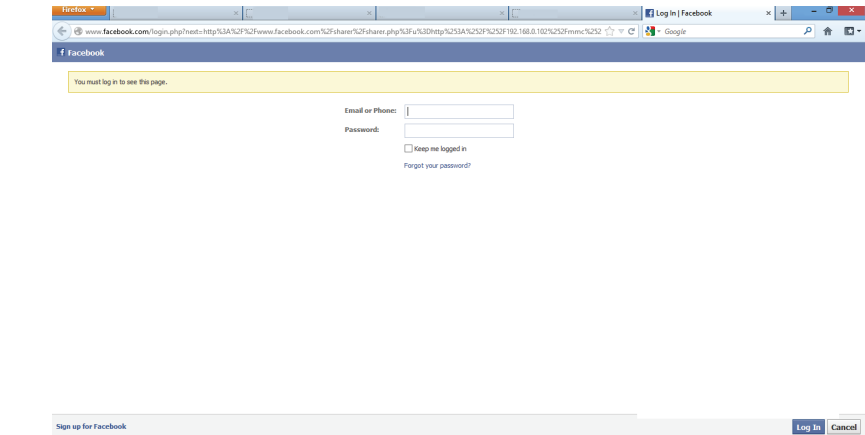
Click on each photo to view separately. The photo is enlarged. On the right-hand side of each image are the social network links.

Click here to close **Single-Image view**. Click here to enlarge into **Full-screen mode**.

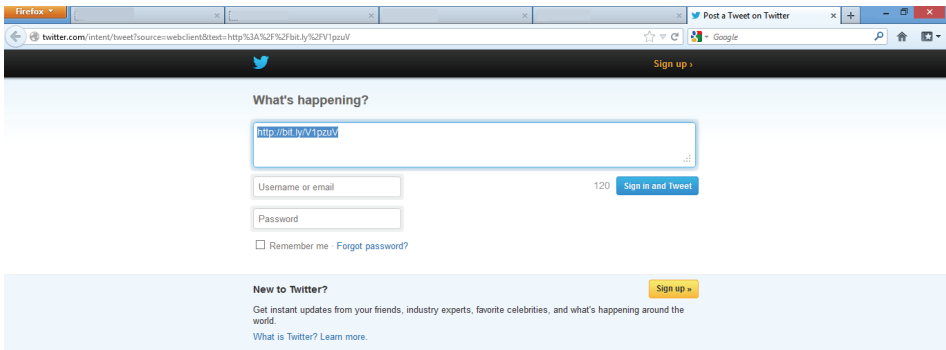


Click here to connect to **Facebook** or click here to connect to **Twitter**.

Click the **Facebook** link to connect your images to your **Facebook account**.



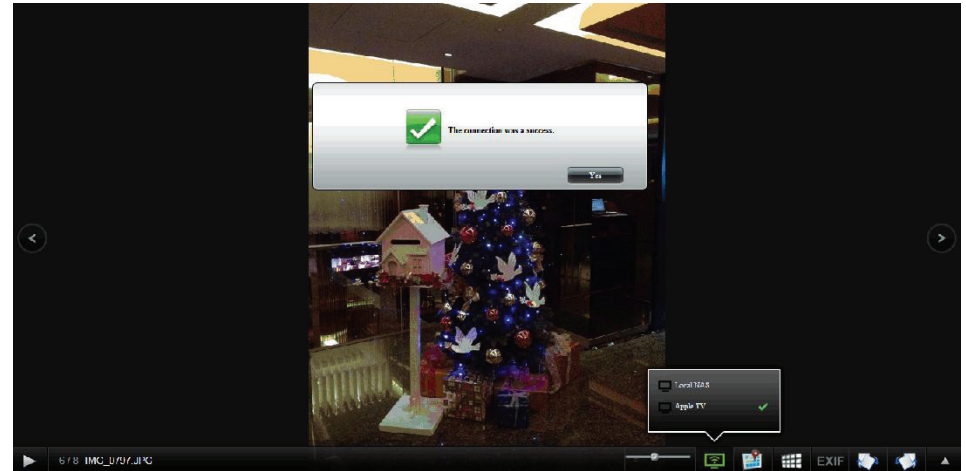
Click the **Twitter** link to connect your images to your **Twitter account**.



### Beam a Slideshow to your TV

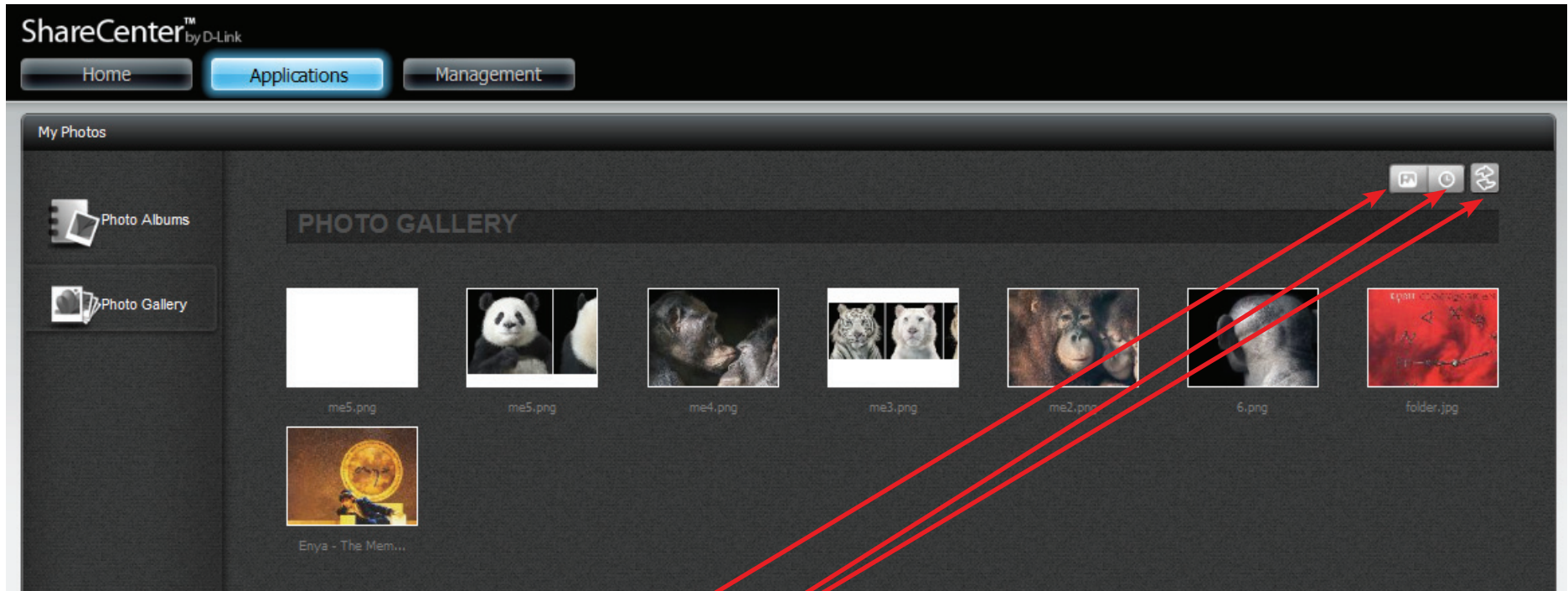
Click Apple Device, the ShareCenter will connect to a shared Apple Device on the Network, a message will pop-up after connecting successfully. Press **Yes** to continue.

Now you can enjoy your slideshow on your TV via the Apple Device and your DNS-320L



## Photo Gallery

Click **Photo Gallery** to view the images in your gallery.



Near the top right-hand corner there are three main icons.

Click here to view **All Photos**.

Click here to view **By Calendar**.

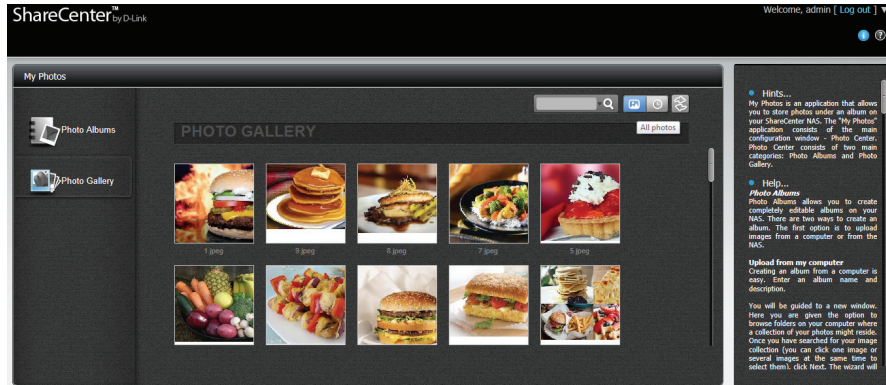
Click here to **Refresh** the page.



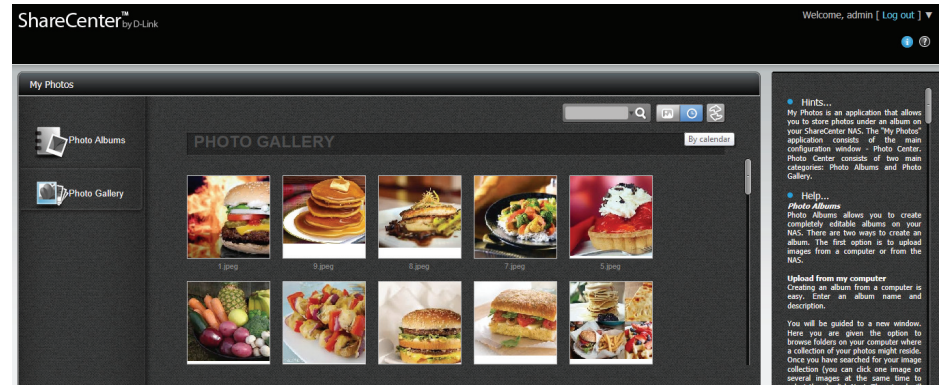


## Section 4 - Configuration

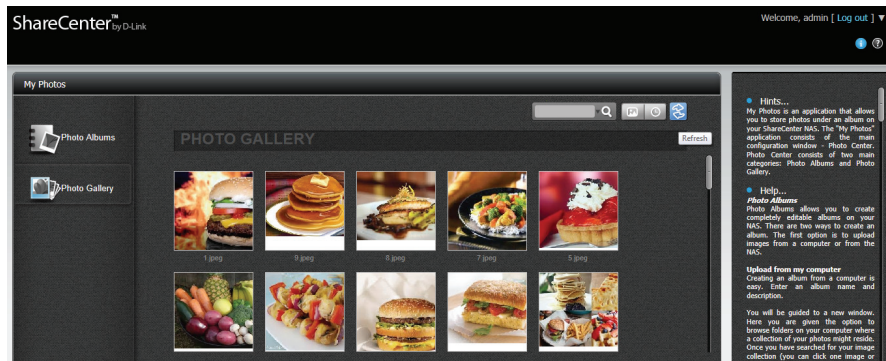
Click the **All Photos** icon to view all your photos in your **Photo Gallery**.



Click the **By Calendar** icon to view your **Photo Gallery** by date.



Click the **Refresh** icon to refresh the database.

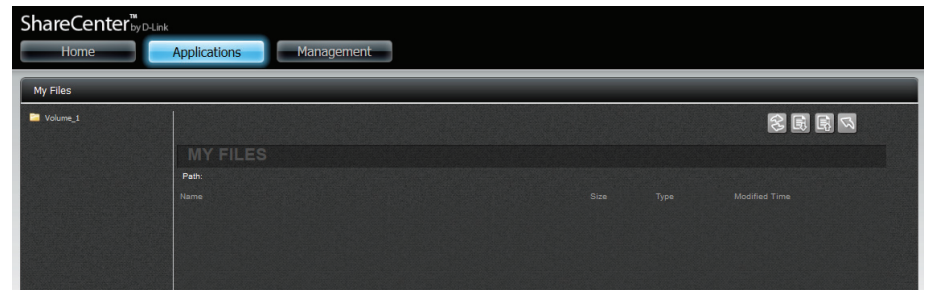
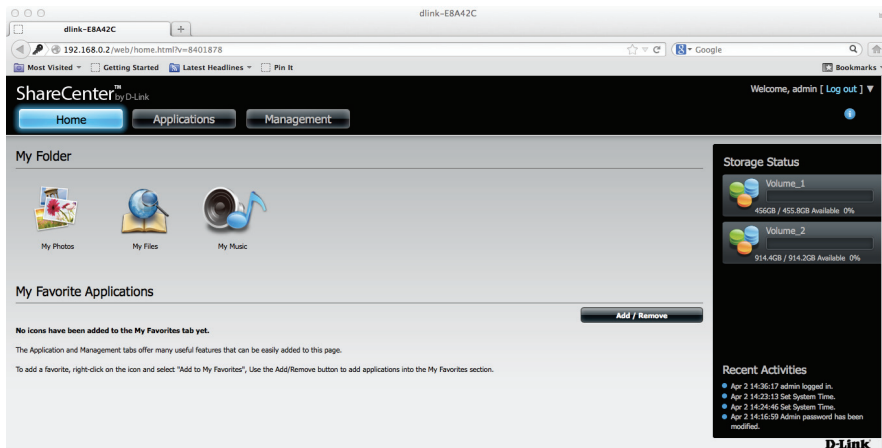


# My Files

Users can access files on their ShareCenter™ by clicking the **My Files** icon in the **My Folder** window under **Home**. **My Files** provides access to all your files on the NAS.

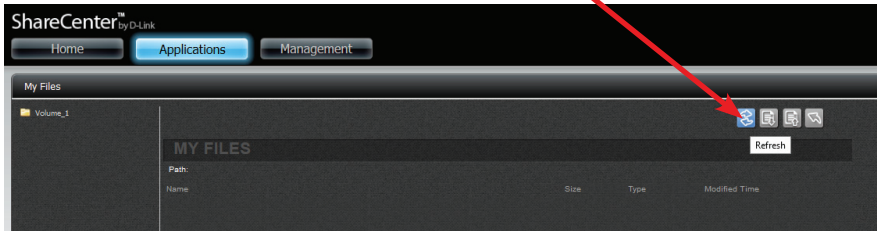
Click **My Files**.

The **My Files** window provides a list of all the **Volumes** created on the NAS. Click on any **Volume** you created to see a directory listing of the files.

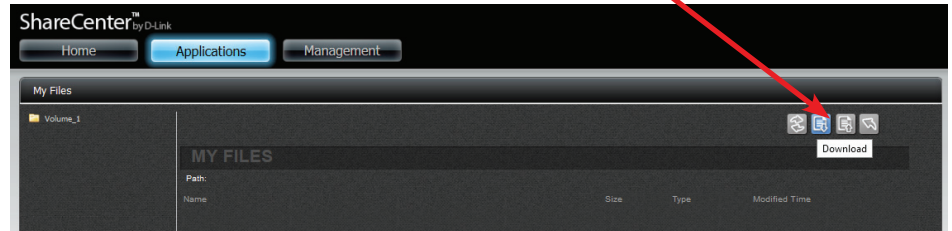


## My Files - Icons

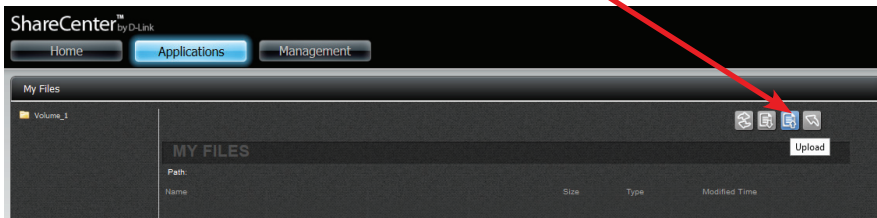
Click the **icons** near the right-hand side of the panel to access the **My Files** features. Click this button to **Refresh** the view.



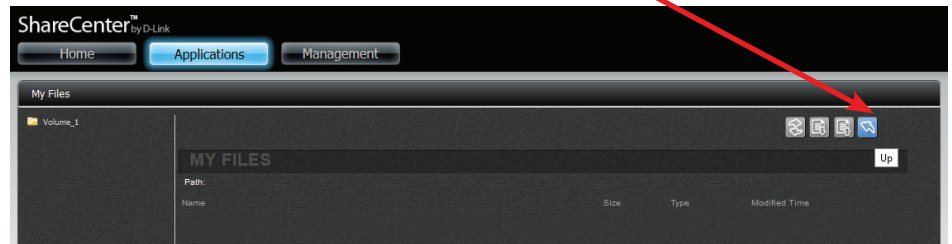
Click the **icons** near the right-hand side of the panel to access the **My Files** features. Click this button to **Download** files to your local PC.



Click the **icons** near the right-hand side of the panel to access the **My Files** features. Click this button to **Upload** files to the NAS.

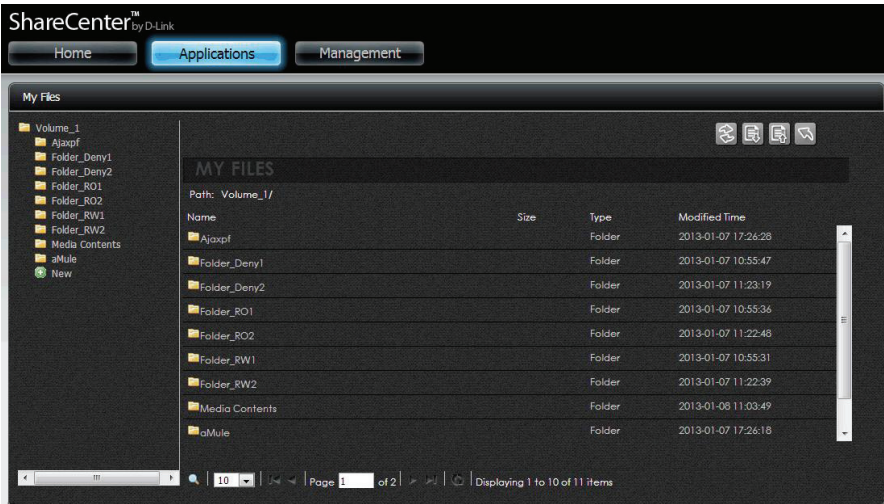


Click the **icons** near the right-hand side of the panel to access the **My Files** features. Click this button to **Return** to the previous screen.



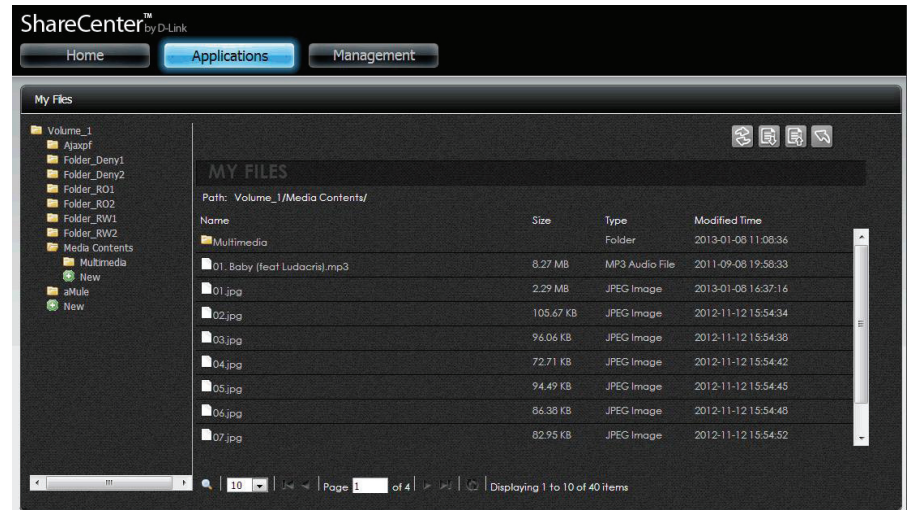
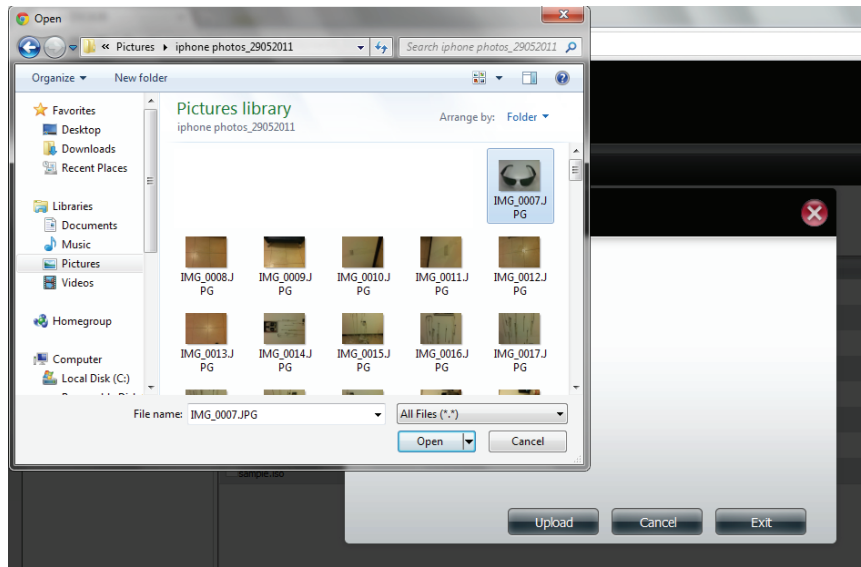
# Upload

To upload more files to the volume you have selected, click the **Upload** button. Click the **Browse** button to find files on your computer to upload to the NAS. Locate the path of the file you want to upload and click **Open**.



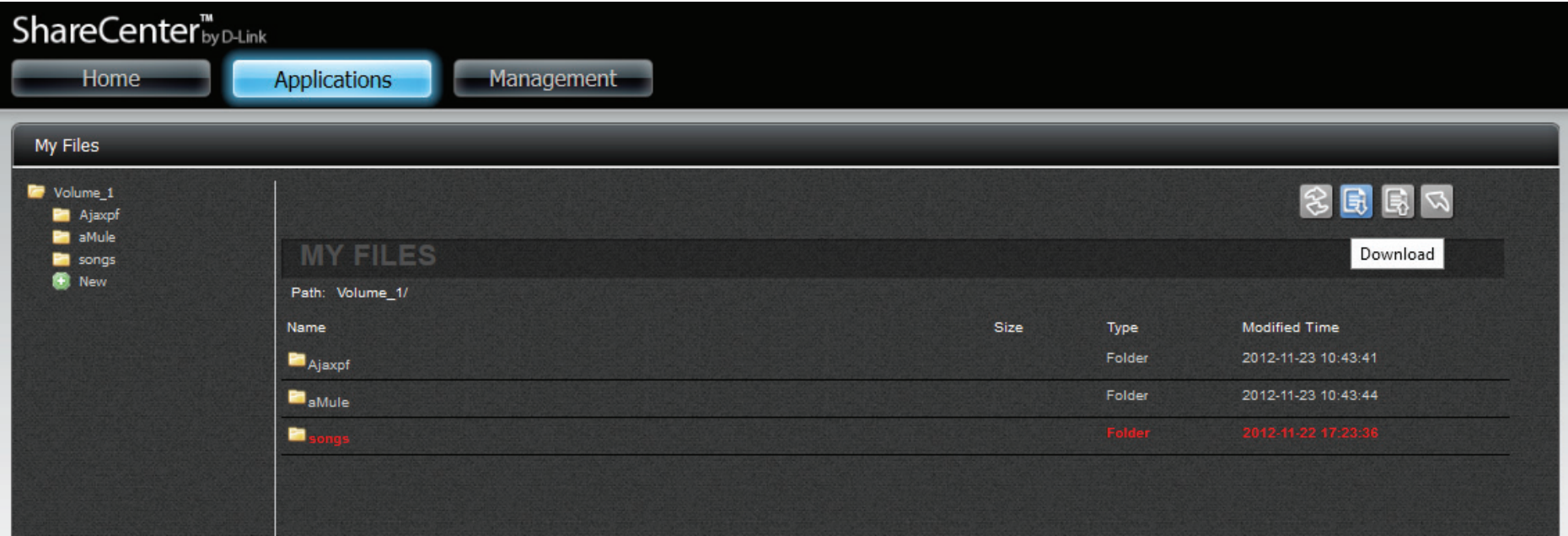


Click **Upload** to start the uploading process. Then click **Exit** to close the upload window. The file updates to the NAS and is displayed on the directory table.

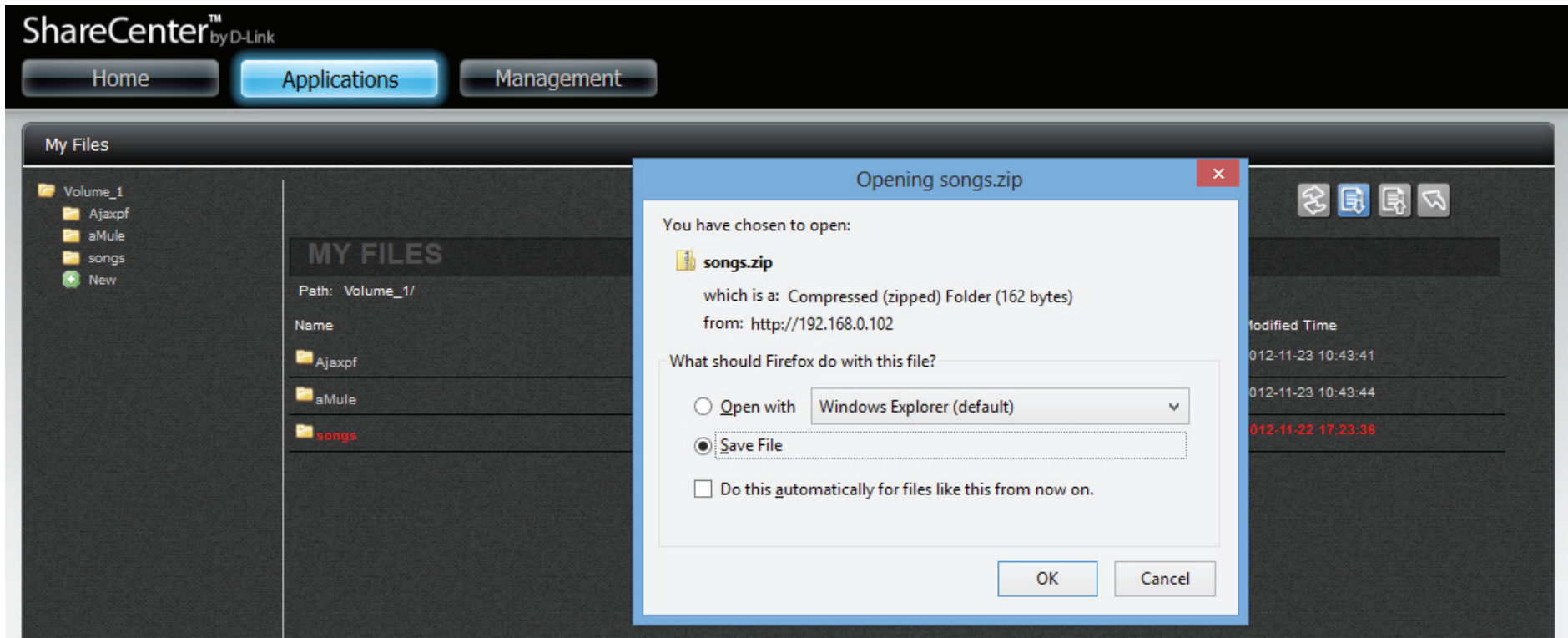


# Download

To download files from the NAS to your computer, select the file you want to download (highlighted in red) and click the **Download** button. Depending on your browser download settings, the browser automatically downloads the file to your saved location.



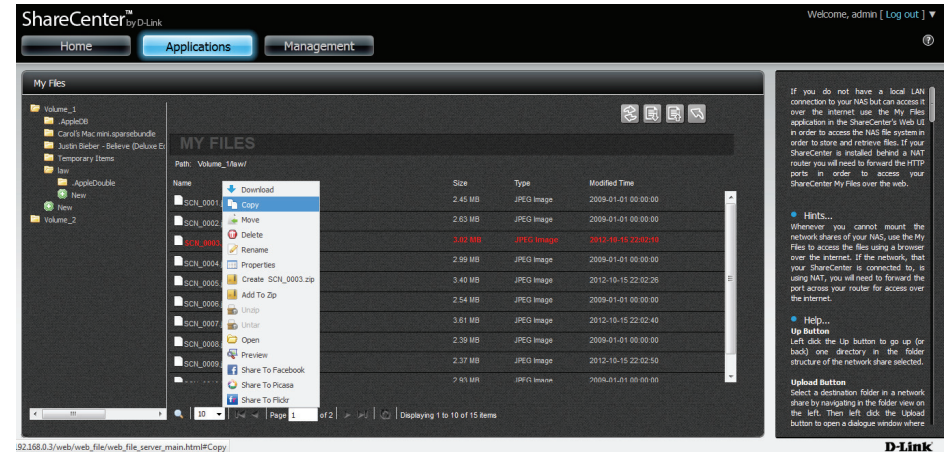
Alternatively, click the **Save File** button and **OK** to continue.



### Copy

To Copy files from one folder to another folder of the NAS, select the file you want to copy (highlighted in red) and right-click. From the drop-down list click Copy.

Go to **Applications, My Files**. Browse any of the folders on the left pane, right click any of the files in the right pane. Select **Copy** (it turns blue).



Under **Copy**, select a Destination **Path** or create a new **Path**.

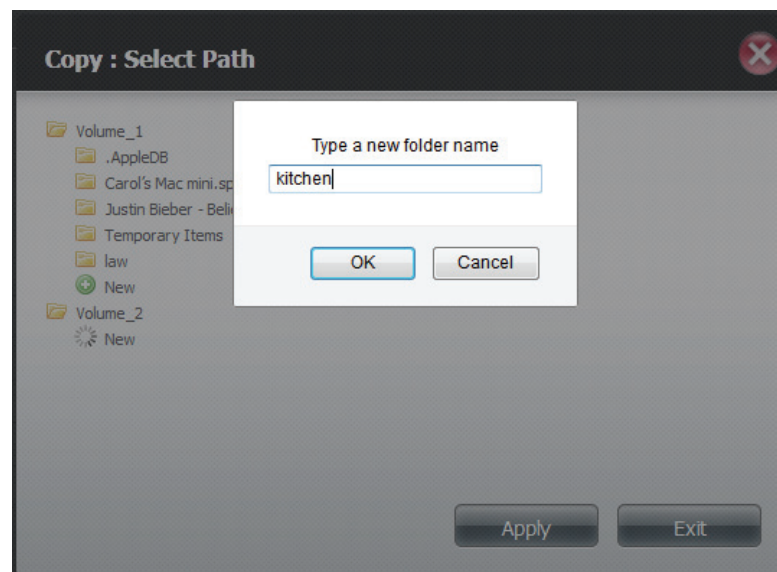




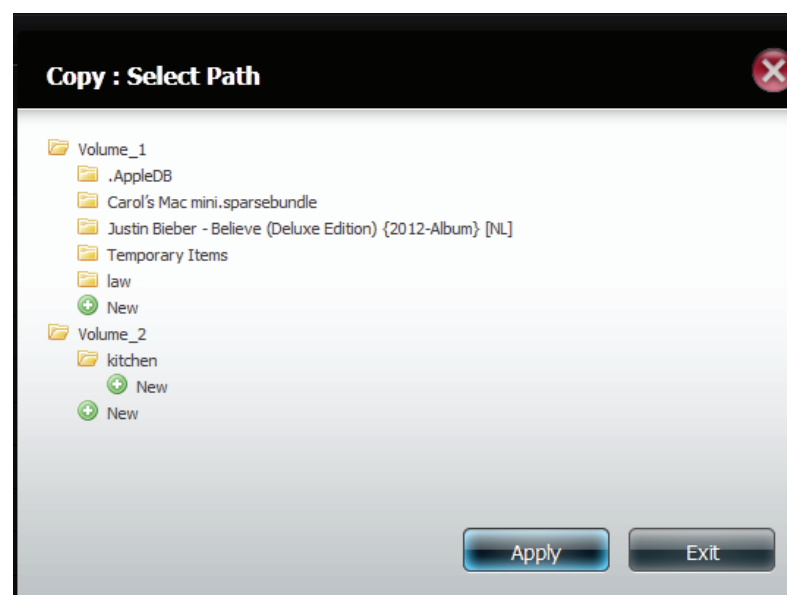
## Section 4 - Configuration

---

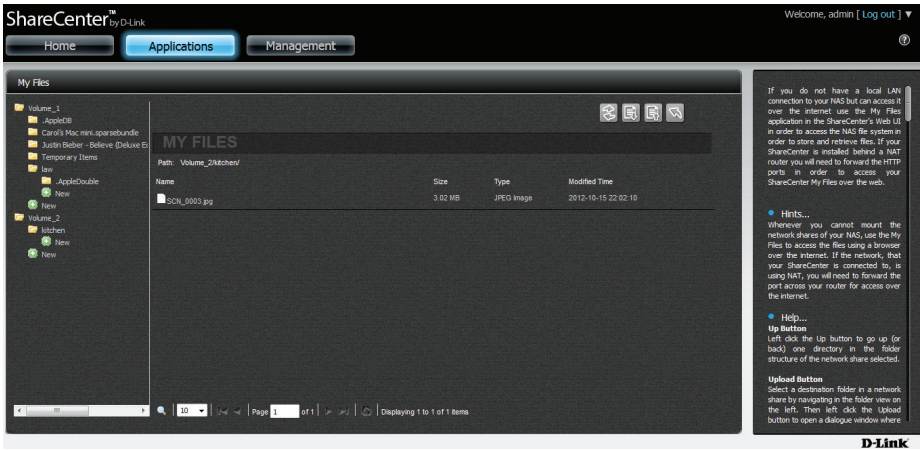
Enter a name for the new **Folder**. Click **OK**.



Select the newly created folder and click **Apply**.



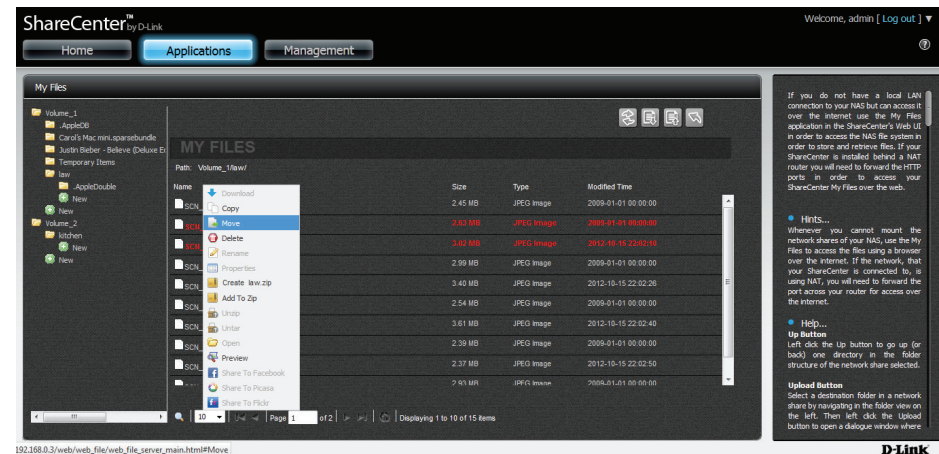
To verify that the file did copy to the destination, browse to the folder in question.



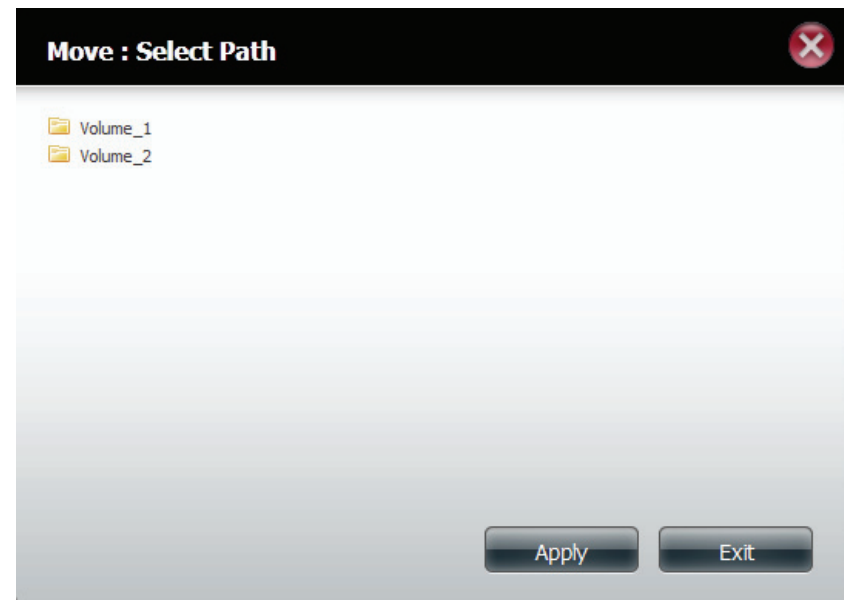
## Move

To Move files from one folder to another folder of the NAS, select the file you want to move (highlighted in red) and right-click. From the drop-down list click Move.

Go to **Applications, My Files**. Browse any of the folders on the left pane, right click any of the files in the right pane. Select **Move** (it turns blue)



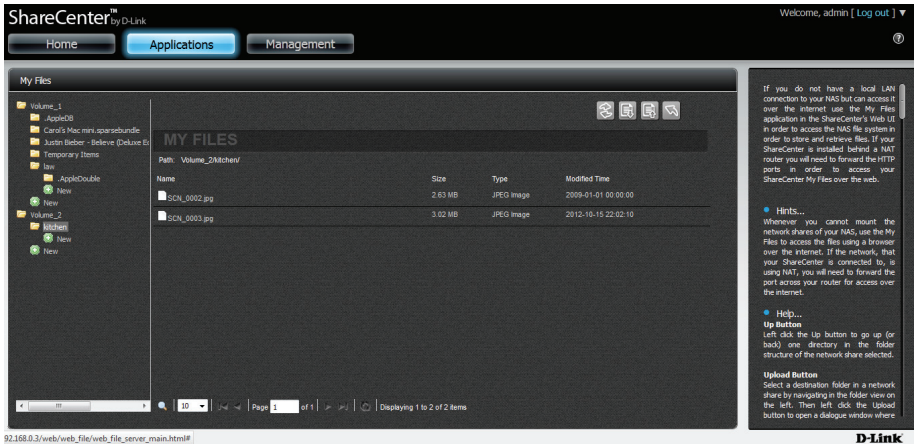
Under **Move**, select a Destination **Path** or create a new **Path**.



Select a folder from one of the **Volumes** and click **Apply**.



Browse to where you moved the file.

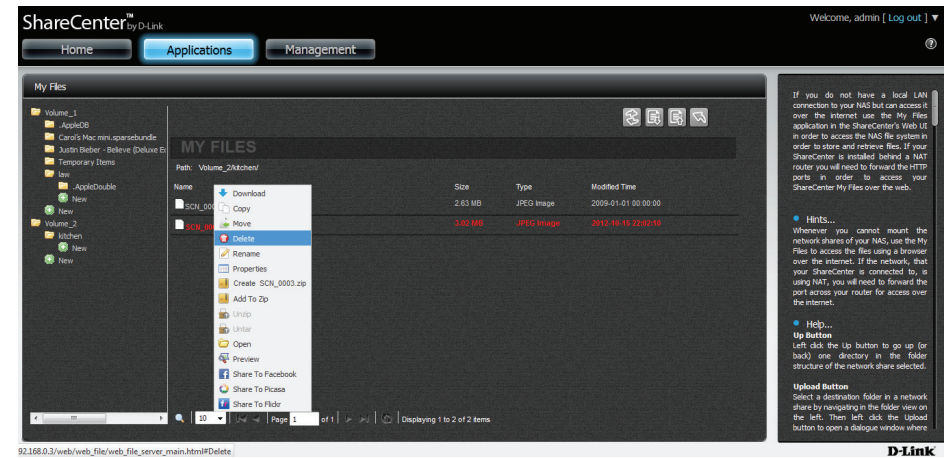




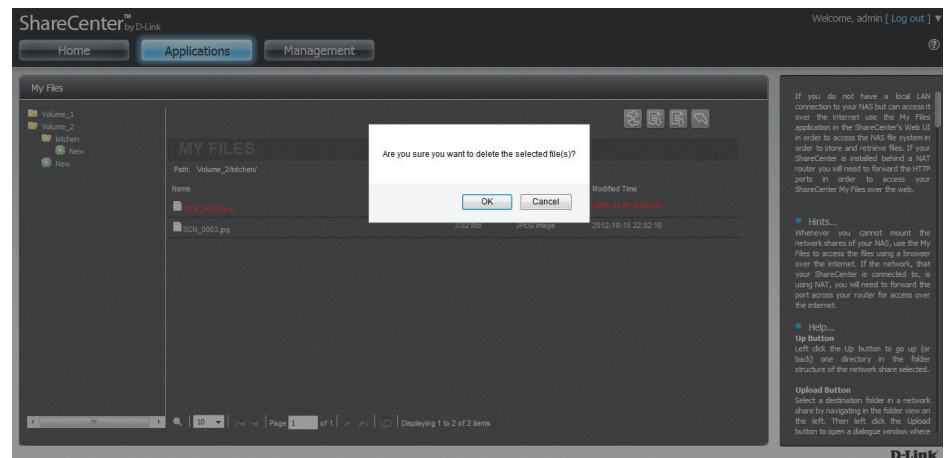
### Delete

To Delete files from the NAS using your computer, select the file you want to delete (highlighted in red) and right-click. From the drop-down list click Delete.

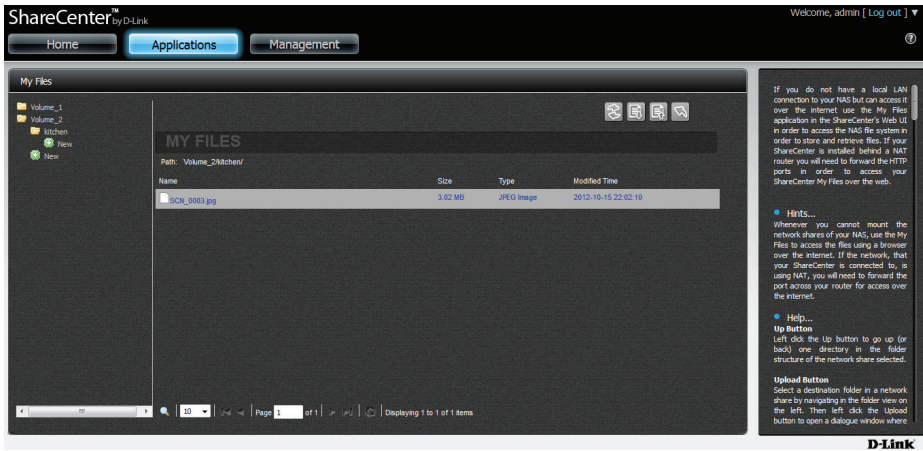
Go to **Applications, My Files**. Browse any of the folders on the left pane, right click any of the files in the right pane. Select **Delete** (it turns blue)



A verification message appears asking for you to verify your selection. Click **OK** to confirm.



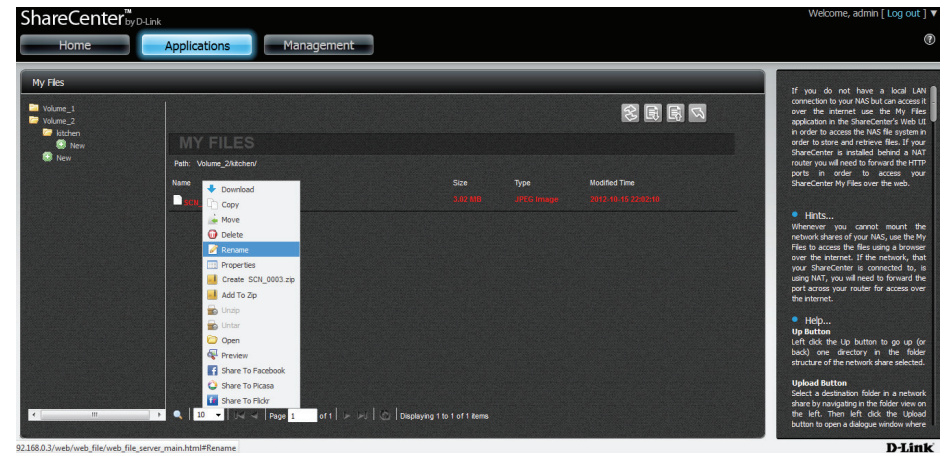
The file no longer exists in the folder.



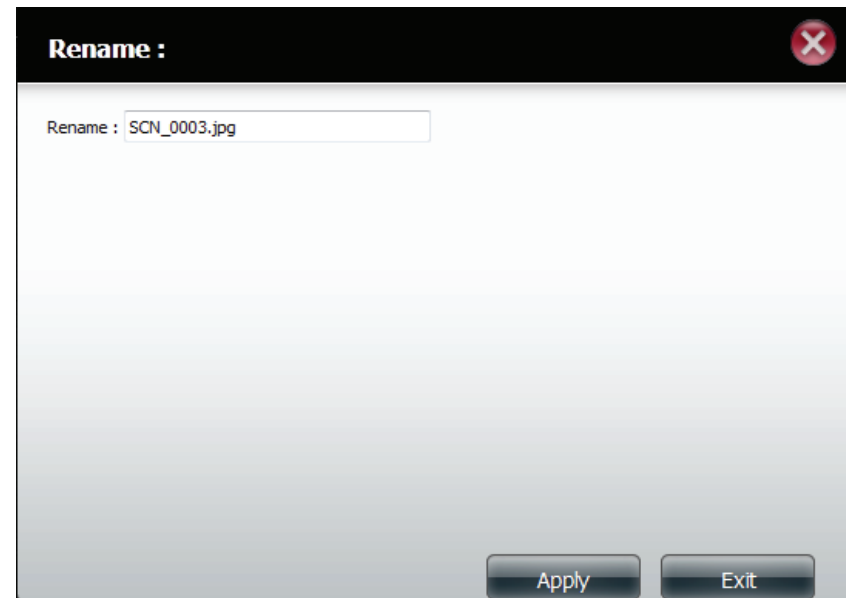
### Rename

To Rename files from the NAS, select the file you want to rename (highlighted in red) and right-click. From the drop-down list click Rename.

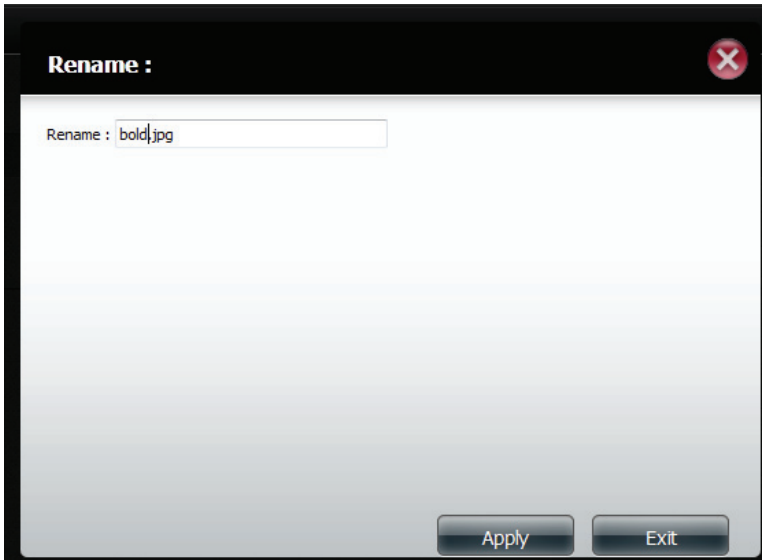
Go to **Applications, My Files**. Browse any of the folders on the left pane, right click any of the files in the right pane. Select **Rename** (it turns blue)



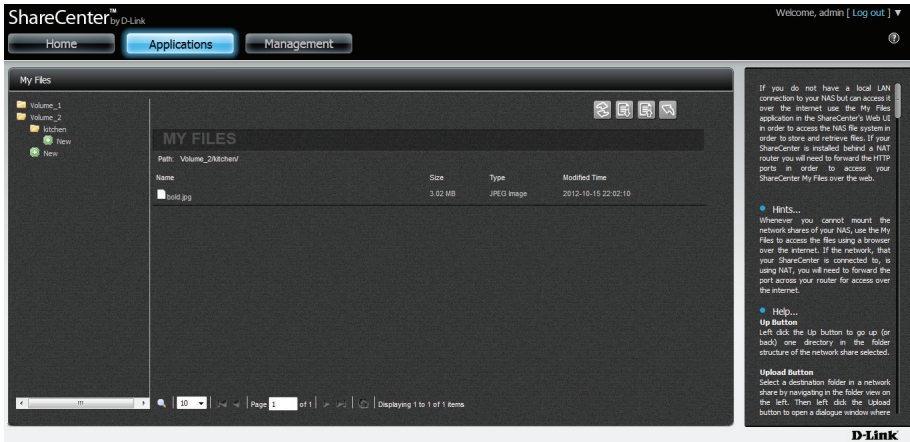
The Rename window displays the original name.



Enter a new name for the file. Click **Apply**.



The **Renamed** file is now accessible from its original location.

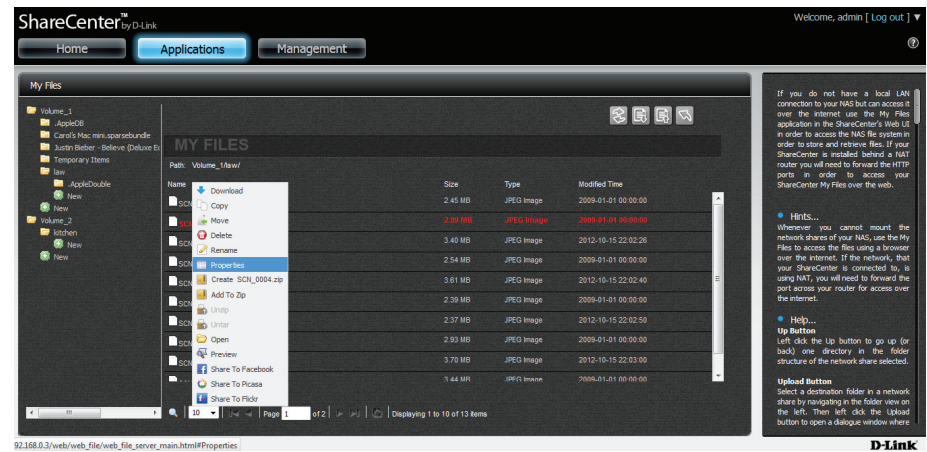




## Properties

To get general information about a file(s) from the NAS, select the file (highlighted in red) and right-click. From the drop-down list click Properties.

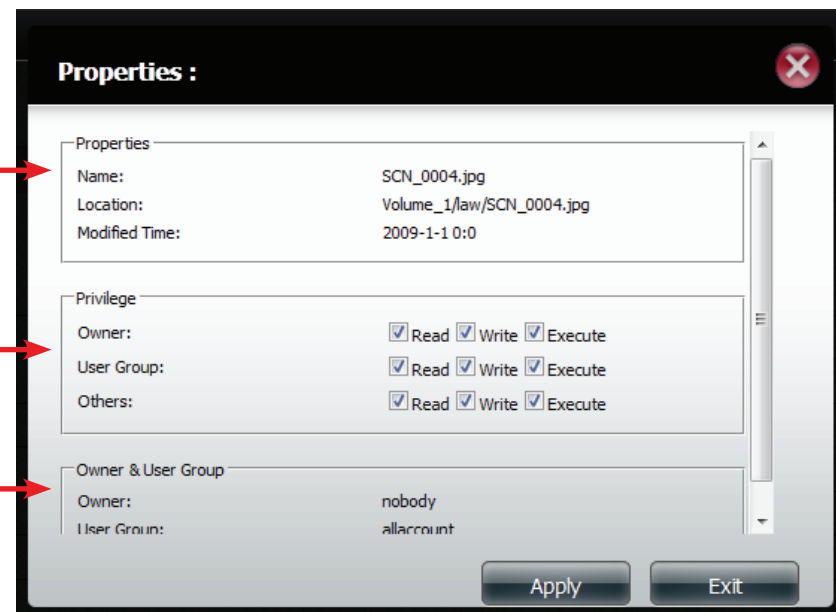
Go to **Applications, My Files**. Browse any of the folders on the left pane, right click any of the files in the right pane. Select **Properties** (it turns blue)



The Properties window displays the **Properties, Privileges, and Owner and User Group**.

Under **Privileges**, you are allowed to change the ownership settings. The **Owner, User Group, and Other** users have **Read, Write, and Executionable** settings.

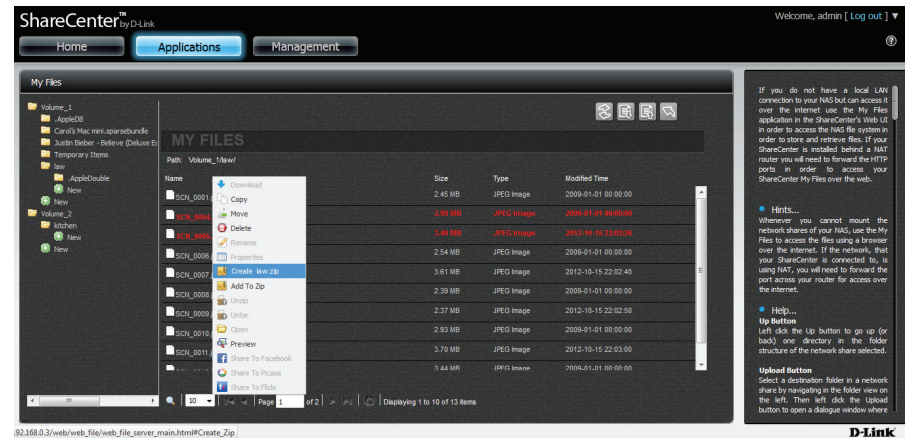
Click **Apply** once you have made the changes for it to take effect.



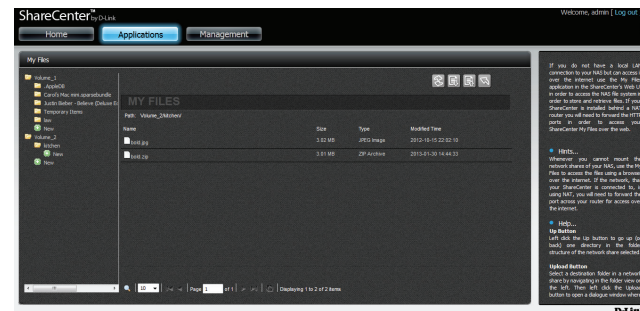
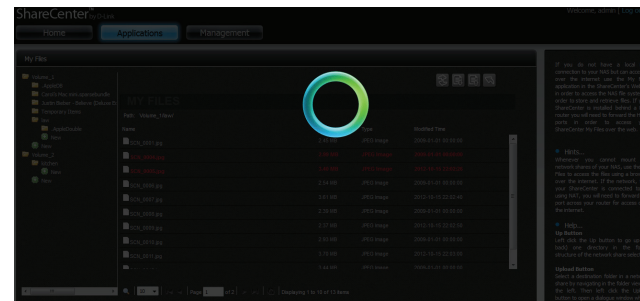
## Create a Zip file from the Selected Folder

To Zip a file(s) from the NAS, select the file you want to zip (highlighted in red) and right-click. From the drop-down list click The Selected File to Zip.

Go to **Applications, My Files**. Browse any of the folders on the left pane, right click any of the files in the right pane. Select **Create (file name) .zip** (it turns blue)



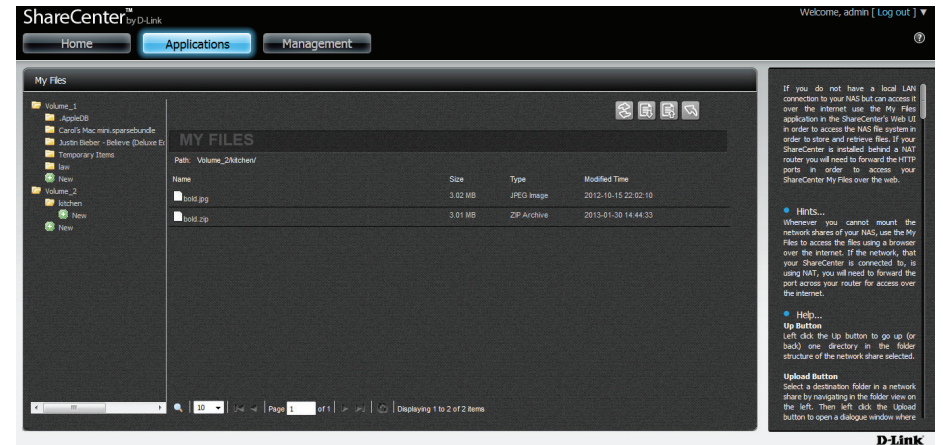
The Wizard creates a zipped file in the same folder.



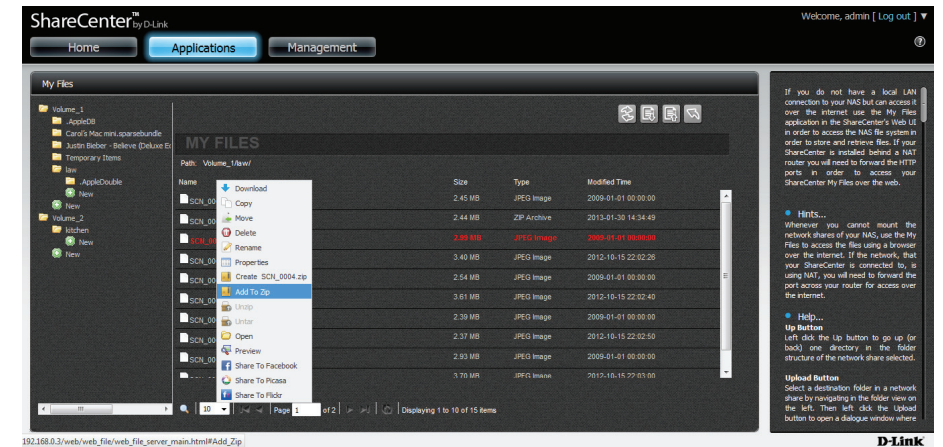
### Add to Zip

To make a file zipped from the NAS, select the file you want to zip (highlighted in red) and right-click. From the drop-down list click Add to Zip.

Add to zip allows you to add to an existing zipped file. So, take an existing zip (look at the file size). In our example, “bold.zip” (the original file size) is 3.01MB

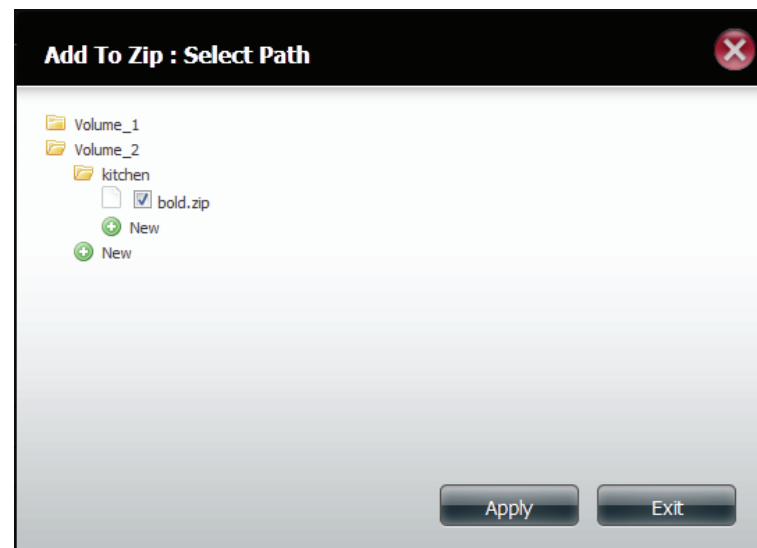


Right click the file you want to “**Add to zip**”

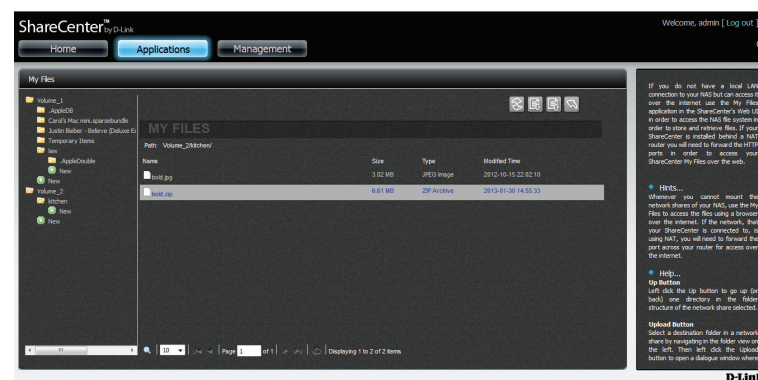


## Section 4 - Configuration

Under **Add to Zip**, select the zipped file you want to have the file added to. Click the checkbox and click **Apply**.



The Wizard adds the new file to the zipped file. In the example, you can see the new file size.

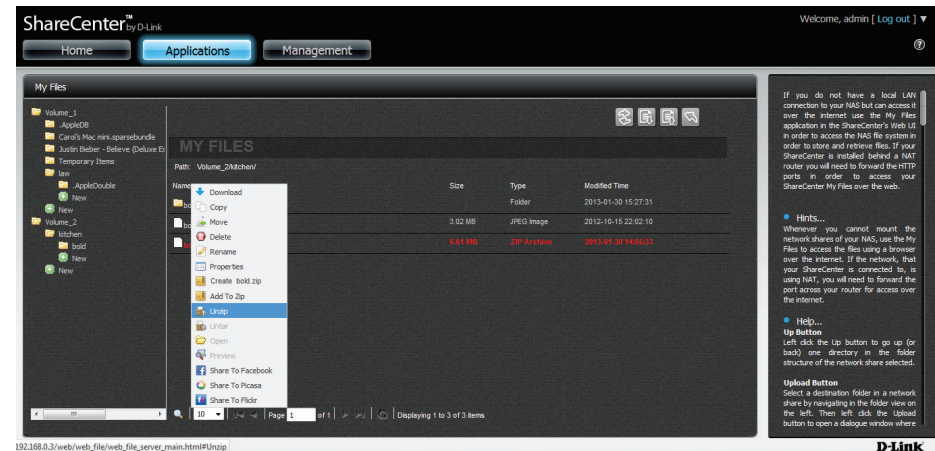




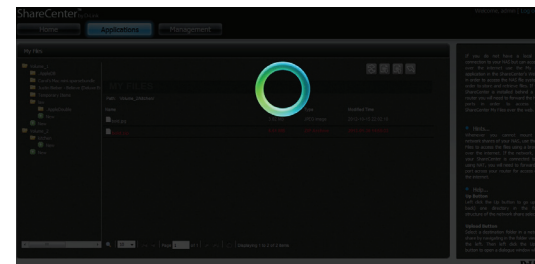
## Unzipping a Zipped File

To unzip a zipped file on the NAS, select the file you want to unzip (highlighted in red) and right-click. From the drop-down list click Unzip.

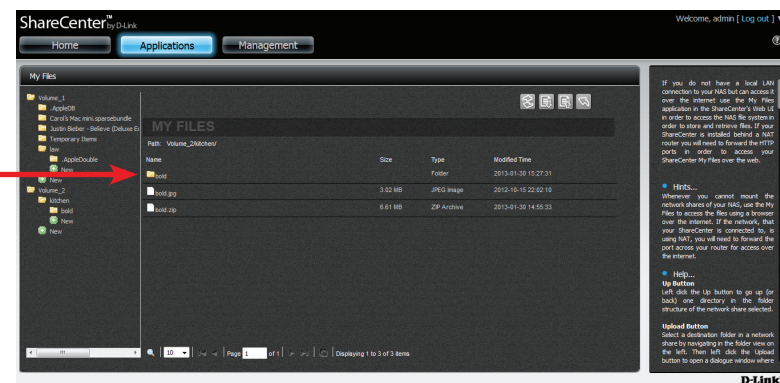
Go to **Applications, My Files**. Browse any of the folders on the left pane, right click any zipped files in the right pane. Select **Unzip** (it turns blue)



The Wizard unzips the zipped file.



A new folder is created from the unzipped file.



### Unzipping a Tar File

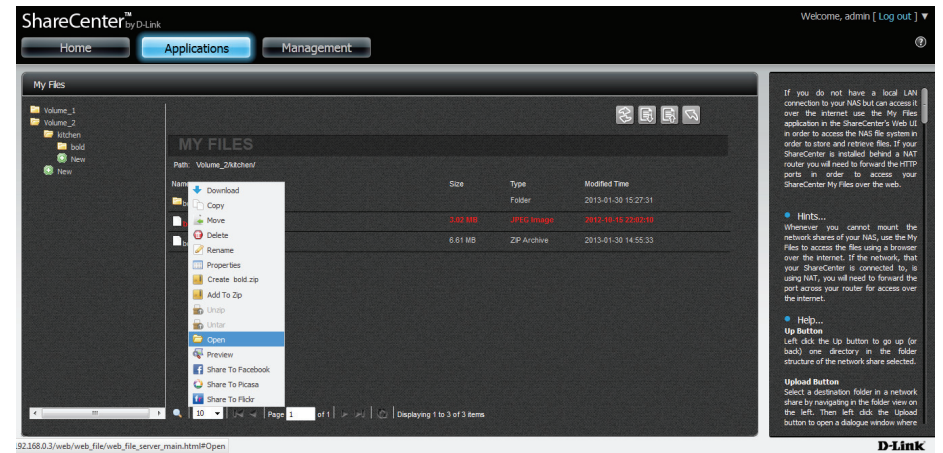
To unzip a tar file on the NAS, select the file you want to untar (highlighted in red) and right-click. From the drop-down list click Untar.

An unzipped TAR file works when your workstation is Linux-based. The unzipping process works similar to unzipping a normal file.

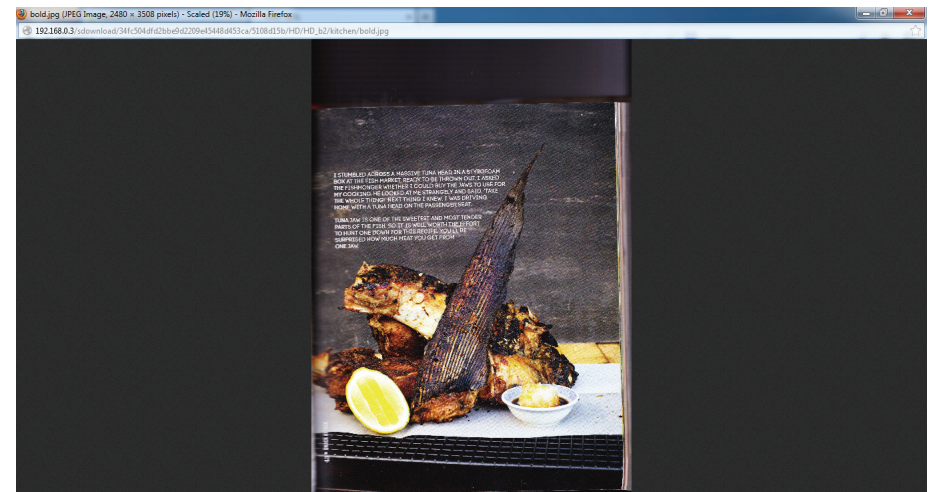
### Opening a File

To open a file on the NAS, select the file you want to open (highlighted in red) and right-click. From the drop-down list click Open.

Select the file you want to open, right-click it.



The file opens in a new browser window.

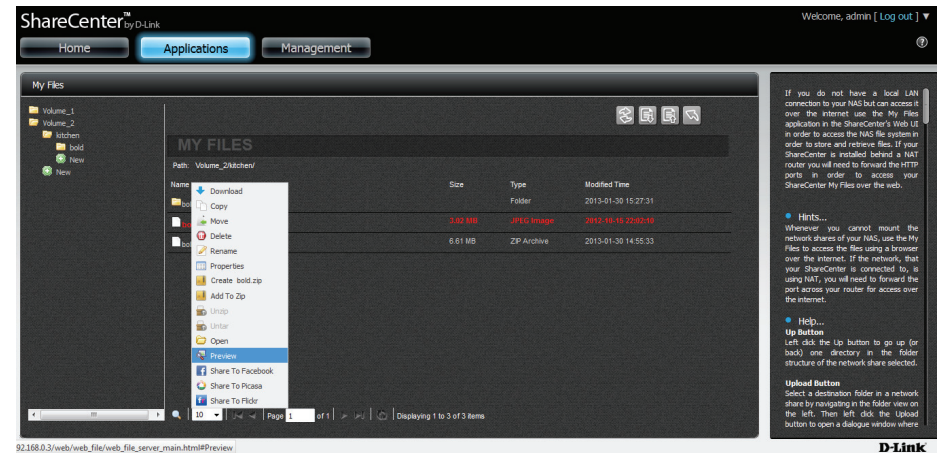




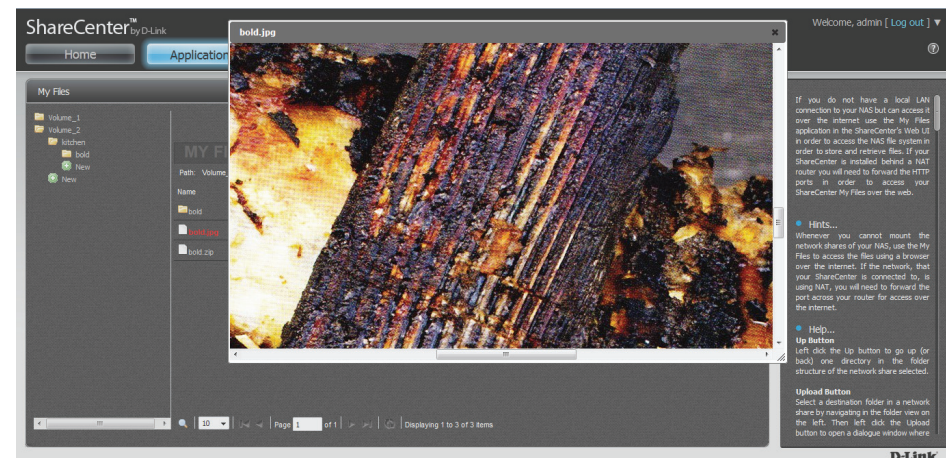
### Previewing a File

To Preview a file (bmp, gif, ico, j2k, jiff, jpeg, jpg, jpg2, pdf, png, ps, psb, psd, webp, doc, docx, xls, xlsx, mp3, txt) on the NAS, select the file you want to preview (highlighted in red) and right-click. From the drop-down list click Preview.

Select the file you want to Preview, right-click it.



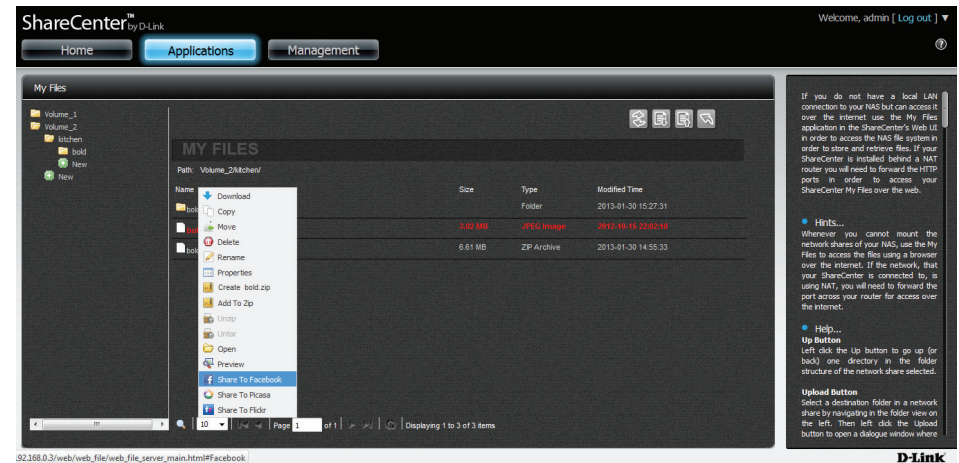
The file opens in a new Gallery-like window. Use the left/right slider to view the image or resize the image from the corner points.



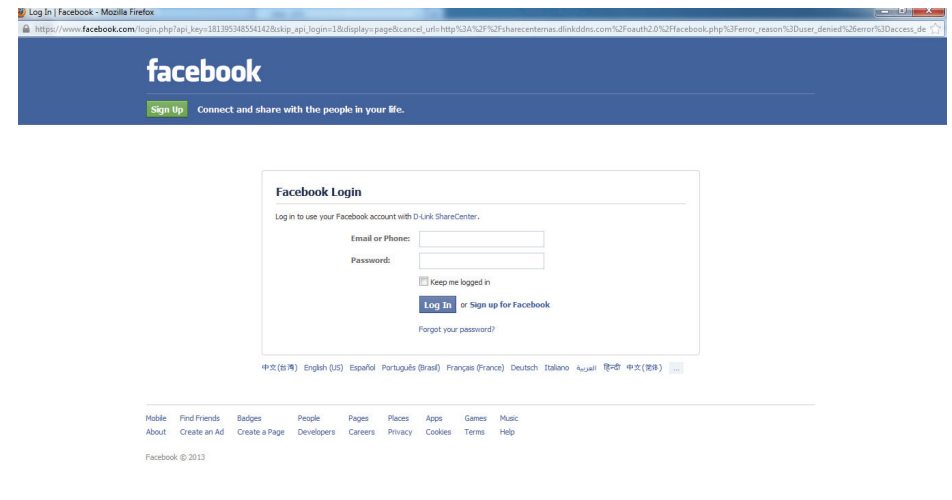
### Share to Facebook

To Share an image file on the NAS to Facebook, select the file you want to share (highlighted in red) and right-click. From the drop-down list click Share to Facebook.

Select the file you want to Share to Facebook, right-click it.



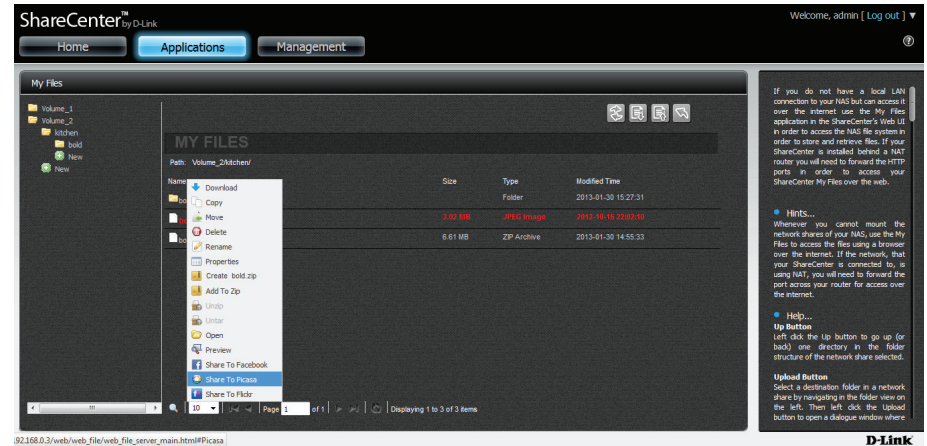
The browser opens a new Window and redirects you to Login with your Facebook account to automatically upload files to Facebook.



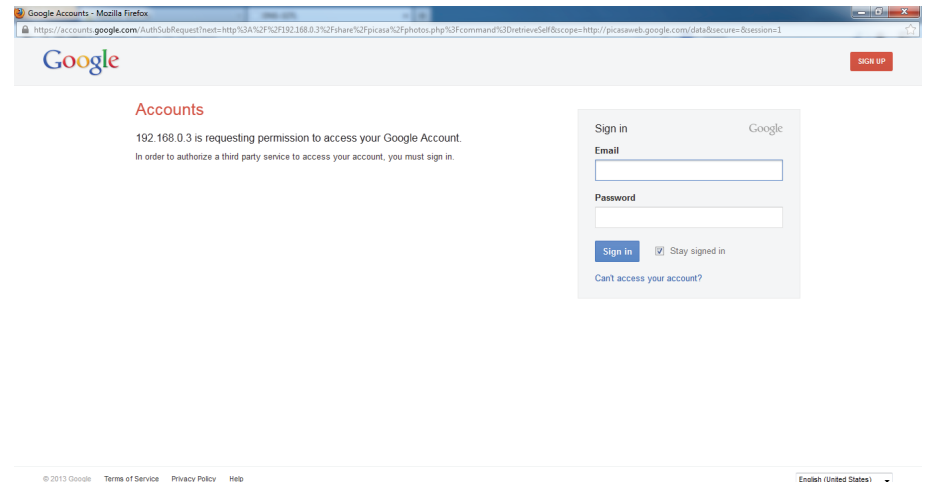
### Share to Picasa

To Share an image file on the NAS to Picasa, select the file you want to share (highlighted in red) and right-click. From the drop-down list click Share to Picasa.

Select the file you want to Share to Picasa, right-click it.



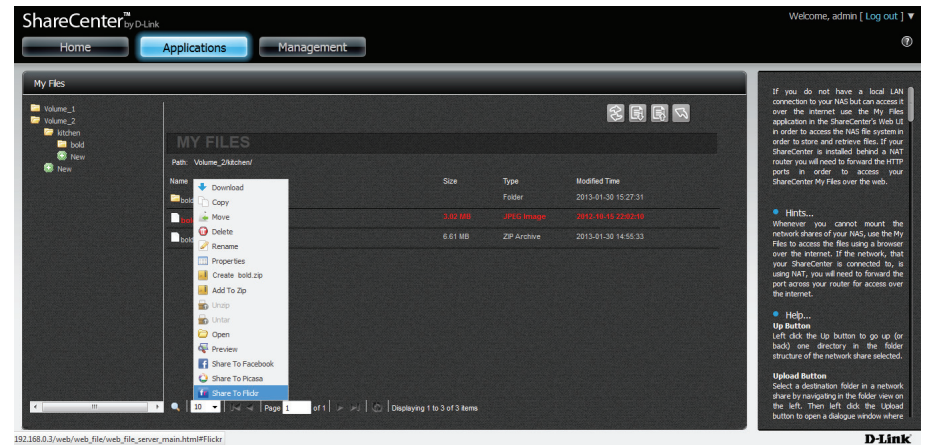
The browser opens a new Window and redirects you to Login with your Google account to automatically upload files to Picasa.



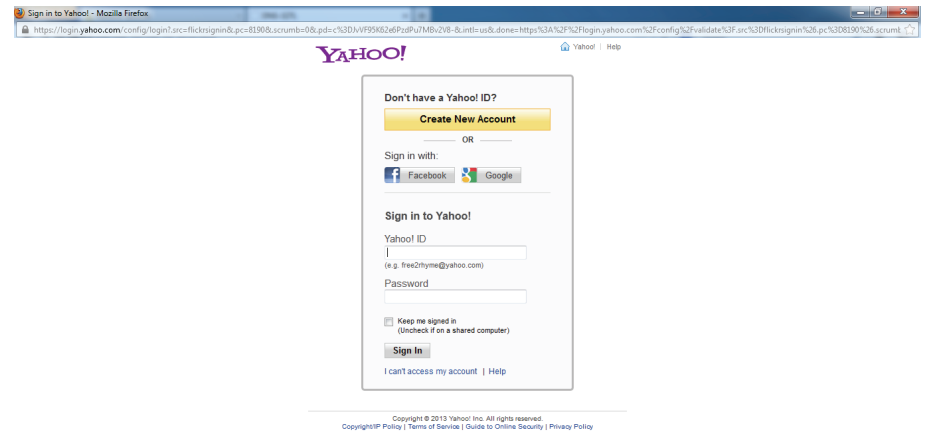
### Share to Flickr

To Share an image file on the NAS to Flickr, select the file you want to share (highlighted in red) and right-click. From the drop-down list click Share to Flickr.

Select the file you want to Share to Flickr, right-click it.



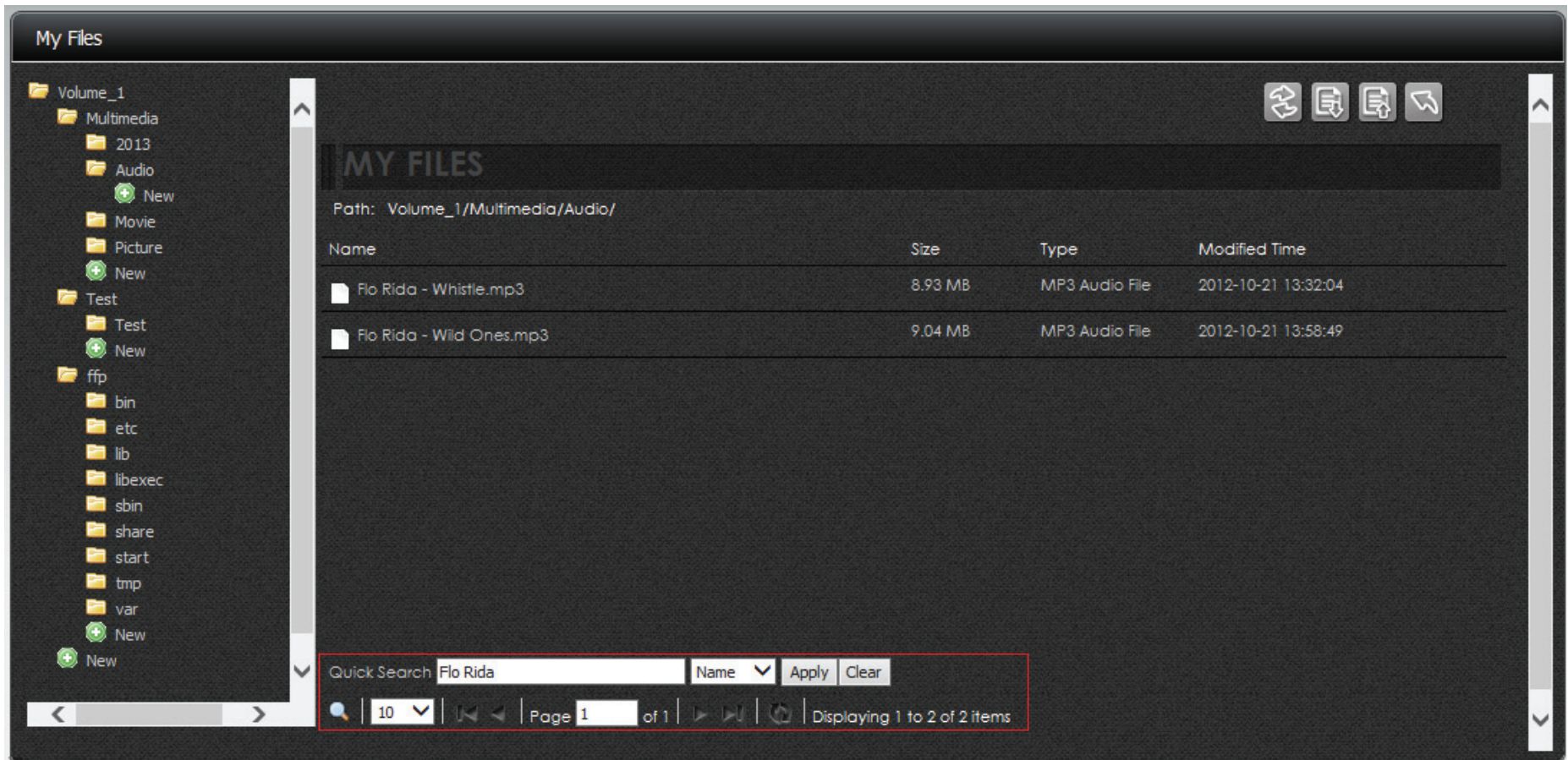
The browser opens a new Window and redirects you to Login with your Yahoo account to automatically upload files to Flickr.





## Quick Search

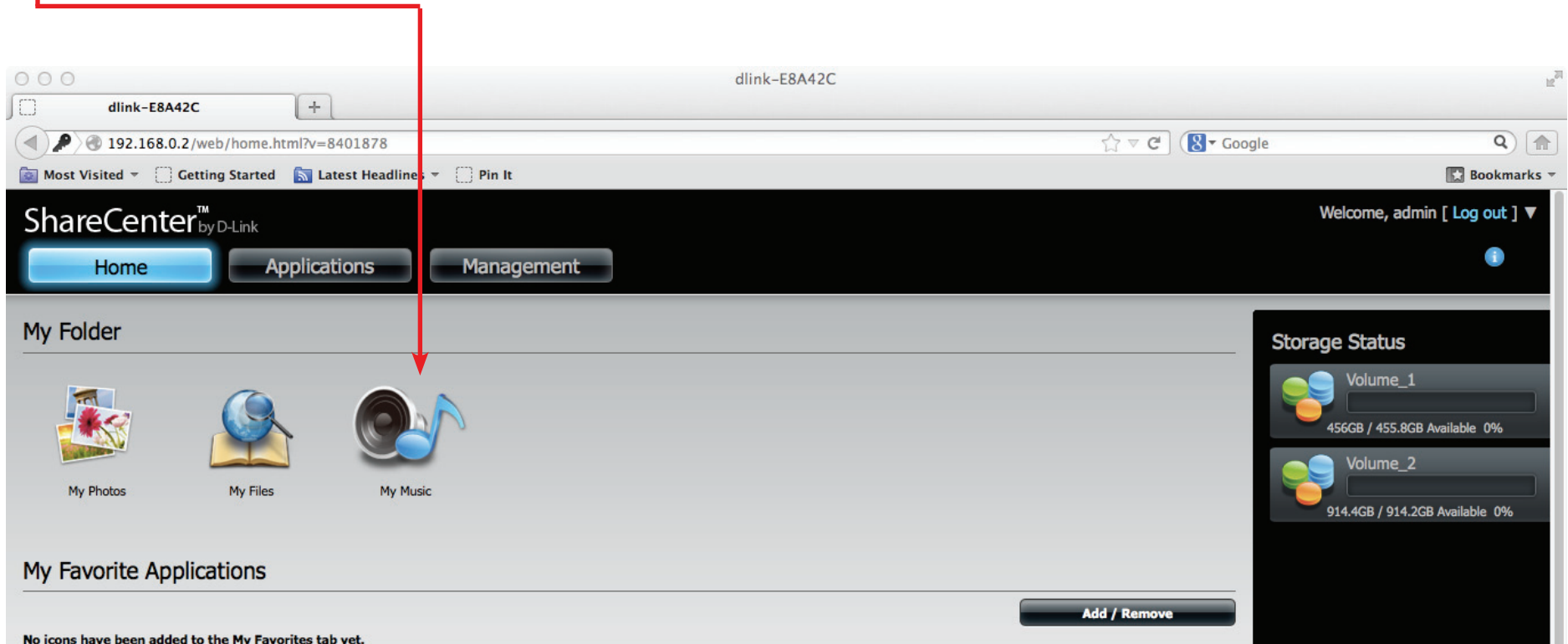
When a user clicks the Search icon, a GUI Quick Search column pops up. The user can then key in the file name (keywords) to search the file(s) in a particular folder.





## My Music

My Music allows users to add music to the DNS-320L. Using this application, users can view, edit and play music straight from the NAS. Access music files on the network.



Click **My Music** to view the **My Music** features

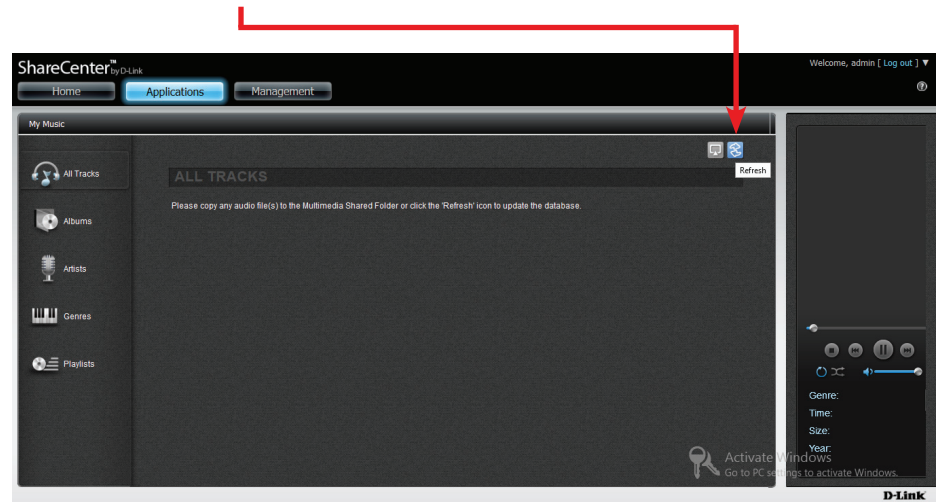
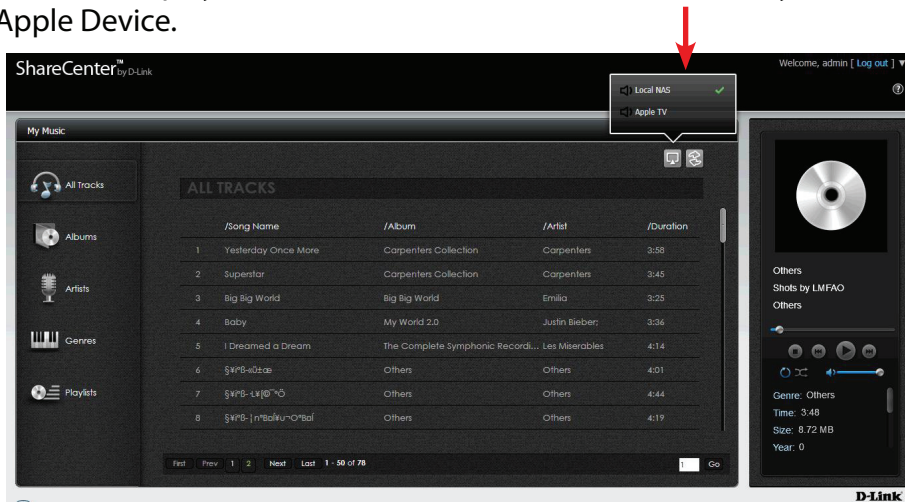




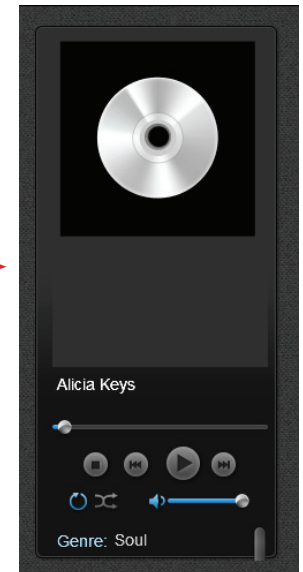
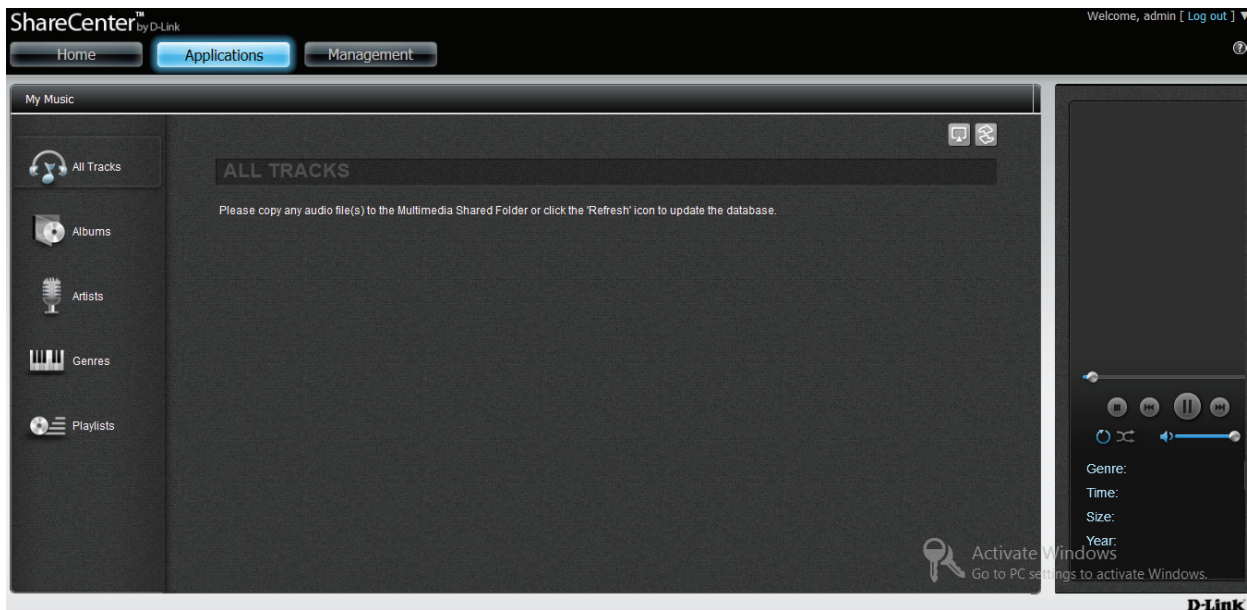
## My Music - The Interface

Click here to playback music to a Local Device or to an AirPlay enabled Apple Device.

Click here to **Refresh** the screen.

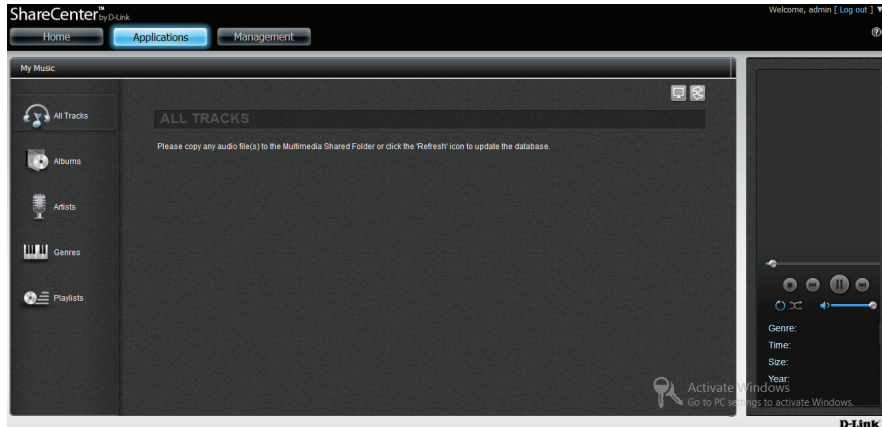


The **Music Player** plays tracks directly off the DNS-320L

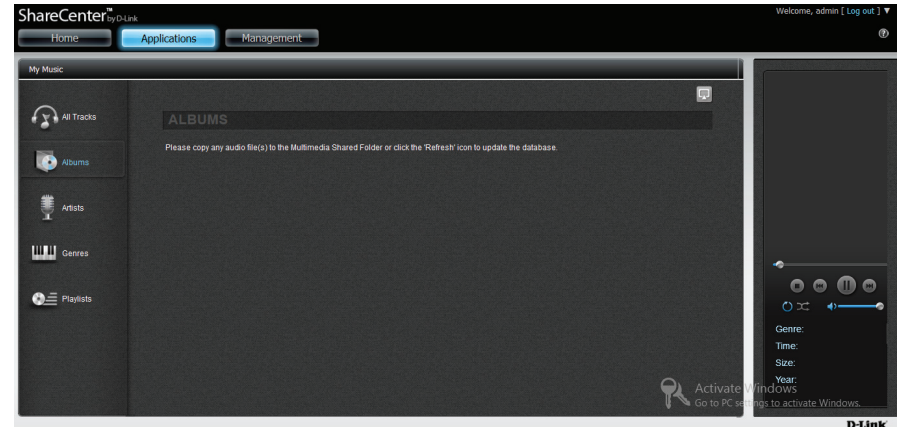


## My Music - The Categories

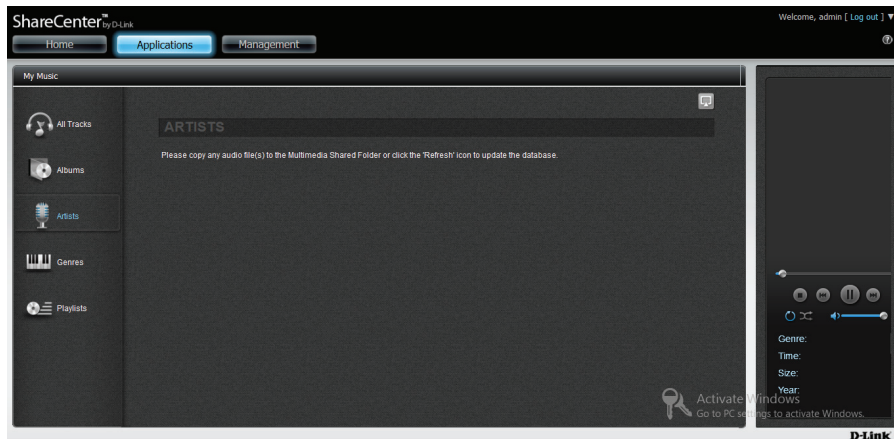
Click **All Tracks** to view all the audio tracks on the DNS320L.



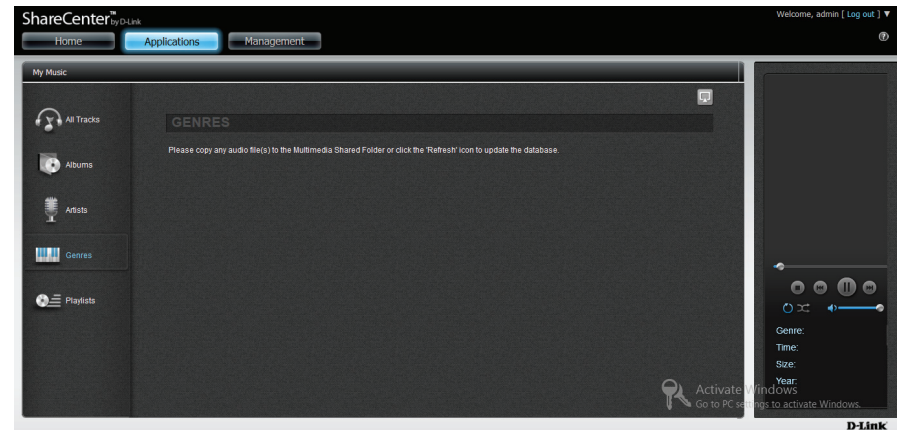
Click **Albums** to view all the albums on the DNS320L.



Click **Artists** to view the playlist by artist on the DNS320L.



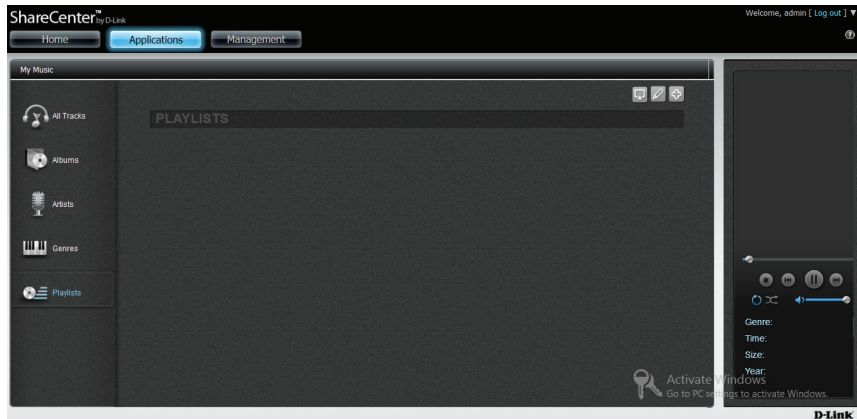
Click **Genres** to view the playlist by genre on the DNS320L.





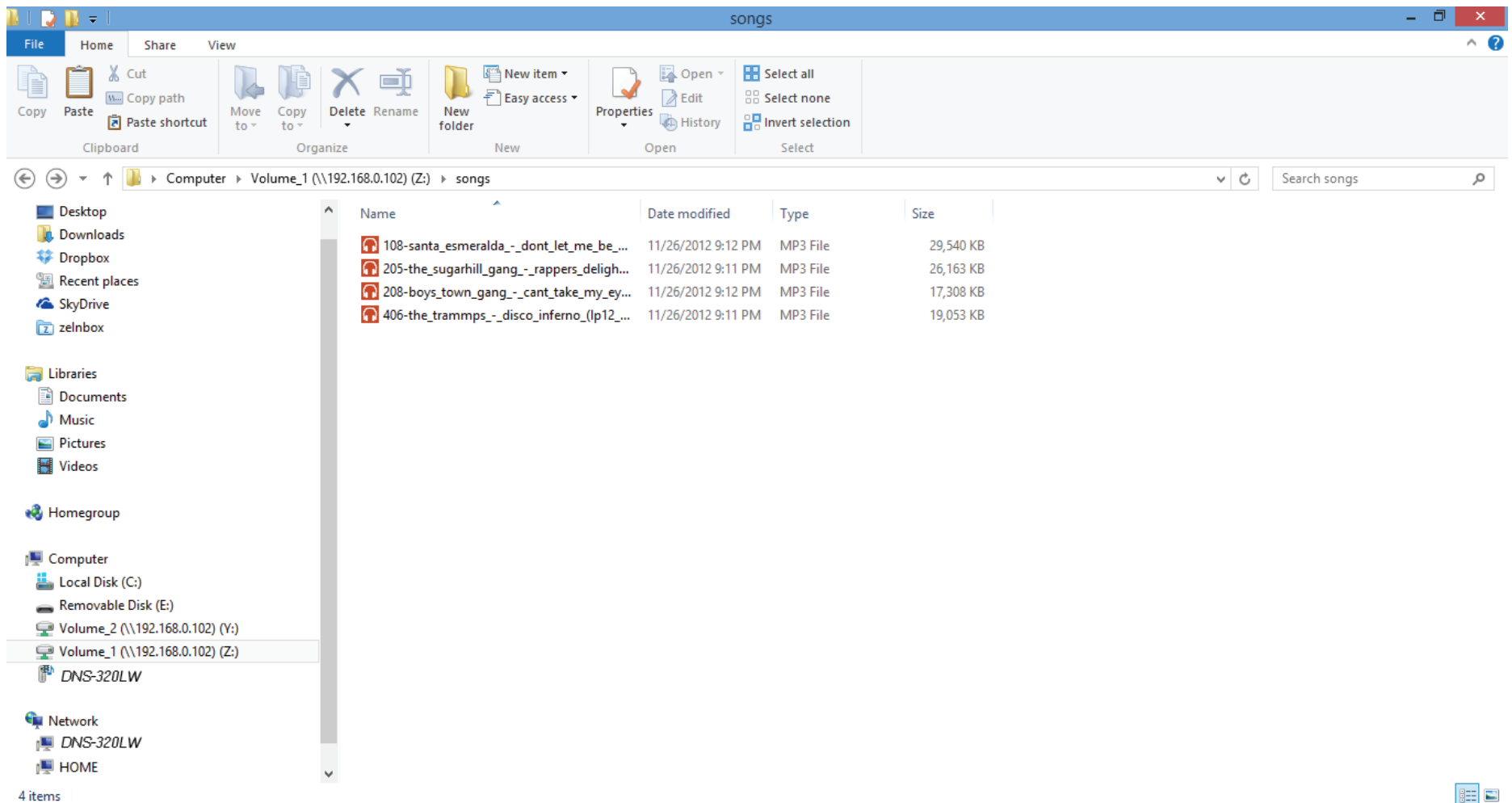
# My Music - The Categories

Click **Playlists** to view all playlists and create new playlists on the DNS320L.



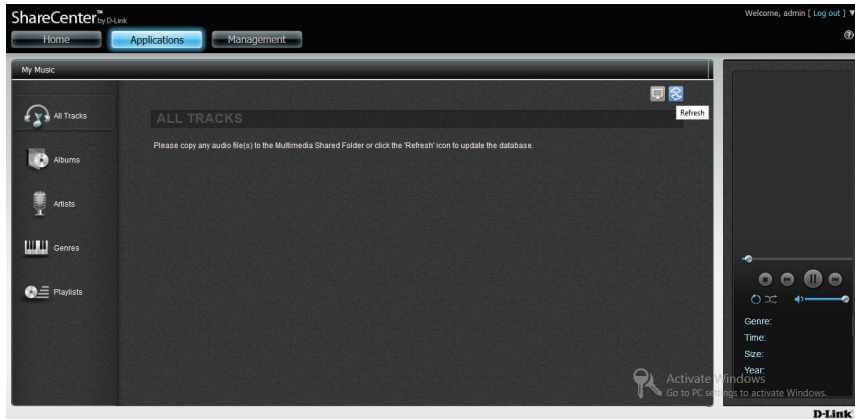
## My Music - Music on your DNS-320L

Access your DNS-320L from your network. Click the NAS Volume directly. Copy music directly from your local drive to the MultiMedia Shared Folder of the DNS-320L. Make sure the files are only MP3 format. The NAS does not accept .flac

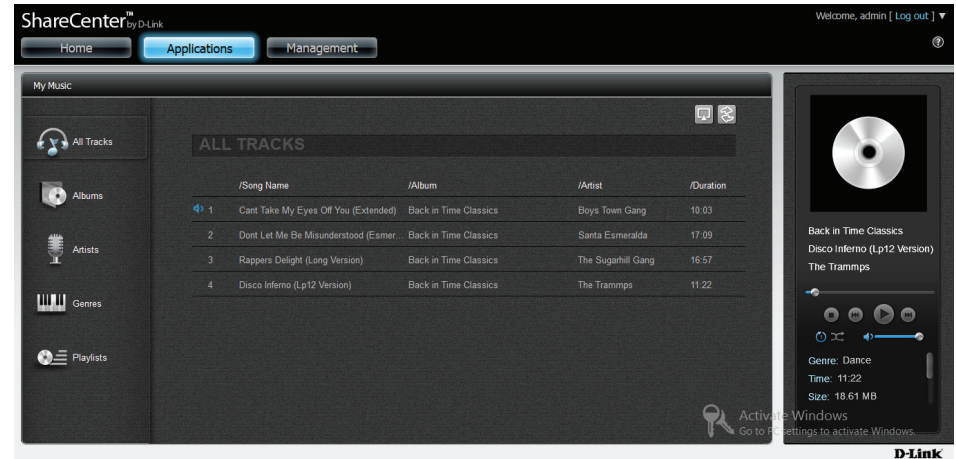


## Section 4 - Configuration

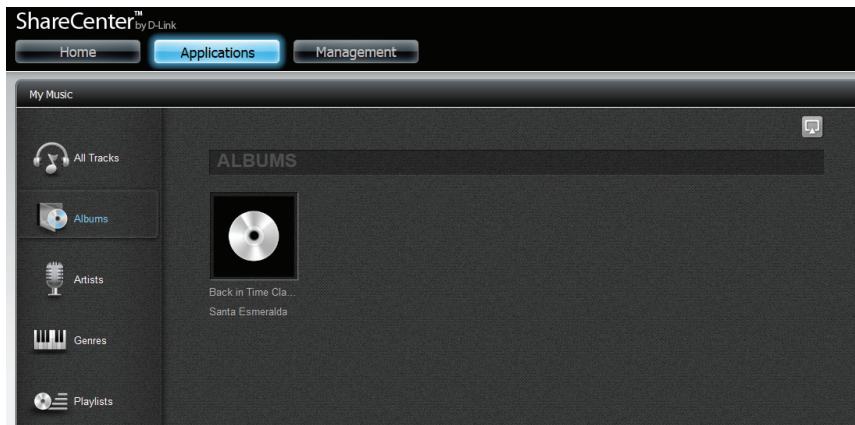
View your **All Tracks** window and click the **Refresh** button.



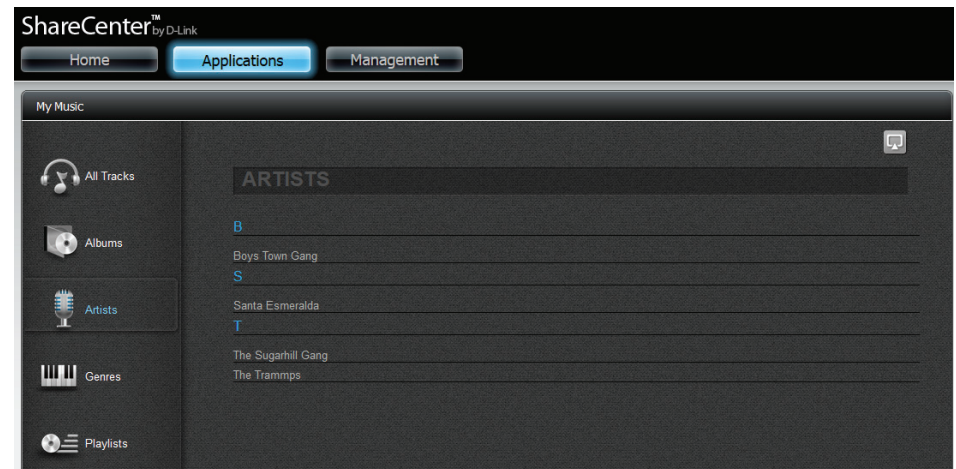
The Playlist is populated with the same tracks you copied and pasted to before.



Click **Albums** to view it in album view.



Click **Artists** to view all the artists in your playlist.





## My Music - Playback Music on an Apple device

Click the Apple Device, the ShareCenter will connect to the Apple Device on the Network. A message will pop-up after connecting successfully. Press **Yes** to continue. Now you can enjoy your music on your Apple Device.

The screenshot shows the D-Link ShareCenter web interface. At the top, it says "ShareCenter™ by D-Link" and "Welcome, admin [Log out]". A dropdown menu is open, showing "Local NAS" and "Apple TV" with a green checkmark next to it. A central pop-up window displays a green checkmark and the text "The connection was a success." with a "Yes" button. The main area is titled "My Music" and contains a sidebar with icons for "All Tracks", "Albums", "Artists", "Genres", and "Playlists". The "ALL TRACKS" section is active, showing a table of songs. The table has columns for song number, song name, album, artist, and duration. The right sidebar shows a CD icon, the text "Carpenters Collection Yesterday Once More Carpenters", a progress bar, playback controls, and metadata: Genre: N/A, Time: 3:14, Size: 5.46 MB, Year: 2003. The D-Link logo is at the bottom right.

	/Song Name			/Duration
1	Yesterday Once More	Carpenters Collection	Carpenters	3:58
2	Superstar	Carpenters Collection	Carpenters	3:45
3	Big Big World	Big Big World	Emilia	3:25
4	Baby	My World 2.0	Justin Bieber;	3:36
5	I Dreamed a Dream	The Complete Symphonic Recordi...	Les Miserables	4:14
6	§¥¦§-«»±œ	Others	Others	4:01
7	§¥¦§-L¥¦©™°	Others	Others	4:44
8	§¥¦§-}n°Baf#u~O°Baf	Others	Others	4:19

First Prev 1 2 Next Last 1 - 50 of 78 Go



## My Music - The Player

The Player is a remote control-like UI that displays the Album art (only available if its in the music folder), the Genre, Artist name(s) and disk.

The Player menu consists of:

A Scrollable music timeline

A Stop button

A rewind button

A Play/Pause button

A Fast Forward button

A Replay button

A Shuffle button

A Volume control

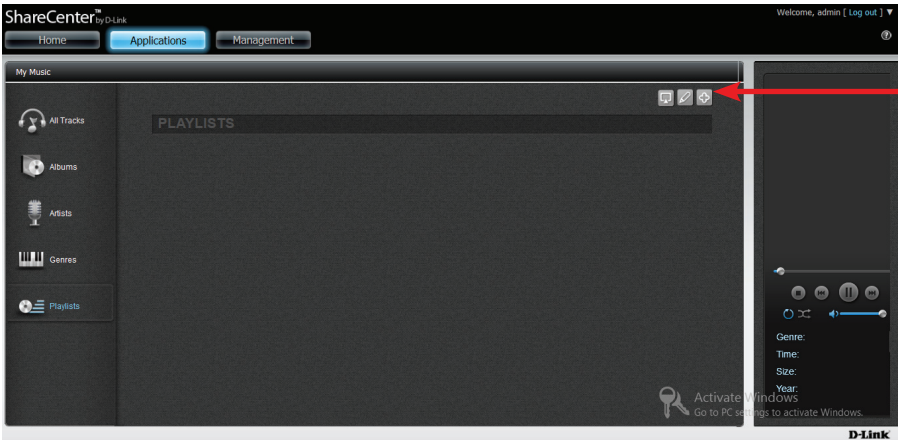
You can also view the Genre, duration of the song, size of the file.



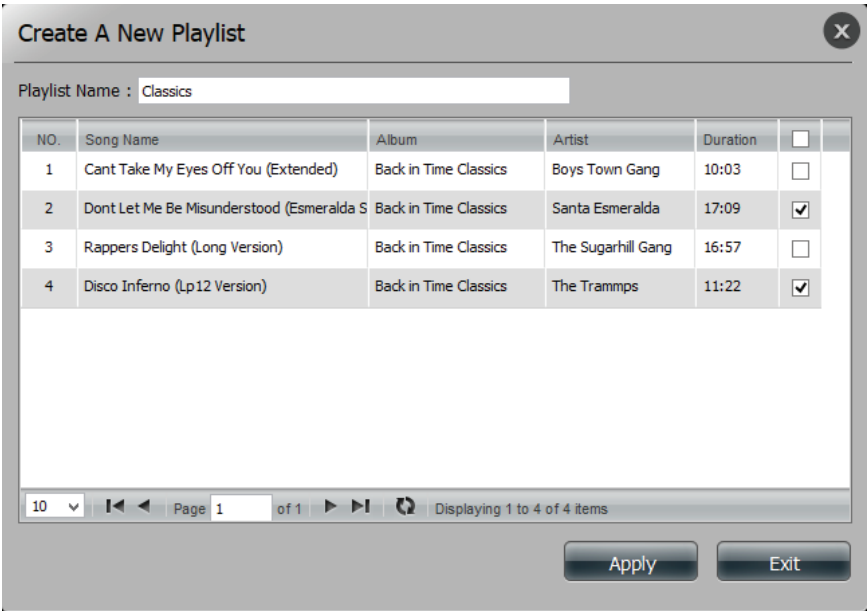
# My Music - Create a Playlist

Click the **Playlist** tab at the bottom of **My Music**.

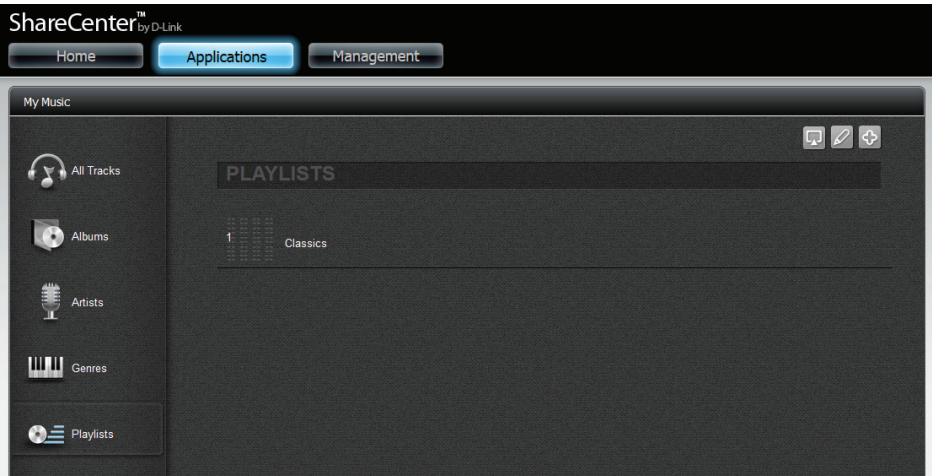
Click the **Plus** icon at the top right-hand corner.



The **Create a New Playlist** menu appears. Enter a name under **Playlist Name** and click the songs you wish to add to the playlist. Click **Apply** to add them to the list.

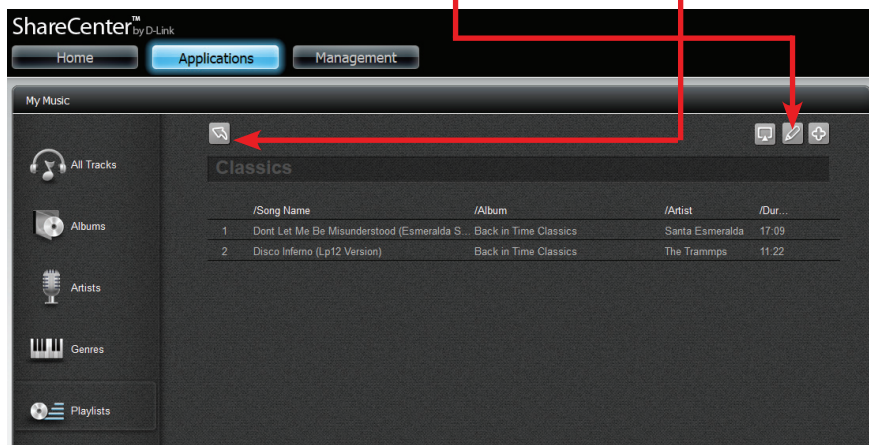


The new playlist is created under the **Playlists** window.

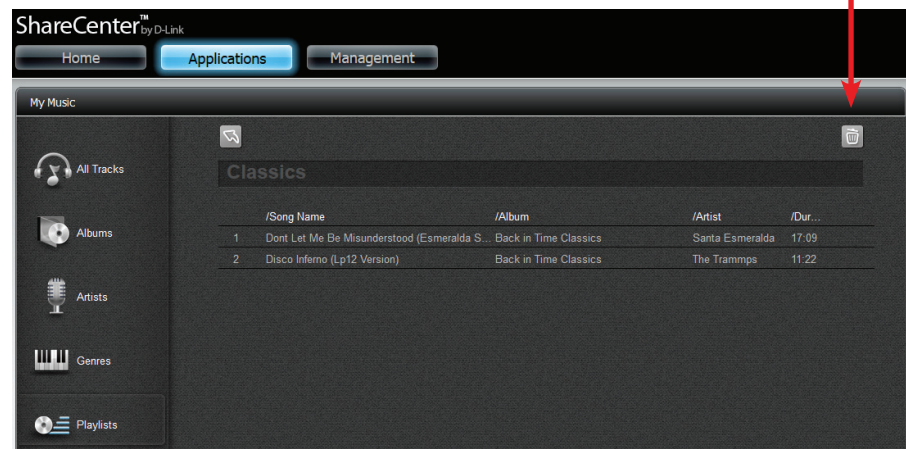


## Section 4 - Configuration

Click on the **Playlist** to view its contents. Click the **Back** icon to return to the **Playlist** menu or click the **Edit** icon to add delete songs from the playlist.

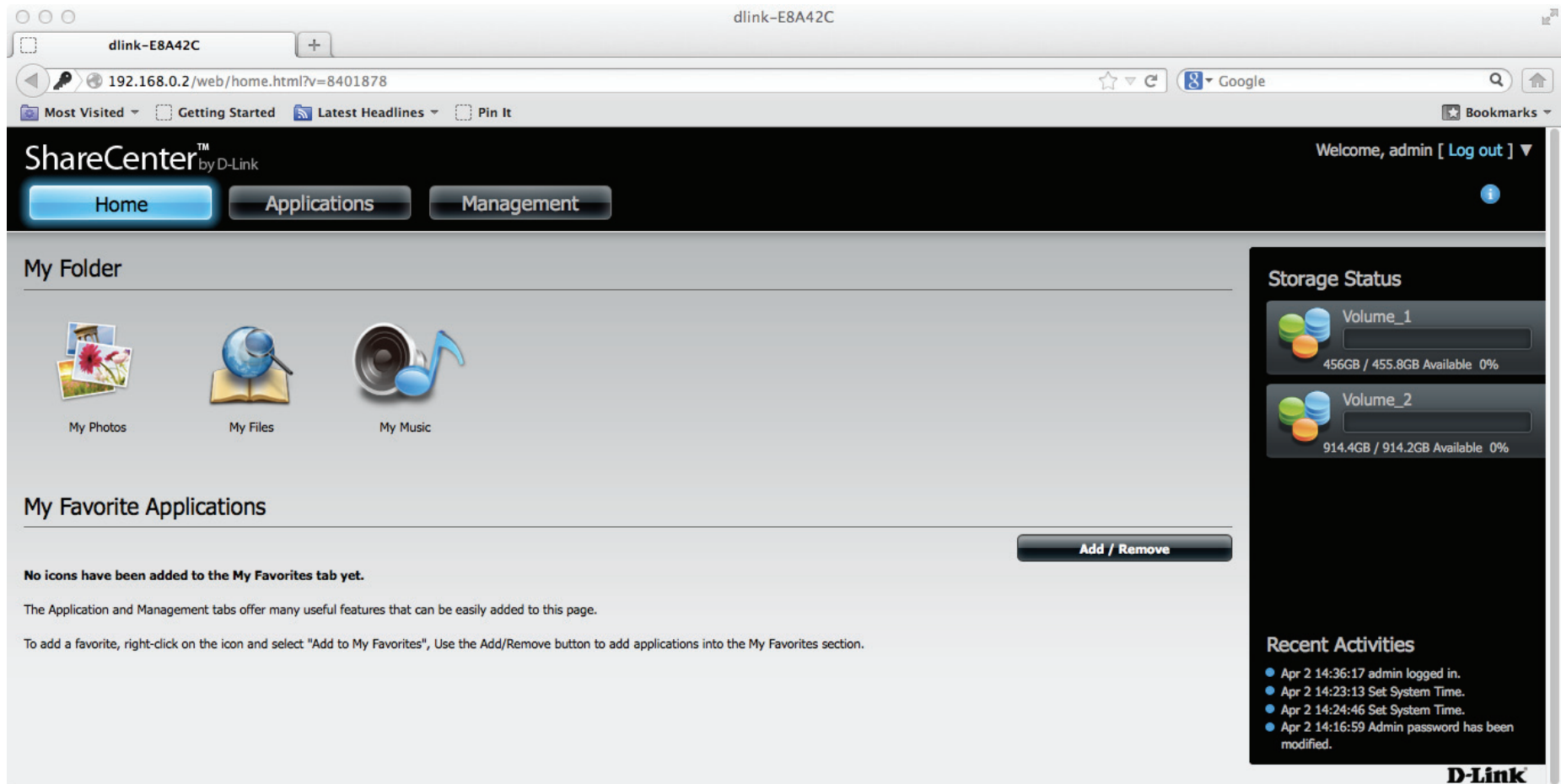


Once you are in **Edit** mode, click the track you want to delete and click the **Delete** icon.



## My Favorites Application

The My Favorites Application section allows users to add applications to the Home section so users can easily access these applications. Follow these easy steps to setup Favorite Applications on the Home screen.



## Adding Applications

Click the **Add/Remove** button to add **Applications**. Click the **checkbox** under each application you wish to add to the Home screen. Click **Apply** to continue.



The **shortcut** is now created on the Home screen. Click the **shortcut** to access the application.





# Applications

## FTP/HTTP Downloads

Schedule file and folder backups from an FTP server, web server, or local network share. Always test the URL before applying changes. This will help to ensure a successful download.

**Category:** Use the radio buttons to select the type of server that the source files/folders for the Schedule Downloads are located on. Click the **HTTP** radio button to specify that the source files are located on a web server or click the **FTP** radio button to specify that the source files/folders are located on an FTP server.

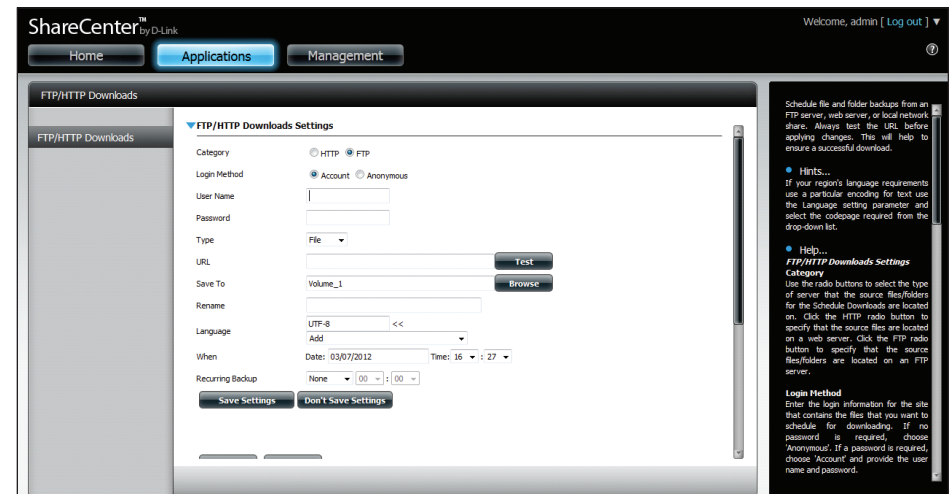
**Login Method:** Enter the login information for the site that contains the files that you want to schedule for downloading. If no password is required, choose **Anonymous**. If a password is required, choose **Account** and enter the user name and password.

**Username:** Enter the user name here.

**Password:** Enter the password here.

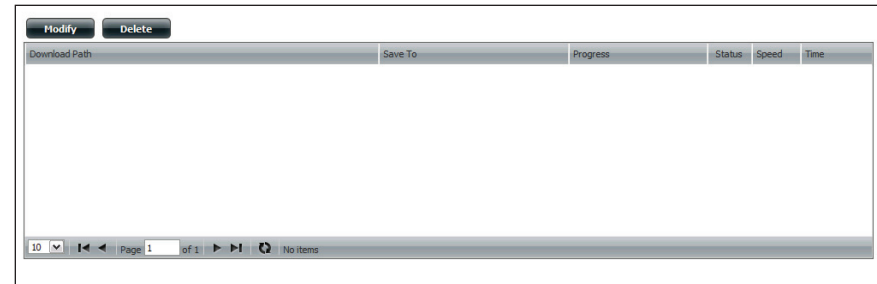
**Type:** Select either **File** or **Folder** from the drop-down list depending on whether you wish to download a file or a folder.

**URL:** Enter the FTP/HTTP site address for the scheduled download. Click on **Test** to verify access to the site address and file/folder. If you selected **File** from the above drop-down list, you must specify the exact file in the URL path, including the file extension. (e.g. http://example.com/test/testfile.txt).



Category	<input checked="" type="radio"/> HTTP <input type="radio"/> FTP	
URL	<input type="text"/>	<input type="button" value="Test"/>
Save To	<input type="text"/>	<input type="button" value="Browse"/>
Rename	<input type="text"/>	
When	Date: <input type="text" value="10/26/2010"/>	Time: <input type="text" value="08"/> : <input type="text" value="35"/>
Recurring Backup	<input type="text" value="None"/> : <input type="text" value="00"/> : <input type="text" value="00"/>	
<input type="button" value="Save Settings"/>		<input type="button" value="Don't Save Settings"/>

- Save To:** Enter the specific destination on the internal drives for the downloaded files or folders to be saved to. Click **Browse** to browse the internal drives.
- Rename:** If you would like to rename a file after it has been downloaded from the specified HTTP/FTP server, enter the name you would like the file to be renamed to in this field.
- Language:** Use the drop-down menu to select the language used in the file or folder that you are trying to download.
- When:** Select the date and time for the download to occur.
- Recurring Backup:** If you wish to schedule a recurring backup, select the desired interval (daily, weekly, or monthly) and the time you want the backup to start.
- Schedule Download List:** Pending and completed download events will be listed here. The current status for each event is displayed here. In addition, there is an option to delete a download event at any time. Current download statistics, such as % completed and download speed, are displayed for each event. A refresh button is also provided to produce updated listings at any time.



## Remote Backups

The Remote Backups section allows you to back up your ShareCenter™ to another ShareCenter™, Linux Server or vice versa from a remote ShareCenter™ or Linux Server to your ShareCenter™. Use the **Create** button in the remote backups list to start a wizard where you can configure the remote backup.

**Enable remote backup service:** Check this box to enable the remote backup server functionality to allow a remote NAS or Linux server to backup from/to your ShareCenter™.

**Note:** *If you are not using the Remote Backup functionality of your ShareCenter™ leave this box unchecked so that your ShareCenter's™ performance will not be affected by the additional overhead used by this process.*

**Password:** Enter a password that the remote client will use to access your NAS for backup.

**Remote Backups list:** This is the list of remote backup jobs.

**Create:** Click the **Create** button to build a new remote backup job on your ShareCenter™.

**Modify:** Click this button to make changes to your existing Remote Backup jobs in the Remote Backup list. You must select the remote backup job first and then click the **Modify** button.

**Delete:** To remove a Remote Backup job select the job in the list and then click the **Delete** button.

The screenshot shows the 'Remote Backups' configuration window. On the left is a sidebar with 'Server' and 'Remote Backups' options. The main area is titled 'Remote Backup Server' and contains a checked checkbox for 'Enable remote backup service'. Below this is a password field with masked characters. At the bottom are two buttons: 'Save Settings' and 'Don't Save Settings'.

The screenshot shows the 'Remote Backups' list interface. At the top are three buttons: 'Create', 'Modify', and 'Delete'. Below them is a table with the following columns: Task, Schedule, Status, Enable / Disable, Backup Now, and Recovery. The table body is currently empty. At the bottom, there is a pagination bar showing 'Page 1 of 1' and 'No items'.

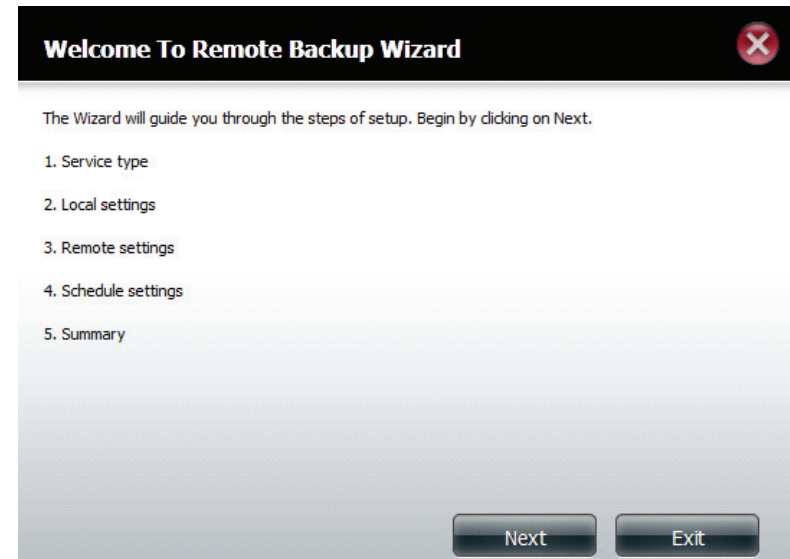
Task	Schedule	Status	Enable / Disable	Backup Now	Recovery



## Create Wizard

When you click the **Create** button above the Remote Backup list a wizard will start, guiding you to configure a new Remote Backup job.

**Welcome:** Displays the steps of the wizard.

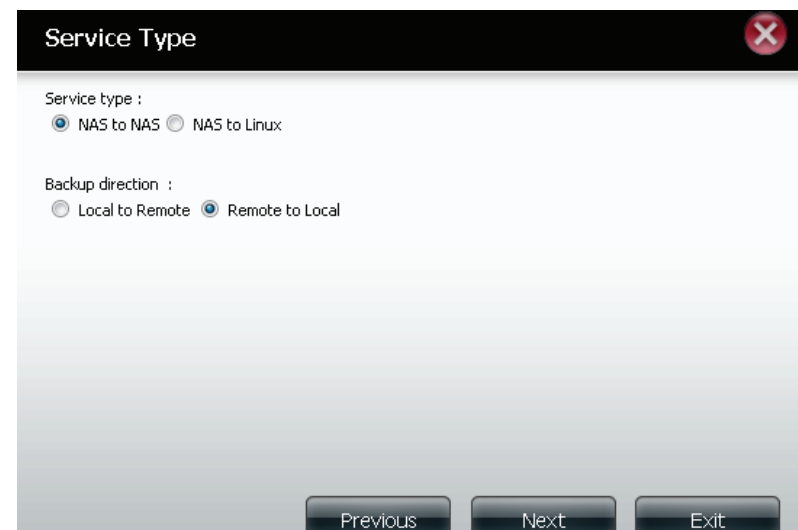


**Service Type:** **NAS to NAS:** backup from the local NAS to a remote NAS or vice versa.

**NAS to Linux** backup from the local NAS to a Linux file system or vice versa.

**Local to Remote:** sets the backup source as the local NAS and the target destination for the backup files as the remote NAS or Linux file system.

**Remote To Local:** sets the backup source as the remote NAS or Linux file system and the target destination for the backup files as the local NAS.



**Local Settings:** **Task (Name):** the name used to refer to the backup job which will be listed later in the Remote Backup list.

**Folder Path:** select a local network share folder or file as the target or source for the backup job.

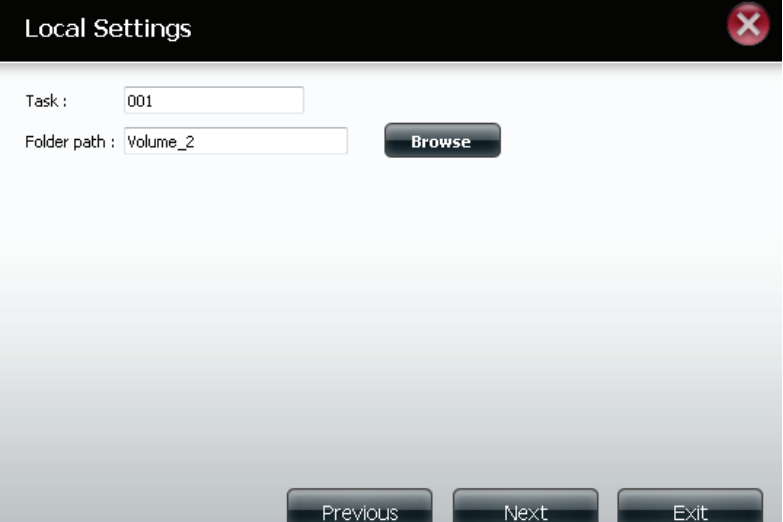
**Remote Settings:** **Remote IP:** The backup process uses Rsync protocol and needs to know the IP address of the destination source or target device for the backup. Input the IP of the remote NAS or Linux file system.

**Password:** Enter the password that is used by the remote backup server on the remote NAS or Linux file system.

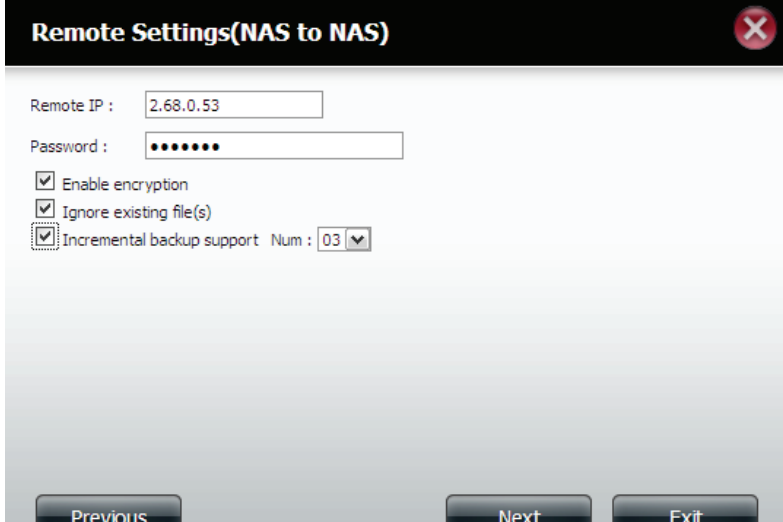
**Enable Encryption:** Checking this box will enable SSH encryption of the files that are transferred (backed up) over the network between the local and remote devices.

**Ignore existing file(s):** Checking this box prevents the backup process from writing over any files in the target file system that are not part of the backup files or folders. Therefore any existing files in the target system are preserved.

**Incremental backup support Num (#):** Checking this box provides multiple backup-capability at scheduled times. The first backup in an incremental series captures all the files for backup. Subsequent backups are incremental in that only the files and the folders that have changed in the backup source since the last incremental backup will need to be backed up. Each incremental backup builds a complete snapshot of the backup source however only the initial backup contains all the original files and folders. The subsequent backups in the incremental series contain new files and folders plus the links to the first incremental backup.



The 'Local Settings' dialog box has a title bar with a close button. It contains two input fields: 'Task :' with the value '001' and 'Folder path :' with the value 'Volume\_2'. A 'Browse' button is to the right of the 'Folder path' field. At the bottom, there are three buttons: 'Previous', 'Next', and 'Exit'.



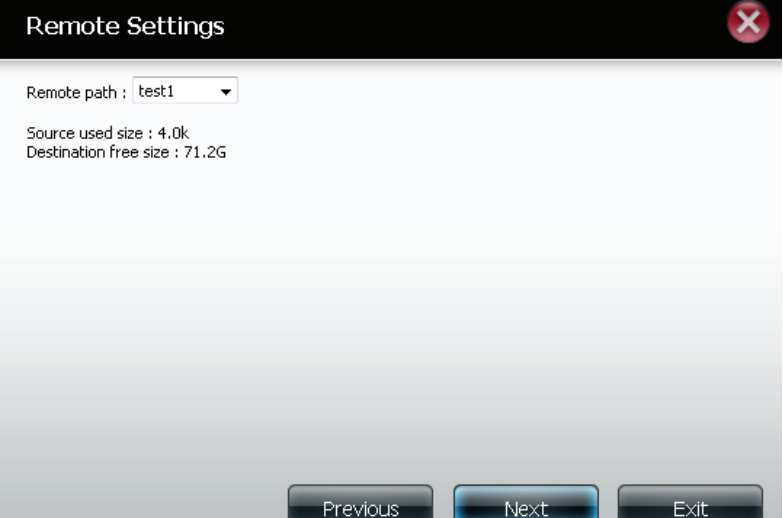
The 'Remote Settings(NAS to NAS)' dialog box has a title bar with a close button. It contains several fields and checkboxes: 'Remote IP :' with the value '2.68.0.53', 'Password :' with masked characters, and three checked checkboxes: 'Enable encryption', 'Ignore existing file(s)', and 'Incremental backup support'. The 'Incremental backup support' checkbox has a sub-field 'Num :' with the value '03' and a dropdown arrow. At the bottom, there are three buttons: 'Previous', 'Next', and 'Exit'.

**Remote Settings:** **Remote Path:** Using the **Browse** button, select the file system (folder) path to the remote target or source system for backup.

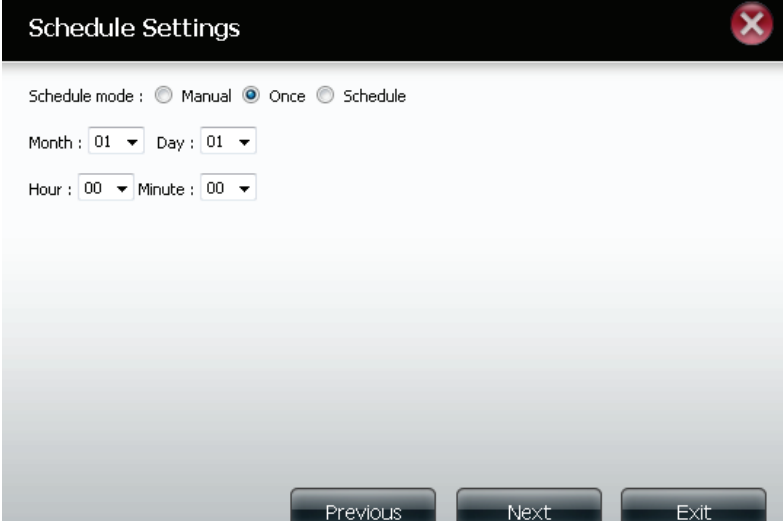
**Schedule Settings:** **Scheduled Mode:** **Manual:** Check either **Yes** or **No** selection below to start the backup (yes) immediately on completion of the wizard or (no) manually start the backup from the Remote Backup list.

**Once** - Select this option to run the Remote Backup once at a specific date and time set here.

**Scheduled:** Select this option to set the backup to occur daily, weekly, monthly per a specific schedule.



The screenshot shows the 'Remote Settings' dialog box. It has a title bar with a close button (X). The main area contains a 'Remote path' dropdown menu with 'test1' selected. Below it, it displays 'Source used size : 4.0k' and 'Destination free size : 71.2G'. At the bottom, there are three buttons: 'Previous', 'Next' (which is highlighted with a blue border), and 'Exit'.



The screenshot shows the 'Schedule Settings' dialog box. It has a title bar with a close button (X). The main area contains a 'Schedule mode' section with three radio buttons: 'Manual', 'Once' (which is selected), and 'Schedule'. Below this, there are two rows of dropdown menus: 'Month : 01' and 'Day : 01' in the first row, and 'Hour : 00' and 'Minute : 00' in the second row. At the bottom, there are three buttons: 'Previous', 'Next' (which is highlighted with a blue border), and 'Exit'.

**Finished:** Click on the **Finish** button if you are satisfied with all the settings of the Backup job created. Otherwise click on the **Previous** button to go back and make changes. Alternatively click on **Exit** to end the configuration without adding a Remote Backup job.

**Remote Backups list:** **Task:** The name of the Remote Backup job.  
**Schedule:** When the Remote Backup job will execute.  
**Status:** Current status which can be

- **Ready:** The remote backup job is ready to be executed.
- **Finished:** the remote backup job has executed completely and successfully.
- **Failed:** the Remote backup job was unsuccessful during execution.

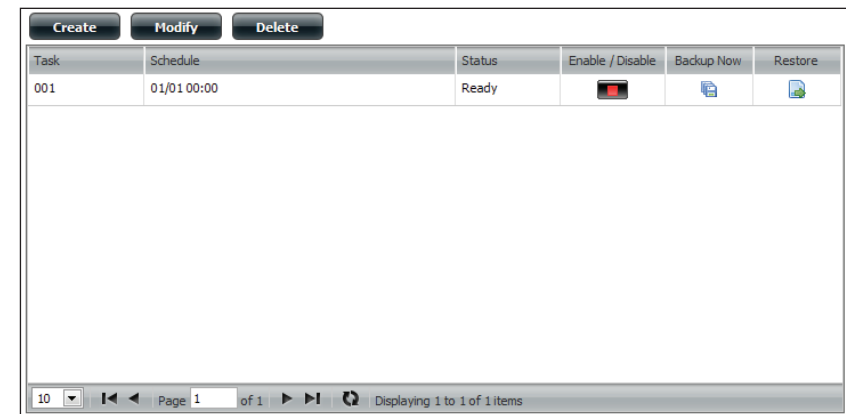
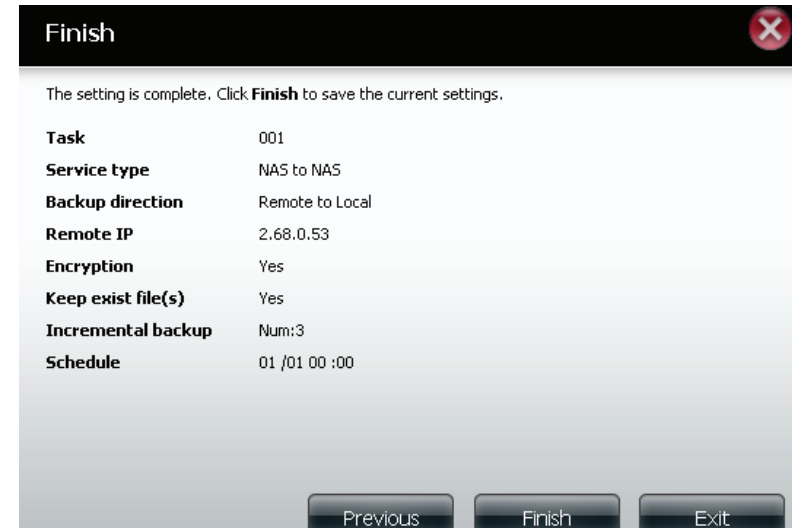
**Enable/Disable:** If the button shows a red circle the remote backup job is enabled. Clicking the red button will disable the remote backup job and the button will change to a green right pointing triangle. Clicking the green triangle will enable the job again.

**Backup now:** Clicking this button will execute the backup job immediately as long as the job is enabled.

**Recovery:** Clicking this button will write the backup files and folders back into the source file system from the backup target system (reverse the file direction).

**Navigation buttons:** Use these buttons to move up and down in the list when there are multiple jobs configured.

**Refresh Button:** Click this button during a backup or recovery process to monitor the progress by updating the progress completed bar.



## Local Backups

Schedule local file and folder backups from the local network share of the device or from the local computer. Always test the URL before applying changes. This will help to ensure a successful backup.

**Category:** Use the radio buttons to select the backup method. If your NAS device has two volumes you can click the **Internal Backup** radio button to backup the data from the first volume to the second volume and vice-versa. The Internal Backup feature also allows you to backup an existing folder on a volume to another folder on the same volume but nested folders in the same volume are not allowed. If you want to backup the data from your PC or another NAS device to your NAS device, click the LAN Backup radio button.

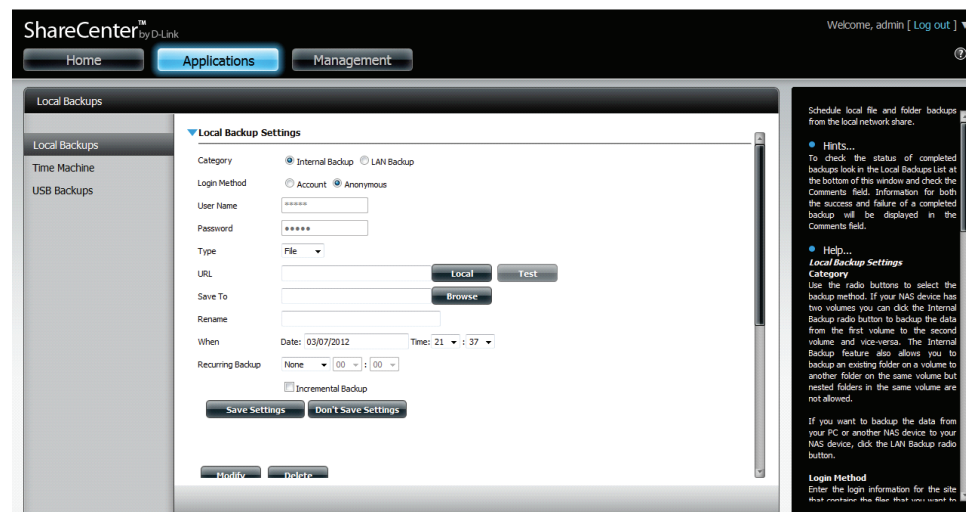
**Login Method:** Enter the login information for the site that contains the files that you want to schedule backups from. If no password is required choose **Anonymous**. If a password is required choose **Account** and provide the user name and password. This option is only available for LAN Backups.

**Username:** Enter the user name here.

**Password:** Enter the password here.

**Type:** Select **File** or **Folder**, depending on what you want to download or backup.

**URL:** Enter the path of the site or server you are initiating a transfer from. (e.g. **Volume\_1/Test** or **\\192.168.0.32\Volume\_1\Test\test.txt**).



**Save To:** Enter a valid destination drive on the ShareCenter™, or click **Browse** to select the destination.

**Rename:** Enter the renamed file name here.

**When:** Enter the date and time you want the scheduled backup or download to initiate.

**Recurring Backup:** Designate the interval and time you want the backup or download to run unattended.

**Incremental Backup:** By default all local backups and file/folder downloads are in Overwrite mode, meaning that identical files in the destination folder will be overwritten by the source files. Checking Incremental Backup will have the ShareCenter™ compare identical file names at the source and destination. Files will only be overwritten if the source file is more recent.

## Time Machine

This section allows the user to configure the ShareCenter™ so that it becomes a backup destination in the Mac OS® X Time Machine. In order to use this function, the AFP service is required. The AFP service will start automatically as soon as this function is enabled.

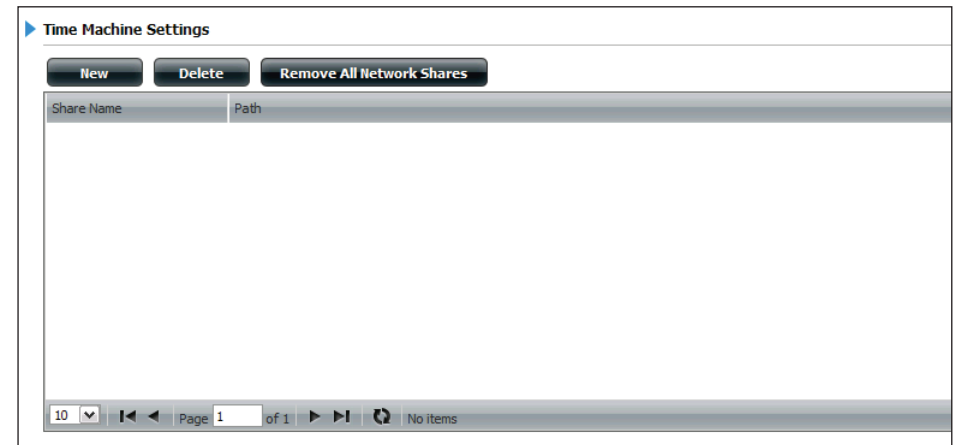
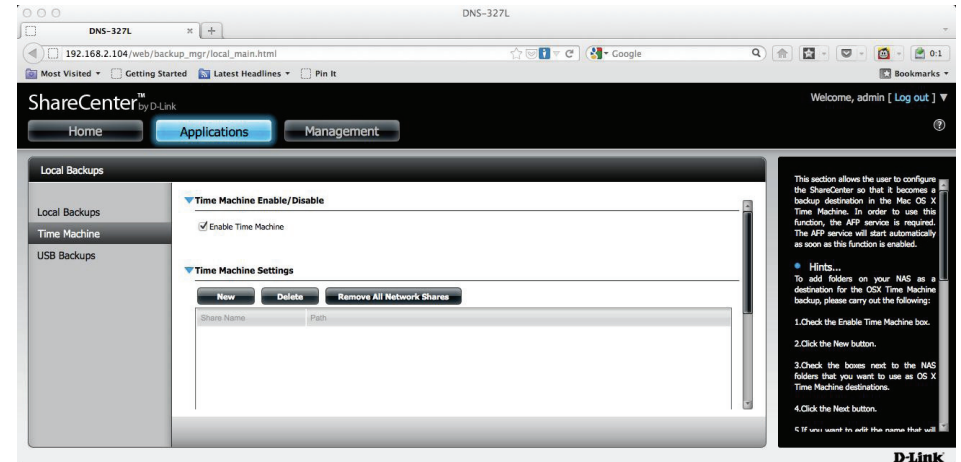
**Enable Time Machine:** Click this to enable the Time Machine function to work with a Mac OS® X Time Machine. The Time Machine Settings list will appear when this checkbox is checked.

**Time Machine Settings list:** A list of destination folders on the Network Shares associated with the Time Machine backup.

**New:** Adds a NAS folder as a Time Machine destination.

**Delete:** Deletes a NAS folder setup as a Time Machine destination.

**Remove all Network Shares:** Delete all the NAS folders in the list configured as Time Machine Destinations.

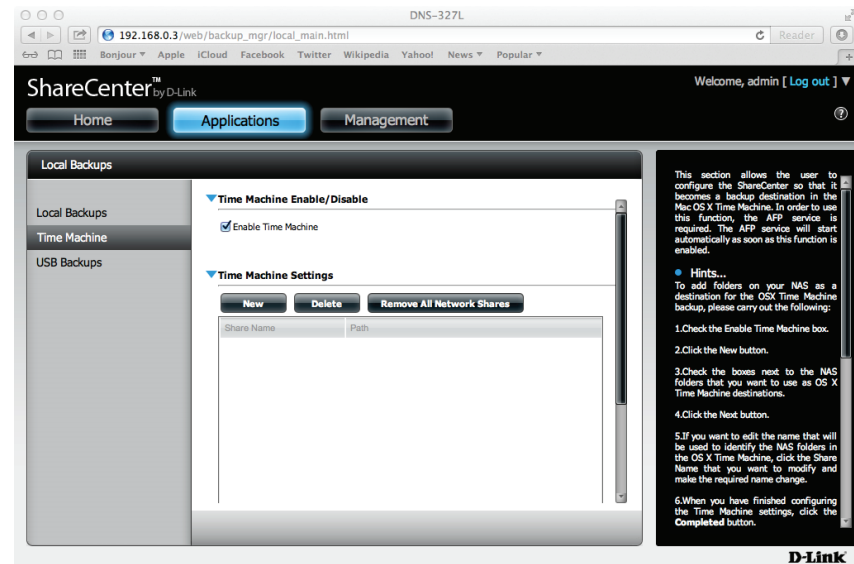


### Time Machine - On the Mac

This section allows the user to configure the ShareCenter™ so that it becomes a backup destination in the Mac OS® X Time Machine. In order to use this function, the AFP service is required. The AFP service will start automatically as soon as this function is enabled.

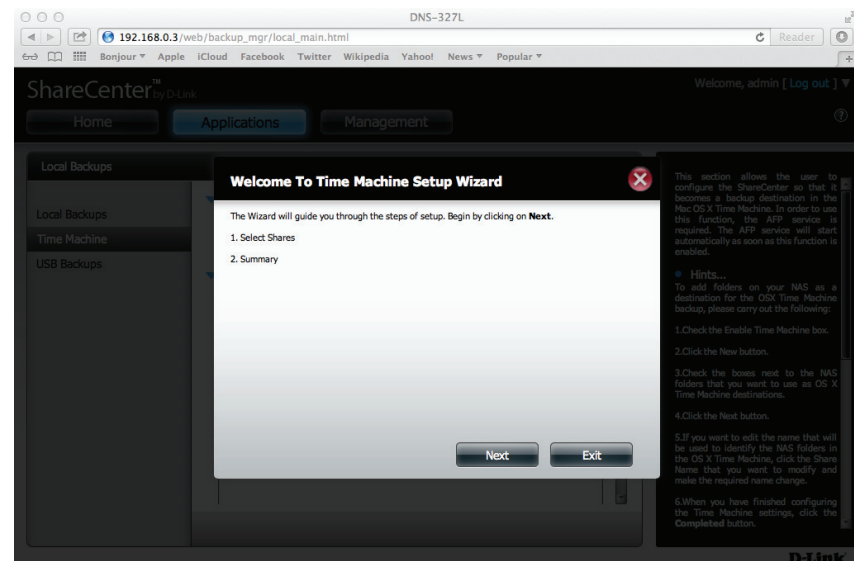
Go to **Applications, Local Backups, Time Machine**. Under **Time Machine Enable/Disable** click the **Enable Time Machine** checkbox.

Click the blue arrow next to **Time Machine Settings** to see the configuration options.

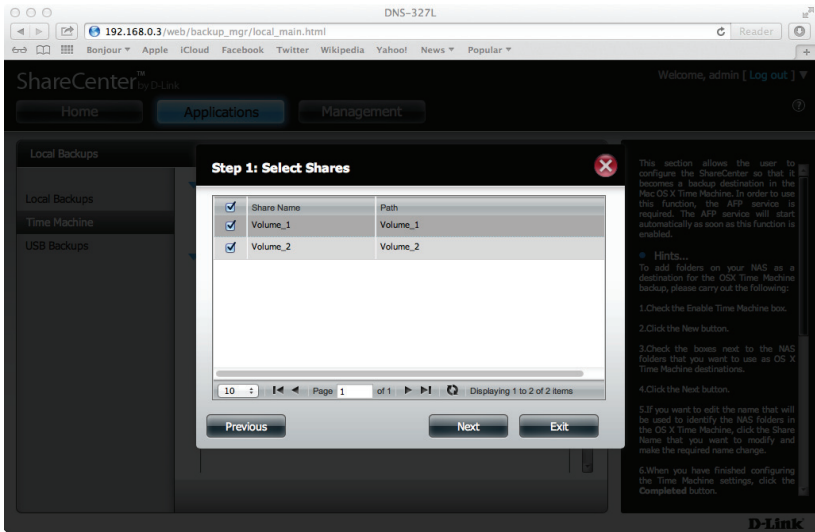


Click **New** under **Time Machine Settings** to access the **Setup Wizard for Time Machine**.

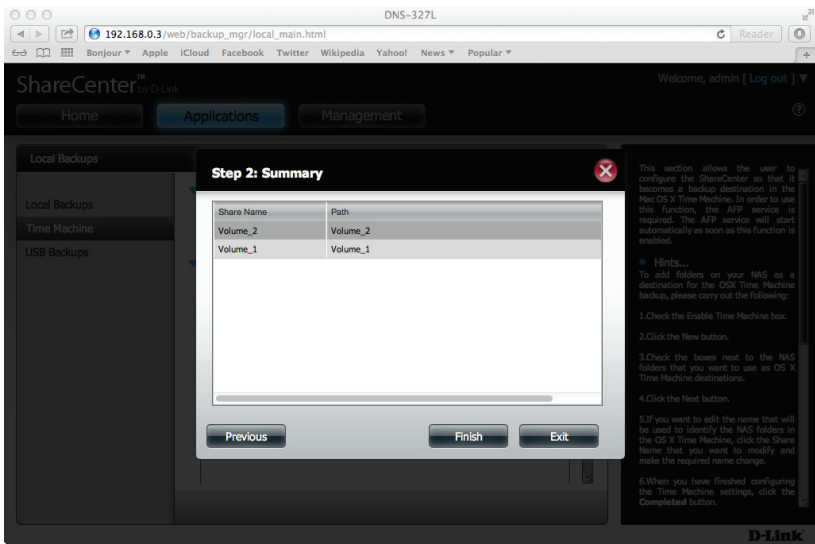
Click **Next** to continue.



Select the **Volume** you want to use for **Time Machine** and click **Next**



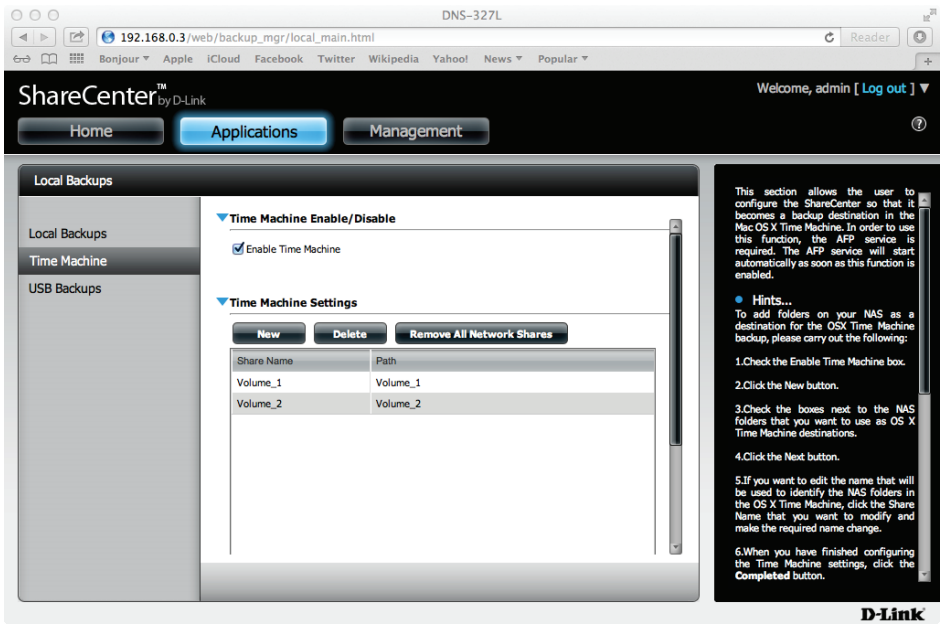
A summary displays your backup options. Click Finish.



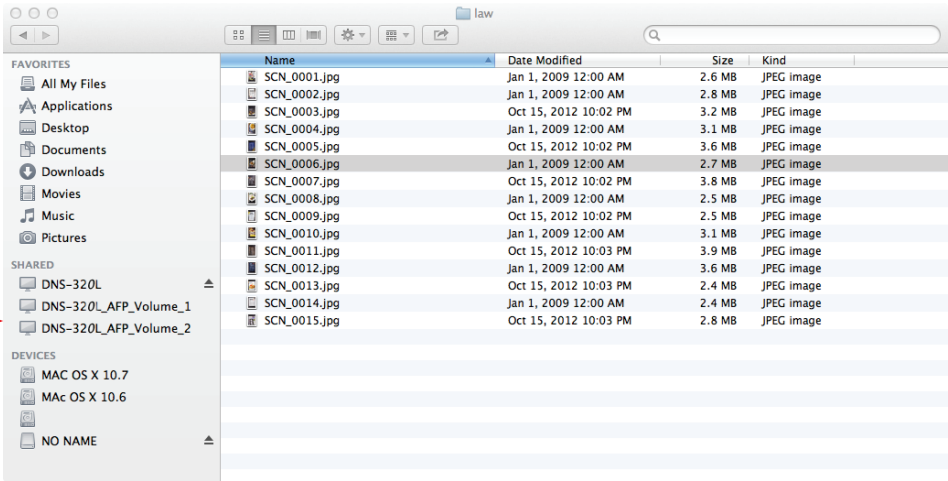


Section 4 - Configuration

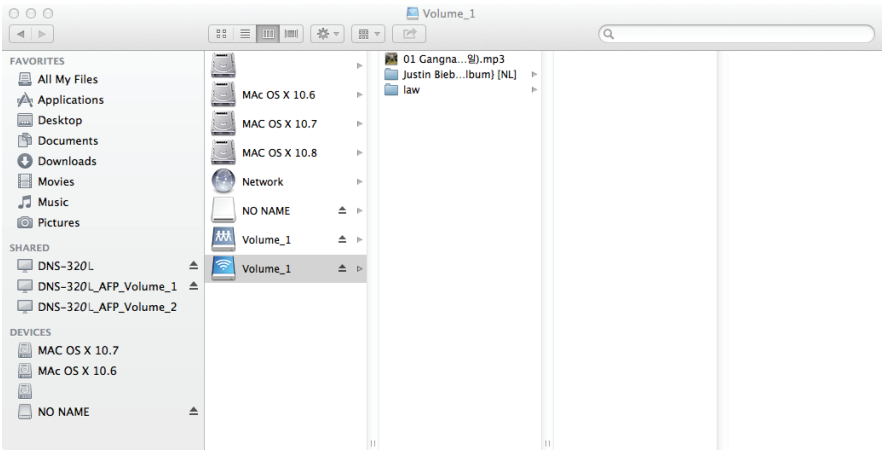
The wizard returns to the Time Machine table. It displays the Volumes you just selected for the backup process.



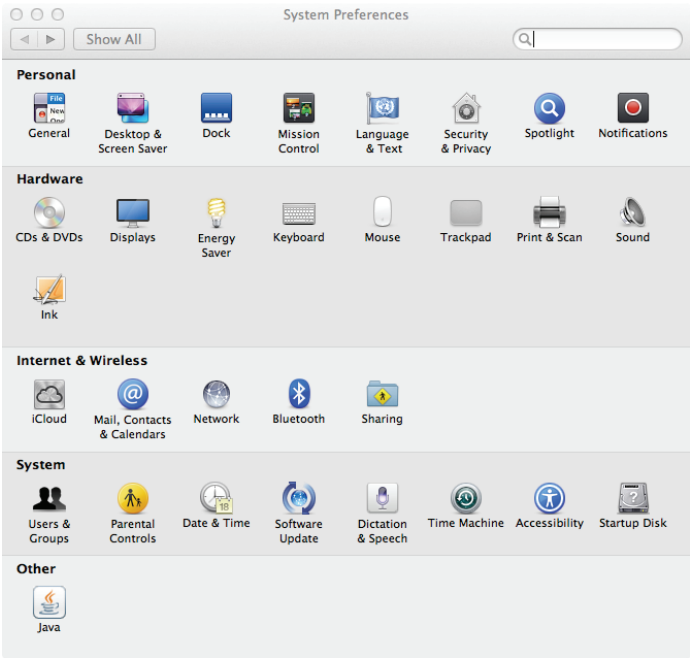
The **Volumes** are also viewable in the **Finder**.



You can also browse the Volume in **Finder**.



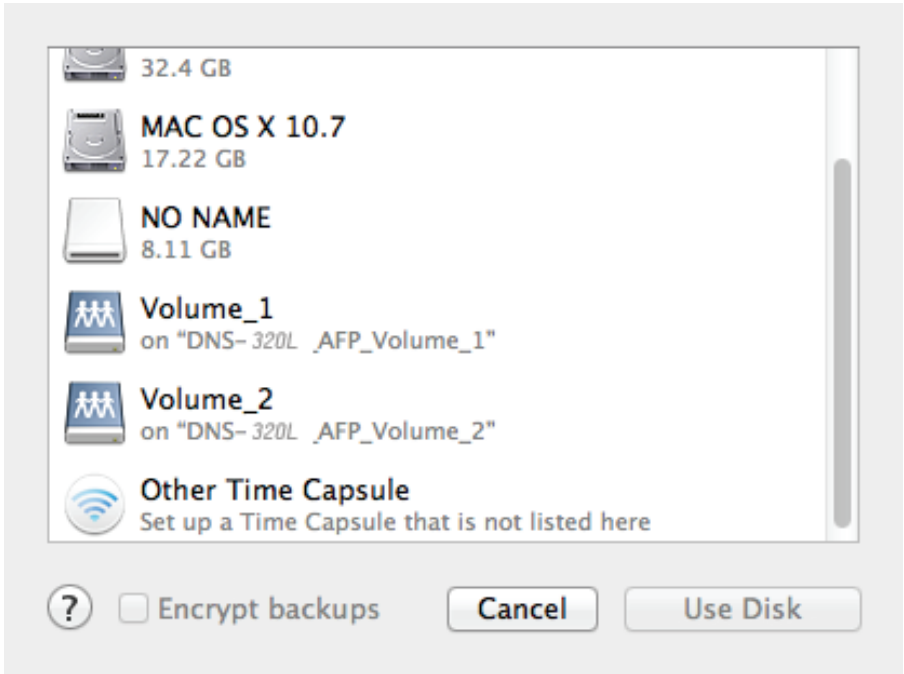
Go to **System Preferences**, click **Time Machine**.



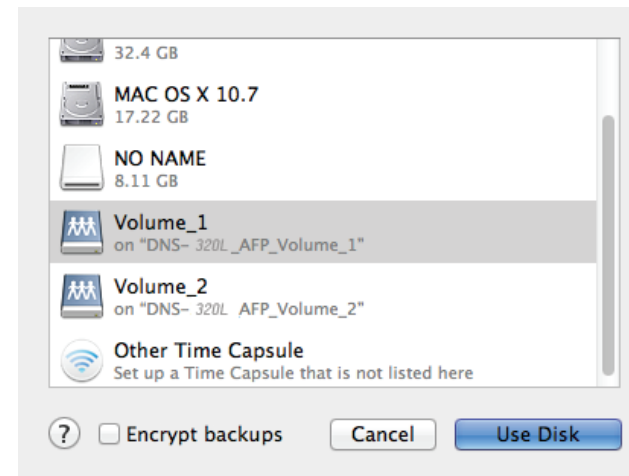
In Time Machine, click Select Backup Disk.



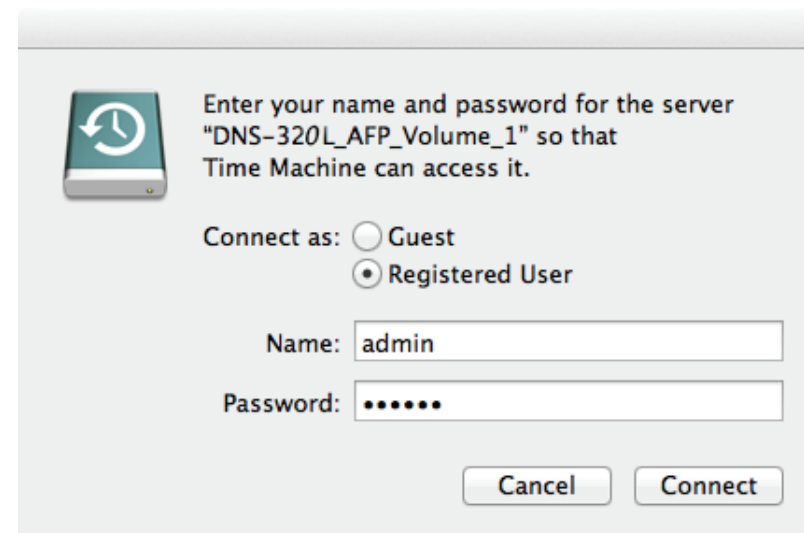
View the DNS-320L Volumes.



Select the **Volume** you want to use for the backup and click **Use Disk**.



Log in to the server. Enter a **Name** and a **Password** and click **Connect**.



## Section 4 - Configuration

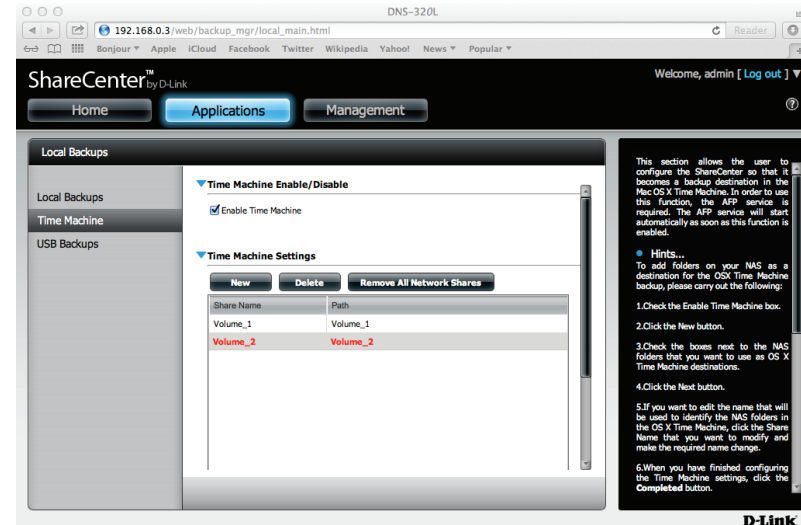
The Time Machine backup process is now complete. View your settings once you have set your disk.

To deactivate **Time Machine**, move the slider to **OFF**. This, however, doesn't delete the **Volumes** from the **DNS-320L** settings.

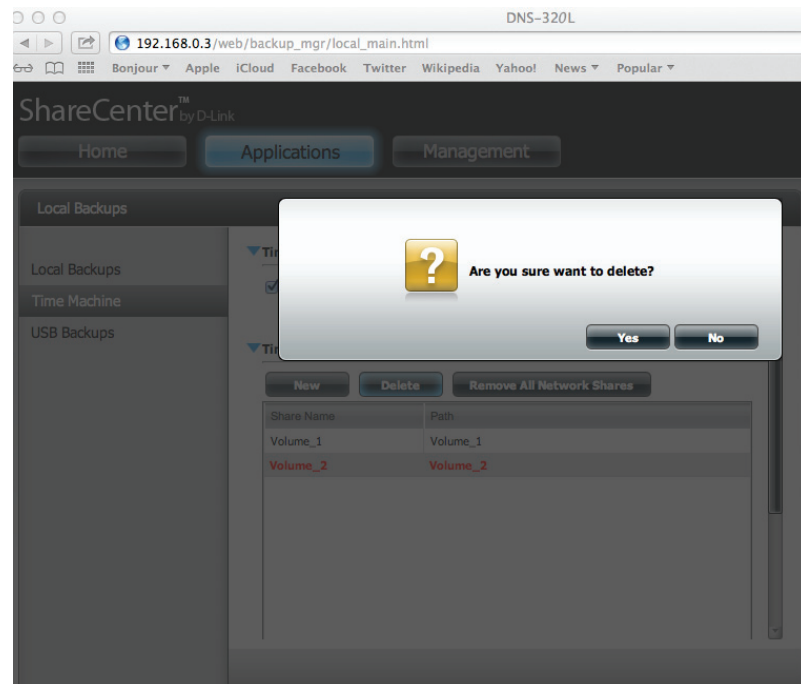


## Time Machine - Delete a Volume

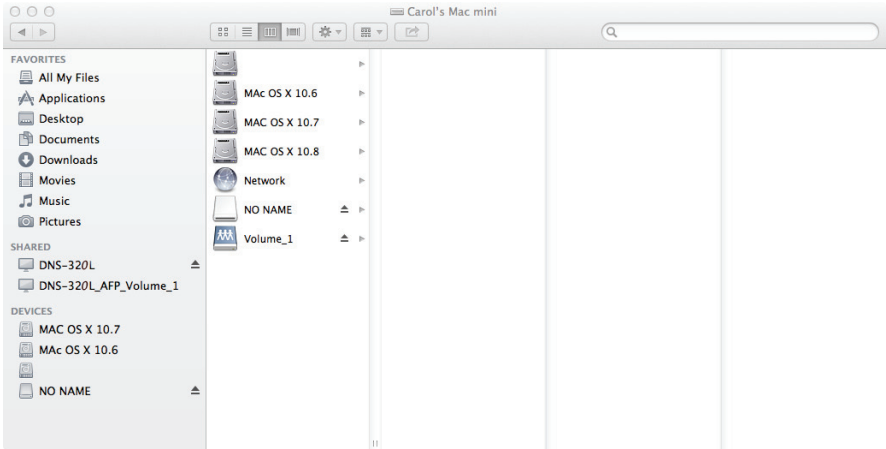
To delete a **Volume** under **Time Machine Settings**, select the **Volume** you want to delete - it turns red. Click the **Delete** button.



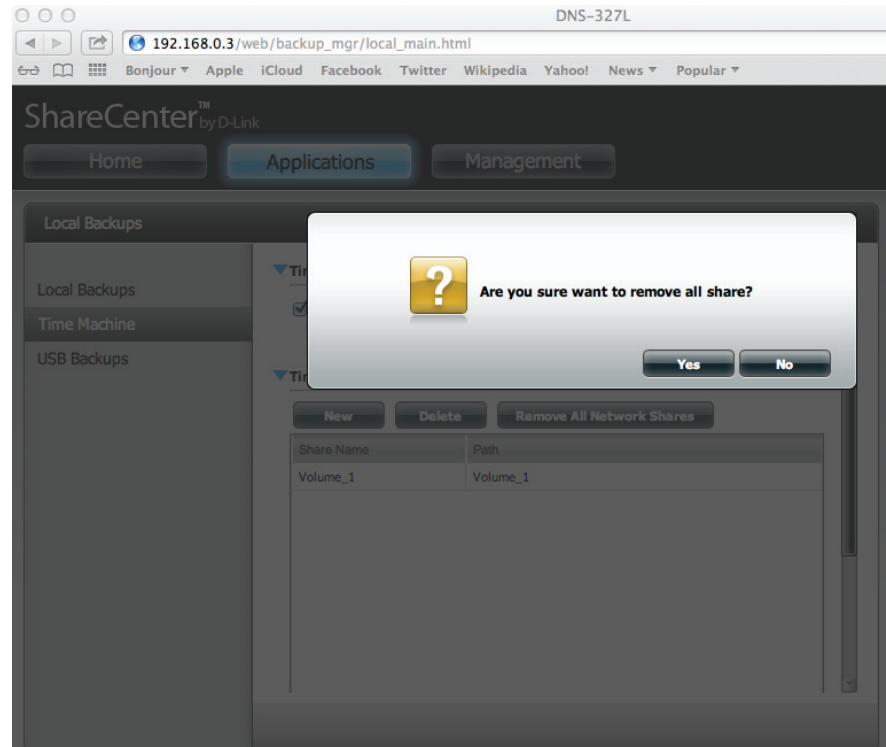
A warning message prompts you to verify if you want to delete the Volume. Click **Yes**.



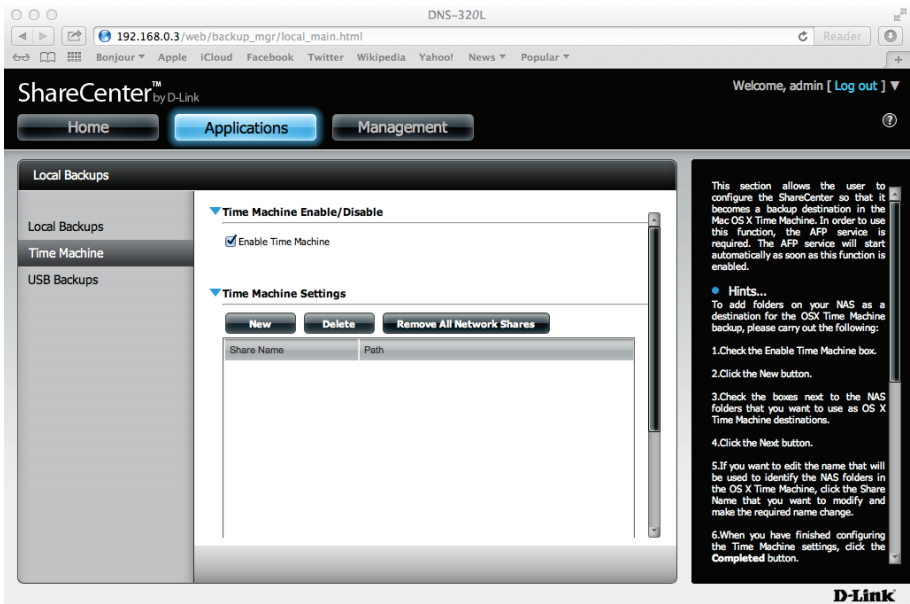
The **Volume** is no longer visible in **Finder**.



To Remove all network shares, click the **Remove All Network Shares** button. A warning message appears asking you to confirm your selection. Click **Yes** to continue.



The **Time Machine** wizard shows an empty **Time Machine Settings** window.





## USB Backups

This section allows the user to configure the ShareCenter™ so that it becomes a backup destination for a USB device that is connected to your DNS-320L.

MTP Backups (Media Transfer Protocol) basically backup digital media content from a MTP compatible USB device such as digital cameras, MP3 players, and smartphones to your ShareCenter™. USB Backups allows you to backup data from a USB storage device to the ShareCenter™ or from the ShareCenter™ to a USB storage device.

The screenshot shows the 'USB Backups' configuration window. On the left is a sidebar with three options: 'Local Backups', 'Time Machine', and 'USB Backups', with 'USB Backups' currently selected. The main area is titled 'USB Backups' and contains two sections. The first section, 'MTP Backups', has a header with a downward arrow. Below it, the 'MTP Backups' status is set to 'Disable' (indicated by a selected radio button). The 'Destination' field contains 'Volume\_1' and has a 'Browse' button next to it. The 'Status' field shows '--'. At the bottom of this section are two buttons: 'Save Settings' and 'Don't Save Settings'. The second section, 'USB Backups', has a header with a rightward arrow and is currently empty.

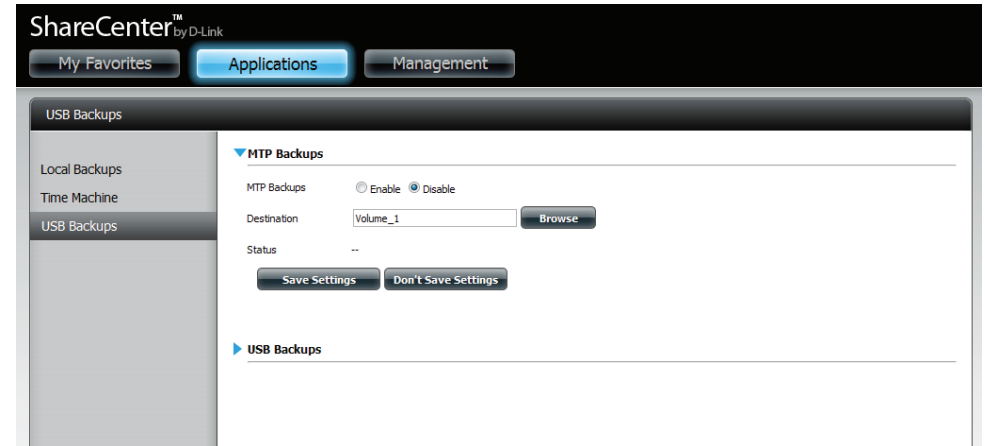
## MTP Backups

**MTP Backups:** Click **Enable** to allow your ShareCenter™ to copy digital media content from a MTP USB device.

**Destination:** Click **Browse** to select a folder on your ShareCenter™ for the backup data to be saved to.

**Status:** Displays the current MTP backup status.

Click on the **Save Settings** button to save the MTP Backups settings.



## USB Backups

**USB Backups:** Click **Enable** to allow your ShareCenter™ to copy data from/to a USB storage device.

**Category:** Select either **USB to NAS** (backup from the USB storage device to the ShareCenter™) or **NAS to USB** (backup from the ShareCenter™ to the USB storage device).

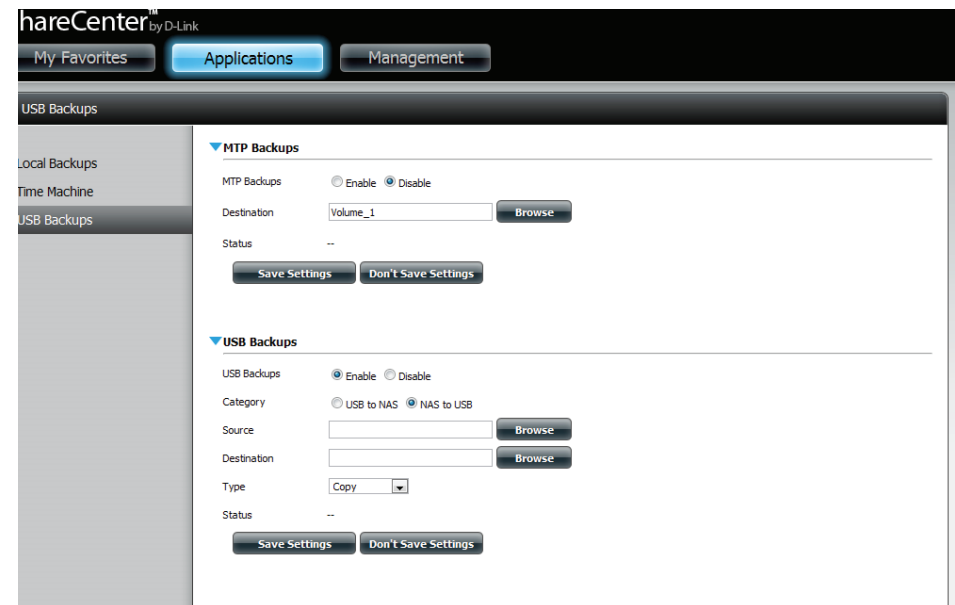
**Source:** Click **Browse** to select a folder as the source folder for the backups.

**Destination:** Click **Browse** to select a folder as the destination folder for the backups.

**Type:** Select **Copy** to create a new folder in the destination folder. Select **Synchronize** to overwrite all the files in the existing USB folder named USBDisk1\_1.

**Status:** Displays the current USB backup status.

Click on the **Save Settings** button to save the USB Backups settings.

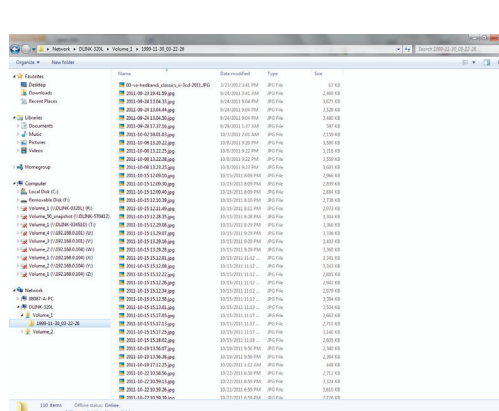
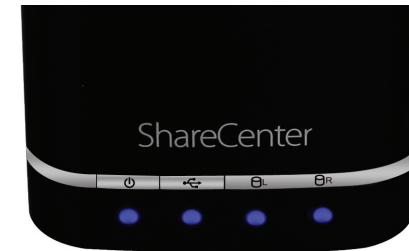


## MTP Backup Process

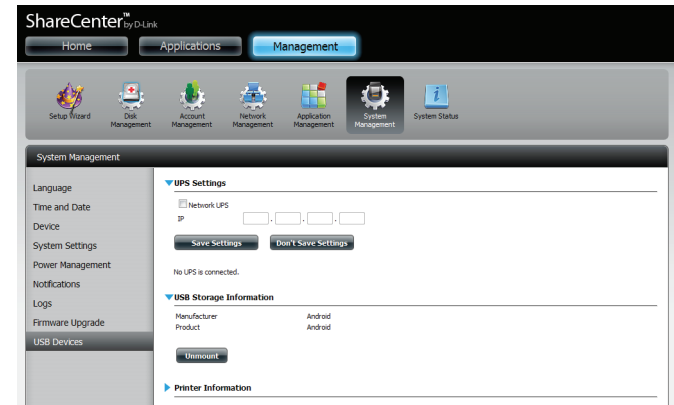
1. Connect a MTP USB device to the USB port on the back panel of the device. The DNS-320L will enter backup mode if MTP Backups has been enabled in the MTP backup settings.



2. Press the **USB** button to start the backup process. The white USB LED flashes briefly to display that the backup is in the process. The ShareCenter™ will create a new folder in the destination folder that you selected in the MTP backups settings and will copy all the media files from the MTP USB device to this folder. At this time the USB LED remains white until the device is disconnected.



3. Go to System Management, USB Devices. Under USB Storage Information, you will see detailed information on the device you plugged into the DNS-320L. You can connect an Android device but enable USB debugging.



4. When the backup is complete, the flashing white LED will become solid white. Click and hold the USB button at the front for over 5 seconds and the DNS-320L unmounts the device.



## USB Backup Process

1. Connect a USB storage device to the USB port on the back panel of the device. The LED will blink then become solid once it is ready for backup, if USB Backups has been enabled in the USB backup settings.



2. Press the **USB** button to start the backup process. The LED starts to blink that the backup is in the process. The ShareCenter™ will copy or sync all the files from the source folder to the destination folder.  
**Please Note: No warning message will appear to indicate that all data on the destination folder will be deleted automatically.**

3. When the backup is complete, the flashing white LED will become solid white. To unmount the USB storage device, you can click and hold the USB button at the front of the DNS-320L for over 5 seconds or you can go to the **USB devices** menu of the **System Management** icon in the **Management Tab** of the Web GUI of the device. Click the blue arrow to reveal the **USB Storage** information. Click the **Unmount** button to eject the **USB device**.



# P2P Downloads Settings

In this menu you can configure the P2P download management settings.

**P2P:** Select **Enable** or **Disable**.

**Download Schedule:** In the block provided the user can configure the running schedule for P2P downloads. Simply select the **Start** and **Stop** block for the appropriate Time and Date.

**Auto Download:** Here the user can enable or disable the automatic download option.

**Port Settings:** The user can choose whether to allow the device to automatically choose an incoming connections port or configure the incoming connections port manually.

**Seeding:** Select one of the three seeding options.

**Torrent Save Path:** Displays the volume where the Torrent will be saved.

**Encryption:** Here the user can choose to enable or disable the encryption.

**Bandwidth Control:** You can manually configure the maximum download rate and maximum upload rate. Enter the value **-1** to set the respective field to **unlimited**.

P2P Downloads

Downloads

Settings

P2P Settings

P2P

☒ Enable

☐ Disable

Start Download

Stop Download

Date/Time	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Sun																								
Mon																								
Tue																								
Wed																								
Thu																								
Fri																								
Sat																								

Auto Download

☒ Enable

☐ Disable

Port Settings

☒ Automatic

☐ Custom

Incoming connections port

6881

(10000 ~ 65000)

Seeding

☒ Seed until removed

☐ Stop seeding after

☐ Stop seeding when meet

0

minutes

0

%

Torrent Save Path

Volume\_1

Encryption

☐ Enable

☒ Disable

Bandwidth Control

Maximum Download Rate (Kb/S)

-1

Default: -1

(Unlimited)

Maximum Upload Rate (Kb/S)

-1

Default: -1

(Unlimited)

Save Settings

Don't Save Settings

☐ Stop seeding when meet

%

Torrent Save Path

Encryption

☒ Enable

☐ Disable

Bandwidth Control

Maximum Download Rate (Kb/S)

-1

Default: -1 (Unlimited)

Maximum Upload Rate (Kb/S)

-1

Default: -1 (Unlimited)

Save Settings

Don't Save Settings

# Downloads

Here the user can add torrents and view P2P download lists.

**Add Torrent from URL:** In the field provided you can copy and paste a link to a torrent file hosted on the internet. The P2P download manager will add the torrent file to the download manager and begin downloading your files.

**Add Torrent from File:** Browse for a torrent file you have downloaded onto your PC.

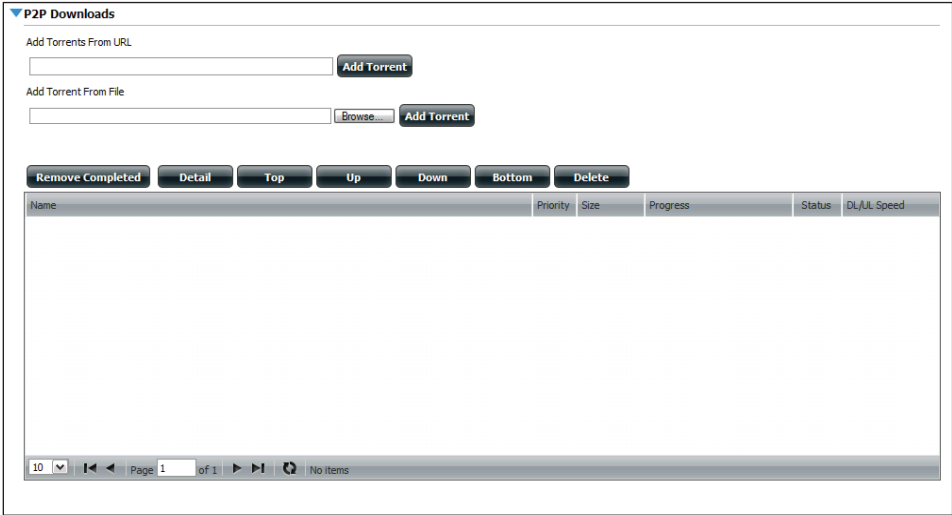
**P2P Downloads list:** This window will display all the running tasks.

**Remove Completed:** The user can click on the **Remove Completed** button to remove finished downloads. Sometimes identifying finished jobs, when multiple downloads exist, can be difficult. This option makes it is easier for the user to remove finished downloads from the list with a single click.

**Detail:** The **Details** button allows the user to view the files that are being downloaded for each torrent.

**Top,Up, Down,Bottom:** The **Top**, **Up**, **Down** and **Bottom** buttons allow you to move the selected P2P download in the task list. The downloads at the top of the list have a higher priority than the one listed below them.

**Delete:** The **Delete** button allows the user to remove a selected download. This will remove not only the torrent file, but also the partially downloaded files too.



**Start / Stop:** The **Start** and **Stop** buttons allow users to start and stop selected P2P downloads in the task list.

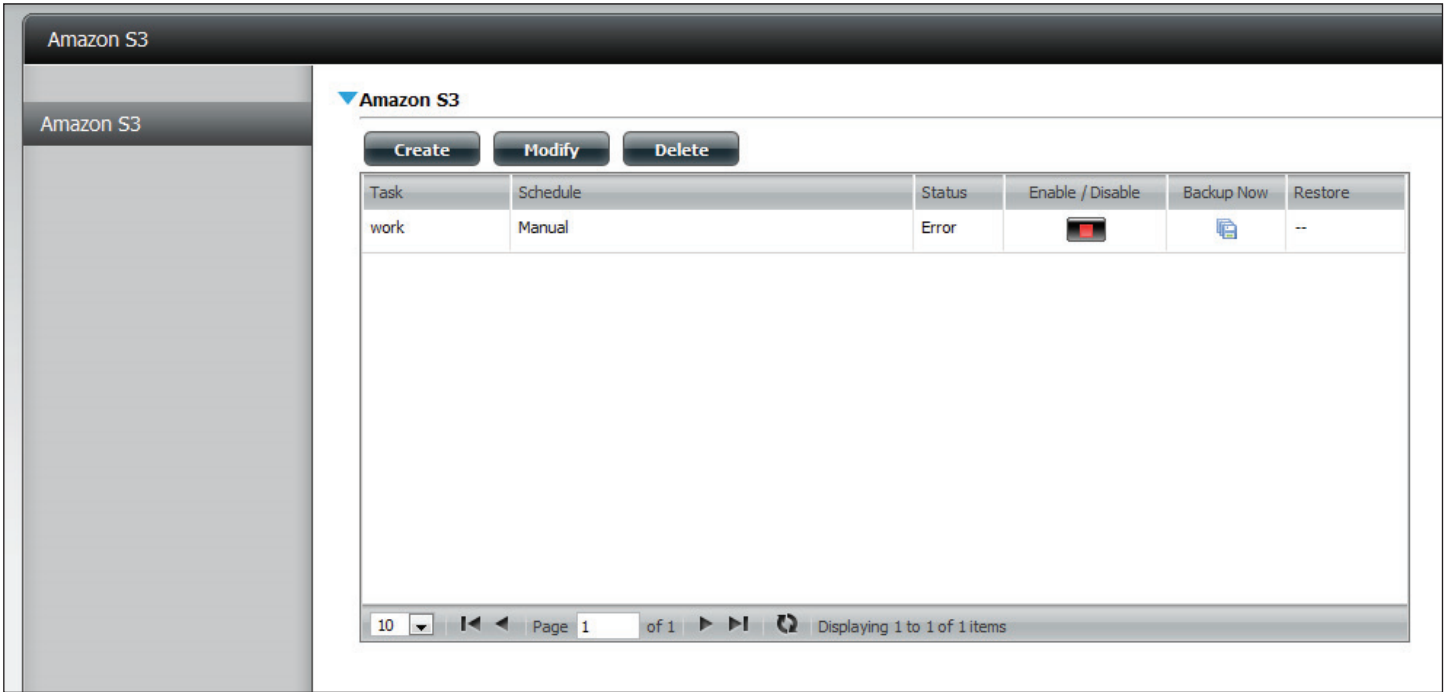
**Navigation:** At the bottom of the P2P Task window there are a couple of navigation controls. When multiple tasks exist, the user can select how many tasks will be displayed by using the drop-down menu. The user can also navigate to other pages when more than one page exist.

**Refresh:** The **Refresh** button allows the user to refresh the P2P task list so it displays the most updated statistics.



## Amazon S3

Amazon S3 (Simple Storage Service) is an online storage web service offered by AWS (Amazon Web Services). It provides a simple web services interface that can be used to store and retrieve any amount of data at any time from anywhere on the web. With Amazon S3 support, it is possible to upload the data from your DNS-320L to Amazon S3 or download the data from Amazon S3 to your DNS-320L.



## Creating an AWS Account

Open your web browser and type the following link for the Amazon Web Services: <http://www.aws.amazon.com/s3>. Then, click on the link at the top named **“Sign Up Now”**. Follow the instructions to create your AWS account.



The screenshot shows the Amazon Simple Storage Service (Amazon S3) page. At the top, there is the Amazon Web Services logo and navigation links for "Sign Up", "My Account / Console", and "English". Below the logo, there is a search bar and links for "AWS Products & Solutions", "AWS Product Information", "Developers", and "Support".

The main content area is titled "Amazon Simple Storage Service (Amazon S3)". It includes a description: "Amazon S3 is storage for the Internet. It is designed to make web-scale computing easier for developers." and another paragraph: "Amazon S3 provides a simple web services interface that can be used to store and retrieve any amount of data, at any time, from anywhere on the web. It gives any developer access to the same highly scalable, reliable, secure, fast, inexpensive infrastructure that Amazon uses to run its own global network of web sites. The service aims to maximize benefits of scale and to pass those benefits on to developers."

On the left side, there is a sidebar with "Amazon S3" and "Developer Resources" sections. The "Amazon S3" section includes links for "Amazon S3 Overview", "FAQs", "Pricing", and "Amazon S3 SLA". The "Developer Resources" section includes links for "Getting Started Guide", "AWS Management Console", "Documentation", "Release Notes", "Sample Code & Libraries", "Developer Tools", "Articles & Tutorials", and "Community Forum".

On the right side, there is a "Get Started with AWS for Free" section with a "Sign Up Now »" button. Below this, it states: "AWS Free Tier includes 5GB storage, 20,000 Get Requests, and 2,000 Put Requests with Amazon S3." and a link to "View AWS Free Tier Details »".

At the bottom, there is a section titled "This page contains the following categories of information. Click to jump down:" with two columns of links. The left column includes: "Amazon S3 Functionality", "Protecting Your Data", "Managing Your Data", "Pricing", and "Getting Started with Amazon S3". The right column includes: "Transferring Large Amounts of Data", "Common Use Cases", "Resources", "Amazon S3 Design Requirements", and "Intended Usage and Restrictions".

At the bottom left, there is a link for "Amazon S3 Data Management and..." and at the bottom center, there is a link for "Amazon S3 Functionality".

## Section 4 - Configuration

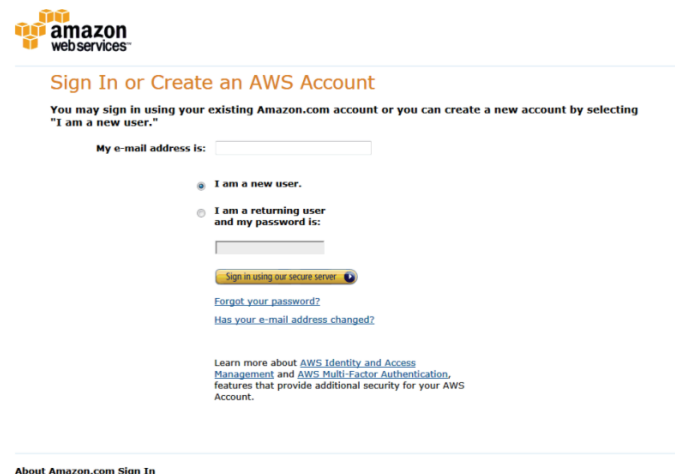
---

Enter your e-mail address and check the I am a New User radio button and follow the instructions to select the amount of desired storage and create your Amazon S3 account.

You will be issued the following keys as credentials to give you access to the account:

1. Access Key ID
2. Secret Access Key

Save these keys in a secure location as your ShareCenter will need them to create the backup and recovery jobs to and from the Amazon S3 Cloud Storage.



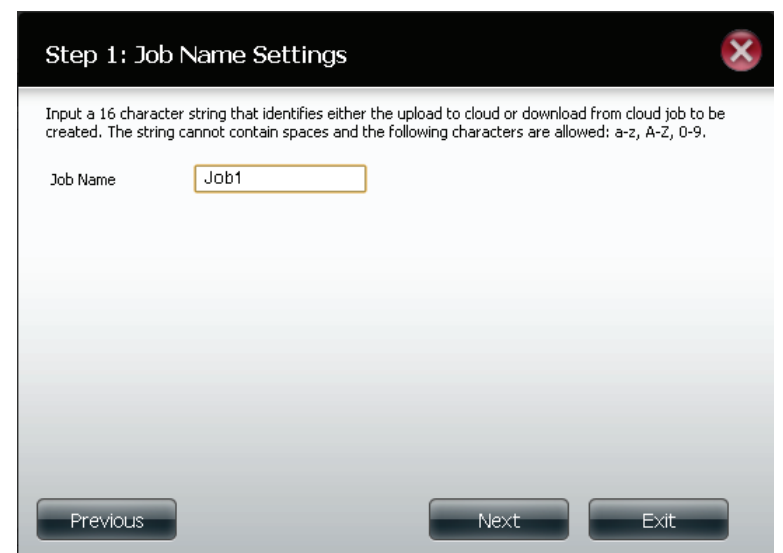
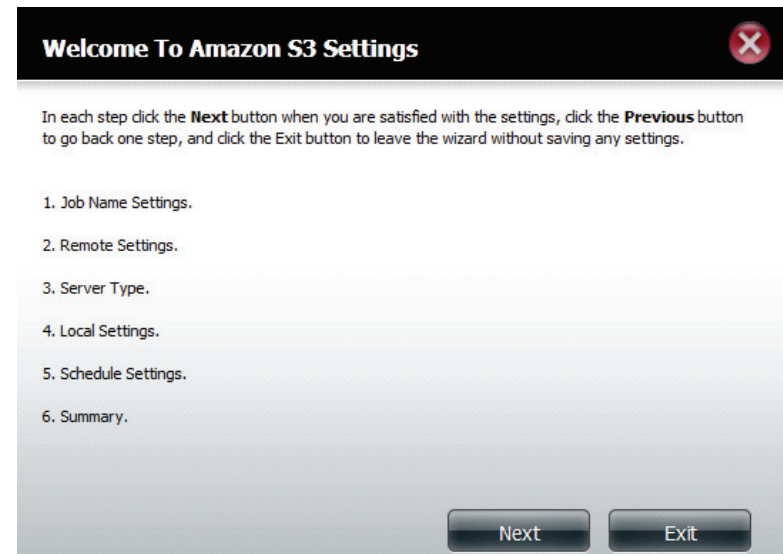
The screenshot shows the Amazon Web Services sign-in page. At the top is the Amazon Web Services logo. Below it is the heading "Sign In or Create an AWS Account". A message states: "You may sign in using your existing Amazon.com account or you can create a new account by selecting 'I am a new user.'". There is a text input field for "My e-mail address is:". Below this are two radio buttons: "I am a new user." (which is selected) and "I am a returning user and my password is:". Below the second radio button is a password input field. There is a "Sign in using our secure server" button with a lock icon. Below the button are two links: "Forgot your password?" and "Has your e-mail address changed?". At the bottom, there is a link to "Learn more about AWS Identity and Access Management and AWS Multi-Factor Authentication, features that provide additional security for your AWS Account." and a footer link "About Amazon.com Sign In".

### Create Button

When you click the **Create** button, the wizard will appear and you will be able to create either a ShareCenter™ backup or a restore job to the Amazon S3 Cloud Storage. You can schedule the job to run once, scheduled, or manually. You will need the following configuration data to create a backup/restore job:

### Step 1: Job Name Settings

Enter a 16 character name to identify the name of the backup or the restore job.



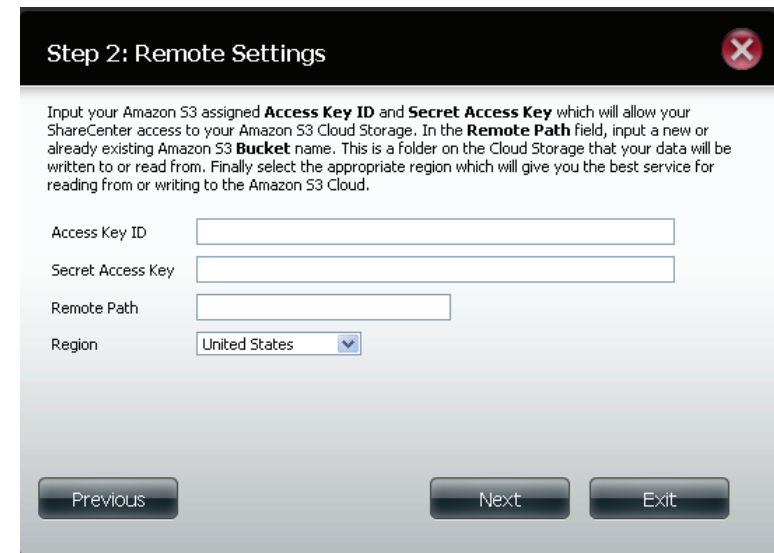
### Step 2: Remote Settings

**Access Key ID:** Enter your Amazon S3 assigned Access Key ID which allows your ShareCenter™ to access your Amazon S3 Cloud Storage.

**Secret Access Key:** Enter your Secret Access Key to access your Amazon S3 Cloud Storage.

**Remote Path:** Input a new or already existing Amazon bucket name.

**Region:** Select your Region from the drop-down menu.



The screenshot shows a configuration window titled "Step 2: Remote Settings" with a close button in the top right corner. The window contains the following text and fields:

Input your Amazon S3 assigned **Access Key ID** and **Secret Access Key** which will allow your ShareCenter access to your Amazon S3 Cloud Storage. In the **Remote Path** field, input a new or already existing Amazon S3 **Bucket** name. This is a folder on the Cloud Storage that your data will be written to or read from. Finally select the appropriate region which will give you the best service for reading from or writing to the Amazon S3 Cloud.

Access Key ID

Secret Access Key

Remote Path

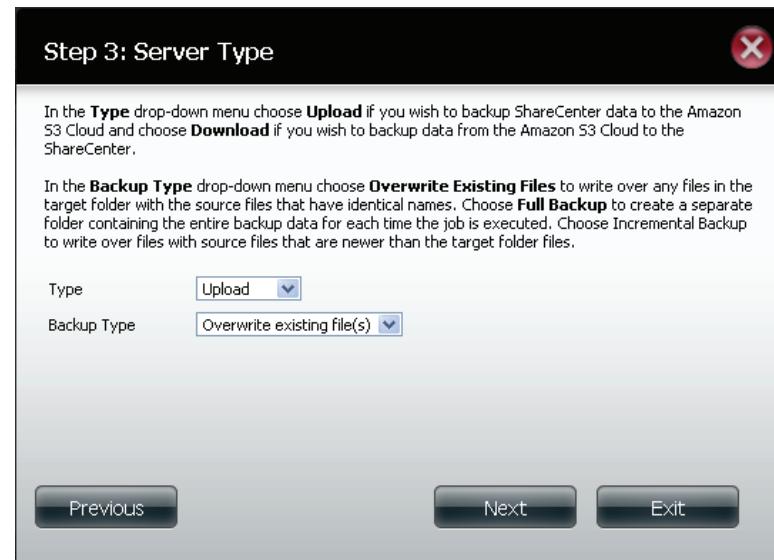
Region

At the bottom, there are three buttons: "Previous", "Next", and "Exit".

### Step 3: Server Type

**Type:** Select **Upload** or **Download** from the drop-down menu.

**Backup Type:** Use the drop-down menu and select **Overwrite Existing Files**, **Full Backup** or **Incremental Backup**.



The screenshot shows a configuration window titled "Step 3: Server Type" with a close button in the top right corner. The window contains the following text and fields:

In the **Type** drop-down menu choose **Upload** if you wish to backup ShareCenter data to the Amazon S3 Cloud and choose **Download** if you wish to backup data from the Amazon S3 Cloud to the ShareCenter.

In the **Backup Type** drop-down menu choose **Overwrite Existing Files** to write over any files in the target folder with the source files that have identical names. Choose **Full Backup** to create a separate folder containing the entire backup data for each time the job is executed. Choose **Incremental Backup** to write over files with source files that are newer than the target folder files.

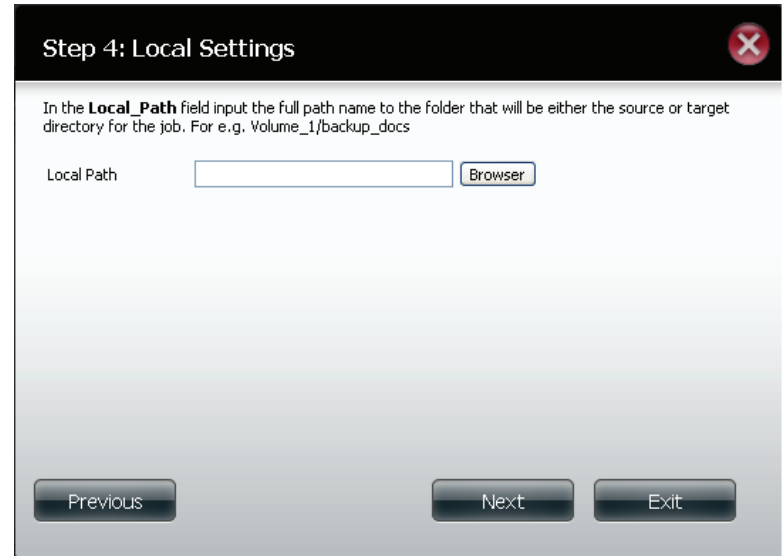
Type

Backup Type

At the bottom, there are three buttons: "Previous", "Next", and "Exit".

### Step 4: Local Settings

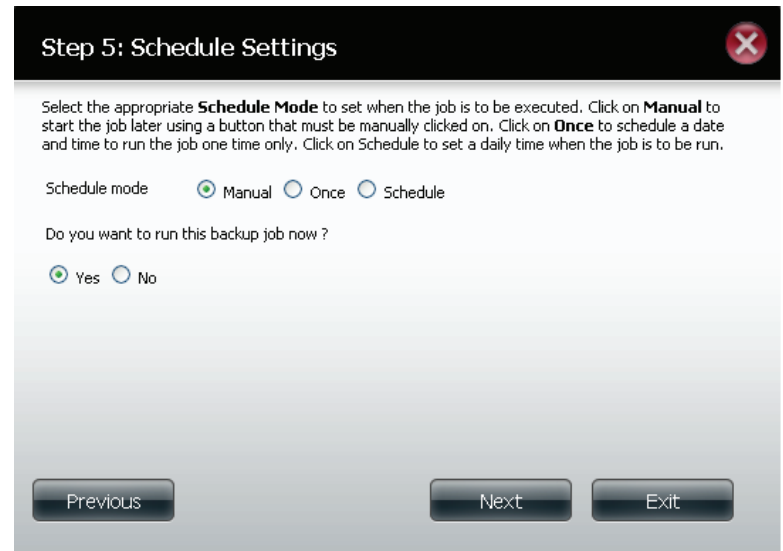
Use the **Browser** button to locate the path to the ShareCenter™ file location to be either backed up or restored to/from the AmazonS3 Cloud.



The screenshot shows a dialog box titled "Step 4: Local Settings" with a close button (X) in the top right corner. The main text reads: "In the **Local\_Path** field input the full path name to the folder that will be either the source or target directory for the job. For e.g. Volume\_1/backup\_docs". Below this text is a label "Local Path" followed by a text input field and a "Browser" button. At the bottom of the dialog are three buttons: "Previous", "Next", and "Exit".

### Step 5: Schedule Settings

Select the **Schedule Mode** for the job to be executed. You may select **Manual** (now or later from the job list), **Once** (at a predetermined time and day), or **Scheduled** (a predetermined time on a daily basis).



The screenshot shows a dialog box titled "Step 5: Schedule Settings" with a close button (X) in the top right corner. The main text reads: "Select the appropriate **Schedule Mode** to set when the job is to be executed. Click on **Manual** to start the job later using a button that must be manually clicked on. Click on **Once** to schedule a date and time to run the job one time only. Click on **Schedule** to set a daily time when the job is to be run." Below this text are three radio buttons labeled "Manual", "Once", and "Schedule", with "Manual" selected. Below the radio buttons is the text "Do you want to run this backup job now ?" followed by two radio buttons labeled "Yes" and "No", with "Yes" selected. At the bottom of the dialog are three buttons: "Previous", "Next", and "Exit".

Modify Button

Once a job is created, the **Modify** button is used to change any of the settings described in the **Create Button** section. Click on a created job in the Amazon S3 table so that its text turns red. Then click the **Modify** button to edit the job settings in a wizard that appears.

*Note: The Job Name cannot be modified.*

Delete Button

The **Delete** button is used to delete any backed up or restored job listed in the Amazon S3 table. Click on a created job in the Amazon S3 table so that its text turns red. Then click the **Delete** button to remove the job from your ShareCenter™ configuration.

Enable/Disable Column

This field of the jobs controls whether the job will execute or not. If the button shows a green triangle, clicking it enables the job to function. If the button shows the red square, clicking it disables the job from executing.



# mydlink

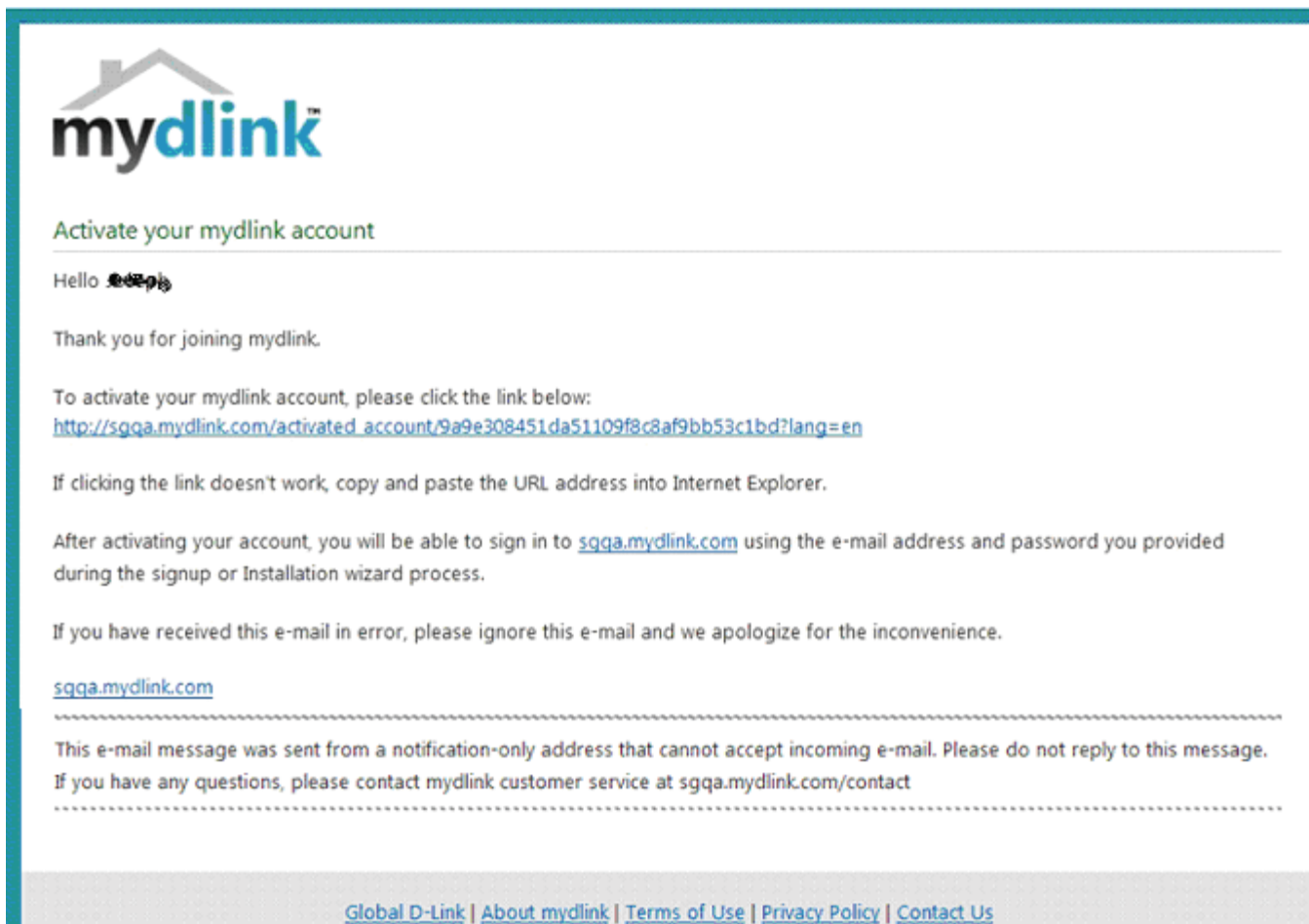
The mydlink service offers a cloud service to DNS-320L users. Connect to the mydlink service from any location and using any operating system. If you are not connecting to the service directly from the DNS-320L, open your browser and type in [www.mydlink.com](http://www.mydlink.com). Sign into your account on the home page.





## mydlink Verification

Check your e-mail box and click the weblink to activate mydlink account.



mydlink is verified

mydlink

FAQ | Support | Language: English ▼

Welcome, **John Doe** | [Sign out](#)

My Devices

My Profile

• Your e-mail address has been verified.

• Please check and update your profile information below.

Sign-in information

E-mail Address

john.doe@mydlink.com.tw

Verified

\*Current Password

change password

Required if making changes to profile.

Profile information

First Name

John

Last Name

Doe

Gender

☒ Male

☐ Female

Date Of Birth

1900

January

01

Language

English

Country

United States

Address

News

Support

Setup wizard

User manual

Firmware

Quick Installation Guide

GO

mydlink

mydlink on mobile...

D-Link ShareCenter™ DNS-320L User Manual

343

## mydlink Java Runtime Machine

Once you log into your account, you will need the Java Runtime machine. The screen provides directions in order for you to download it.

The screenshot displays the mydlink user interface. At the top left is the mydlink logo. To its right are links for 'FAQ | Support | Language: English'. Further right, it says 'Welcome, garth naude | Sign out'. Below the logo is a navigation bar with 'My Devices' and 'My Profile'. The 'My Devices' section shows a device named 'dlink-010009' with ID '44441519' and a warning icon. The main content area features a red error message: 'The Java Runtime Environment cannot be found.' Below this, it explains that the user needs to download and install the Java Runtime Environment. It also provides a link to 'How to enable the Java Runtime Environment?' and a 'Download JRE' button. On the right side, there is a 'News' section and a 'Support' section with links to 'Setup wizard', 'User manual', 'Firmware', and 'Quick Installation Guide'. At the bottom of the page, there are links for 'Global D-Link | About mydlink | Terms of Use | Privacy Policy | Contact Us' and a copyright notice: 'Copyright©2008-2012 D-Link Corp. All rights reserved.'

mydlink™

FAQ | Support | Language: English ▼

Welcome, **garth naude** | Sign out

**My Devices** My Profile

**dlink-010009**  
44441519

**The Java Runtime Environment cannot be found.**

You will need to download and install the Java Runtime Environment in order to view from your .  
If you ever installed the Java Runtime Environment, you may need to check the Java status in Java Preference setting.

[How to enable the Java Runtime Environment?](#)

**Download JRE**

**News**

**Support**

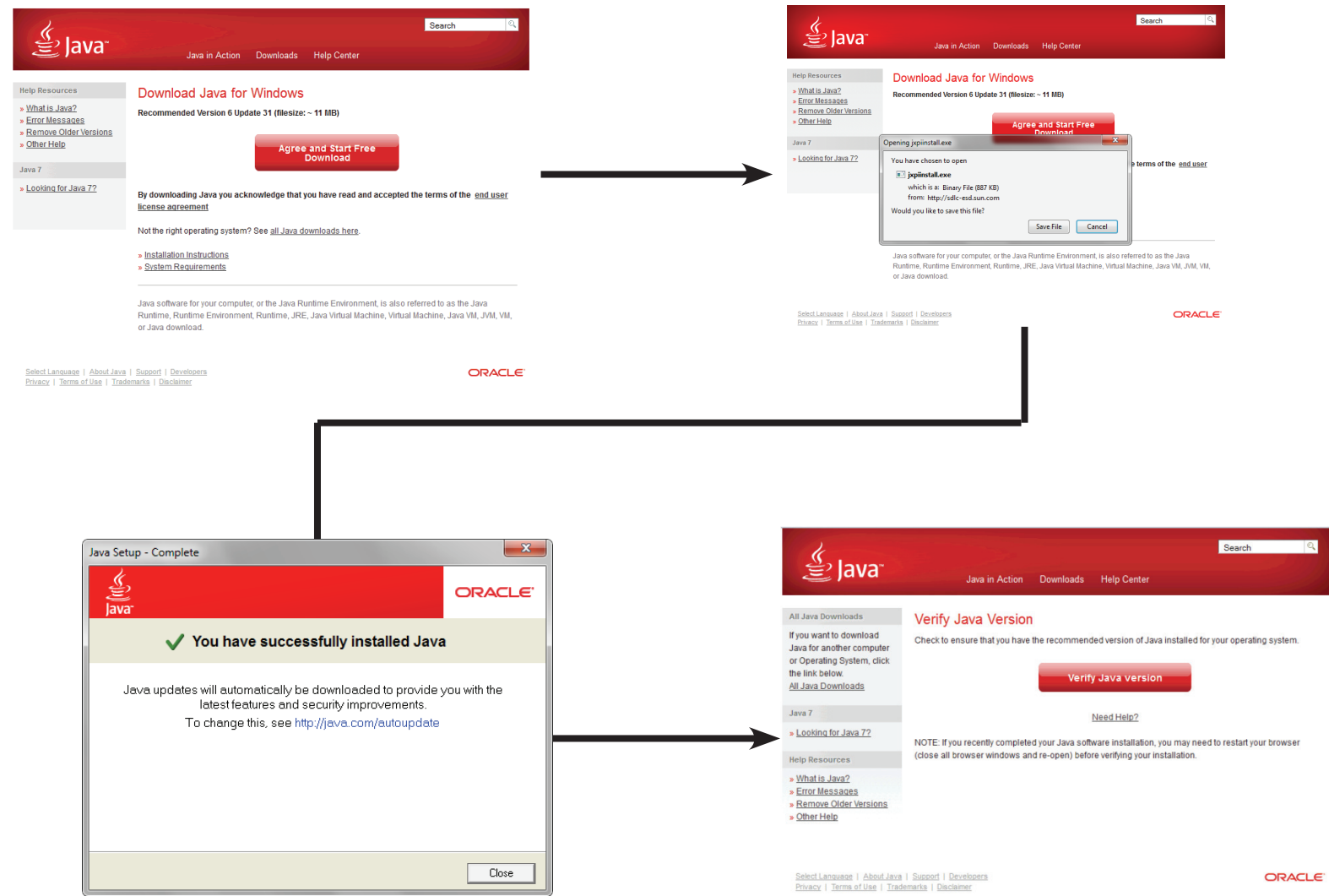
- Setup wizard
- User manual
- Firmware
- Quick Installation Guide

**GO**

**mydlink**  
*mydlink on mobile...*

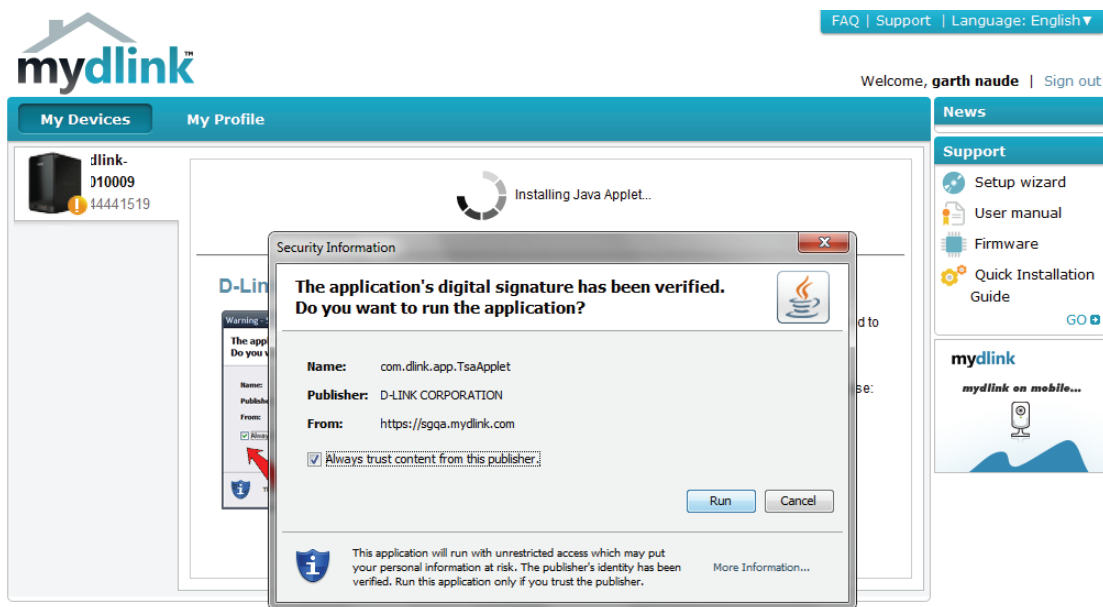
Global D-Link | About mydlink | Terms of Use | Privacy Policy | Contact Us  
Copyright©2008-2012 D-Link Corp. All rights reserved.

The Java Runtime machine takes a few steps. Follow the instructions:

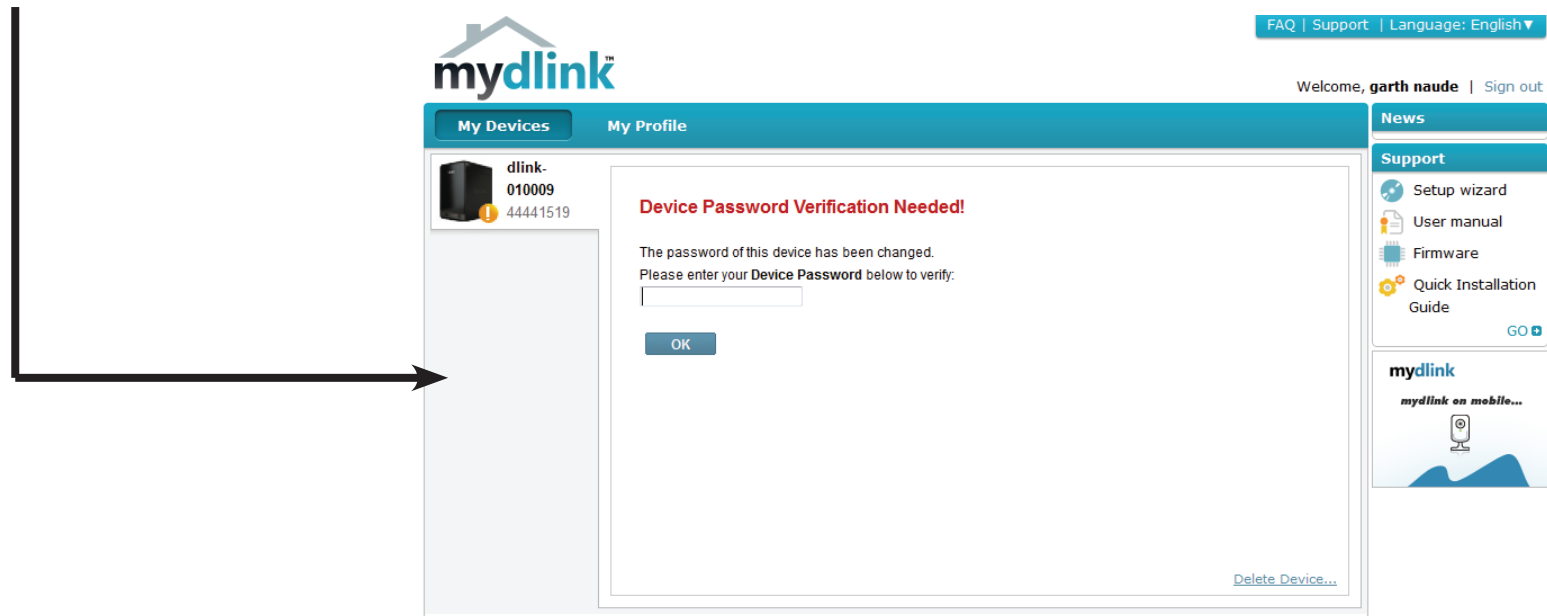


## Section 4 - Configuration

After the Java Runtime machine is installed, run the mydlink application and enter the password.



Global D-Link | About mydlink | Terms of Use | Privacy Policy | Contact Us  
Copyright©2008-2012 D-Link Corp. All rights reserved.



Global D-Link | About mydlink | Terms of Use | Privacy Policy | Contact Us  
Copyright©2008-2012 D-Link Corp. All rights reserved.

Once you are connected you can view your existing storage on the cloud and the DNS-320L. You can also upload, download files using your browser, create new folders, rename folders and delete folders.

The screenshot displays the mydlink web interface. At the top, there is a navigation bar with the mydlink logo, a 'Welcome, edison chou' message, and a 'Sign out' link. Below the navigation bar, there are two tabs: 'My Devices' and 'My Profile'. The 'My Devices' tab is active, showing a list of devices on the left. The first device is a DIR-905L with ID 44443144. The second device is a link-00B6 with ID 14442414. The main content area shows the 'File' and 'Settings' tabs. The 'File' tab is active, displaying a 'Home' button and a 'Channel' button. Below these, there are two storage volumes: 'Volume\_1' and 'Volume\_2'. 'Volume\_1' shows 16% used (74GB of 455GB). 'Volume\_2' shows 28% used (128GB of 455GB). On the right side, there is a vertical banner for 'D-Link Access Anywhere' with a large 'D' logo and text stating 'With iOS and Android mobile apps, you can check your devices on-the-go'. Below the banner is an image of a hand holding a smartphone displaying the mydlink app. At the bottom of the interface, there are three sections: 'News', 'Top 5 FAQs', and a product advertisement for the DIR-826L Wireless N600 Dual-band Gigabit Cloud Router. The 'Top 5 FAQs' section lists five questions: 'How do I update my device's firmware manually?', 'Which device does the mydlink website support?', 'How do I install the mydlink lite app on my Android device?', 'Which web browsers can I use with mydlink?', and 'How do I sign up for a mydlink account?'. The product advertisement shows the DIR-826L router and the 'cloud' logo.

mydlink

FAQ | Support | Language: English ▼

Welcome, edison chou | Sign out

My Devices My Profile

DIR-905L 44443144

link-00B6 ... 14442414

File Settings

Home Channel

Volume\_1

16% used (74GB of 455GB)

Volume\_2

28% used (128GB of 455GB)

D-Link

Access Anywhere

With iOS and Android mobile apps, you can check your devices on-the-go

News

Top 5 FAQs

- How do I update my device's firmware manually?
- Which device does the mydlink website support?
- How do I install the mydlink lite app on my Android device?
- Which web browsers can I use with mydlink?
- How do I sign up for a mydlink account?

GO


D-Link

DIR-826L

Wireless N600 Dual-band Gigabit Cloud Router

cloud

Click **Volume 1** to see its contents. Here you can create a **New Folder**, **Upload and Download files**, **Delete** and **Rename** files.




[FAQ](#) | [Support](#) | [Language: English ▼](#)


Welcome, **edison chou** | [Sign out](#)

My Devices

My Profile



DIR-905L  
44443144



dlink-00B6 ...  
44442414

File

Settings

Home > Volume\_1

Channel

Upload

Download

New Folder

Delete

Rename


↻

16% used (74GB of 455GB)


	Name ▼	Type	Size	Modified Date & Time
<input checked="" type="checkbox"/>	01 Can't Sing a Different Son ...	Other	3172 KB	2008-06-11 11:36:18
<input type="checkbox"/>	01 Love In This Club.m4p	Other	4143 KB	2008-06-11 11:43:26
<input type="checkbox"/>	01_Ultraviolet_Trailer_DivX 5 ...	Other	19174 KB	2008-07-22 16:00:00
<input type="checkbox"/>	02 跳痛.Ape	Other	21914 KB	2010-06-25 09:13:55
<input type="checkbox"/>	02 跳痛.Flac	Other	26326 KB	2010-06-25 09:12:31
<input type="checkbox"/>	02 跳痛.Ogg	Other	3494 KB	2010-06-25 09:07:07
<input type="checkbox"/>	02_IceAge2_Trailer_DivX 5( ...	Other	10727 KB	2008-07-22 16:00:00
<input type="checkbox"/>	03 Canadian Idiot (Parody of ...	Other	2469 KB	2008-06-11 11:33:46
<input type="checkbox"/>	03 Kelsey.m4p	Other	3422 KB	2008-06-11 11:36:44
<input type="checkbox"/>	03_公公婆婆痛.Wav	Music	31568 KB	2012-12-28 05:53:30
<input type="checkbox"/>	03_GetRichorDieTryin_DivX ...	Other	10119 KB	2008-07-22 16:00:00
<input type="checkbox"/>	04_Garfield_ATailofTwoKittie ...	Other	11984 KB	2008-07-22 16:00:00
<input type="checkbox"/>	05_ThePinkPanther_DivX 5( ...	Other	19953 KB	2008-07-22 16:00:00

D-Link

Access Anywhere

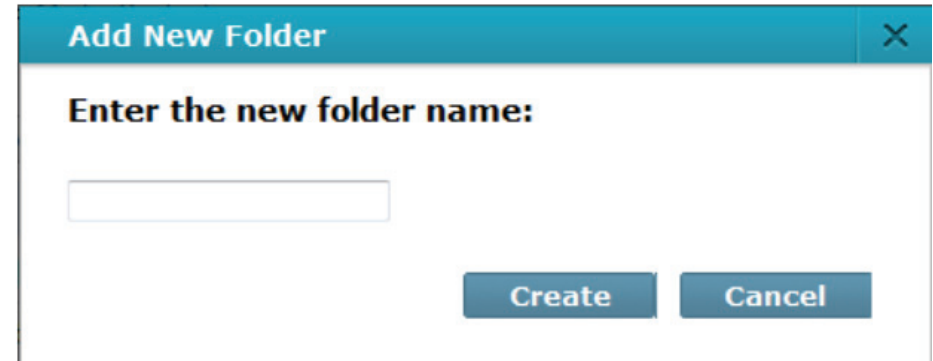


With IOS and Android mobile apps, you can check your devices on-the-go



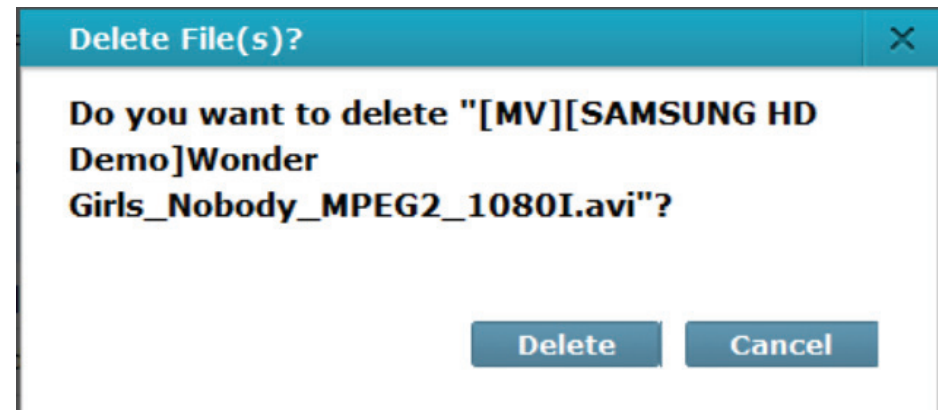
## Creating a New Folder

Click the **New Folder** button to create a new folder. Enter a name for the folder and click **Create**.



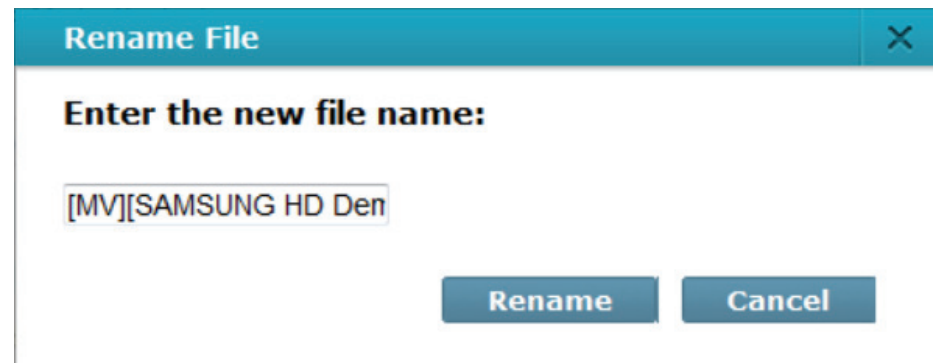
The dialog box has a title bar with the text "Add New Folder" and a close button (X) on the right. The main content area contains the text "Enter the new folder name:" followed by a text input field. At the bottom right, there are two buttons: "Create" and "Cancel".

To delete a folder, click the checkbox next to the file you wish to delete. Click the Delete button. A confirmation window will appear for you to confirm the deletion. Click Delete to proceed.



The dialog box has a title bar with the text "Delete File(s)" and a close button (X) on the right. The main content area contains the text "Do you want to delete "[MV][SAMSUNG HD Demo]Wonder Girls\_Nobody\_MPEG2\_1080I.avi"?" followed by two buttons: "Delete" and "Cancel".

To rename a file or folder, click the checkbox next to the file/folder you wish to rename. Click the Rename button. A confirmation window will appear for you to rename the file. Enter a new name and click Rename.




The dialog box has a title bar with the text "Rename File" and a close button (X) on the right. The main content area contains the text "Enter the new file name:" followed by a text input field containing the text "[MV][SAMSUNG HD Den". At the bottom right, there are two buttons: "Rename" and "Cancel".



## mydlink Settings Details

Under General Information you can view the properties of your NAS. On display is the Device Name, mydlink Number, Model Name, MAC address (which is associated with your account and NAS), and Activation time and date. Also viewable is the router you are using and file settings.





FAQ | Support | Language: English ▼

Welcome, **Neo Chen** | [Sign out](#)

**My Devices**


**My Profile**

**dlink-00B6 ...**  
44442428

**DIR-605L**  
20315122

**File**


**Settings**

 **General Information**

**Device Name:**

dlink-00B6D8


**mydlink No.:**




**Model Name:**


DNS- 320L

**MAC:**



**Device activated on:**




 **More Settings**

You can remove your **dlink-00B6D8** from your account by clicking the **Remove Device** button.


Remove Device

**D-Link**

**Access Anywhere**



With iOS and Android mobile apps, you can check your devices on-the-go



### ShareCenter™ NAS Status

Here you can see the online status of your ShareCenter™ NAS when connected to mydlink. Your online status might be one of the following:



A green checkmark indicates that your ShareCenter™ NAS is online and ready for use.



A yellow exclamation point indicates that your ShareCenter™ NAS is online, but the mydlink password has changed. You will need to enter your new mydlink password to access your ShareCenter NAS again.



A red x indicates that your ShareCenter™ NAS is offline and currently cannot be accessed remotely.

If your ShareCenter™ is offline, try the following:

- Check to make sure that the internet connection to your ShareCenter™ NAS is working properly.
- Try restarting your internet router.
- Check your ShareCenter™ NAS cable connections and make sure they are secure.
- Check to make sure that the LED on your ShareCenter™ NAS is lit solid blue.

If you still cannot access your ShareCenter™ NAS, reset your ShareCenter™ NAS and run the DNS-320L Setup Wizard again from the CD-ROM included in your package.

### Deleting a mydlink device

Select the device you wish to delete. A warning message appears for you to verify your deletion.

Enter your admin password to delete the device. Click **Delete Device** to proceed. An acknowledgement message appears to confirm the deletion.

#### Delete Device

The following device will be deleted from your account:

**Device name:** DNS-320L

**mydlink No.:** 44441518

**Device model:** DNS-320L

#### Warning!

- Remove the device will also remove any mydlink functions related to the device.

Please enter your password to proceed:

Password

Cancel

Delete Device

#### Delete Device

The following device has been successfully deleted from your mydlink account:

**Device name:** DNS-320L

**mydlink No.:** 44441518

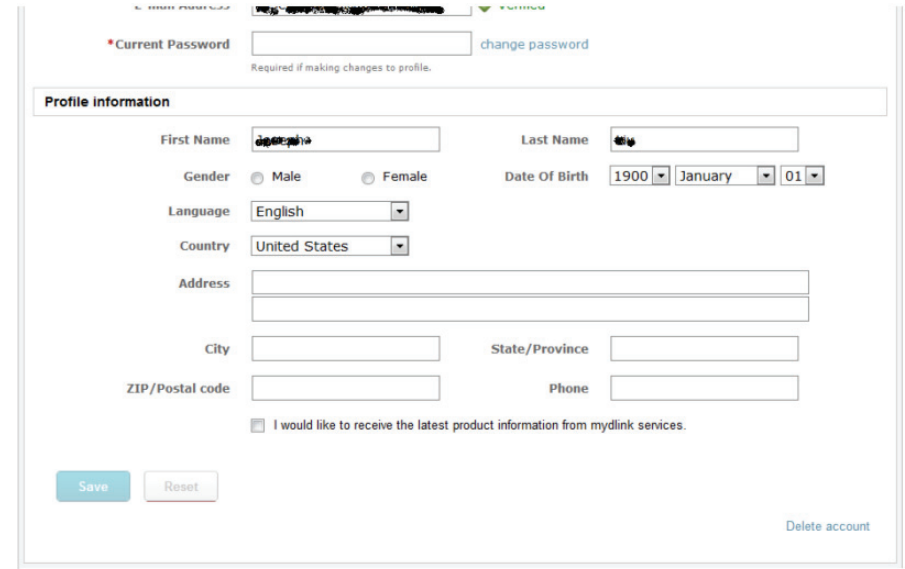
**Device model:** DNS-320L

To add the device to mydlink account and enable remote access to it, please run the device's Setup Wizard again. You can download the Setup Wizard from the [Support](#) page.

Done

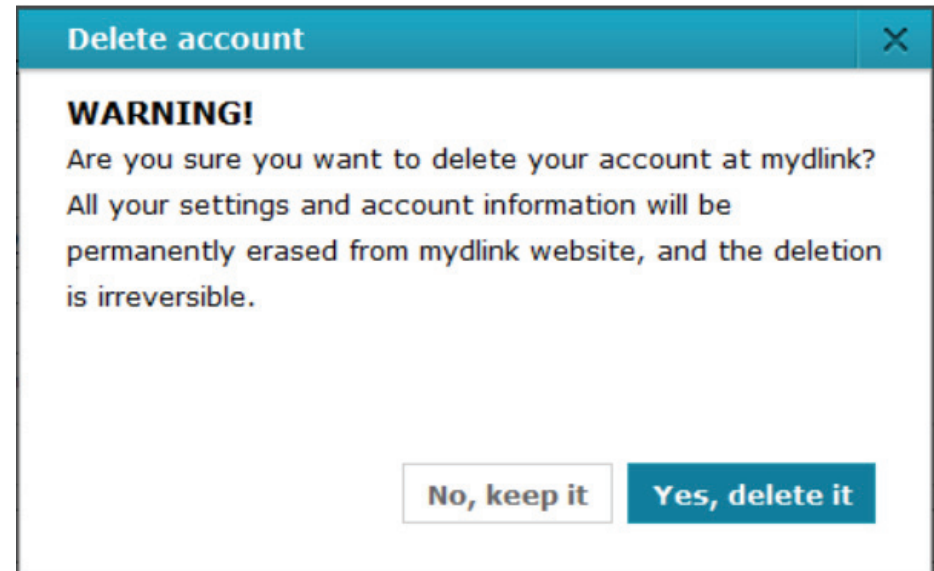
## Deleting a mydlink account

Under **Profile Information**, click the **Delete account** link at the bottom.



The screenshot shows the 'Profile information' section of a mydlink account page. At the top, there is a 'Current Password' field and a 'change password' link. Below this is the 'Profile information' section with fields for First Name, Last Name, Gender (Male/Female), Date Of Birth (year, month, day), Language, Country, Address, City, State/Province, ZIP/Postal code, and Phone. There is also a checkbox for receiving product information. At the bottom of the form are 'Save' and 'Reset' buttons. A 'Delete account' link is located at the bottom right of the page.

A warning message appears to ask you if you want to delete the account. Select **No, keep it** to do nothing or click **Yes, delete it** to delete the account.

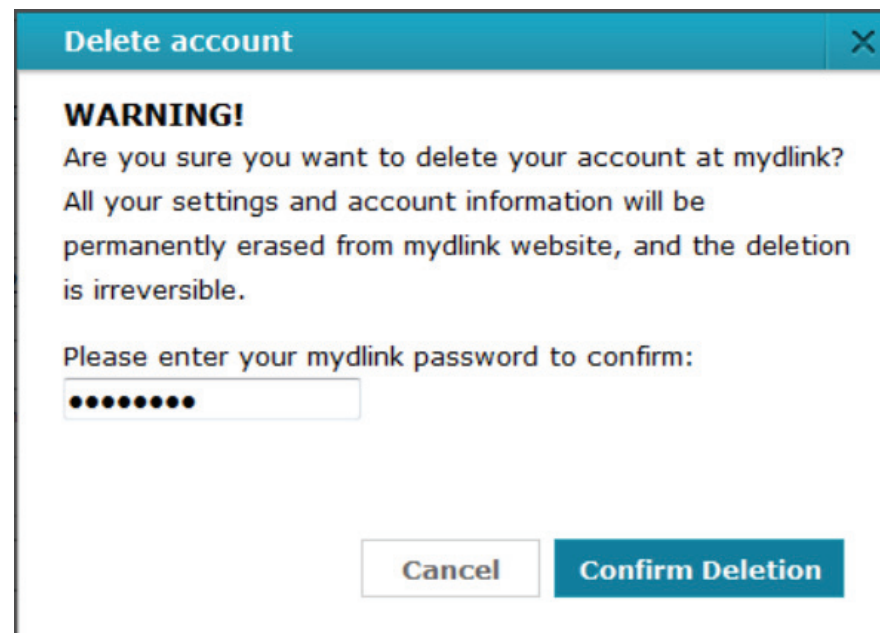


The screenshot shows a 'Delete account' warning dialog box. The title bar is blue with the text 'Delete account' and a close button. The main content area has a white background with a blue border. It contains a 'WARNING!' section followed by the text: 'Are you sure you want to delete your account at mydlink? All your settings and account information will be permanently erased from mydlink website, and the deletion is irreversible.' At the bottom, there are two buttons: 'No, keep it' and 'Yes, delete it'.

## Section 4 - Configuration

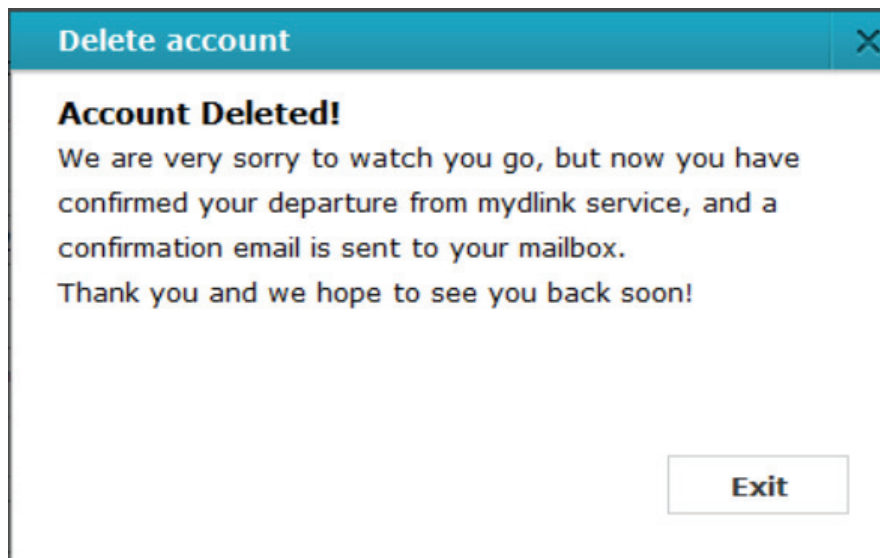
In order to delete the mydlink account you need to enter your password details. Enter your details and then click Confirm Delete.

Click Cancel to revert back and keep your account in tact.



A dialog box titled "Delete account" with a close button (X) in the top right corner. The main text reads: **WARNING!** Are you sure you want to delete your account at mydlink? All your settings and account information will be permanently erased from mydlink website, and the deletion is irreversible. Below this, it says: Please enter your mydlink password to confirm: followed by a password input field with ten dots. At the bottom right, there are two buttons: "Cancel" and "Confirm Deletion".

The Account is deleted.



A dialog box titled "Delete account" with a close button (X) in the top right corner. The main text reads: **Account Deleted!** We are very sorry to watch you go, but now you have confirmed your departure from mydlink service, and a confirmation email is sent to your mailbox. Thank you and we hope to see you back soon! At the bottom right, there is an "Exit" button.

### The mydlink Access NAS App

Access your files anytime, anywhere with your ShareCenter Cloud NAS and the mydlink Access-NAS app. Stream your stored photos, documents, music, and movies directly to your iOS and Android devices over 3G or Wi-Fi.



### The mydlink Access NAS App - Features

The mydlink Access-NAS app enables you to remotely connect to your ShareCenter Cloud NAS over the Internet to open your documents, browse your photo albums, listen to your music collection, or watch your favorite shows at home or on the road. Download files directly to your mobile device for offline access, or back up your photos and videos to your ShareCenter Cloud NAS. The mydlink Access-NAS app makes it easy to access and manage your files no matter where you are!

#### **iOS Features:**

- Access files stored on your ShareCenter Cloud NAS through the Internet
- Stream music and movie files to your iOS device
- Browse through your photos, or view a slideshow of all your images
- Open documents such as Microsoft Office files and PDFs
- Save files to your mobile device for offline playback
- Back up photos and images from your Camera Roll to your ShareCenter Cloud NAS
- Search for specific files on your ShareCenter Cloud NAS or on your iOS device
- Rename and delete your files
- Supports "Open in" option to open your files with different apps
- Supports AirPlay for playback of your media on other devices
- Supports AirPrint to print out your documents
- Monitor disk usage and status

#### **Android Features:**

- Access files stored on your ShareCenter Cloud NAS
- Stream music and movie files
- Browse through your photos, or view slideshows
- Open Office files and PDFs
- Save files to your Android device for offline playback
- Back up photos and images to your ShareCenter Cloud NAS
- Search your ShareCenter Cloud NAS or Android device for files
- Rename and delete files
- Open files in different apps
- Monitor disk usage and status

### The mydlink Access NAS App - Compatibility

mydlink Access-NAS is compatible with the following models:

- DNS-320L ShareCenter 2-Bay Cloud Network Storage Enclosure
- DNS-320LW ShareCenter 2-Bay Cloud Network Storage Enclosure
- DNS-327L ShareCenter 2-Bay Cloud Network Storage Enclosure
- More coming soon!

**Note:** If you are using a DNS-325 or DNS-345, please use the mydlink Cloud app.



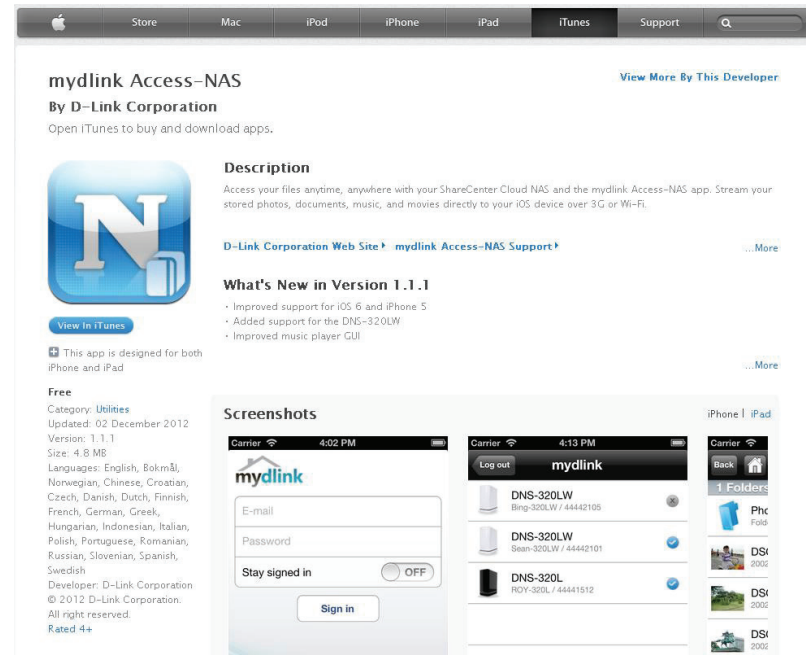


## Section 4 - Configuration

You can download the app from below link:

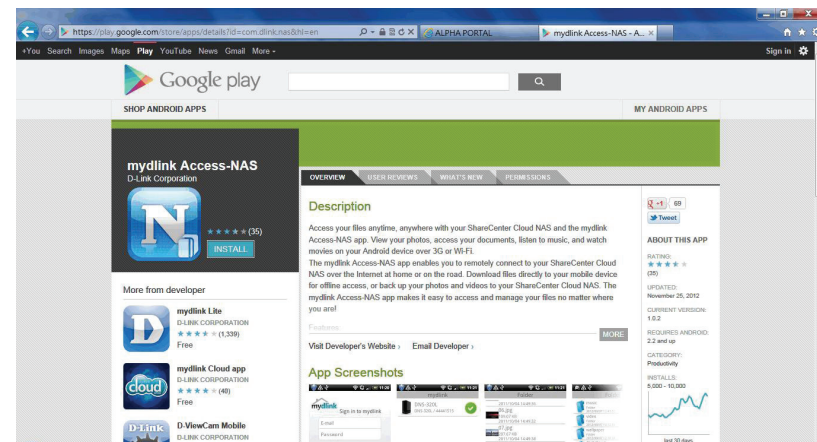
### iOS (iTunes App Store)

<https://itunes.apple.com/us/app/mydlink-access-nas/id531078699?l=zh&mt=8>



### Android (Google Play)

<https://play.google.com/store/apps/details?id=com.dlink.nas&hl=en>



# Knowledge Base

## What is RAID?

RAID, short for Redundant Array of Independent Disks, is a combination of two or more disks with the aim of providing fault tolerance and performance improvement. There are several different levels of RAID, with each one providing a different method of sharing or distributing data amongst the drives. The DNS-320L supports Standard, JBOD, RAID 0, and RAID 1.

**Standard** Standard provides a single volume for each drive.

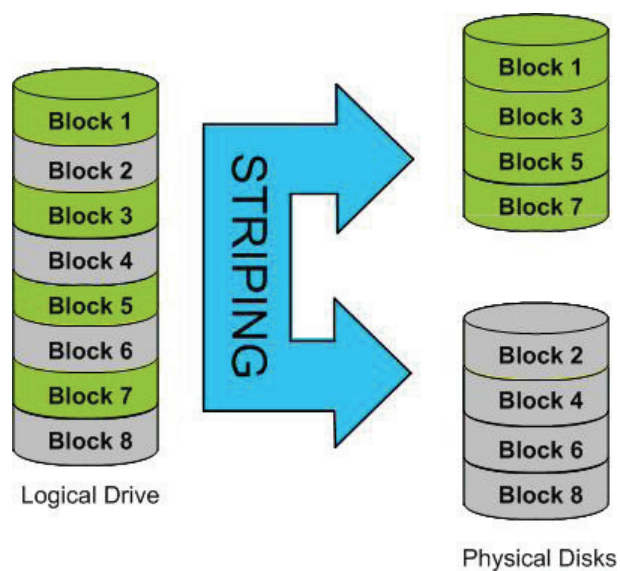
Although performance is improved, the lack of any RAID or mirroring means that if one drive fails, all data on the volume will be lost.

**JBOD** JBOD allows you to create a large virtual disk drive by concatenating two or more smaller drives together.

It offers no redundancy and limited data protection..

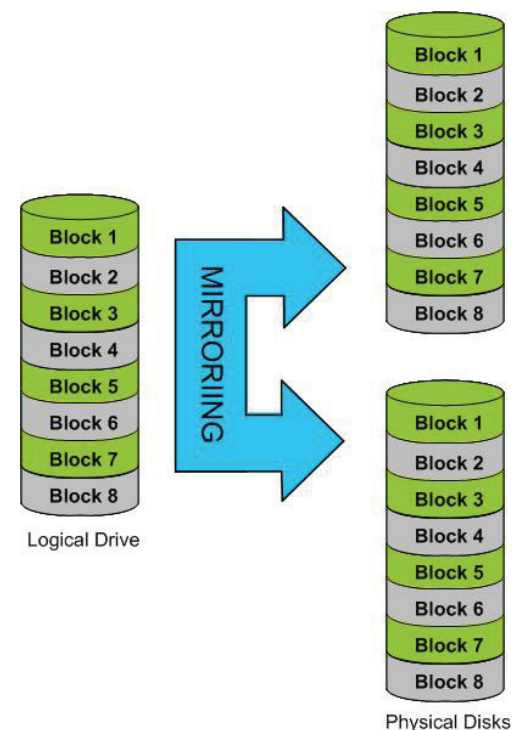
**RAID 0** RAID 0 provides data striping, which spreads out blocks of data over all the drives, but does not provide data redundancy.

Although performance is improved, the lack of fault tolerance means that if one drive fails, all data in the array will be lost.



**RAID 1** RAID 1 provides mirroring over multiple disks, with the same read/write speed of a single disk. A RAID 1 array can only be as large as it's smallest member disk.

Because the data is stored on multiple disks, RAID 1 provides fault tolerance and protection, in addition to performance advantages.



## RAID Options

Here is a list of the RAID options available on the ShareCenter™ DNS-320L.

**Standard RAID** - creates a single volume for one drive or more drives.

### Standard

Creates separate volumes (or one volume if only one hard drive is present). Each hard drive is its own volume.

**JBOD** - allows you to create a large virtual disk drive by concatenating two or more smaller drives together. The individual hard drives that makes up a JBOD RAID can be different sizes and manufacturers. The total size of the JBOD RAID is the combined total of all the individual drives in the set.

### JBOD

Combines 2 hard drives in a linear fashion to create one large volume thereby maximizing available disk space.

**RAID 0** - allows you to assign two or more disks as a striped set. Once you create the striped set, you will see it as a single disk drive. But when you write data to the RAID 0 striped set, the data will be distributed across all of the drives that make up the set. Because each disk has less to do, it takes less time to write the data. The same is true when reading data; instead of a single disk having to seek out and then send a large block of data, multiple disks each stream their part of the data stream. As a result, RAID 0 striped sets can provide a dynamic increase in disk performance.

### RAID 0

Stripes data across 2 or more drives increasing performance.

**RAID 1** - allows you to assign two disks as a mirrored set. Once you create the mirrored set, you will see it as a single disk drive. But when you write data to the mirrored set, it will duplicate the data across all members of the set. This ensures that your data is protected against loss if any hard drive in the RAID 1 set fails. In fact, as long as any single member of the set remains functional, you will continue to operate normally, with complete access to your data.

**RAID 1**

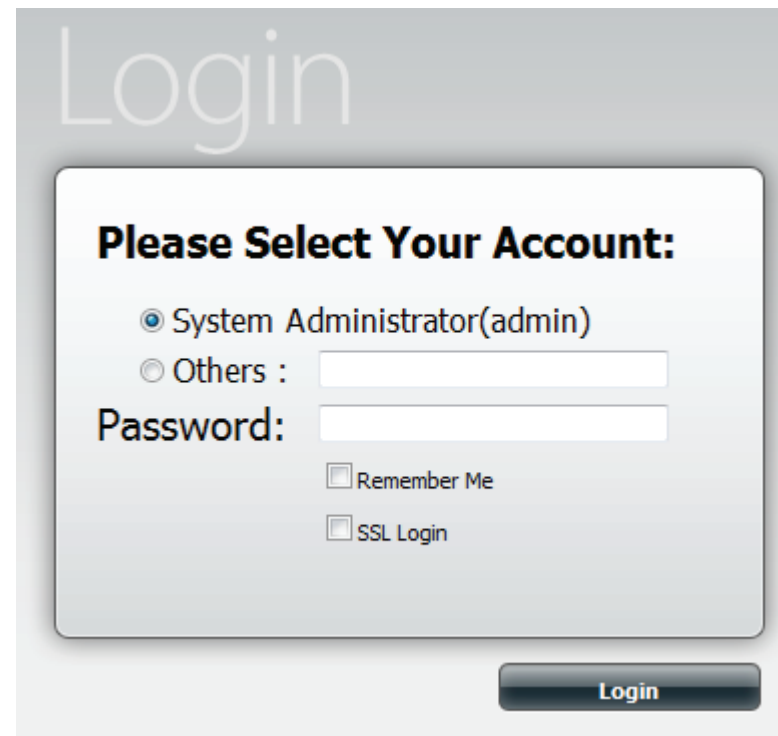
Copies exactly one of the data disks and produces a mirrored copy on another disk.

# UPS Connectivity

The DNS-320L supports USB UPS, giving users the ability to share the UPS on their local network and protect from an abnormal shutdown due to a power failure. Connect a UPS to the USB port on the back of the ShareCenter™.

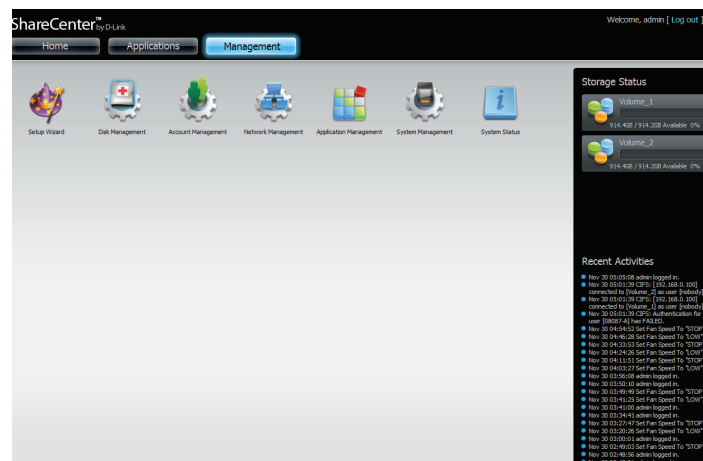
## Standalone and Network Master Mode:

Log into the DNS-320L.



The image shows a web-based login interface for the DNS-320L device. The background is a light gray with the word "Login" in a large, faint font at the top. In the center, there is a white rounded rectangle with a gray border. Inside this rectangle, the text "Please Select Your Account:" is displayed in bold. Below this text, there are two radio button options: "System Administrator(admin)" which is selected, and "Others :". To the right of "Others :" is a text input field. Below these options is a "Password:" label followed by another text input field. At the bottom right of the white rectangle, there are two checkboxes: "Remember Me" and "SSL Login". Below the white rectangle, centered, is a dark gray button with the word "Login" in white text.

Click **Management**.

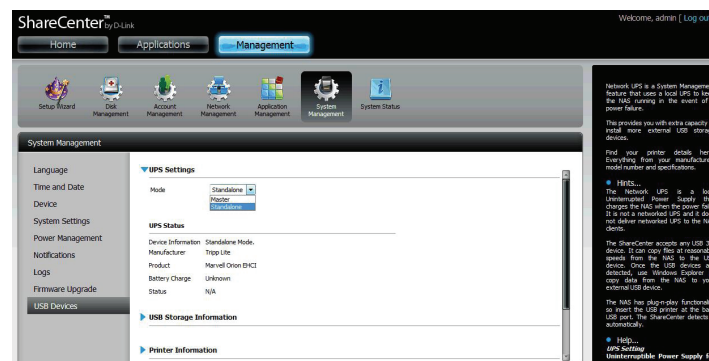


Click **System Management** and then **USB Devices**.

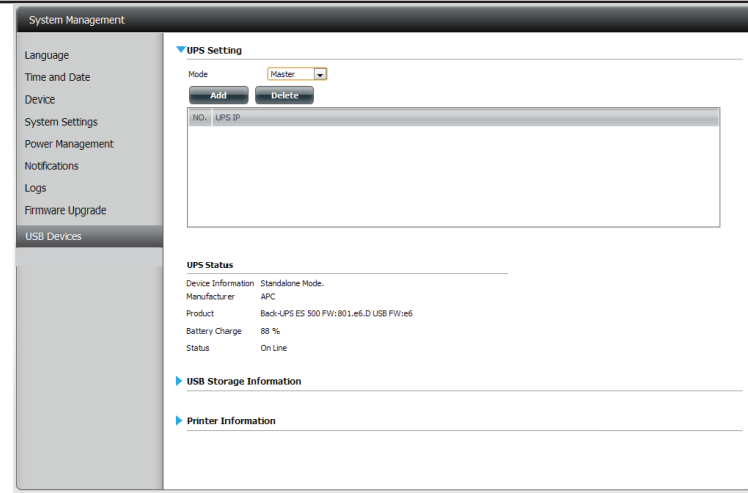
Click the blue arrow next to UPS Settings. There are two modes - **Standalone** and **Master**.

Select **Standalone** to use the UPS only on the DNS-320L or select **Master** to share the UPS with the network UPS slaves.

The UPS Status screen shows the mode, manufacturer, product type, battery charge meter, and status.



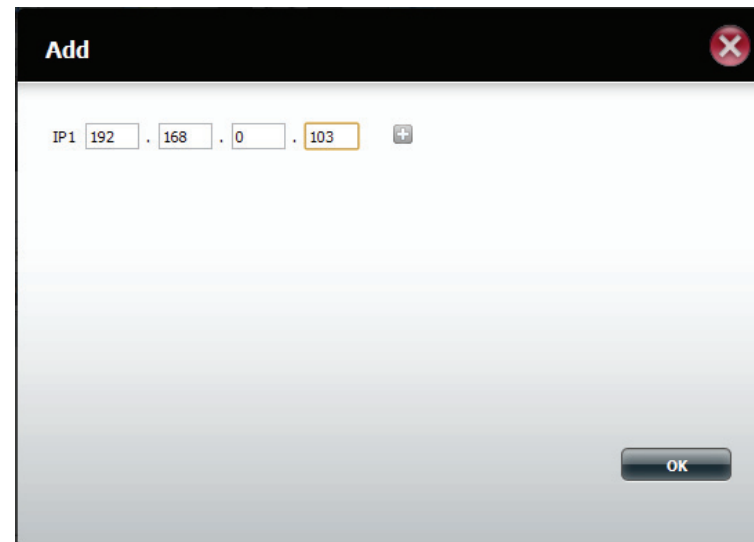
Under **Mode**, select **Master** from the drop-down list and then click **Add**.



Enter the IP address of the other UPS slave on the network.

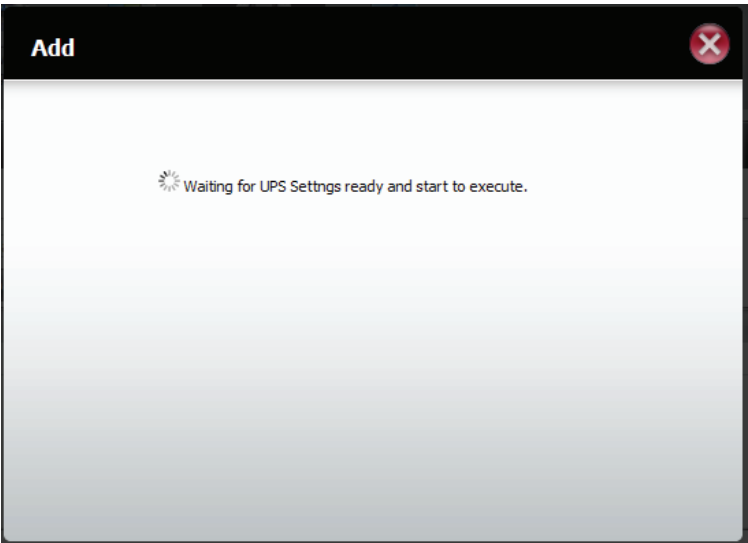
Click the + button to add more IP addresses.

Make sure the DNS-320L and the UPS slaves are on the same physical network.



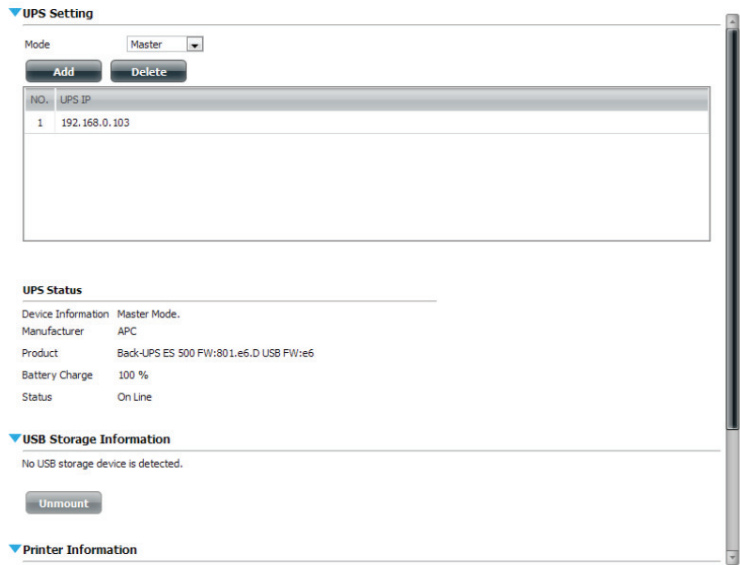


Once you have entered an IP address, the system will check its database for IP address records.



The UPS Settings table will display the IP address(es) you added.

Your DNS-320L is now setup as the network master to notify the network slaves about critical power status.



## Deleting a UPS Slave

Under **Management > System Management > USB Devices > UPS Setting**, select the IP address. Your selection will turn red.

Click **Delete**.

▼ UPS Setting

Mode: Master

Add Delete

NO.	UPS IP
1	192.168.0.103
2	192.168.0.101

UPS Status

Device Information: Standalone Mode.

Manufacturer: APC

Product: Back-UPS ES 500 FW:v801.e6.D USB FW:e6

Battery Charge: 100 %

Status: On Line

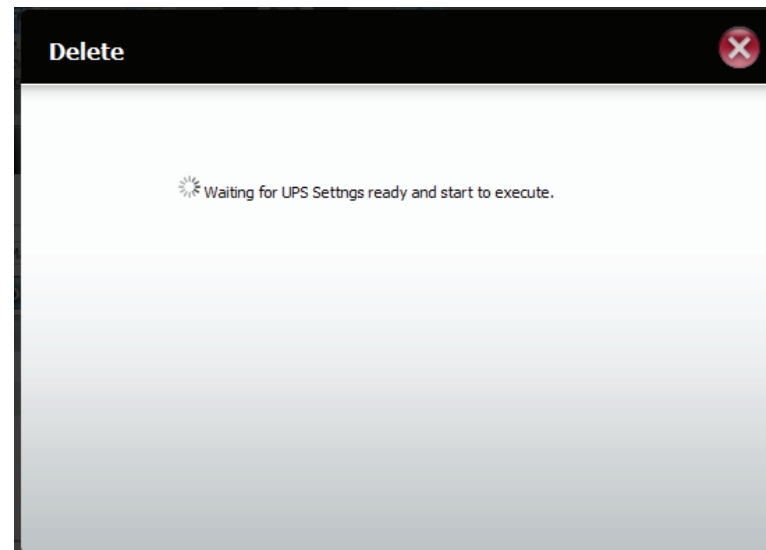
▼ USB Storage Information

No USB storage device is detected.

Unmount

▶ Printer Information

The DNS-320L will process your request.



The IP address will no longer be listed in the table.

▼ UPS Setting

Mode

Master

Add

Delete

NO.	UPS IP
1	192.168.0.101

UPS Status

Device Information

Master Mode.

Manufacturer

APC

Product

Back-UPS ES 500 FW:801.e6.D USB FW:e6

Battery Charge

100 %

Status

On Line

▼ USB Storage Information

No USB storage device is detected.

Unmount

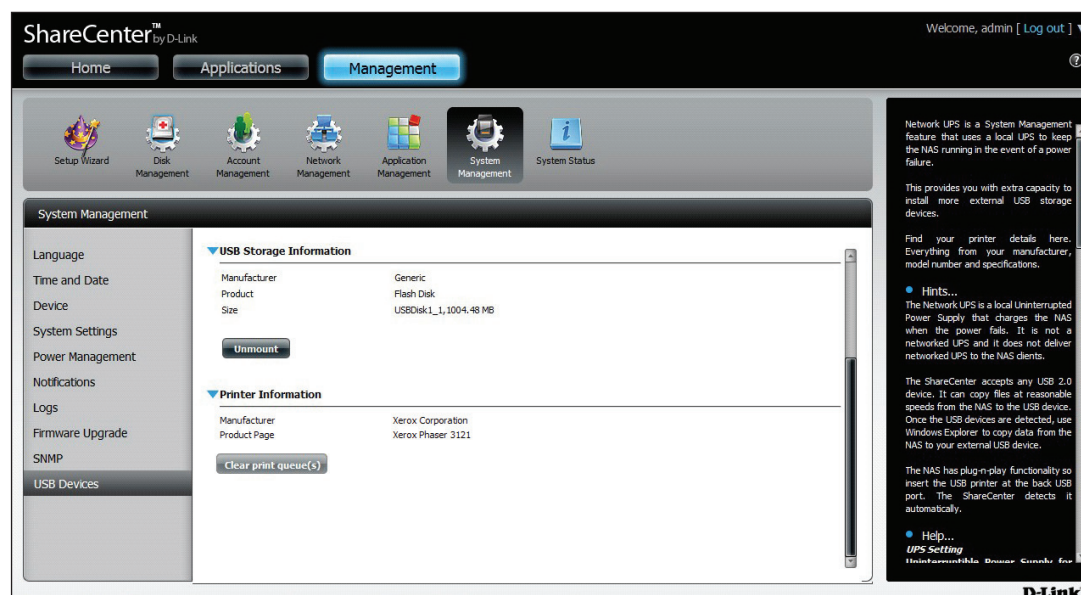
▶ Printer Information

# USB Print Server

The device features a built-in USB print server, giving users the ability to share a printer on their local network. Connect a USB printer to the USB port on the back of the device. It is important to ensure that any of the printer manufacturer's drivers are already installed or available on any computer you want to print from.

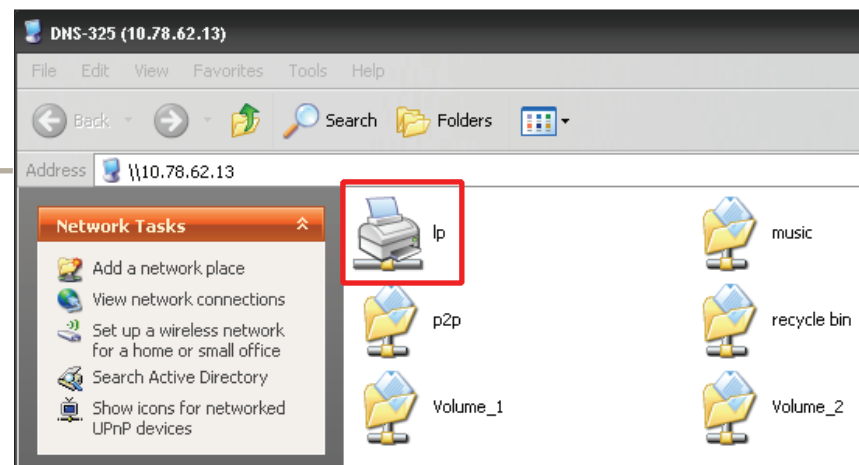
**Note:** Only the print function is supported. The device does not support the copy and scan functions of Multi-Function Printers.

To add a printer, connect your printer via USB cable to the USB port of your device:



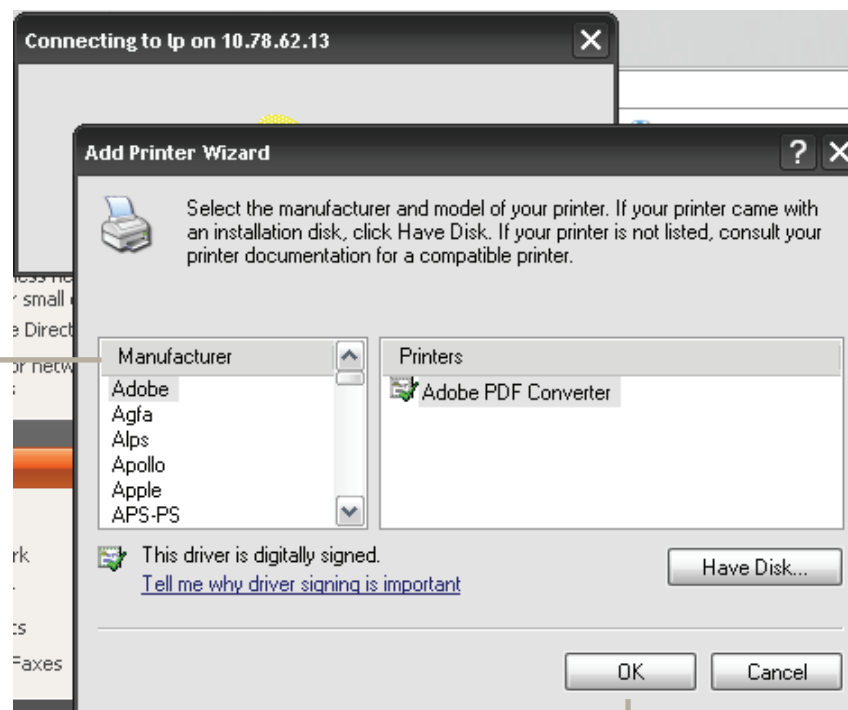
The printer should appear in the USB Devices menu of the System Management icon.

Connect to your device with Samba and then double-click the lp icon.

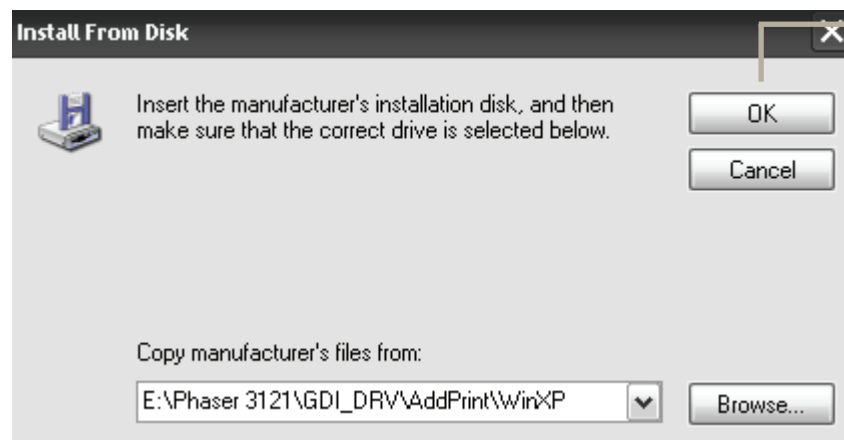


The Windows® Add Printer Wizard will launch:

Select the printer driver from the installed Manufacturer list or use the **Have Disk** button to browse for the printer driver file.

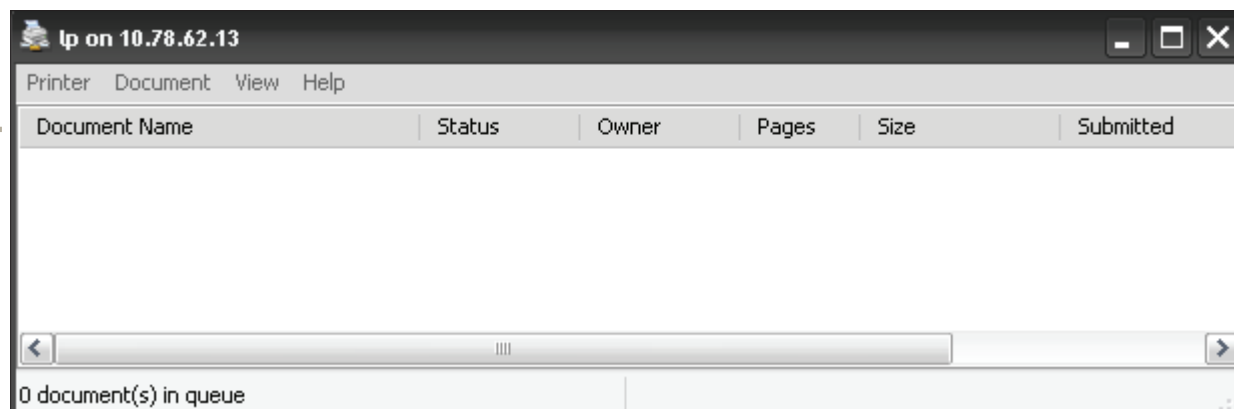


Click **OK** to continue.



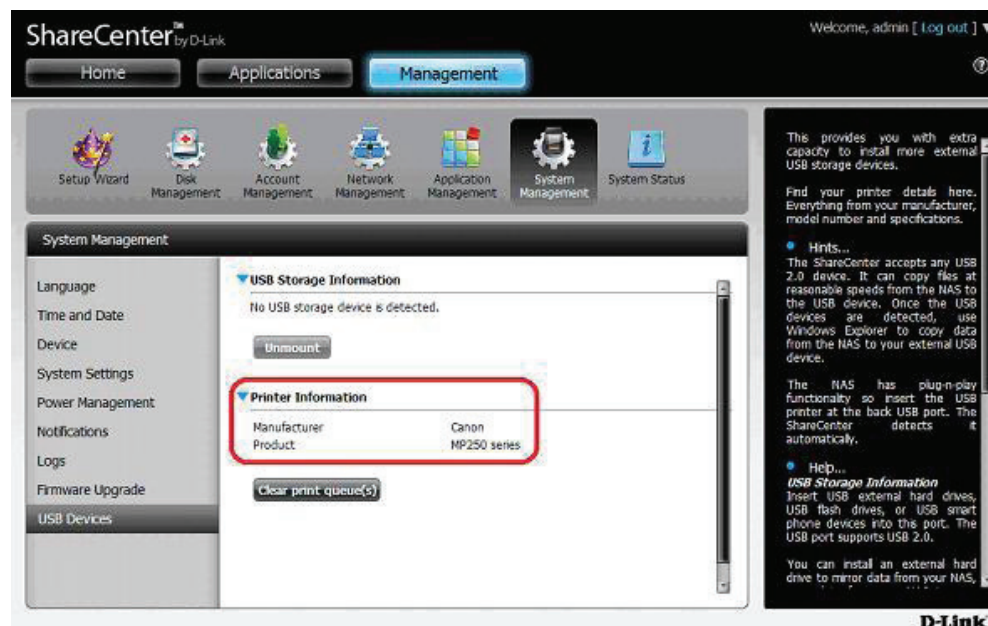
Once you have selected the proper driver as shown in the browse list then click **OK** to install the printer.

The printer is now installed and the printer queue will appear.

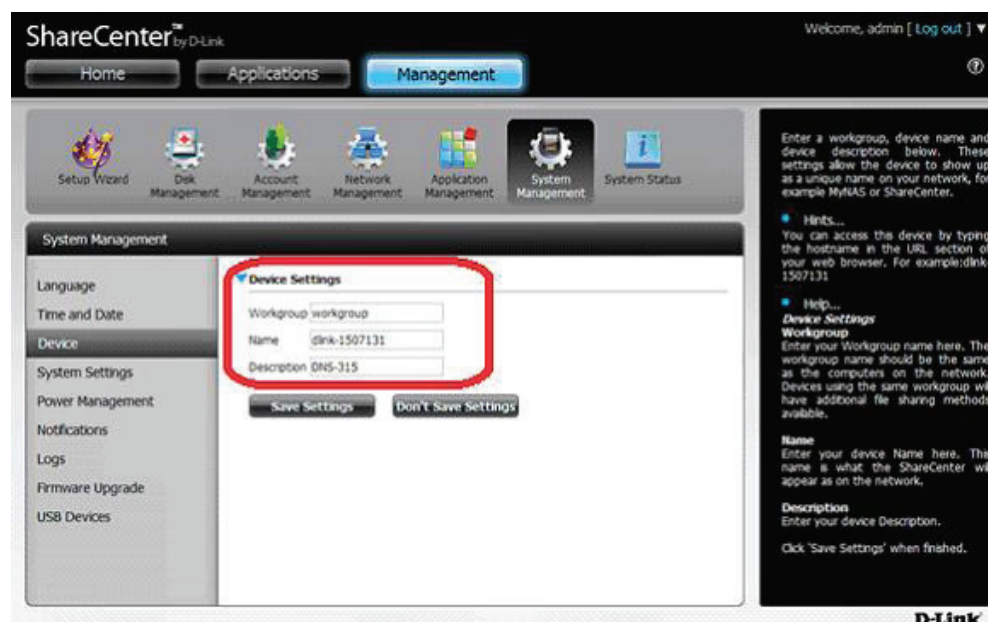


# Setting up a printer using Mac OS 10.8

Go to Management, System Management, USB Devices to view the printer attached to your NAS.



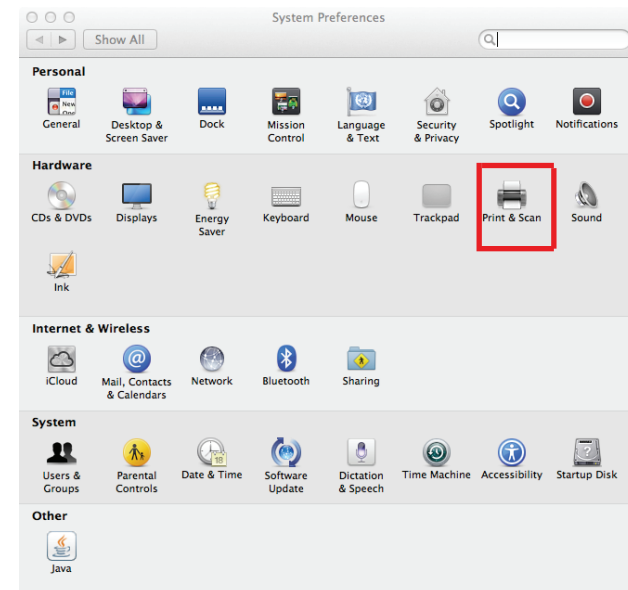
Check the device settings, under System Management, Device, Device Settings.



# Setting up a printer using Mac OS 10.8

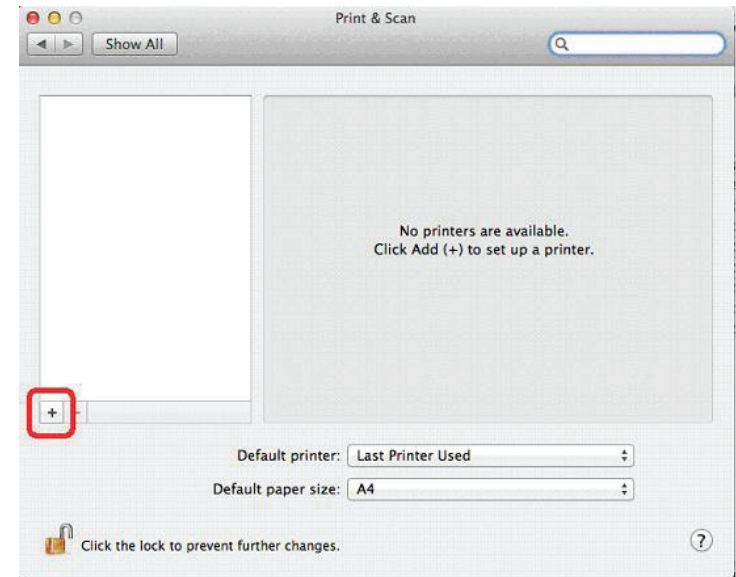
Download the drivers from the respective Printer manufacturers and install it on your Mac. (You need to select the proper firmware for Mac OS 10.8)

Go to System Preferences, Print & Scan.

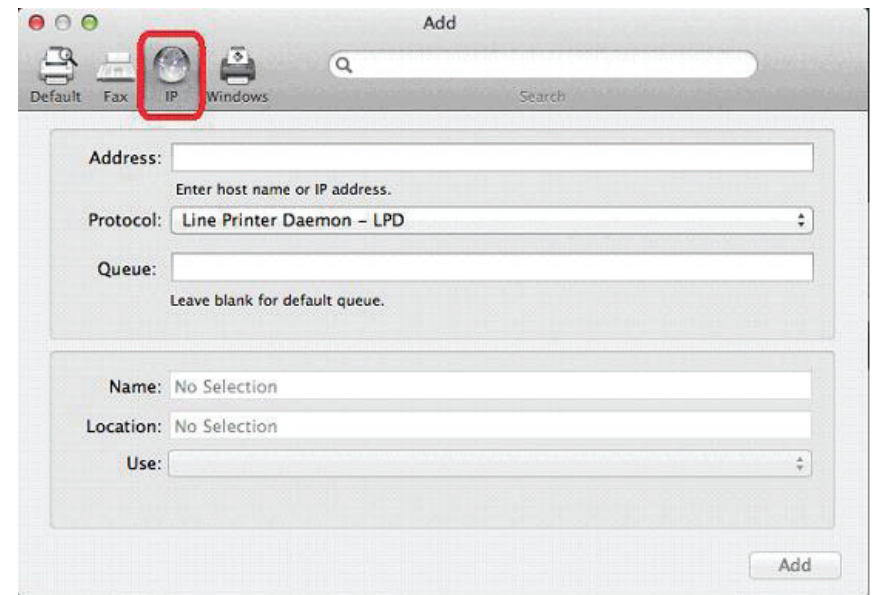




Under **Print & Scan**, click the plus sign.

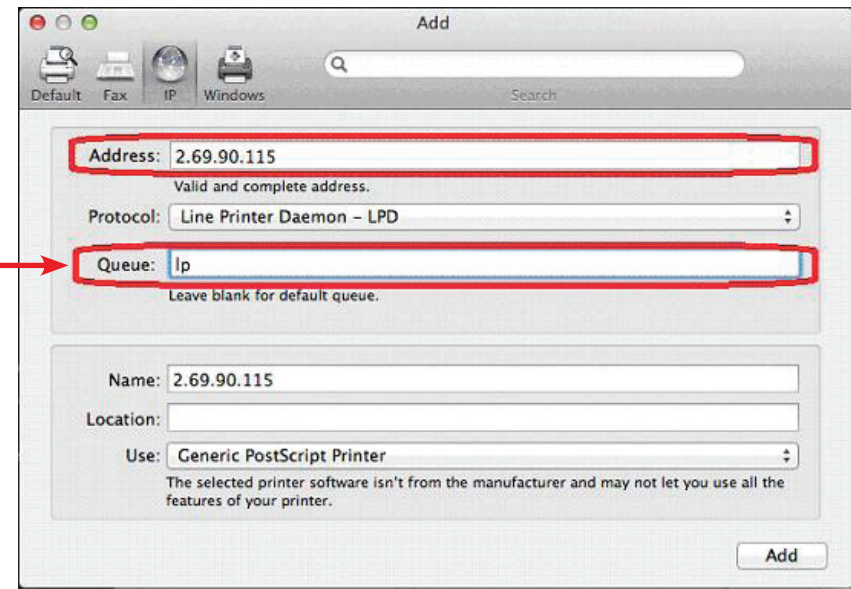


Under **Add Printer**, click the **IP** tab to add the shared printer which is connected to the NAS.

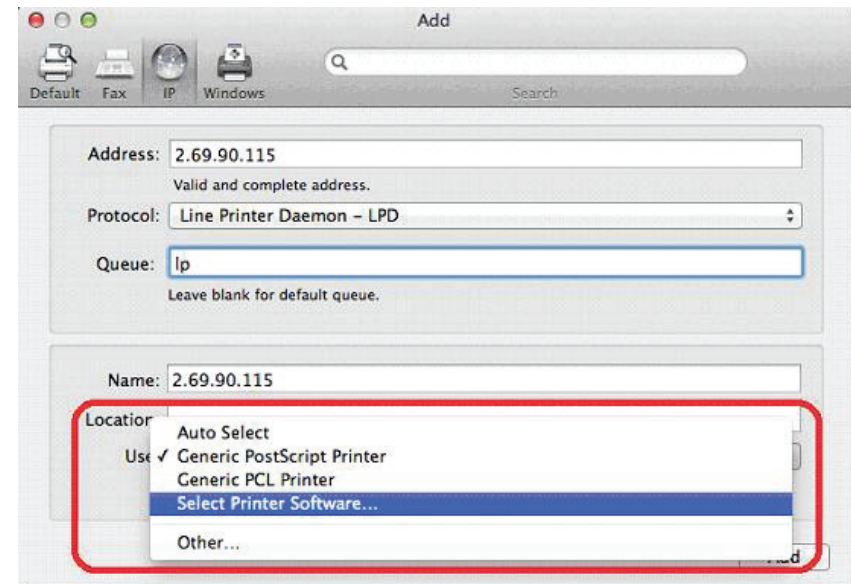


Enter the IP address and the Queue configuration.

Note: Under the Queue section, enter "lp", (where "lp" stands for Line Printer).



Under **Location**, select Printer Software.



Select your specific printer. (If you cannot find a driver for your printer, please download the driver from the manufacturer's web site and install it.)



The IP printer now appears under Print & Scan. The IP address is clearly visible in the configuration settings.

