



User Manual

ShareCenter™ 2-Bay Cloud Network Storage Enclosure

Preface

D-Link reserves the right to revise this publication and to make changes in the content hereof without obligation to notify any person or organization of such revisions or changes.

Manual Revisions

Revision	Date	Description
1.20	November 13, 2013	• add "My Surveillance " Section

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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 yoru music, photos, and video collections to teh DNS-320L for safekeeping. Then enjoy the benefits of the built-in UPnP AV media server as you stream digital content to compatible media players² (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, RAID 1) 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.

¹ Hard Drive(s) not included.

² 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
- Ouick Installation Guide
- 12VDC 3A Output Power Adapter
- CAT5F Fthernet 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

Section 1 - Product Overview

- 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-mydlink Portal Web Access
 - Remote Files Access through Web Browser
 - Browse, Upload/Download, and Manage File/Folders
- Cloud Service–Mobile Apps (the "mydlink 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-320LThe 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:

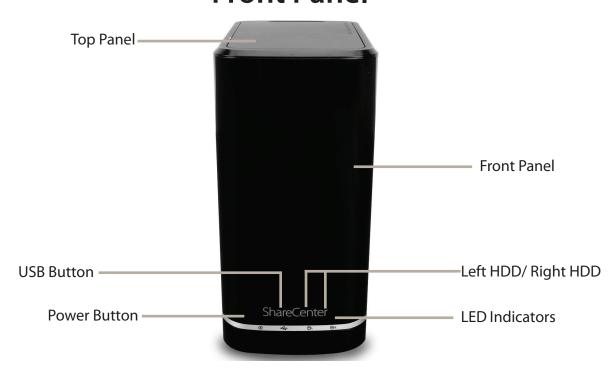
If you are connecting your ShareCenter[™] to a router or switch, your router or switch needs to support Gigabit Ethernet (1000Mbit/s) for maximum performance. The ShareCenter[™] will auto-negotiate the highest connection speed available to your router or switch. If you are using Port Bonding, use a managed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

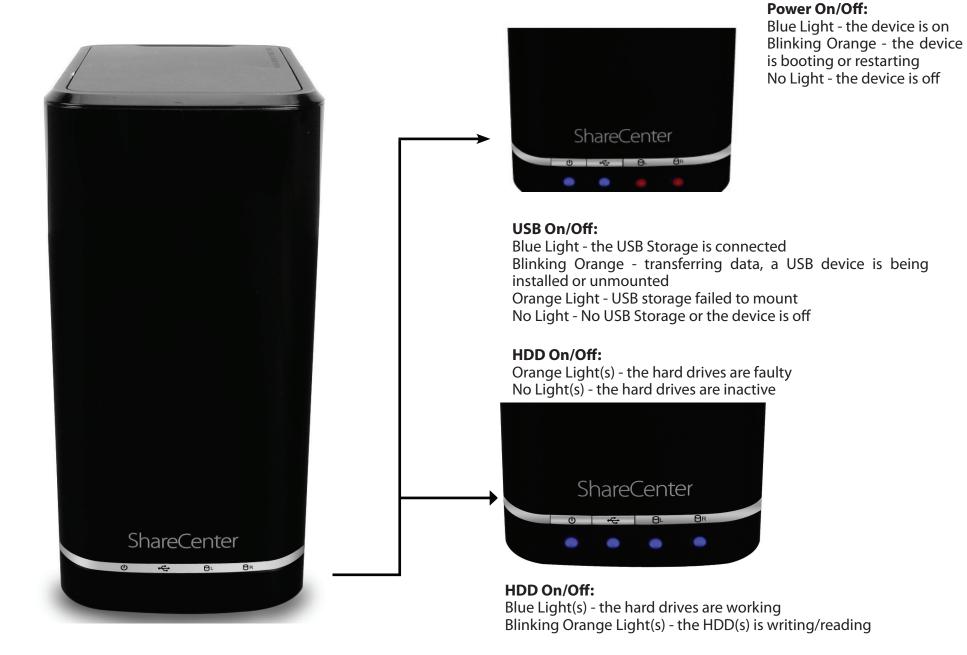
Please check D-Link support website for a list of tested and compatible Hard Drives

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.
	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



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 7 - Connect the power adapter to the power receptacle.



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).

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.





Step 5 - Slide one, or two hard drive into an available hard drive bay

of your ShareCenter™.



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).



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^{TM} matches what you see on the screen.

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





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



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.



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.



Networking Setup

Step 13 - You may either use Static IP or DHCP to configure the IP network settings of the ShareCenter $^{\text{TM}}$. 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.





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.



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 conected 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.



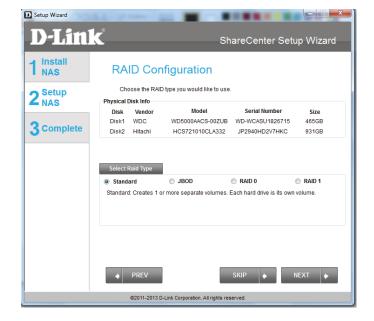
Step 16 - The **Disk Information** window provides the current RAID Type. However, if this isn't already configured, read the instructions under the **Note**.

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



RAID 0 - Step 29



JBOD - Step 23



RAID 1 - Step 35

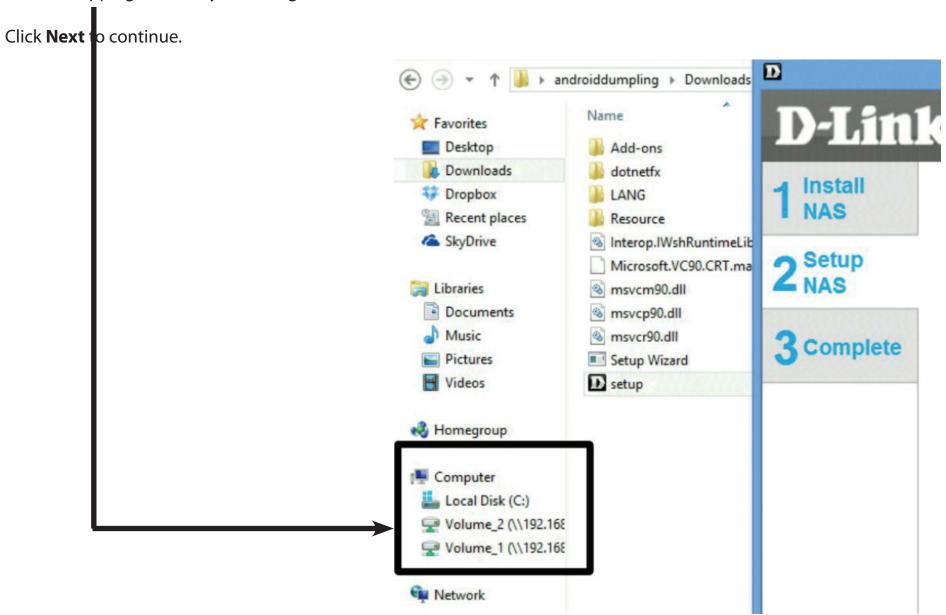
Step 18 - Click **Next** to configure the **Standard RAID** or click **SKIP** to bypass this step.

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.





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



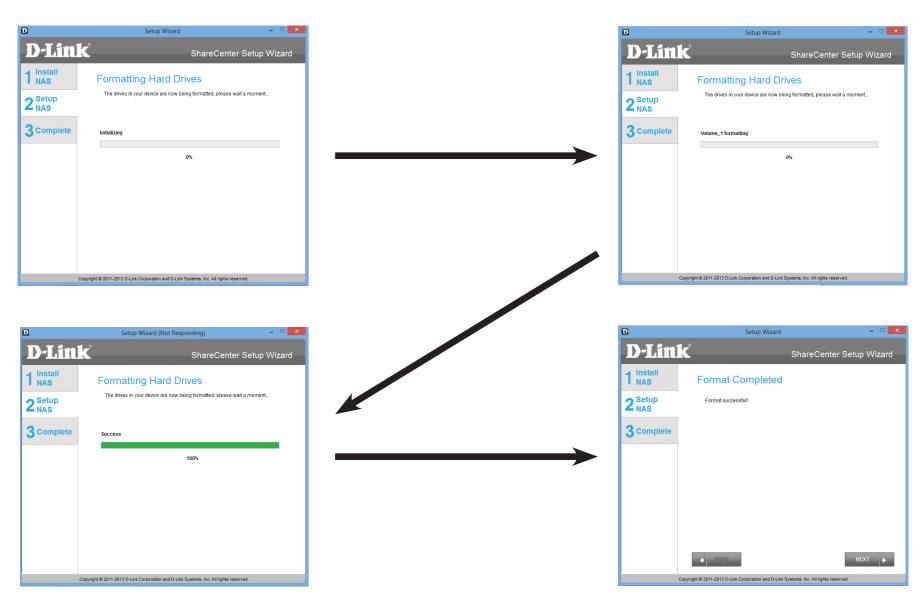
Step 20 - Volume Configuration Summary. This window provides a detailed summary of your current configuration. If you are satisfied with your configuration click **Next** or if you want to change your settings click **PREV** to go back and change your settings. Read the details carefully before making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

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.





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

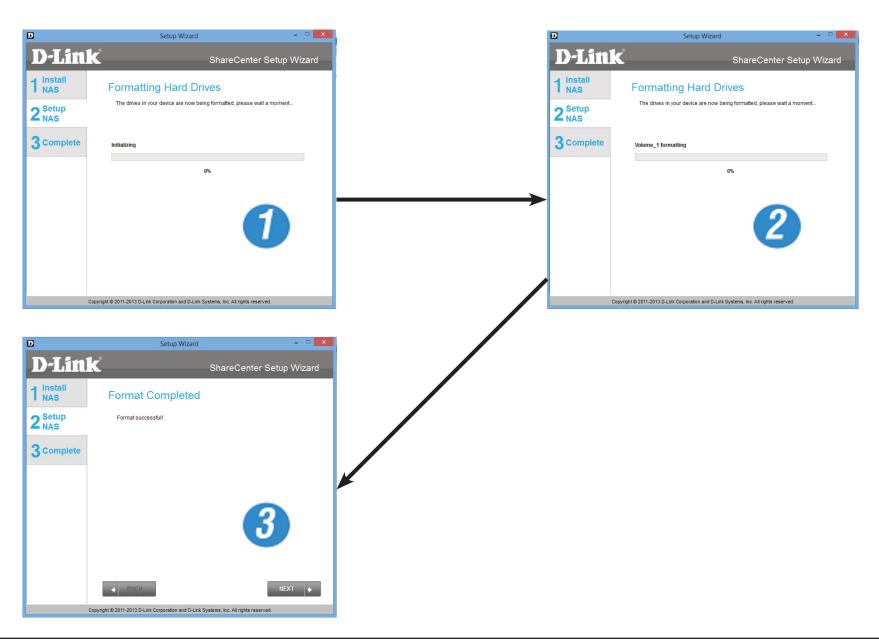
Click **Next** to continue.



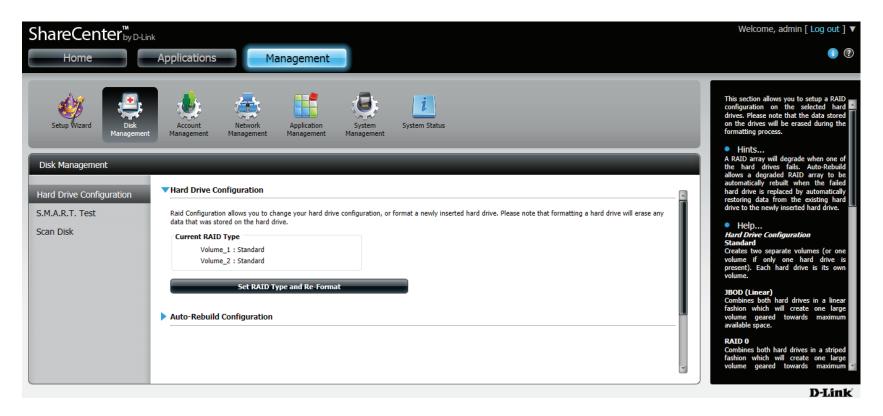
Step 26 - Click **Next**, you are prompted to verify your decision before you continue. Click **Yes** to continue.



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.

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.





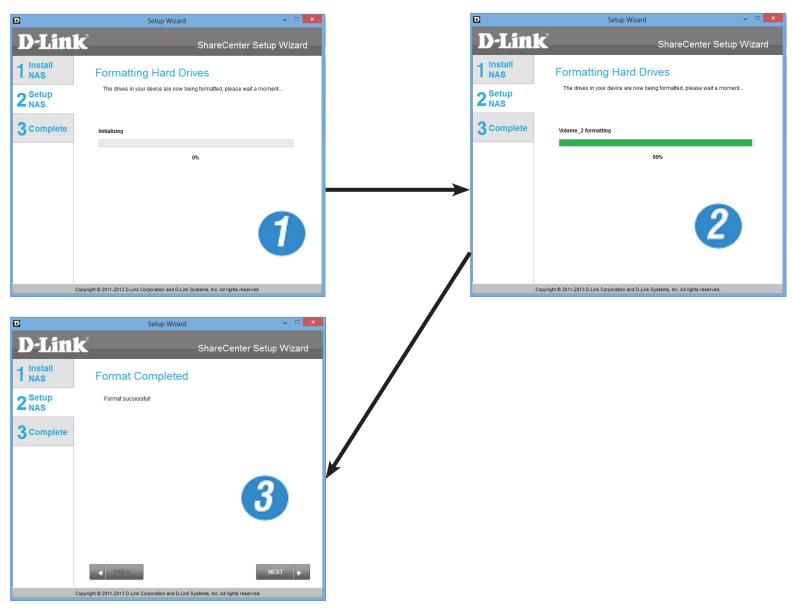
Step 31 - The **Volume Configuration Summary**, displays the details of the new configuration.



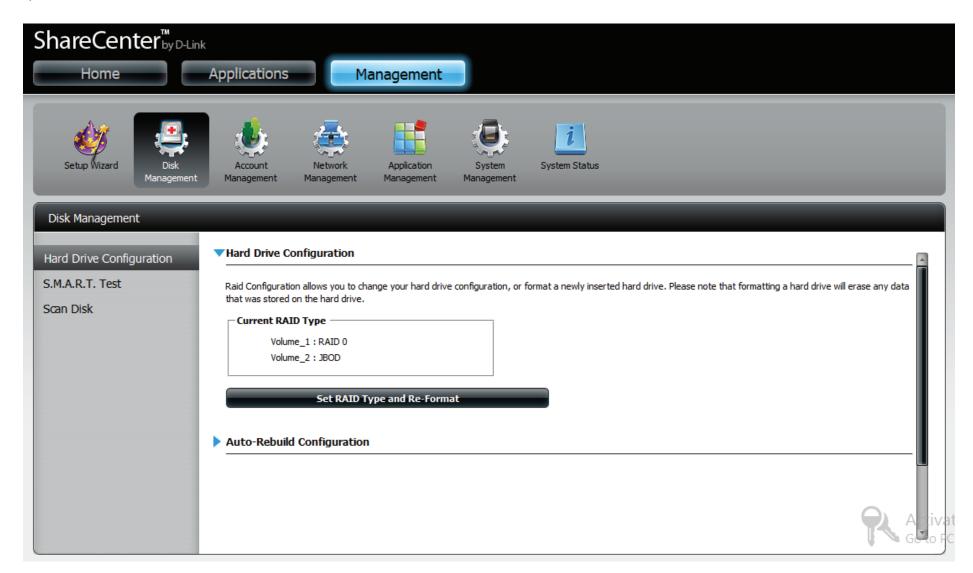
Step 32 - Verify your configuration selection before continuing. Click **Yes** to continue



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.

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.





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

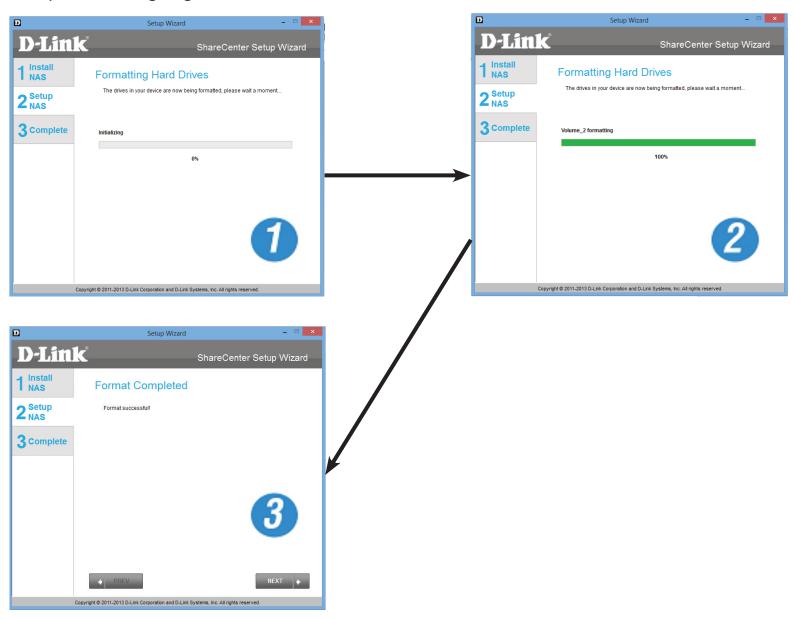
Click **Next** to continue.

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

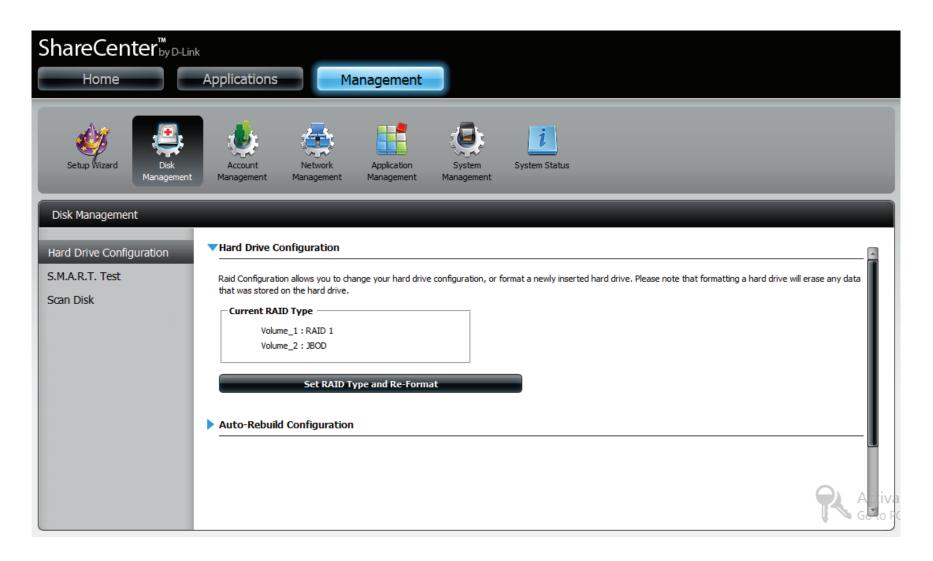




Step 39 - The **RAID 1** is **initialized**, **formatted**, and **complete** in 3 easy steps. Do not click any buttons while this process is ongoing.



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.

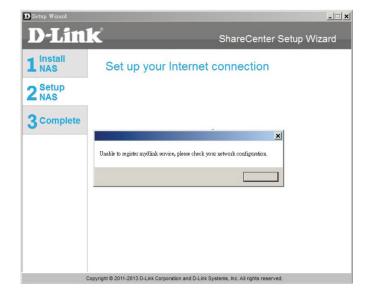


Step 42 - The wizard connects you to the mydlink servers and configures your cloud service.

Click **Next** to continue.



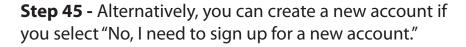
Step 43 - When the wizard fails to connects you to the mydlink servers and configures your cloud service, the following screen appears to warn you of your network configuration.



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.

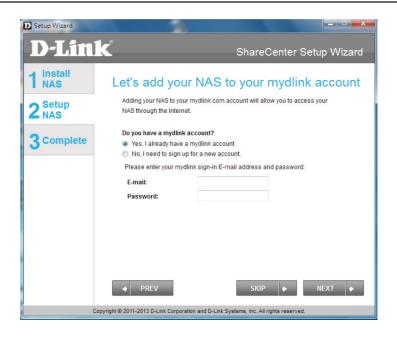
Enter your email address and password.

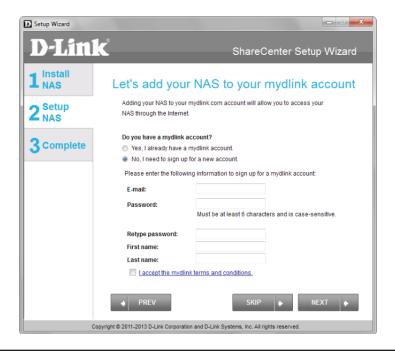
Click **Next** to continue.



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:

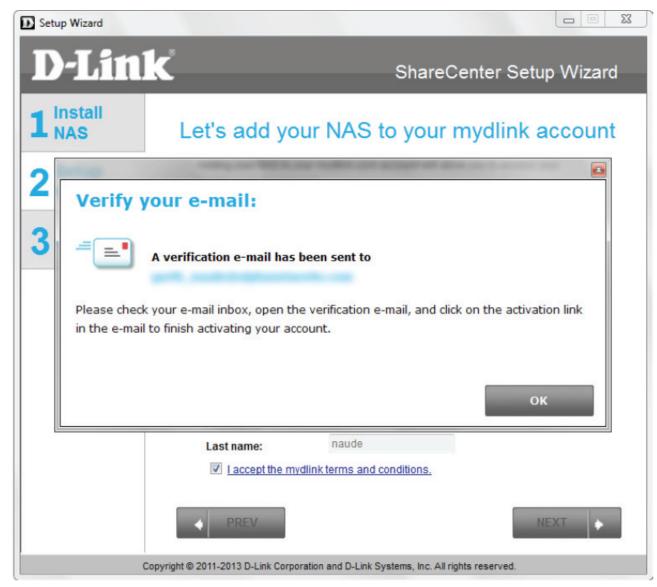
"I accept the mydlink terms and conditions."





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.

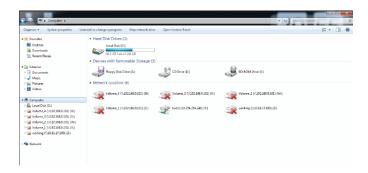


Mapping a Drive

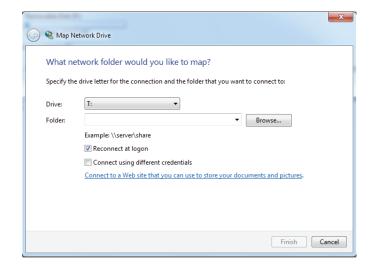
Map a Volume on your DNS-320L using Windows® Explorer in Windows® 7.

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'



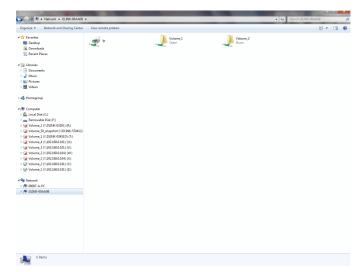
Step 2 - The Map Network Drive screen appears. Choose a Drive letter, click **Browse** to find your network.



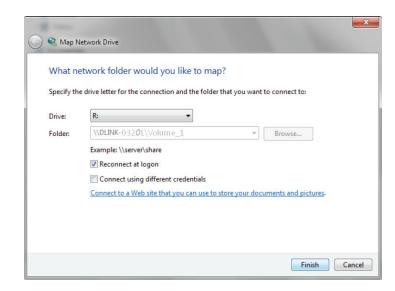
Step 3 - Windows will automatically detect all devices on your network including your ShareCenter™



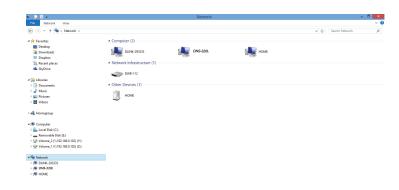
Step 4 - Click on your ShareCenter[™] to see the volumes you created earlier. Then select the volume that you wish to access and click **OK**.



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.

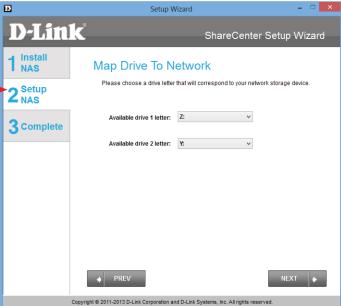


Alternative methods to Mapping a Drive

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.



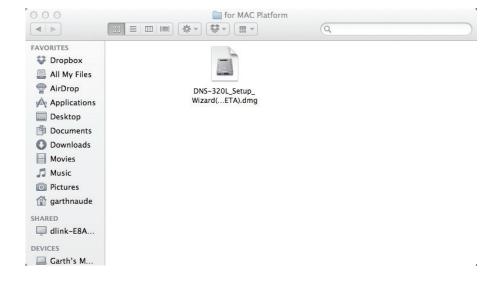
Another method is using the Setup Wizard. As you go through the Setup Wizard process, there is a step in the process to map the drive. See the image here.



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.



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



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**.

D-Link*

ShareCenter Setup Wizard

Install NAS

Attach The Faceplate

Setup NAS

Complete

Re-attach the top cover to the device.

Click NEXT to continue.

PREV

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ShareCenter Setup Wizard

D-Link*

ShareCenter Setup Wizard

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

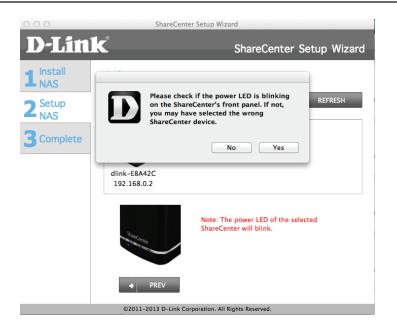


Step 9 - Follow the instructions on the screen (Power on the NAS) and click **Next**.

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.

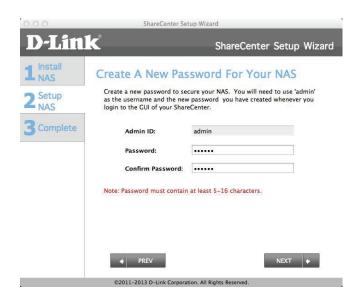


Step 13 - If you have entered a wrong password from a previous installation, a warning message prompts you to relog-in. Click **OK** to continue.



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

Click Next.



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**.





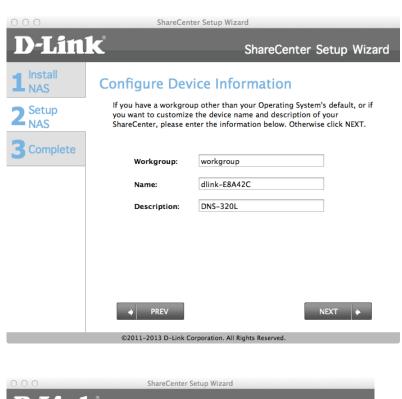
Step 17 - To configure the Device Information, enter the particulars in the fields provided: Workgroup, Name, and Description.

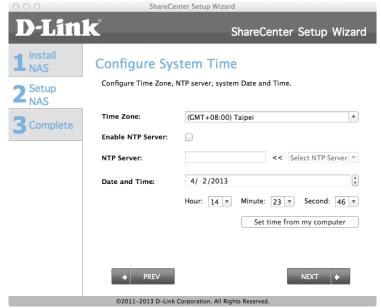
Click Next.

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.





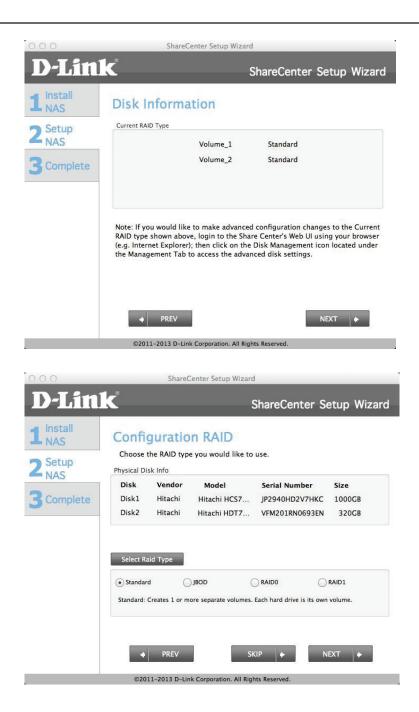
Step 19 - The Wizard displays the Disk Information.

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.



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.





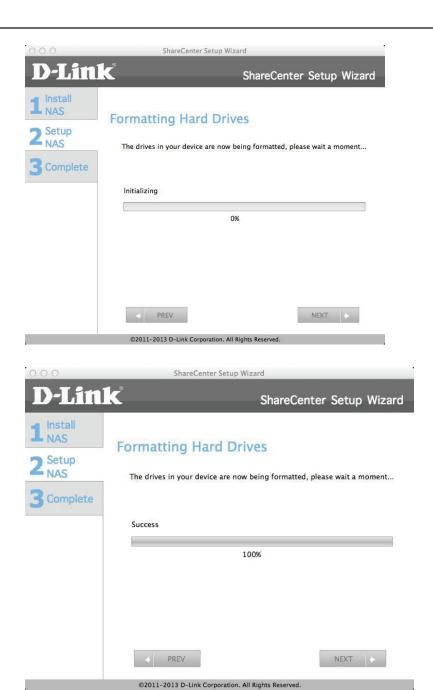
Step 23 - The format begins.

Click Next.

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

Step 24 - The formated process is successful.

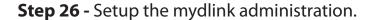
Click Next.



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.



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





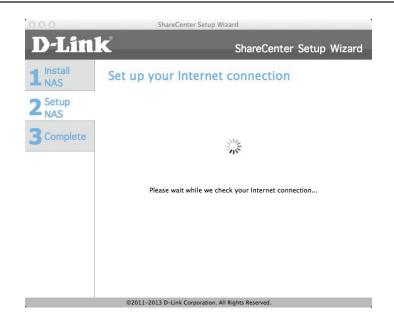
Step 27 - The NAS starts to link to the internet and register mydlink.

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.





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.

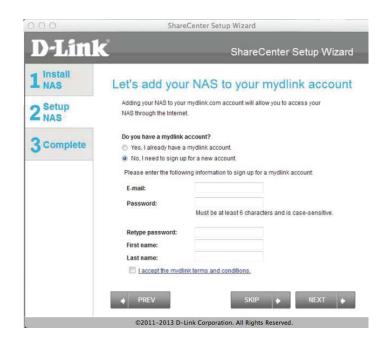
Click **Previous** if you want to go back and make changes to any parts of your past configuration options.

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."



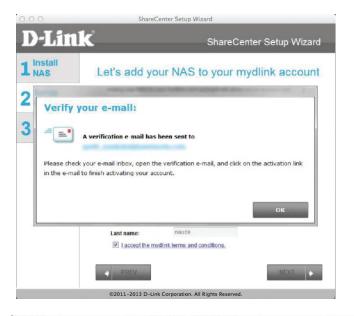


Step 31 - A message appears asking you to verify your email address and account.

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.





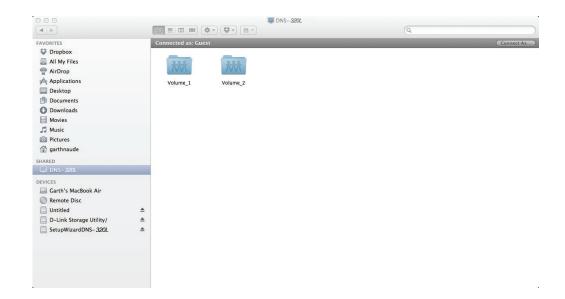
Step 33 - The setup is complete.

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 The D-Link Storage Utility displays any ShareCenter™

Device: 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 Choose an available drive letter. Click Connect to map

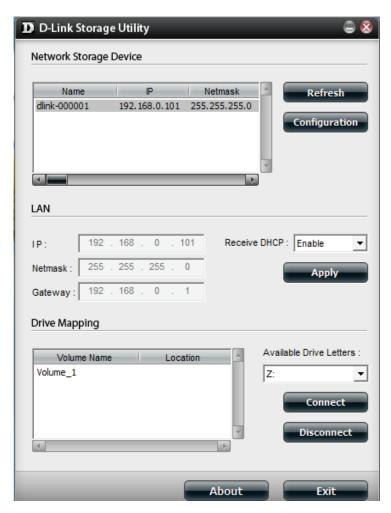
Letters: the selected volume. Click **Disconnect** to disconnect the

selected mapped volume.

About: Click **About** to view the software version of the Easy

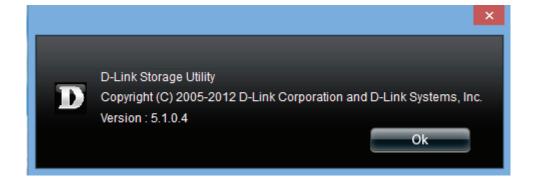
Search Utility.

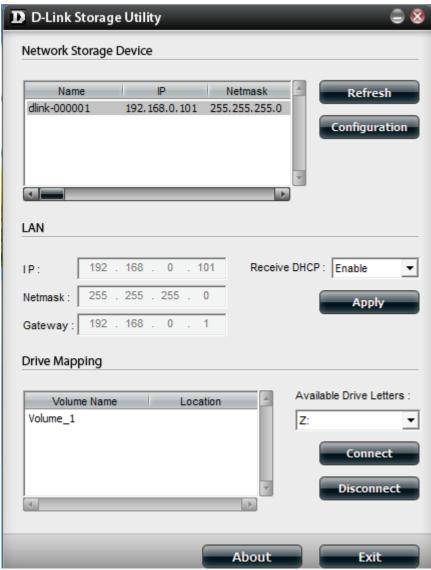
Exit: Click **Exit** to close the utility.



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[™] webbased 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.

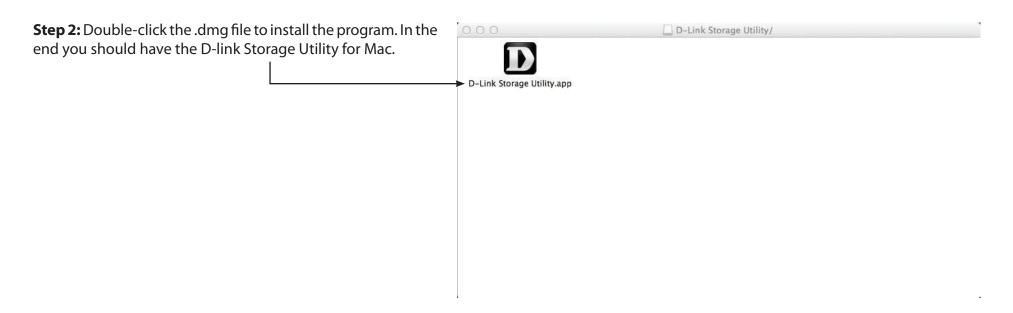




D-Link Storage Utility - For Mac

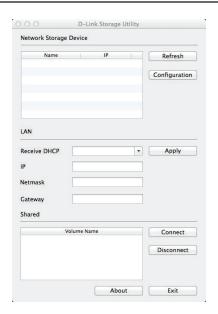
Step 1: To get started with the ShareCenter[™] Storage Utility for Mac, insert the supplied CD into your CD-ROM drive: Double-click the .dmg file.

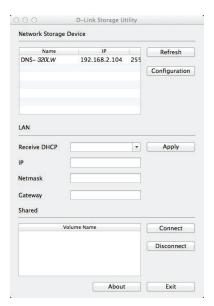




Step 3: This opens the D-Link Storage Utility

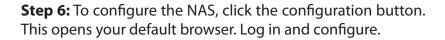
Step 4: Make sure you are connected to your local LAN. Click the Refresh button. The D-Link Storage Utility displays the D-Link DNS-320L.

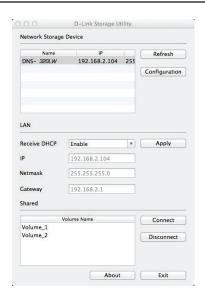


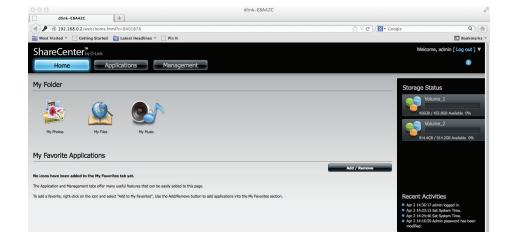


Step 5: The Storage Utility now shows the DNS-320L, the LAN configuration (toggle between DHCP and manual), and the Volume details.

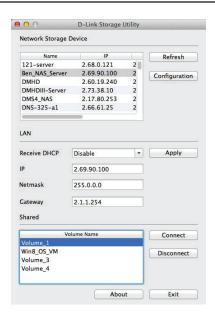
Use the drop-down list to configure your LAN settings and click Apply.







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



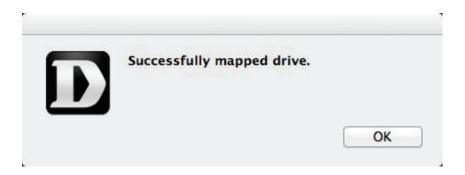
Step 8: The Log-in window appears. Select Guest or Registered User.



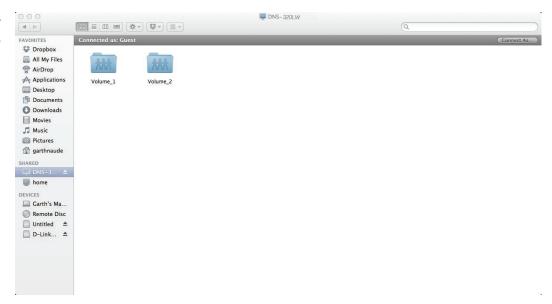
Step 9: Enter a username and password for the DNS-320L and click Connect.



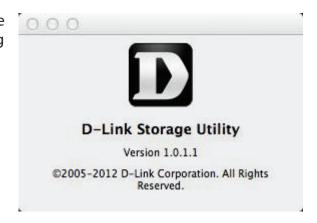
Step 10: A pop-up window appears notifying you that mapping the drive was a success. Click OK to continue. Use the Disconnect button to disconnect from the mapped drive(s).



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.

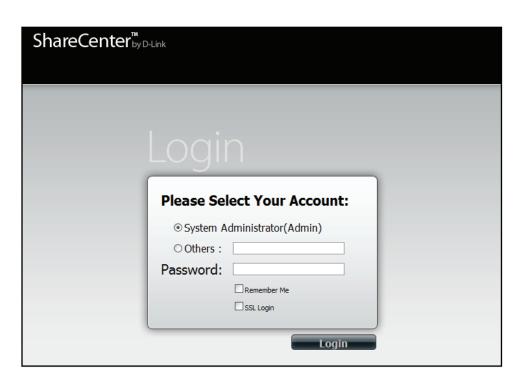


Web UI Login

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:

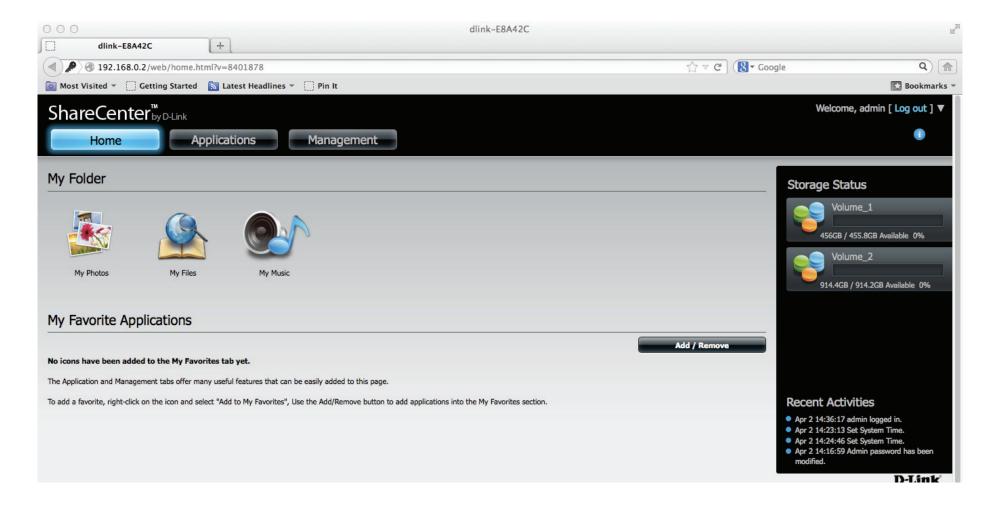
Select **System Administrator** and enter the password created during the Setup Wizard. Click **Login**.



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

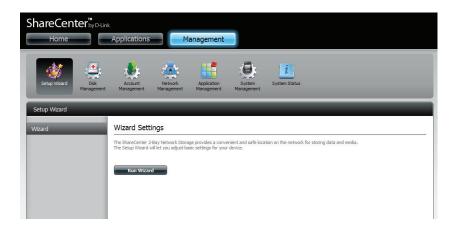


Management

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.



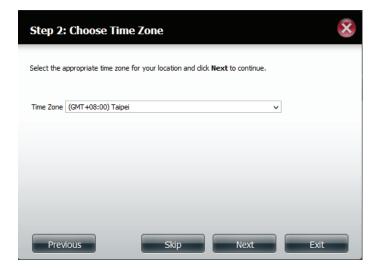
Step 3 - Update the administrator account password here and confirm the password or leave it blank.

Click **Next** to continue.



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.



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

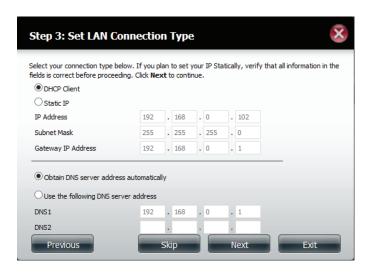
IP Address: Enter an IP address for the DNS-320L.

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).

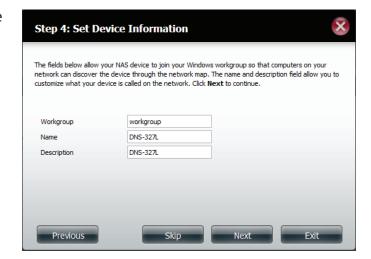
DNS Servers: Enter the IP address(es) of your DNS server(s). DNS1 is usually the IP address of your router.

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



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

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



Step 7 - Click Account and enter your e-mail information in the boxes provided to receive Event Alerts from the ShareCenter™. Click the Test E-Mail 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 Your ShareCenter™ hard drives can be **Configuration:** 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 Click on this button to launch a wizard that **Reformat:** allows you to select the RAID configuration

and format the drives.

Auto-Rebuild If you have chosen RAID 1 as the configuration **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.

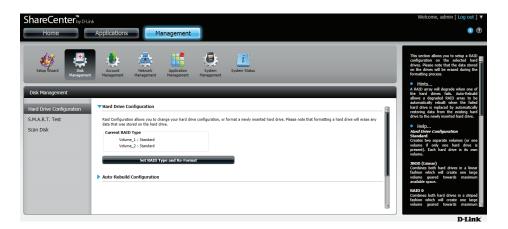
> **Note:** You can still rebuild a drive using the RAID 1 functionality however you must initiate the

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'.

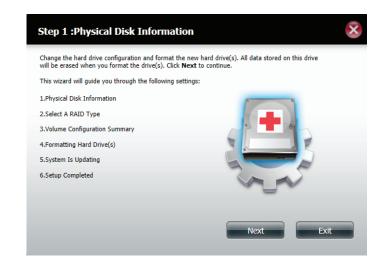
Current RAID Type —

Volume_1 : Standard Volume_2 : Standard

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

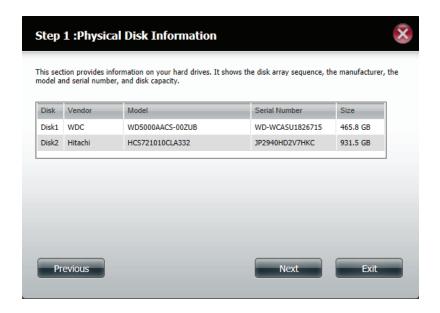
The Setup Wizard begins.

Set RAID Type and Re-Format



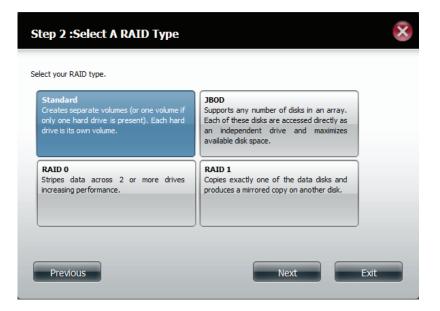
The 'Physical Disk Information' page displays all of the hard drives on the DNS-320L. It shows the array number, vendor, model, serial number, and drive capacity.

Click **Next** to continue.



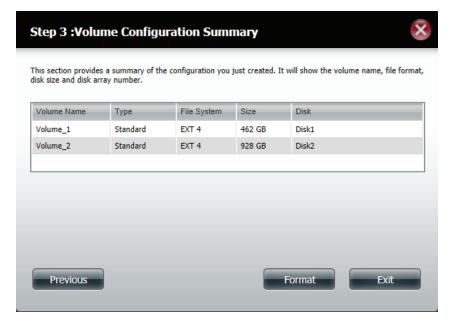
Select the format you want by clicking on the RAID type box (highlight in blue). In this example, it is Standard.

Click **Next** to continue.



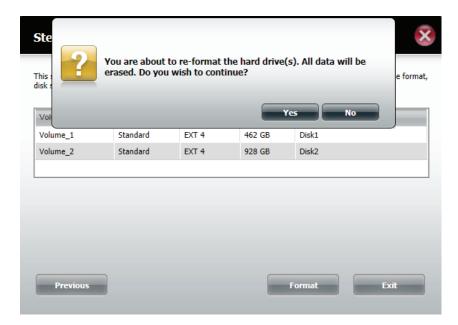
Step 3 shows the Volume Configuration Summary - the Volume Name, Disk Type, File System, Disk Size, and Disk.

Click **Format** to continue.

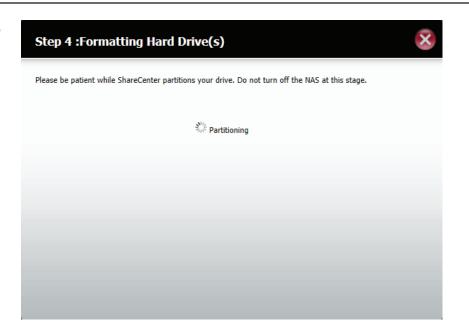


A warning message will appear to inform you that all volumes and data will be formatted and erased.

Click Yes to continue.

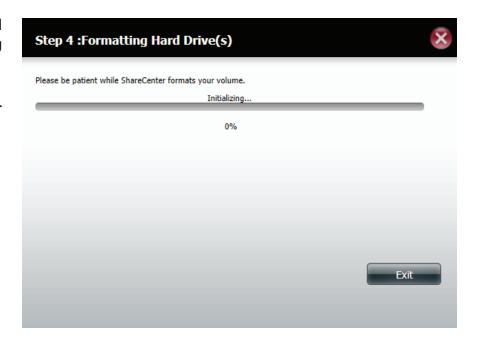


Partitioning will now begin. Please be patient while this process takes place. Do not turn off your NAS during this process.



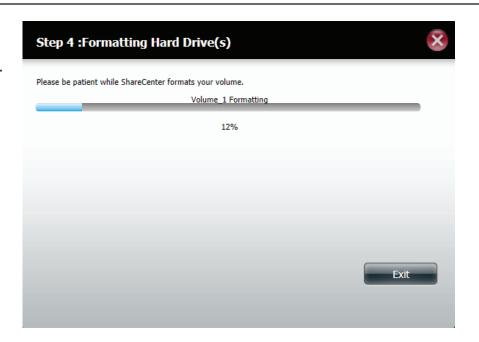
Once the partition is completed, the system initializes and format of the first drive starts. Do not turn off your NAS during this process.

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



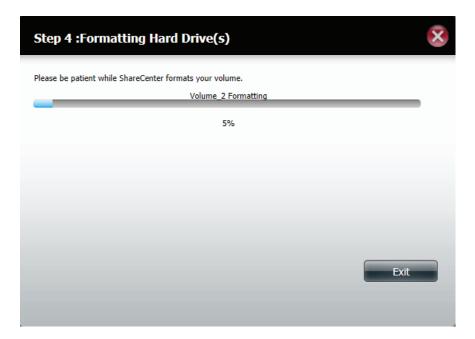
The wizard starts to format the first Volume.

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



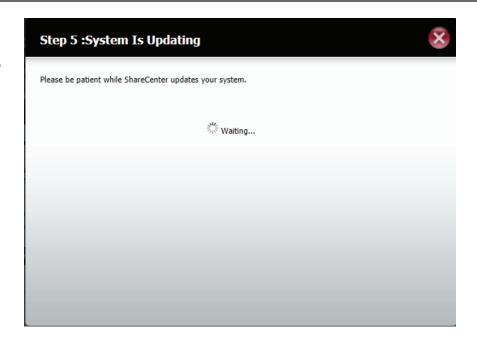
The wizard starts to format the second Volume.

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



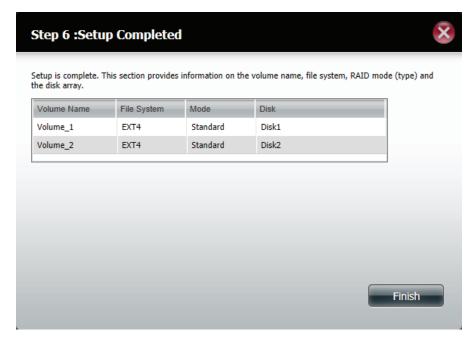
The system will now update all of the changes made.

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.



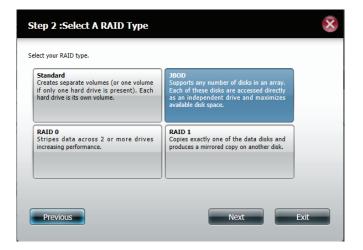
On completion, you are redirected back to the main Disk Management GUI.



JBOD

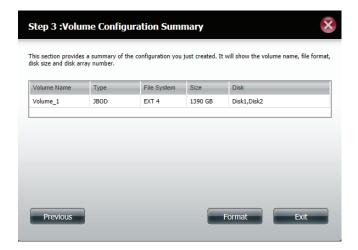
Select **JBOD** to create a single volume from all of the drives.

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.

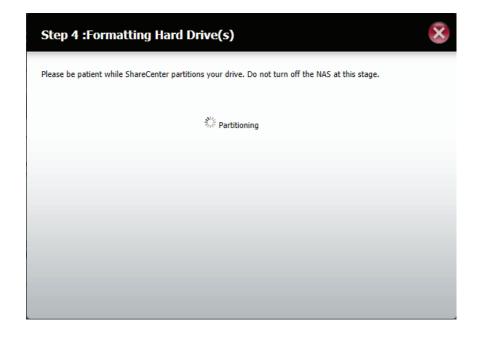


A warning messege appears indicating that you will format the disk.

Click **Yes** to continue.

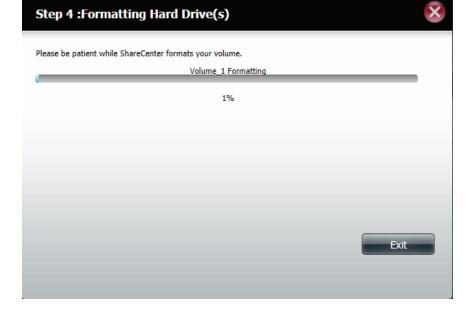


The Wizard starts to partition the drive.

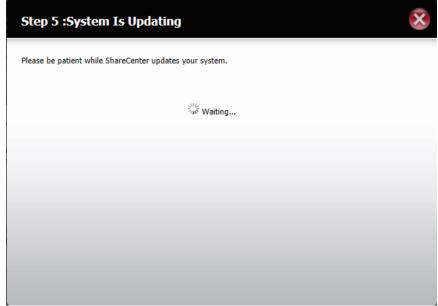


The Wizard formats the first Volume.

Click **Exit** to stop this process.



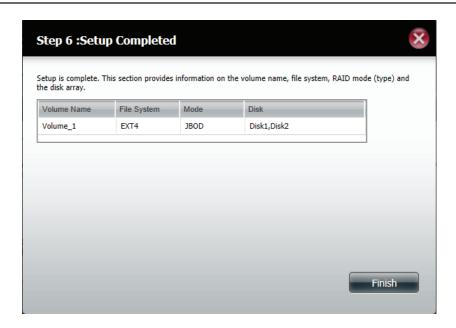
The Wizard updates the system.

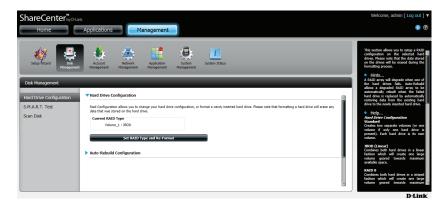


Setup is complete.

Click **Finish** to continue.

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



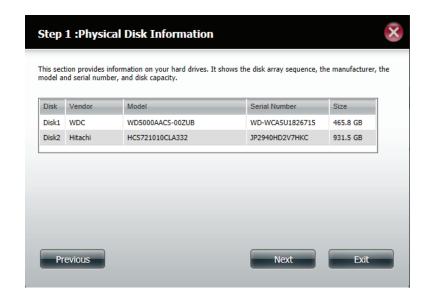


RAID 0

Start the Wizard.

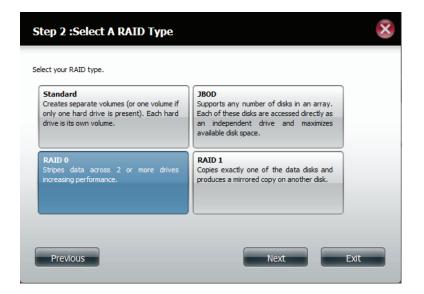


Step 1 displays your current **Physical Disk Information**.



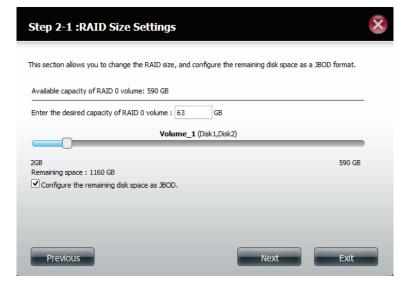
Step 2, select RAID 0 (stripes all of the drives).

Click **Next** to continue.



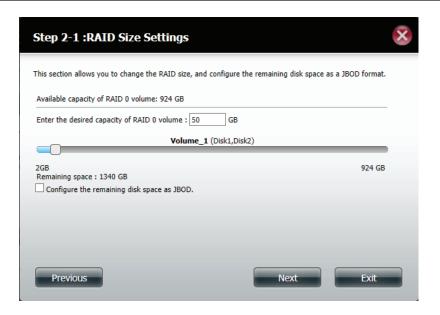
RAID Size Settings allows you to tweak the size of the **RAID Volume**. Use the slider to change the RAID size or enter an amount in the field provided. Click the "**Configure the remaining disk space as JBOD**" if you wish to use the remaining space for another RAID configuration.

Click **Next** to continue.



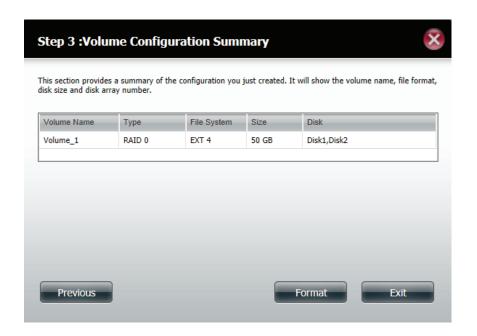
You can also deselect the "Configure the remaining disk space as JBOD".

Click **Next** to continue.



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

Click Format to continue.

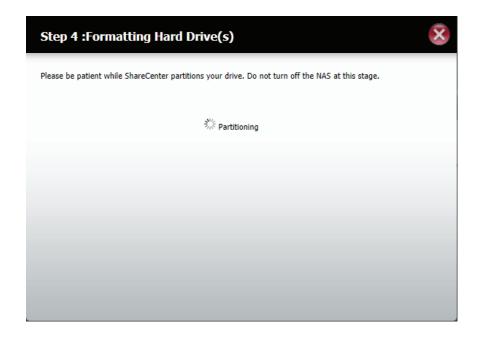


A pop-up screen displays a warning message that your disk will be formatted.

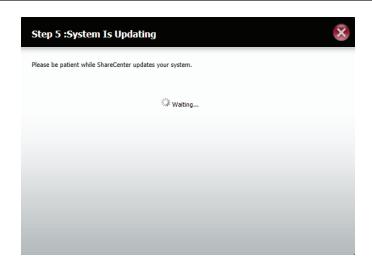
Click **Yes** to continue.



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

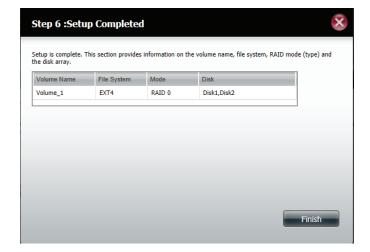


Step 5, the Wizard updates the system.



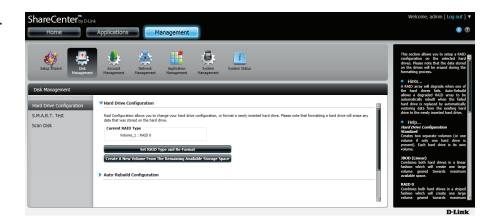
Step 6, the **Wizard** and **Setup** is complete. View the **Volume Name**, **File System**, **Mode and Disk**.

Click **Finish** to continue.



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

Under **Current RAID Typ**e, you can view your changes.



RAID 1

The Hard Drive Configuration Wizard starts

Click **Next** to continue.

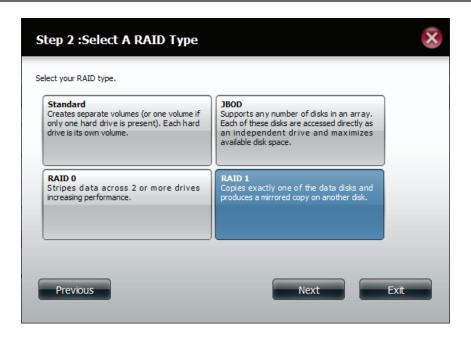


View the **Physical Disk Information**.

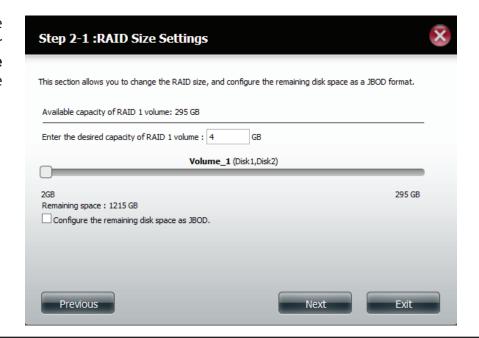


Select the **RAID TYPE** you want

Click **Next** to continue.



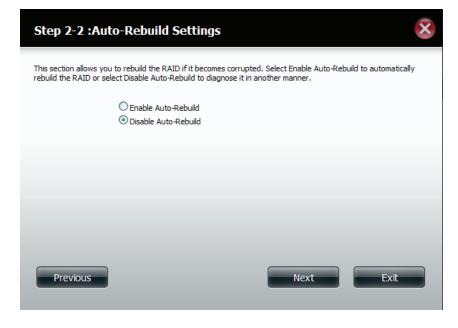
RAID Size Settings allows you to tweak the size of the **RAID Volume**. Use the slider to change the RAID size or enter an amount in the field provided. Click the "**Configure** the remaining disk space as JBOD" if you wish to use the remaining space for another RAID configuration.



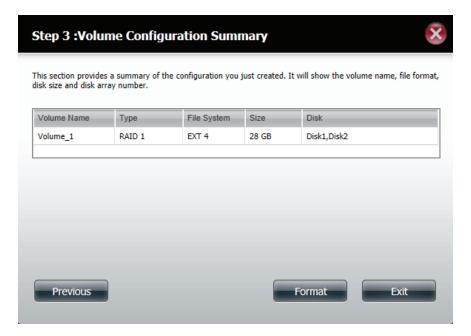
Click **Enable Auto-Rebuild** to automatically rebuild a failed drive if it has been replaced with a new one.

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

Click **Next** to continue.



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.

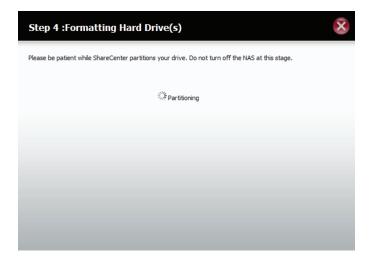


A pop-up screen displays a warning message that your disk will be formatted.

Click **Yes** to continue.

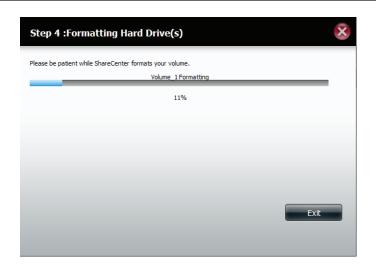


Partitioning will now begin. Please be patient while this process takes place. Do not turn off your NAS during this process.

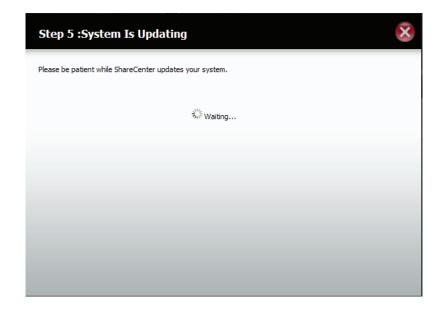


The system formats the Volume.

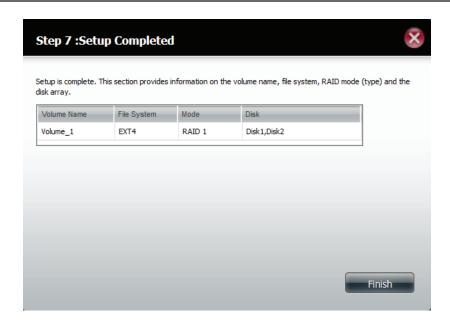
If you would like to change your settings at this stage, click **Exit**.



The system updates.

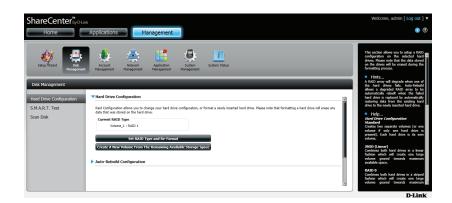


Setup is complete. Setup provides a **Volume Name, File System, and Mode.**



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

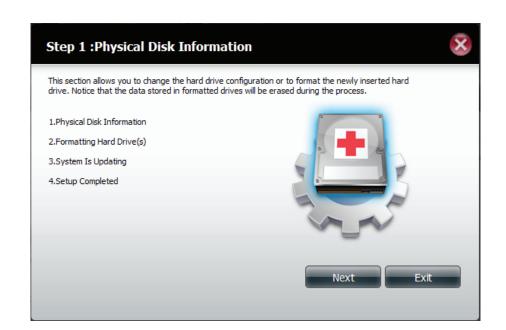
You can add a second hard drive and migrate it from Standard mode to RAID 1 without shutting down the DNS-320L. Standard Mode doesn't offer any redundancy and security of data. It is best then to migrate from Standard Mode to RAID 1. To do this follow these instructions:

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

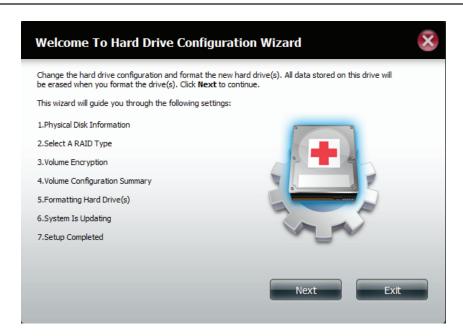


Step 2 - Check the second HDD LED status. If the HDD LED is blinking, please wait for the blinking to stop before proceeding.

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.



Set RAID Type and Re-Format.



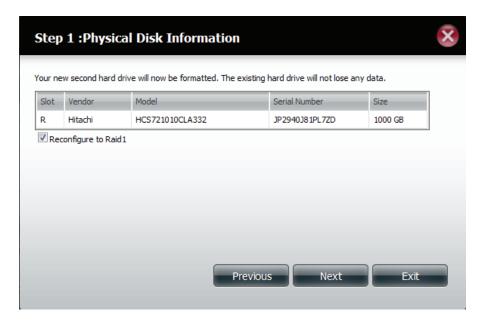
Format the new drive as Standard type.

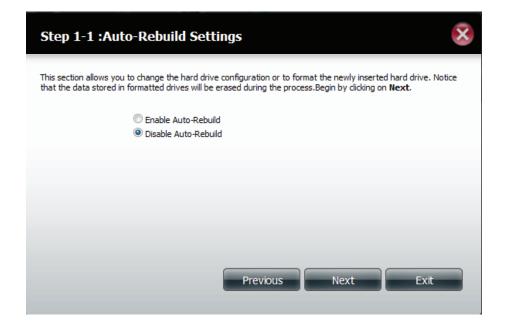
Step 4 - Under **Physical Disk Information**, you will be able to see the drive you just installed. It provides the **slot location**, **vendor**, **model number**, serial number, and **disk size**.

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.

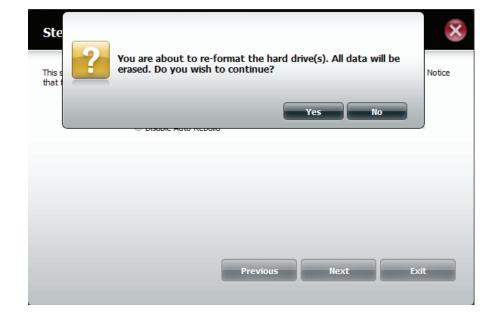
Click **Next** to continue.



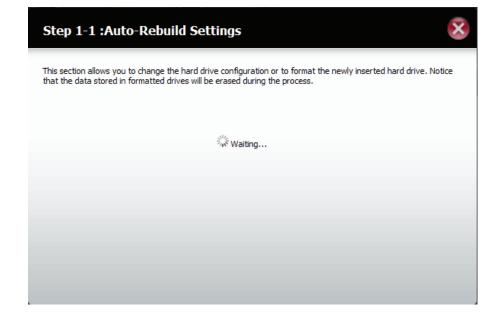




Step 6 - A warning message will appear prompting you to confirm whether you want to format your hard drive. Click **Yes** to continue or **No** to exit.



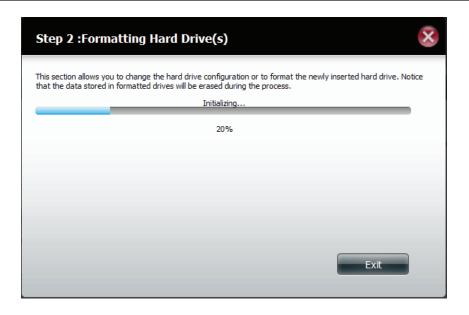
Step 7 - The software communicates with the hardware to build a list.

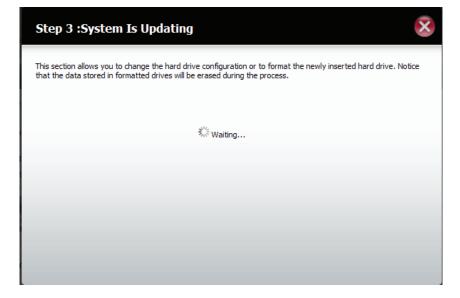


Step 8 - The Wizard formats the hard drive.

Click **Next** to continue.

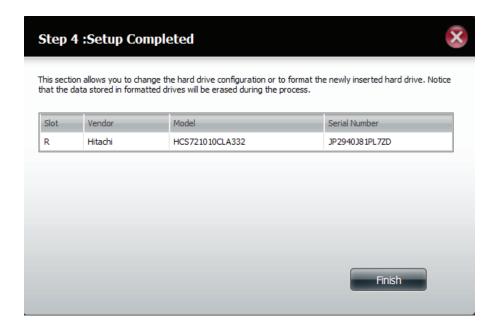
Step 9 - The System updates.



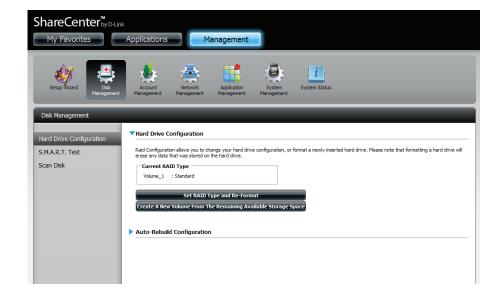


Step 10- Setup is completed when it shows final information on the slot, vendor, model number, and serial number.

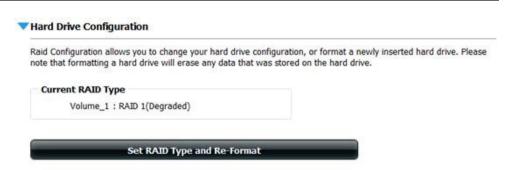
Click **Finish** to continue.



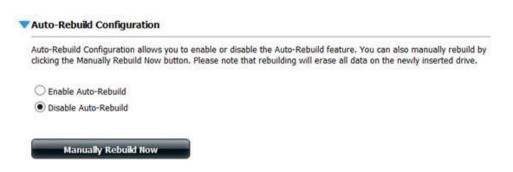
Step 11 - The wizard returns to the main Hard Drive Configuration .



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



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



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.

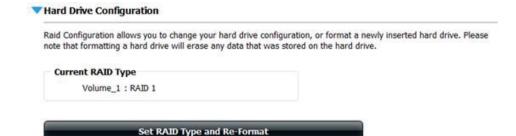
▼ Hard Drive Configuration

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.

Volume_1 Is Syncing Now.

4 %

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



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.

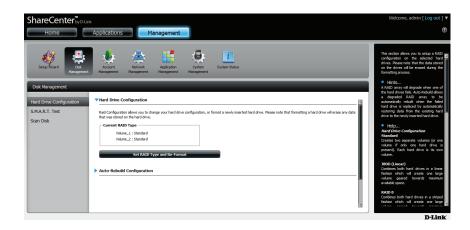
The Extended Test requires a lot more time to complete. However, it is a more thorough when compared to the Quick Test

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. ShareCenter[™] by D-Link Home **Applications** Management Management Management Management Disk Management ▼S.M.A.R.T. Test Hard Drive Configuration S.M.A.R.T. Test Slot Result Manufacturer Model Progress Disk1 Pass [2012/11/22 12:13:07] Hitachi Hitachi HCS72101 Scan Disk Disk2 Hitachi Hitachi HDT72503 Test Type : ● Quick Test ○ Extended Test Send Result By E-mail Create Schedule Start Schedule Schedule List

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 $^{\text{TM}}$. 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



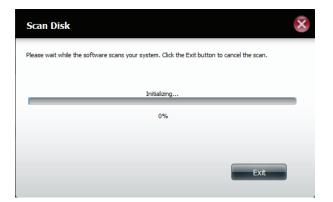
A warning message will prompt you to stop running all services (hard drive and network activity).

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



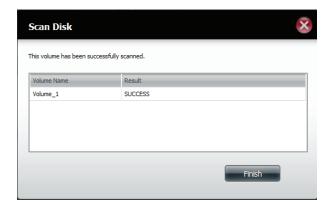
The DNS-320L will initialize the volume(s) and begin scanning.

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.

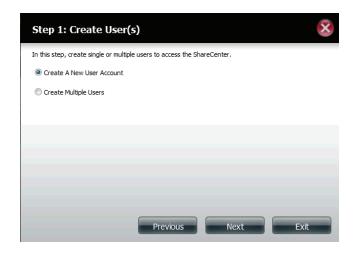
Click **Users/Groups** on the left side and then click **Create.**



The **User Setup Wizard** will appear.



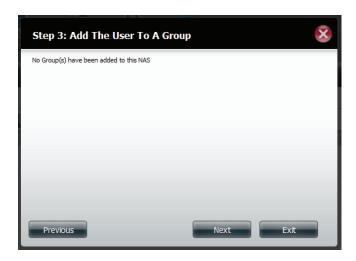
Step 1 - Select **Create A New User Account** and then click **Next** to continue.



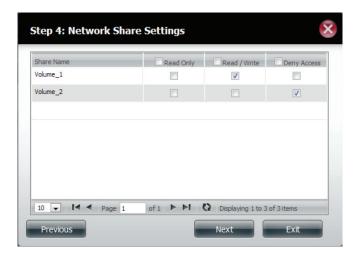
Step 2 - Enter the user name and password for the new user and then click **Next** to continue.



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



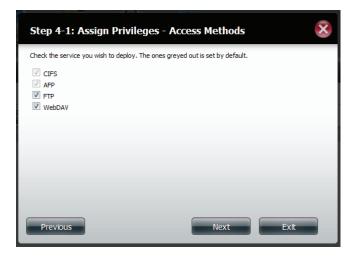
Step 4 - Select the network share settings. Select **Read Only**, **Read/Write**, or **Deny Access**. Click **Next** to continue.



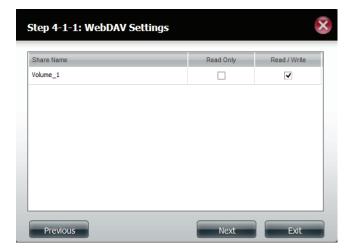
Assign Privileges/Access Methods to the user. Select either **FTP** or **WebDAV**. CIFS and AFP are set as default.

- 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.

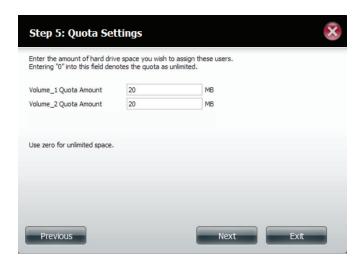
Click **Next** to continue.



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



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.

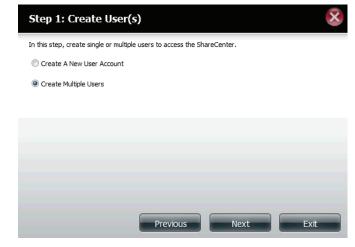


Step 6 - The final step is a summary of all the configurations you made. Click **Finish** to accept the changes or click **Exit** to cancel the changes.



Creating Multiple Users

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



Step 2 - Enter the following information:

Enter a username.

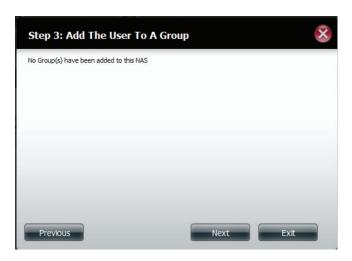
Enter the account prefix. The Account Prefix is a starting number (Eg. 1, no alphabet letters are allowed) you select for the user list.

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.

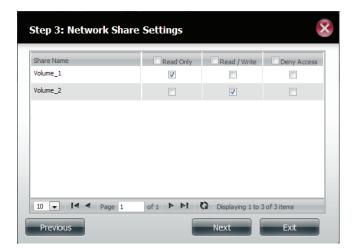
Enter a password and confirm it.



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



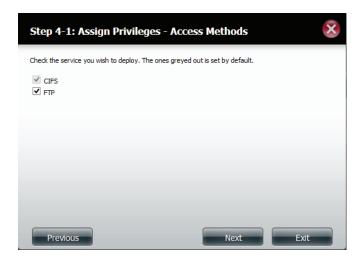
Step 4 - Select the network share settings. Select **Read Only**, **Read/Write**, or **Deny Access**. Click **Next** to continue.



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.

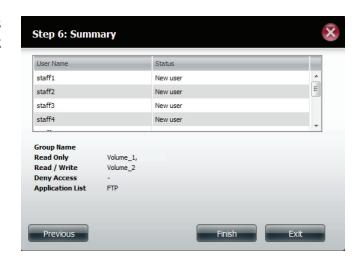
Click **Next** to continue.



Step 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).



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.



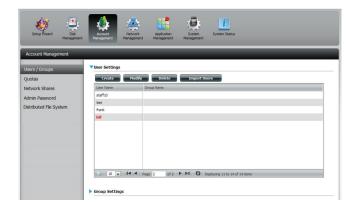
The User Settings window will show a list of the users created.



Modify Users

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

Click **Modify** to continue.



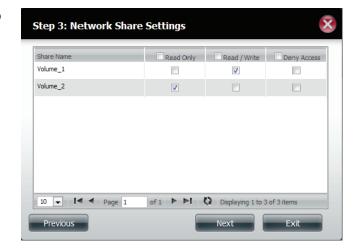
Step 2 - The User Setup Wizard will appear.



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



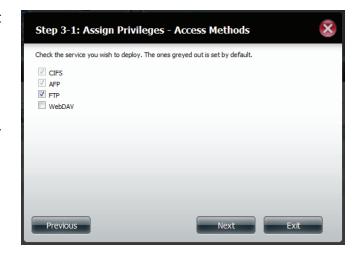
Step 4 - Change the Network Share Settings. Click **Next** to continue.



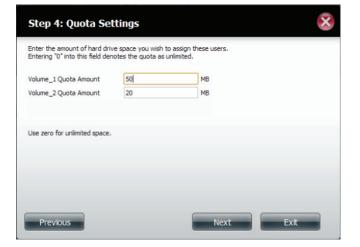
Step 5 - Assign Privileges/Access Methods for the user. Select either FTP or WebDAV. CIFS and AFP are set as default.

- 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.

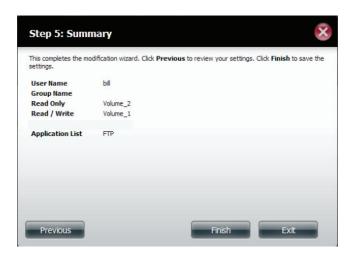
Click **Next** to continue.



Step 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.



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

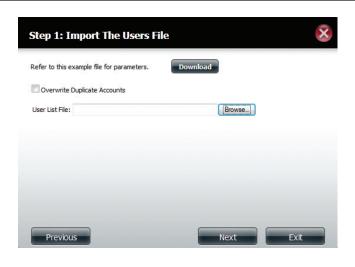
Note: You must create the user groups and share folders first before importing the users file

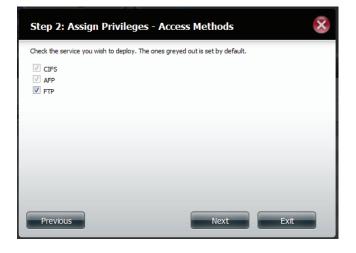
Check the **Overwrite Duplicate Accounts** box if this is necessary.

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

Click **Next** to continue





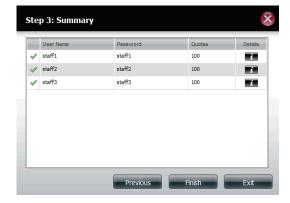


Step 5 - The Summary will show a list of the imported users. If there are problems with the user list, the wizard will show the errors in red on the table.

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.



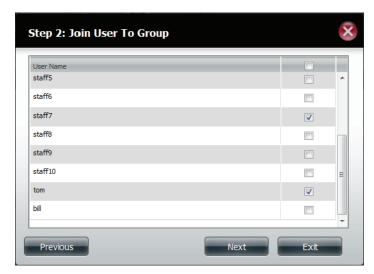
Step 2 - The Group Setup Wizard will now start. Click **Next** to continue.



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

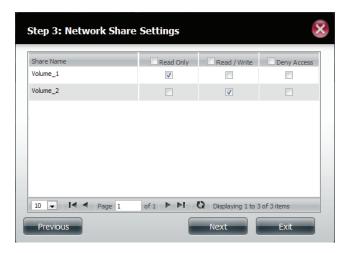


Step 4 - Click the checkbox to select the user(s) you wish to add to the group and then click **Next** to continue.



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

Click **Next** to continue.



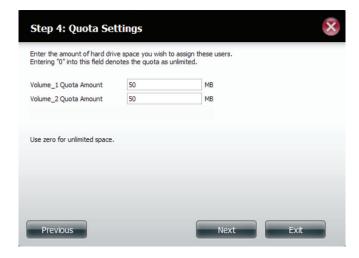
Step 6 - Select the Privileges/Access Methods you want to assign to the group. The greyed out selections are assigned by default.



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



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 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

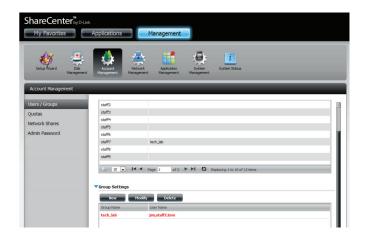
Step 1 - Click Account Management > Users/Groups.

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.

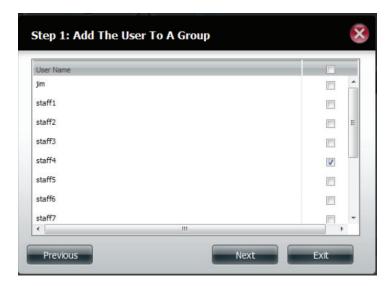
Click **Modify** to change the settings for the Group.



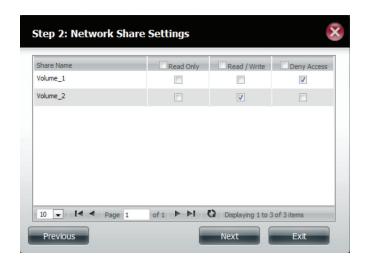
Step 3 - The Group Setup Wizard will now start. Click **Next** to continue.



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.

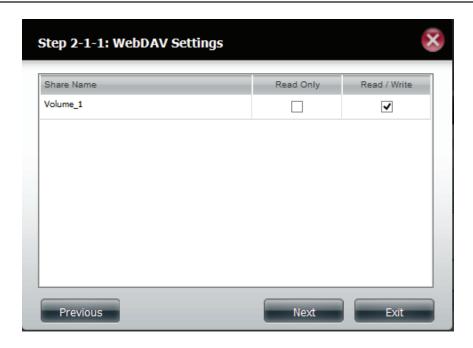


Step 6 - Select the appropriate privileges you want to assign to the group. The greyed out selections are assigned by default and cannot be modified.

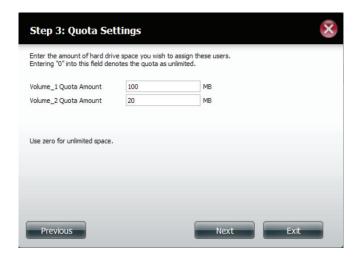


Step 7 - Select either Read Only or Read/ Write priviledges for WebDav Settings.

Click **Next** to continue.

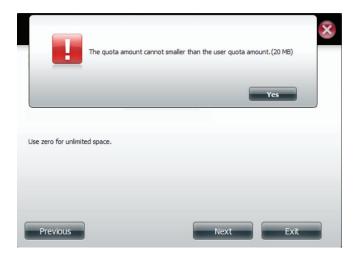


Step 8 - Edit the amount of space you want to assign to the group for each volume. Enter zero to give unlimited disk space to the group.



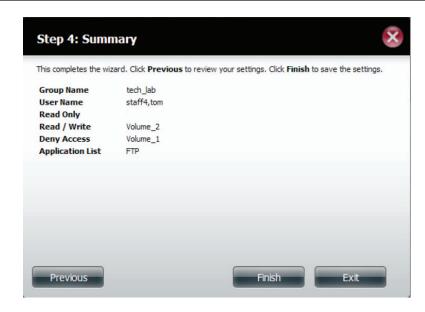
Step 9 - When editing the quota, make sure the size is not smaller than the user quota on his/her account.

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**.



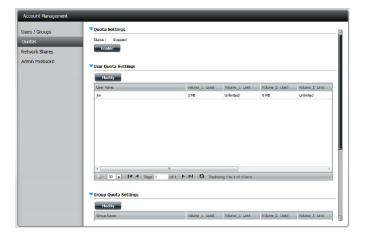
Step 2 - A warning message will appear asking you to verify if you want to delete the Group. Click **Yes** to delete the Group or **No** to cancel your decision.



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.

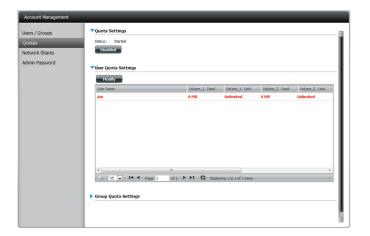
Click **Enable** to activate Quota Settings. The status will now display 'Started' notifying you that the Quota Settings are enabled.



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.

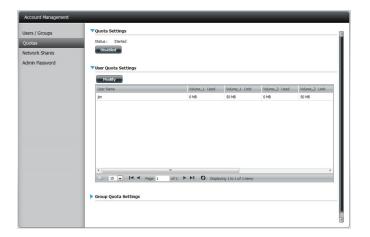


The Quota Settings configuration box will display the user account you want to modify. Enter a new quota amount for each volume.

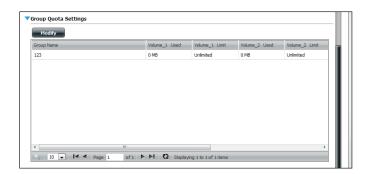
Click **Apply** to confirm your settings.



The modified quota settings will be displayed in the table.



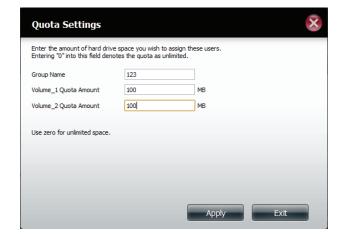
For Group Quota Settings, click the blue drop-down arrow next to Group Quota Settings to view the group quota table.



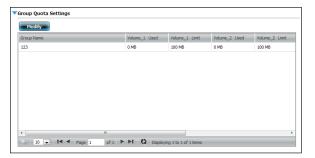
Select the group you want to modify. Your selection will turn red. Click **Modify**.



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.



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.

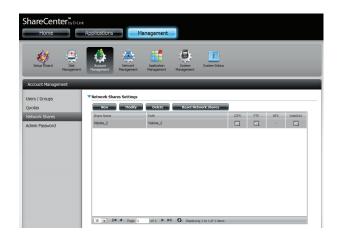
Network Share/ISO The Network Shares Settings window allows the Mount Shares: user to add, modify, and remove both new and existing Network Share and ISO Mount Share Settings.

> 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 $^{\text{TM}}$. 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 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.



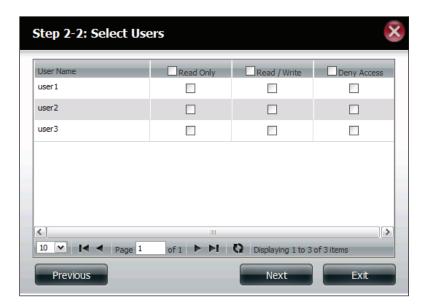
Step 4 - Select the appropriate access rights for the share. Options to select from are Read Only, Read/Write, and Deny Access.

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

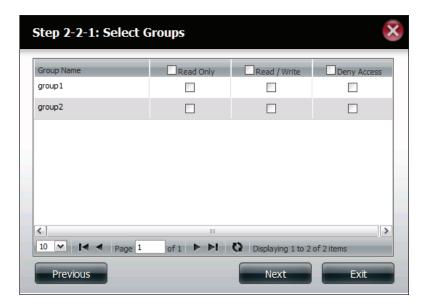


Step 5 - If you selected **Specific User/Group** in Step 3, then this step allows you to set the access rights for each User configured on the ShareCenter[™].

Click **Next** to continue.



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 ShareCenterTM.

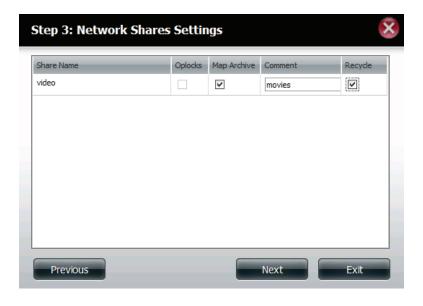


Step 7 - Here you can assign privileges to this share.

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

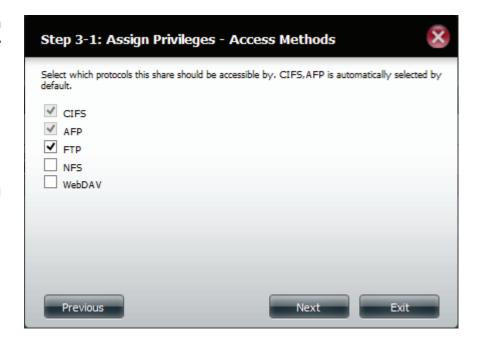
Oplocks are guarantees made by a server for a shared logical volume to its clients. These guarantees inform the Client that a file's content will not be allowed to be changed by the server, or if some change is imminent, the client will be notified before the change is allowed to proceed.

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 $^{\text{TM}}$.



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.

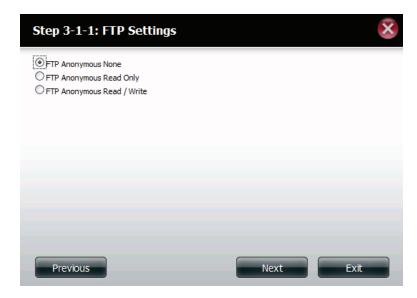
- CIFS is short for Common Internet File System.
- AFP is short for Apple Filing Protocol.
- FTP is short for File Transfer Protocol
- NFS is short for Network File System.
- WebDAV is short for Web-based Distributed Authoring and Versioning.



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.



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.



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

Click **Next** to continue.



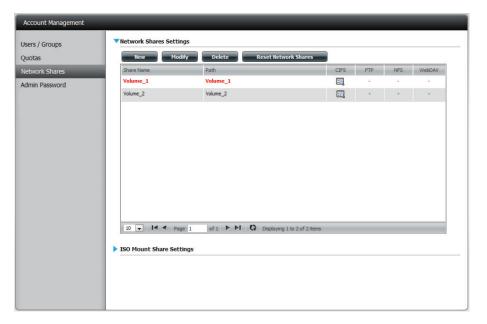
Step 10 - Here a summary of the created shares will be displayed.

Click **Finish** to save your settings.



Deleting a Network Share

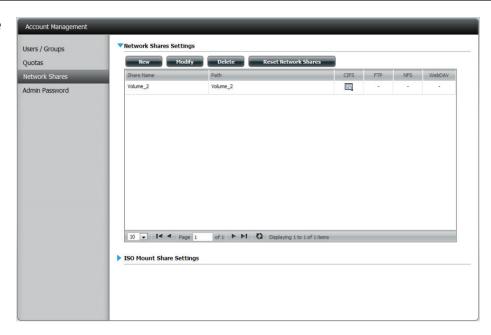
Select the Network Share you wish to delete. Your selection will turn red. Click **Delete** to remove the share.



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.

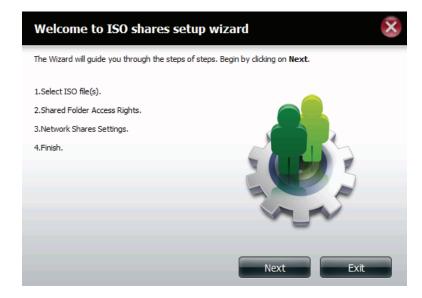
Click **Yes** to confirm or **No** to cancel.



ISO Shares Setup Wizard

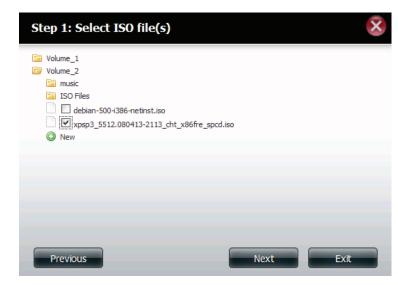
The following section will describe how to add a new ISO mount on the ShareCenter $^{\text{TM}}$. To add an ISO Mount, click on the **New** button. An easy to configure wizard will launch.

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.



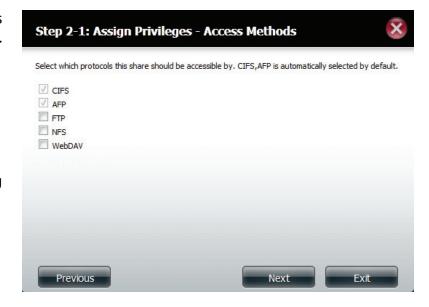
Add a comment that describes the ISO Mount Share.

Click **Next** to continue.



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.

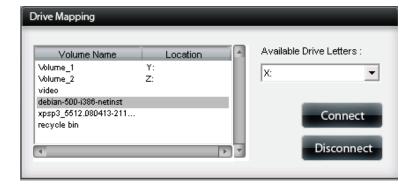


A summary of the share will be displayed.

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.

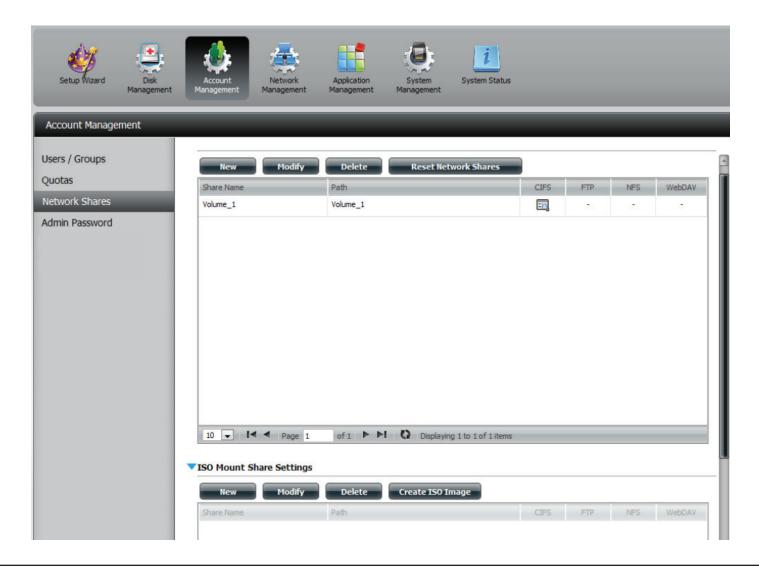


Creating an ISO Image

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.

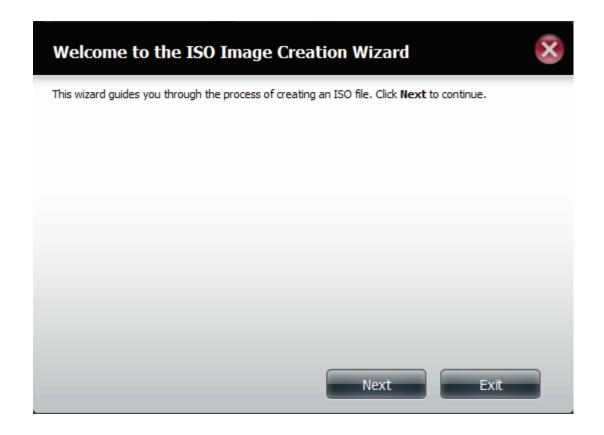
Click on the **Create ISO Image** button at the bottom.



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.

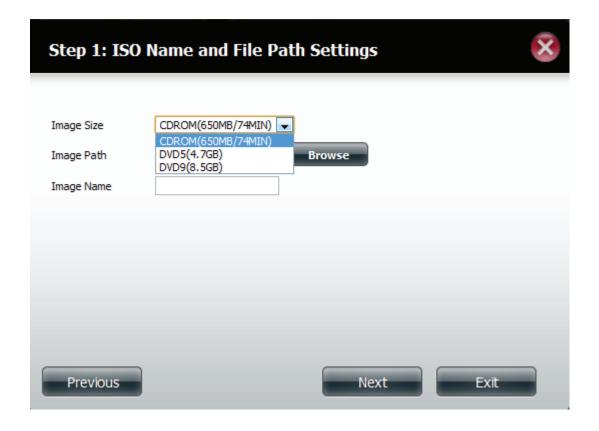


ISO Name and File Path Settings

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.



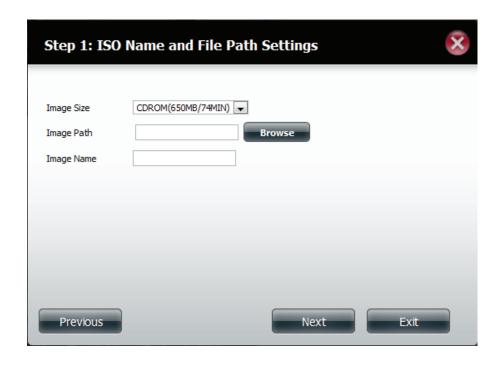
Select the **Image Path**.

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**.



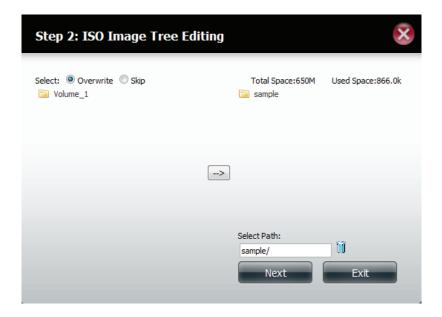
A warning message appears asking you to confirm your decision. Click **Yes** to continue or click **No** to cancel.



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.

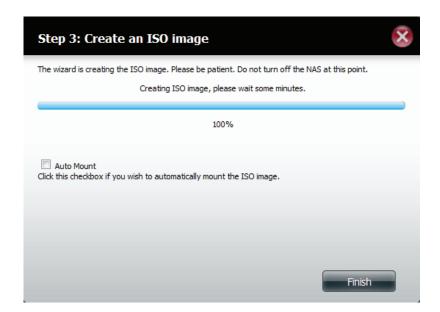
Click **Next** to continue.



The wizard will create the ISO image.

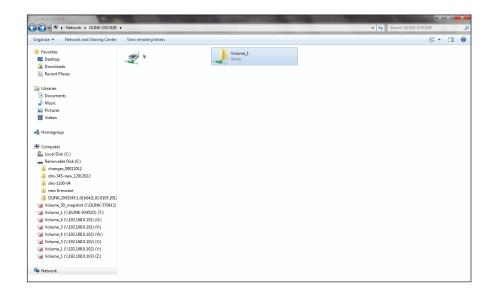
Click the **Auto Mount** checkbox if you want the ISO file to be mounted automatically.

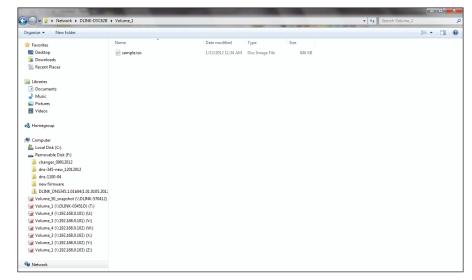
Click **Finish** to close the wizard.



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

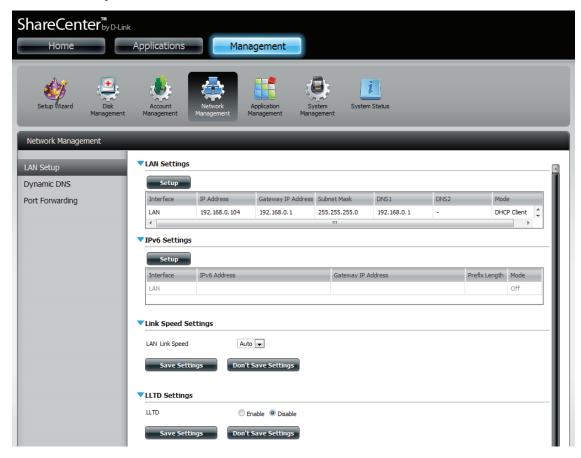
Click **Save Settings** to accept the changes or **Don't Save Settings** to cancel changes.



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**.

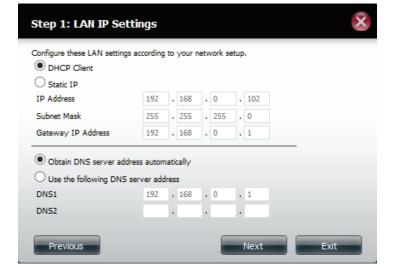
The LAN setup wizard gives you the option to configure the - IP settings.

Click **Next** to continue.



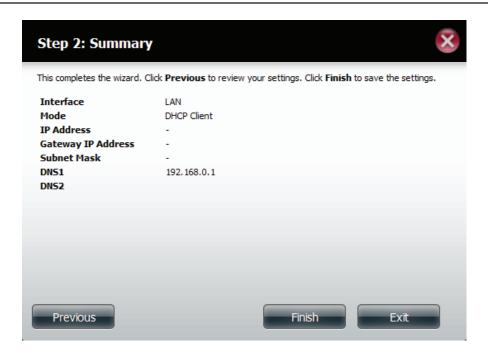
This step allows you to configure your LAN settings. Here you can choose between **DHCP Client** or **Static IP**. If you select Static IP, you will need to manually configure your own IP settings.

Click **Next** to continue.



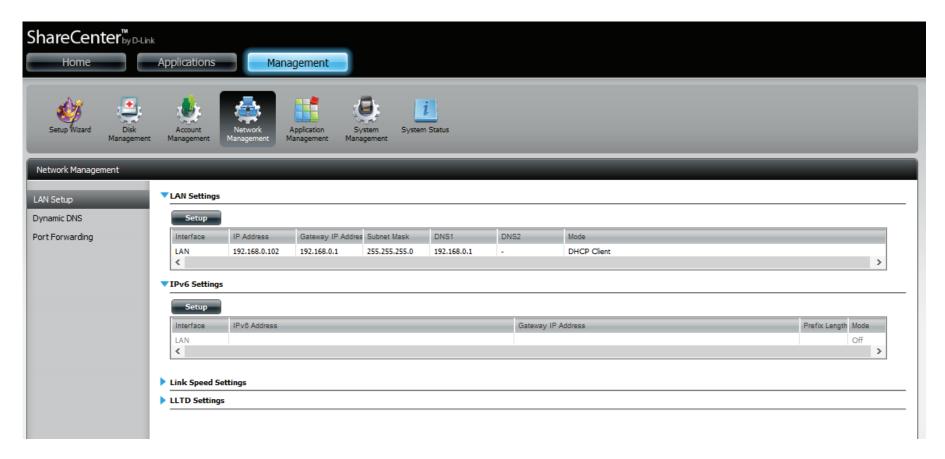
A summary of what you just configured will be displayed.

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.



IPv6 Setup

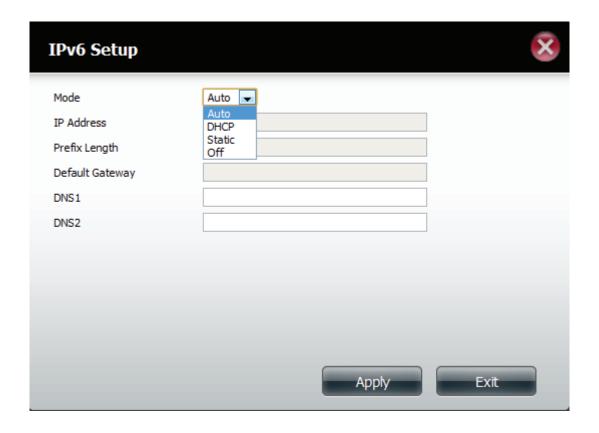
There are four connection modes to select from: Auto, DHCP, Static and Off.

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

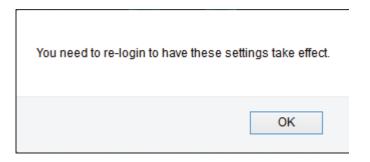
Off - Do not use IPv6

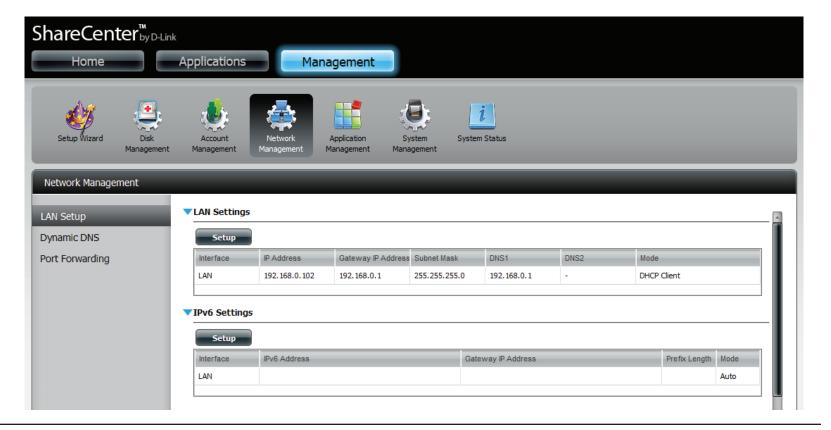


Section 4 - Configuration

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.



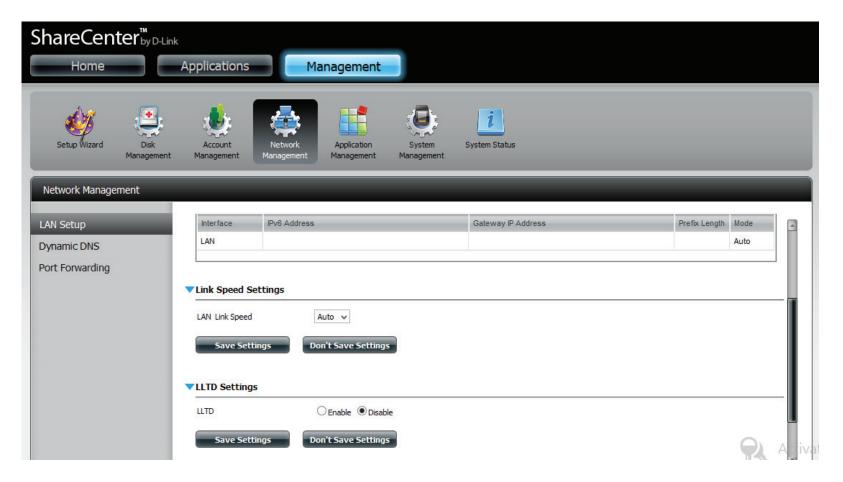


Link Speed and LLTD Settings

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.



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.

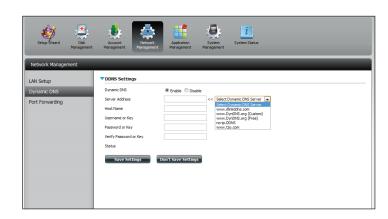
Password or Key: Enter your DDNS password or key.

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 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

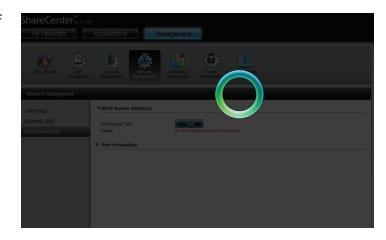
The DNS-320L supports UPnP port forwarding which configures port forwarding automatically on your UPnP-enabled router.

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

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

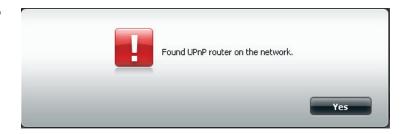


The DNS-320L is searching for a UPnP router. Do not turn off your NAS.



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.



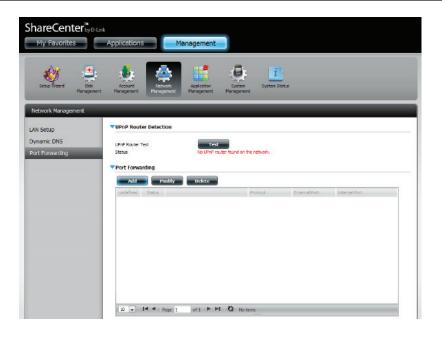
Click the blue arrow next to port forwarding to reveal the Port Forwarding options.



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.

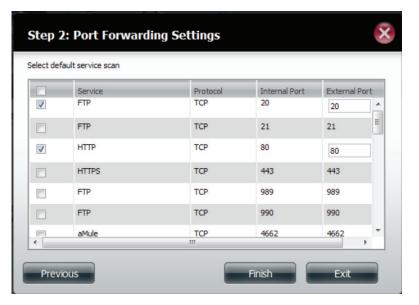
Click **Next** to continue.



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.



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.

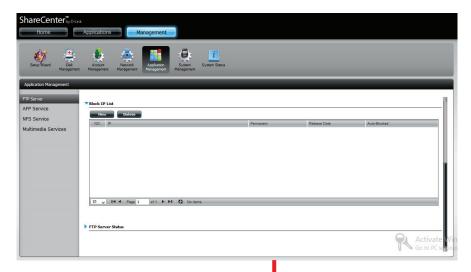
FXP: Enable or Disable File eXhange Protocol to transfer files from one FTP server to another.

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.

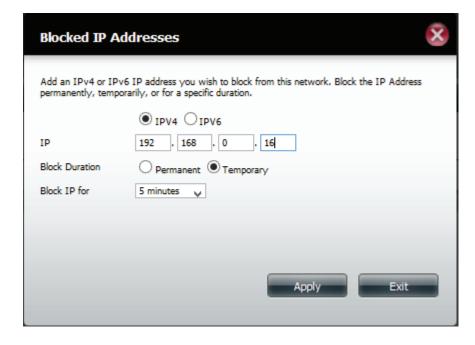


The window expands to include a Blocked IP list and a FTP Server Status report. Click the blue arrow to see the drop-down list.

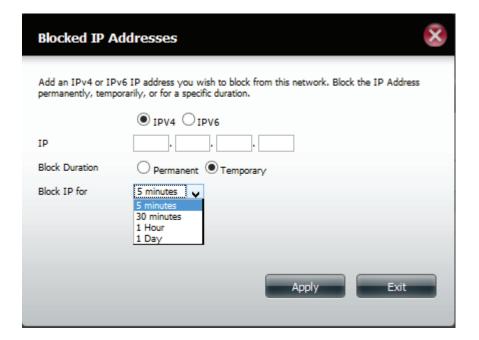
Click **New** to block a specific IP address.

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.

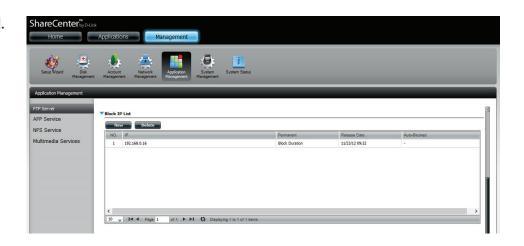
If you selected permanent, click **Apply** and continue.



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

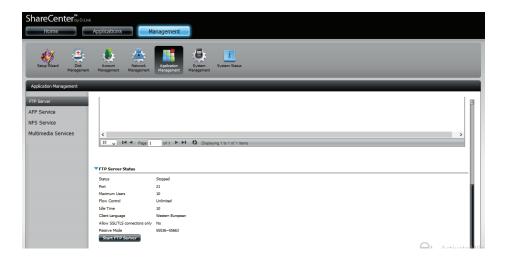


The **Blocked IP** list will display the IP addresses you blocked.

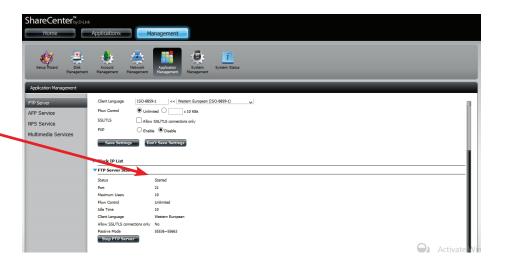


Click the blue arrow next to **FTP Server Status** to reveal the FTP details.

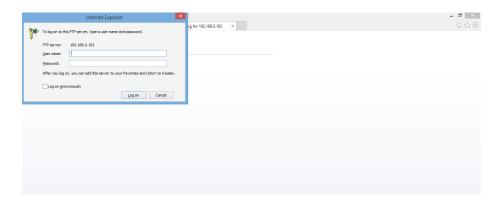
The FTP server is stopped by default. Click **Start FTP Server** to run the process.



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.

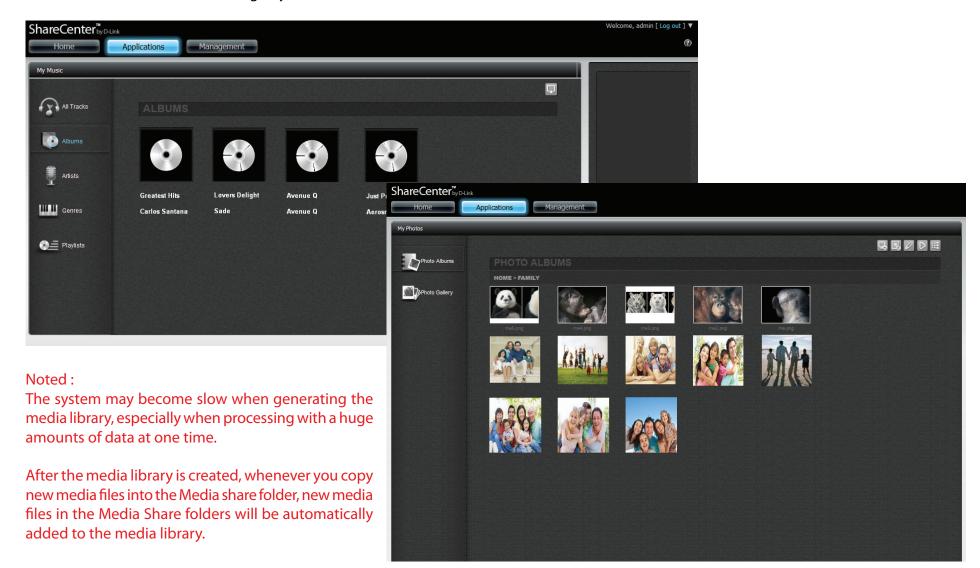
Click the **Enable** radio button to turn NFS service on.

Click Save Settings.

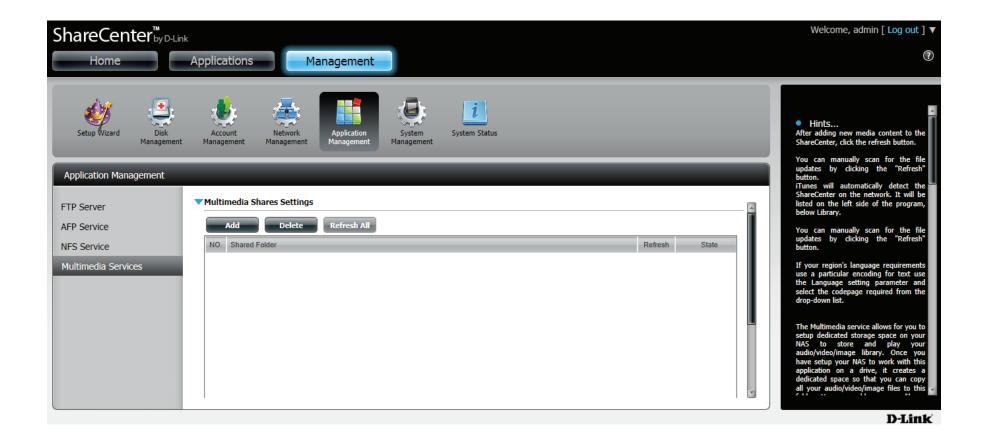


Multimedia Services

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.



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.

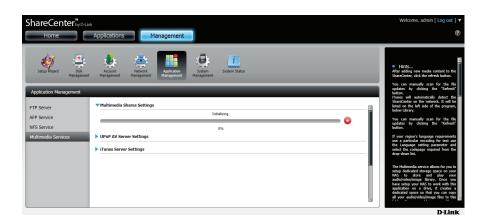


Once you click Refresh now, the following message appears:

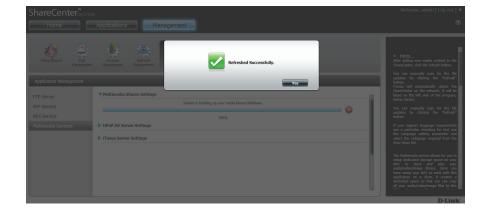
Click **Yes** to continue.



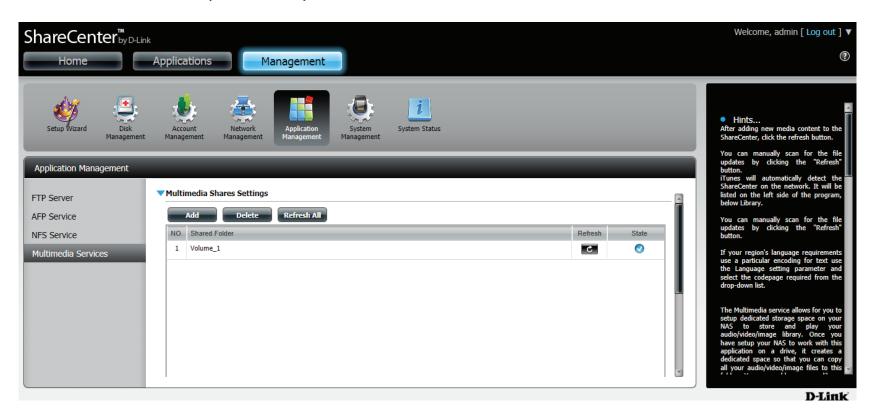
The Multimedia settings are initialized.



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.

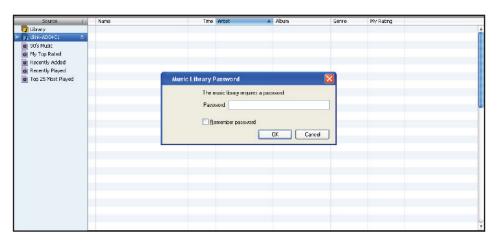
Password: Sets password for the iTunes server. (Optional)

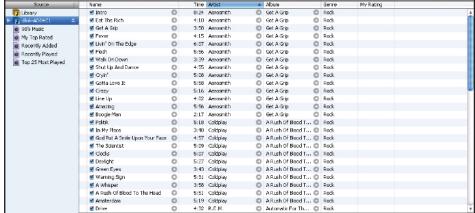
MP3 Tag Codepage: Here the user can select the MP3 Tag Codepage used by this device. Currently the Codepage is set to Western European.

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



After enabling the iTunes server on the ShareCenter $^{\text{TM}}$, launch iTunes. In your iTunes utility, select the ShareCenter $^{\text{TM}}$ and enter the iTunes server password if required.





Select the ShareCenter $^{\text{\tiny TM}}$. When prompted, enter in the iTunes server password. Click OK.

 $Media\,stored\,on\,the\,Share Center^{^{\text{TM}}}\,\,will\,then\,be\,available\,for\,use\,in\,i Tunes.$

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.

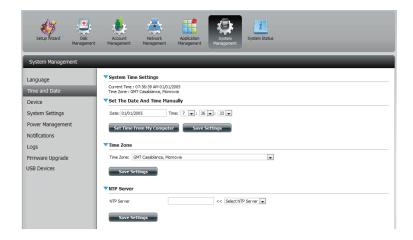
Click Yes to continue.



Time and Date

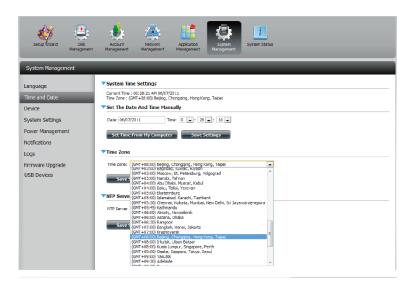
The Time and Date configuration option allows you to configure, update, and maintain the correct time and date on the internal system clock. In this section you can set the time zone that you are in, and set the NTP (Network Time Protocol) Server in order to periodically update your system time from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

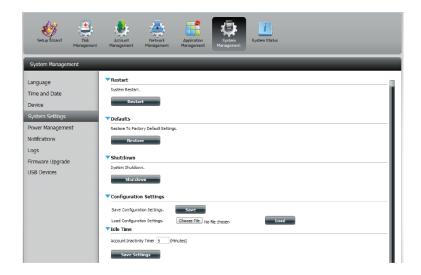
Restart: Click to reboot the DNS-320L.

Default: Click to restore the device back to the factory

default settings. All previous settings that have been

configured will be erased.

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



Configuration Click on the **Save** button to save the current **Settings:**

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**.

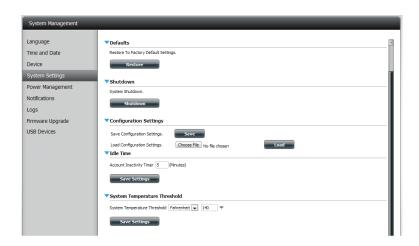
Enter the time (in minutes) that the administrator and Idle Time:

users will be allowed to remain idle while accessing

the web UI.

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

when it reaches the temperature set here.



HDD

Power Management

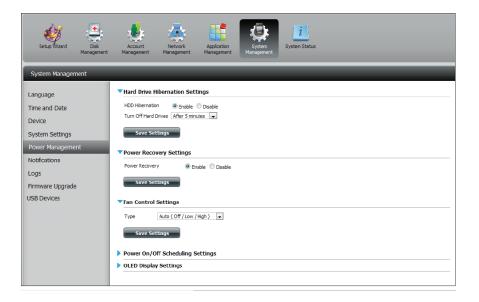
The device Power Management feature allows you to configure the drives to shut down while power remains constant to the device. The drives will power up again when data is accessed.

Hibernation:

Turn Off Hard Set the amount of idle time before the drives go into hibernation.

Click **Enable** or **Disable**.

Power 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:

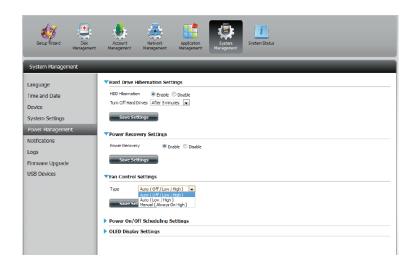
The speed of the fan can be controlled from this section.

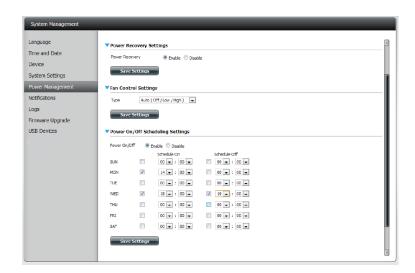
If you select **Auto** mode, the speed of the fan will change (Off/Low/High) depending on the internal temperature of the enclosure.

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 Select **STARTTLS** or **SSL** from the drop-down menu if it is

Connection: 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 Check this box to enable SMS alerts to be sent to **Notifications:** 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 If required by your service provider enter a

character with: character that will be used for the space.

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

function.

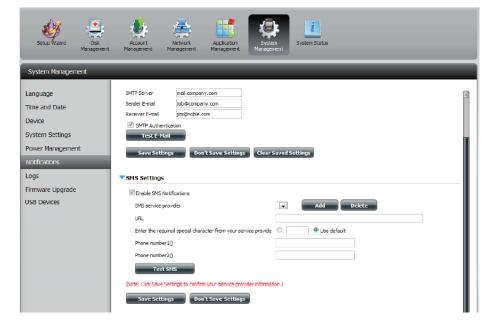
Phone Number 2: Enter a second mobile telephone number.

Verify that the number input is according to the configuration instructions from your Mobile

Service Provider.

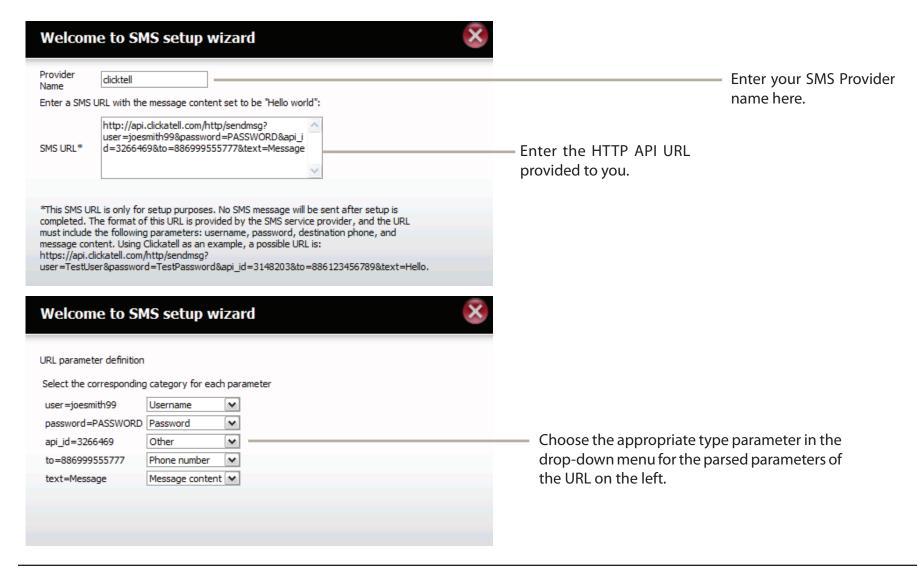
Test SMS button: Click this button to send a test message to your

mobile phone to verify the settings are correct and the API URL is functioning with your provider.



Adding an SMS Service Provider

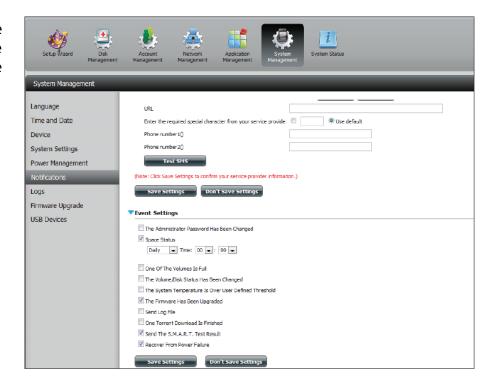
Once you have a SMS Service provide you with a HTTP API URL, enter it into the Add SMS Service Provider wizard. Enter the URL in the first window with an appropriate Provider Name. In the next window select the appropriate HTTP API URL parameter types definitions from the drop-down menus next to the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



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.



Logs

Within the Logs menu you can setup your ShareCenter^{TM} 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.

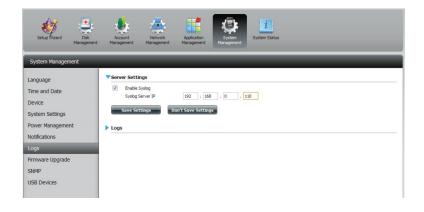
Syslog Server IP: Enter the IP address of an external Syslog server that

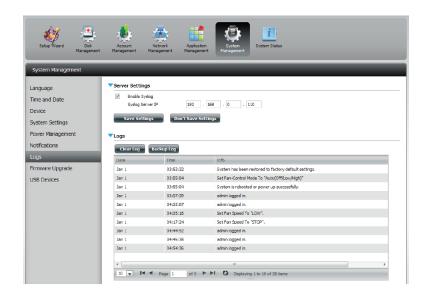
you wish to send the logs of this device to.

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 Displays the current firmware version on your

Version: ShareCenter[™] device.

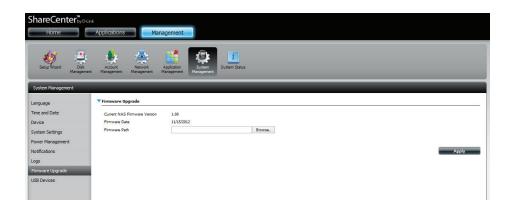
Firmware Date: Displays the date of when the firmware was

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 ShareCenterTM 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.

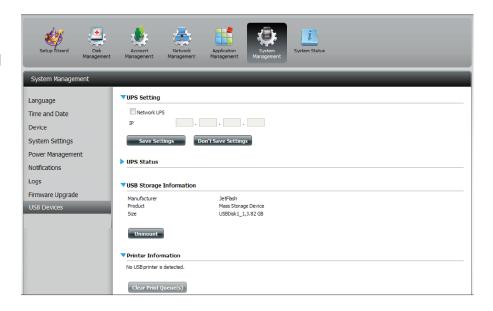


Printer Information

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

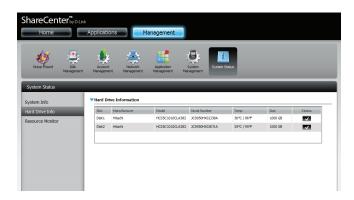
Click the blue arrow from each of the headings to reveal information on each segment.

LAN Information, Device Information, and Volume Information.



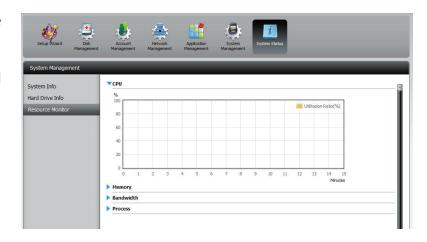
Click **System Status** and then **Hard Drive Info**.

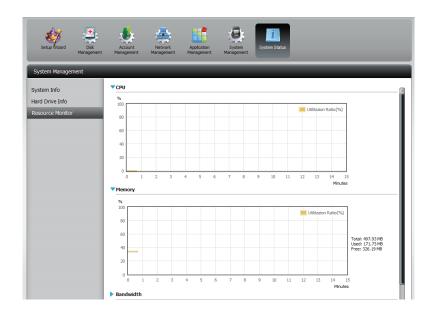
Click the blue arrow to reveal a table of hard drive information.

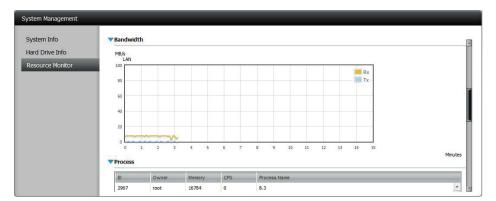


Click **System Status** > **Resource Monitor**, then click the blue arrow to reveal the resource details.

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

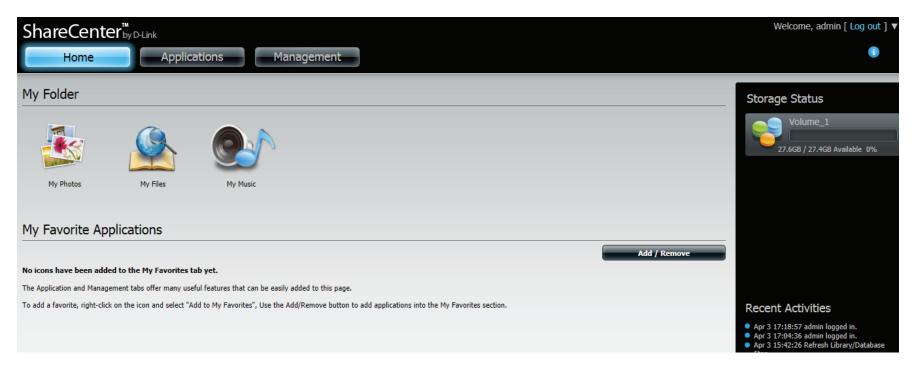






Home

The Home tab is the center for all files on your ShareCenter $^{\text{TM}}$. 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.



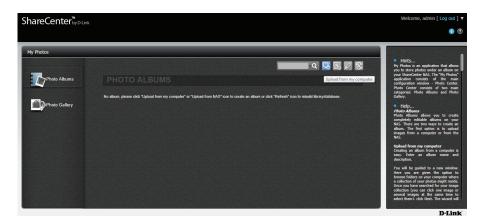
My Photos

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

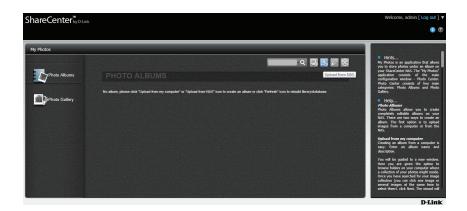
When you click the **My Photo** app, you are transferred to the **Applications** section. There are two sections in the **My Photos** app - **Photo Albums** and **Photo Gallery**.



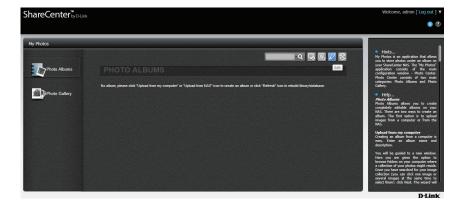
On the right-hand side of **My Photos** there are 4 main icons and a search field The icons turn blue when you roll your mouse over it. The first icon is "**Upload from my computer**"



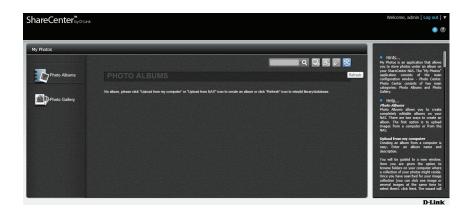
The second icon is "Upload from NAS"



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.

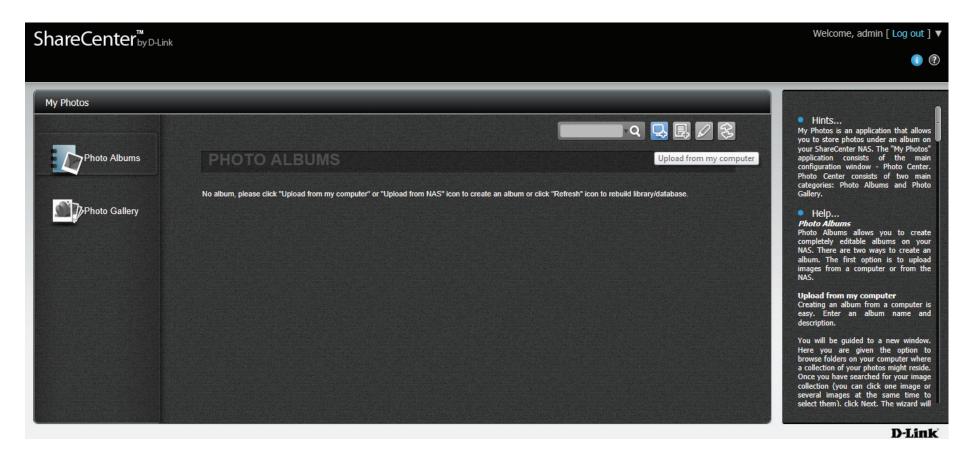
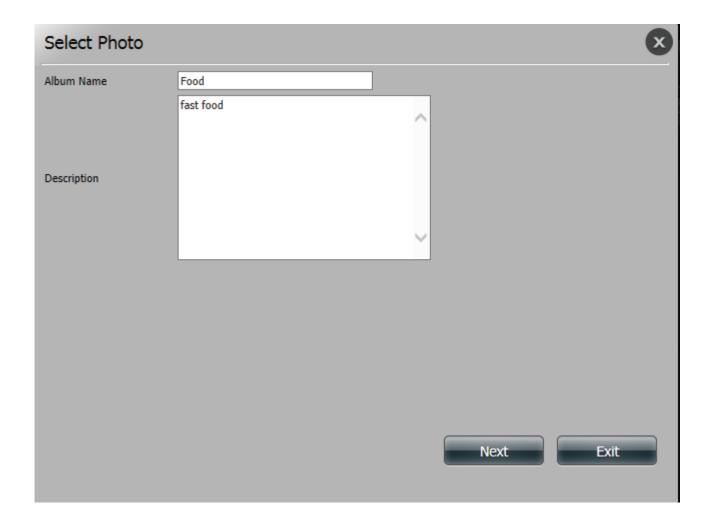


Photo Album Wizard

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.

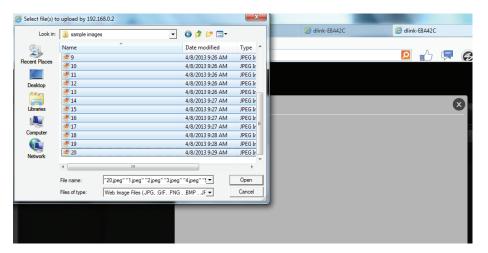


Under the **Select Photo** section, click the **browse** button to search your computer for your photos.

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.

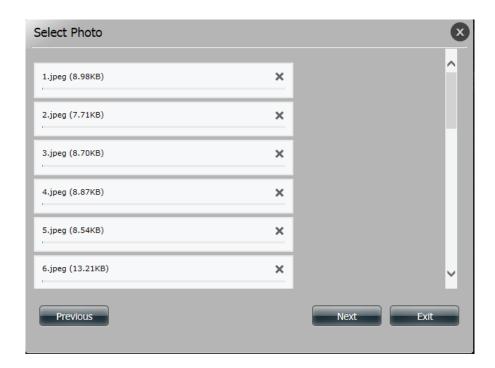
Click the **Open** button to add them to the **Album**.





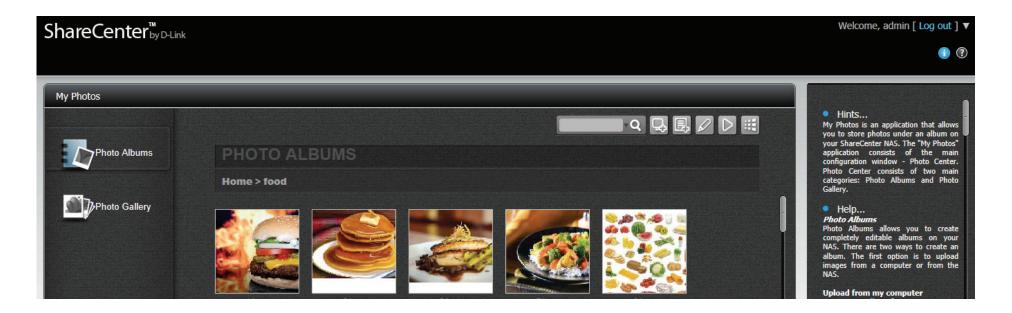
The **Photo Album Wizard** is now populated with the photos you have selected. Click **Next** to upload the photos.

ShareCenter[™] automatically updates the photos to the NAS.



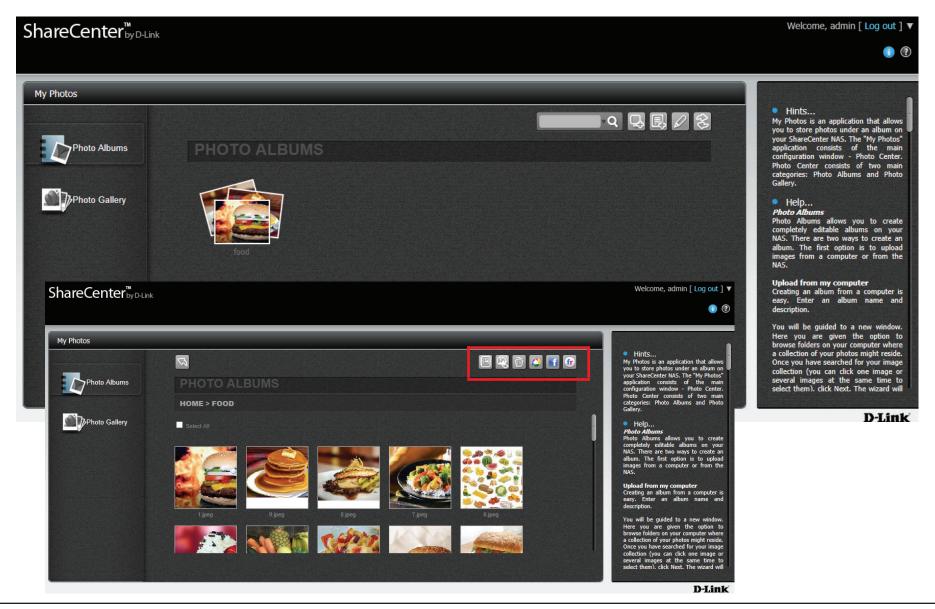


The **Photo Album** now features your Album.

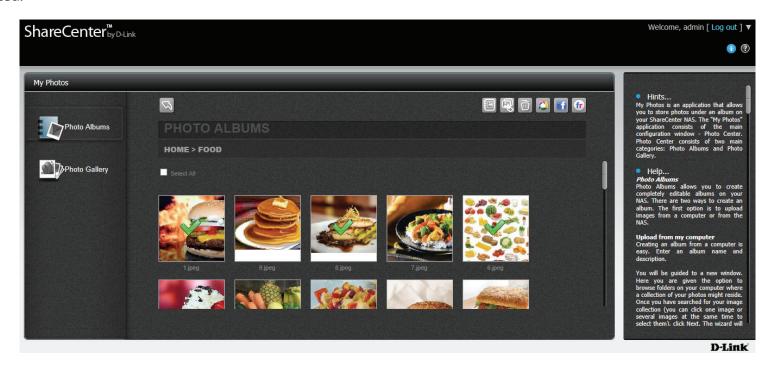


Editing Photos in an Album

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 **Delete** the current photo from the **Photo Album**.



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



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



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



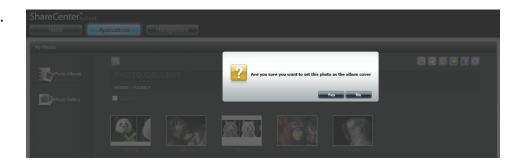
Select this icon if you wish to Share the current photo to **Flickr**.

Select a Photo as a Cover image

Click the **Set Cover** icon.



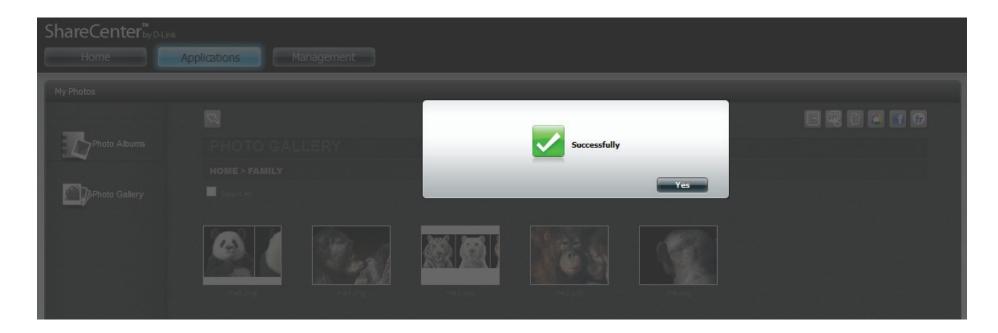
You are asked to verify your instruction. Click **Yes** to continue, **No** to exit.



The NAS configures the changes.



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



Select a Photo to Move

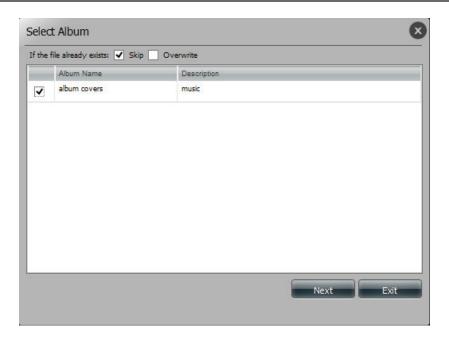
Click **My Photos**, **Photo Albums**, the **Photo Album** you wish to select the **Photo** from.



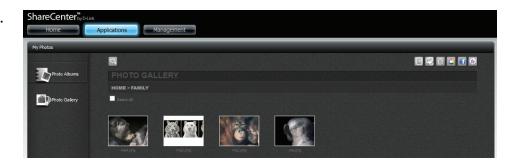
Select the **Photo** and click **Move**.



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**.



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).

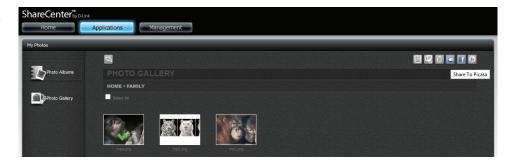


Share a Photo to Picasa

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

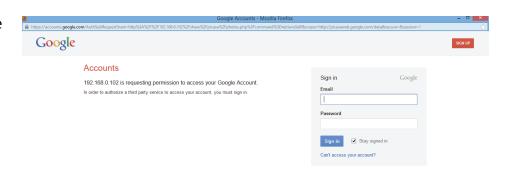


Select the Photo you wish to share on **Picasa**. A green check-mark highlights your selection and click **Share to Picasa**.

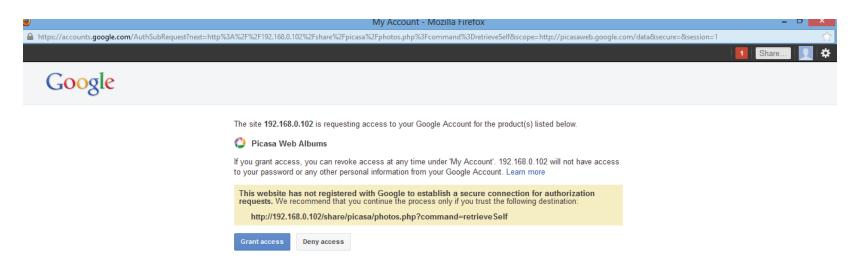


Google requests you log-in to your **Google account**. You are unable to use the **Picasa** feature if you do not have a Google account.

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

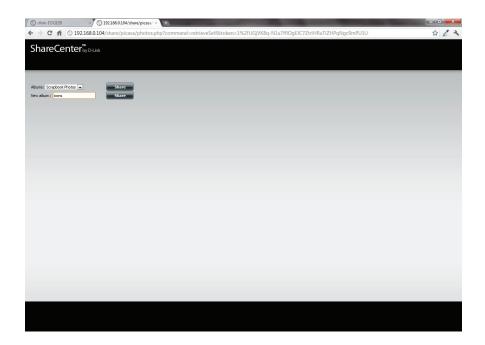


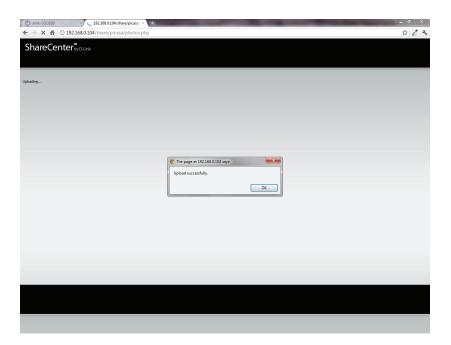
Google requests you to grant access to **Picasa Web Albums**. Click **Grant Access** to proceed.



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.

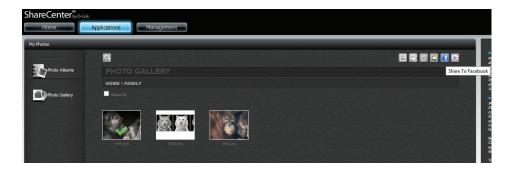
Note: You will have to enable Photos (Picasa Web Albums) with your Google account.



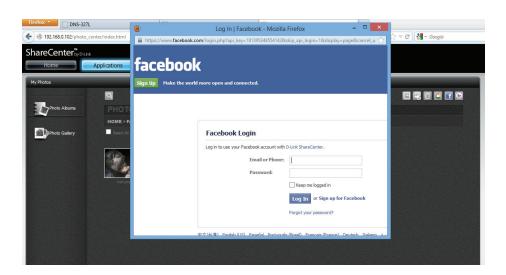


Share a Photo to Facebook

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



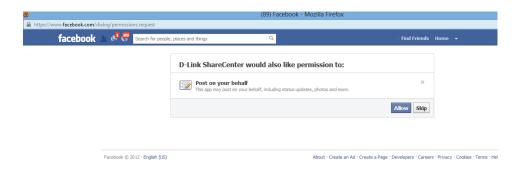
Select the **Photo** you wish to share on **Facebook**. A green check-mark highlights your selection and click **Share to Facebook**. A pop-up window appears directing you to log-in to Facebook. Enter your details and log-in.



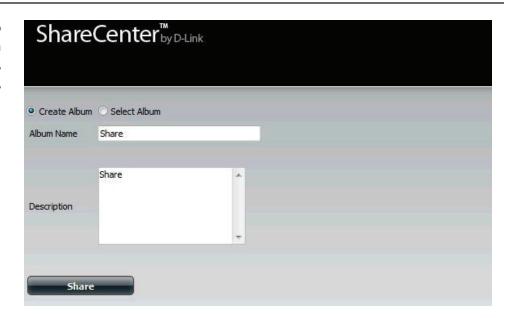
Facebook requests you to access and get their **D-Link ShareCenter**TM **App**. Click **Go to App** to proceed.



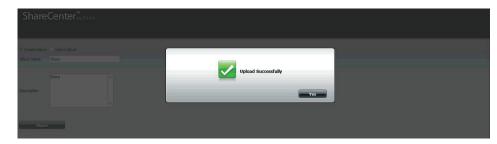
The **D-Link ShareCenter**[™] **App** also requests permission to post images on your behalf. Click **Allow** to continue.



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.



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

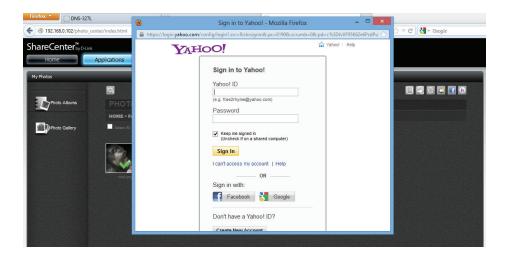
Click **My Photos**, **Photo Albums**, the **Photo Album** you wish to select the **Photo** from.



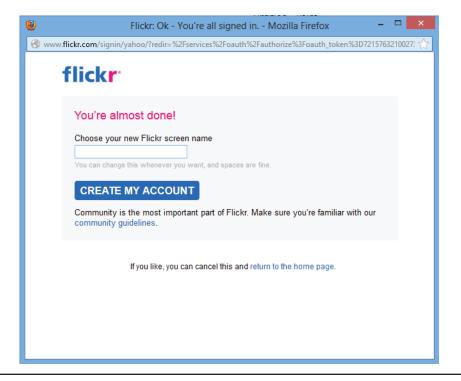
Select the **Photo** you wish to share on **Flickr**. A green check-mark highlights your selection and click **Share to Flickr**. A pop-up window appears directing you to log-in to **Yahoo Flickr**. Enter your details and log-in.



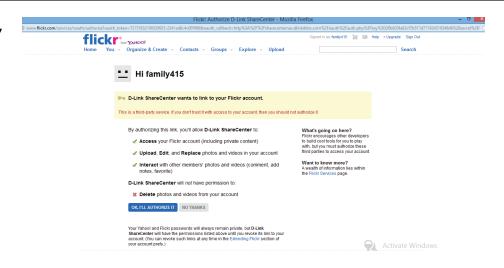
A pop-up window appears directing you to log-in to **Yahoo Flickr**. Enter your details and click Sign-in.



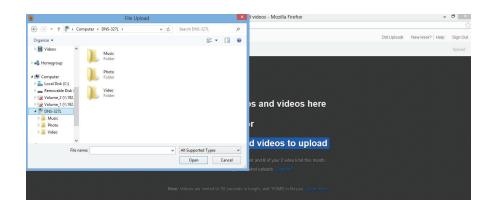
Create a name for your **Album** on **Flickr**.



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.



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.

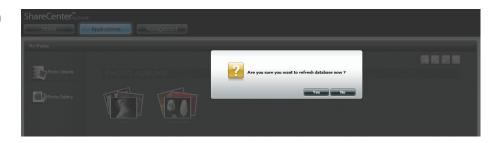


Refreshing the Album Database

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.

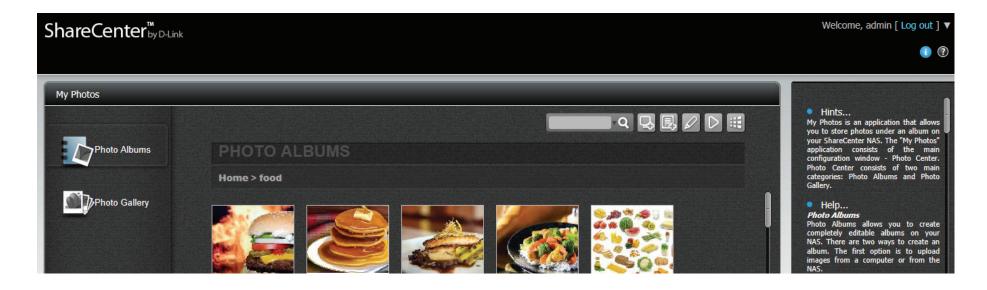


The DNS-320L refreshes the system and is ready.

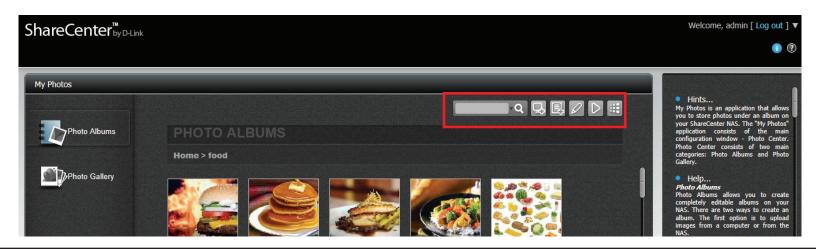


Managing Photos

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.



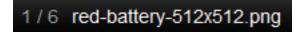
Slideshow Toolbar

The **toolbar** consists of the:

Play button: Press this button to play the Gallery images.



Photo information: View the image name and file format.



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.

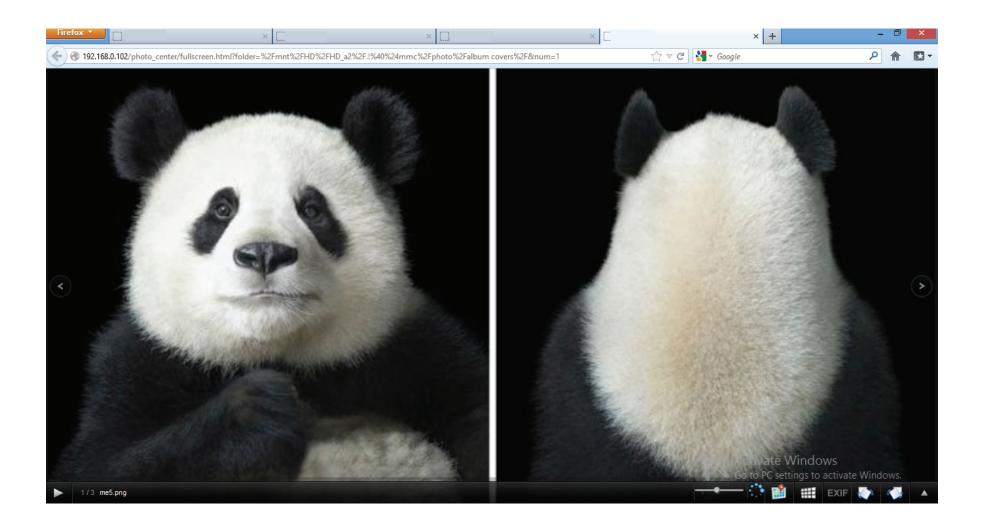


Gallery Navigation: This provides a pop-up display of all the images in the gallery.



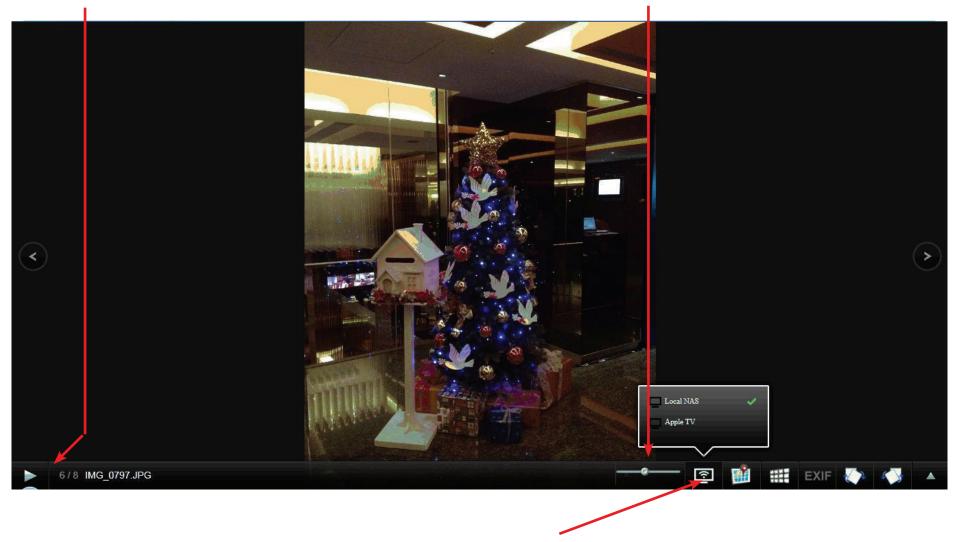
Click a photo to go in **full screen** mode. This is similar to clicking the fourth icon in the icon list, to the right, the **Slideshow** icon. The screen opens in a new tab.



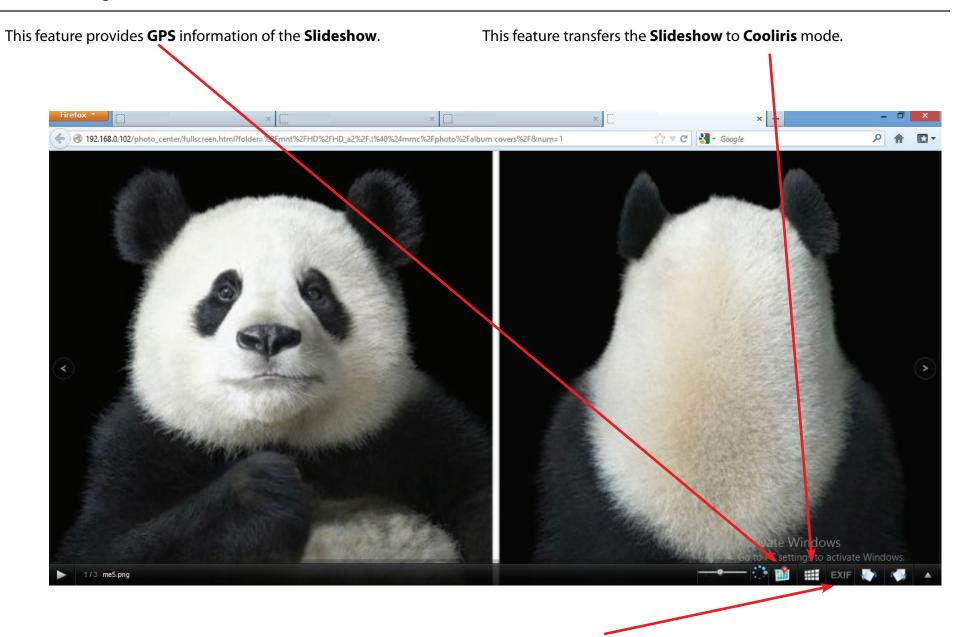


This feature plays the **Slideshow**.

This feature adjusts the speed of the **Slideshow**.



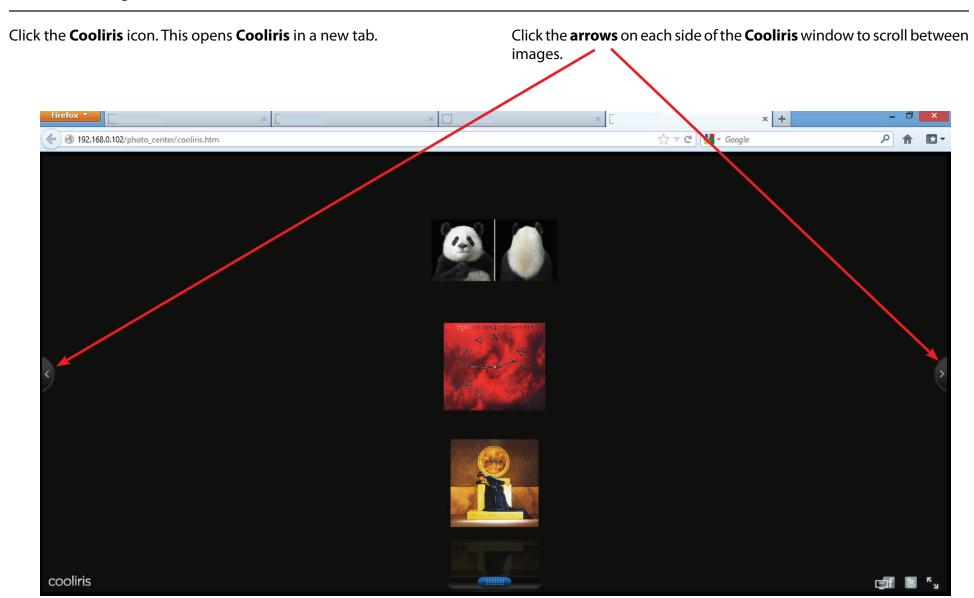
This feature beams your Slideshow to a Local Device or to a TV via AirPlay enabled Apple Device.

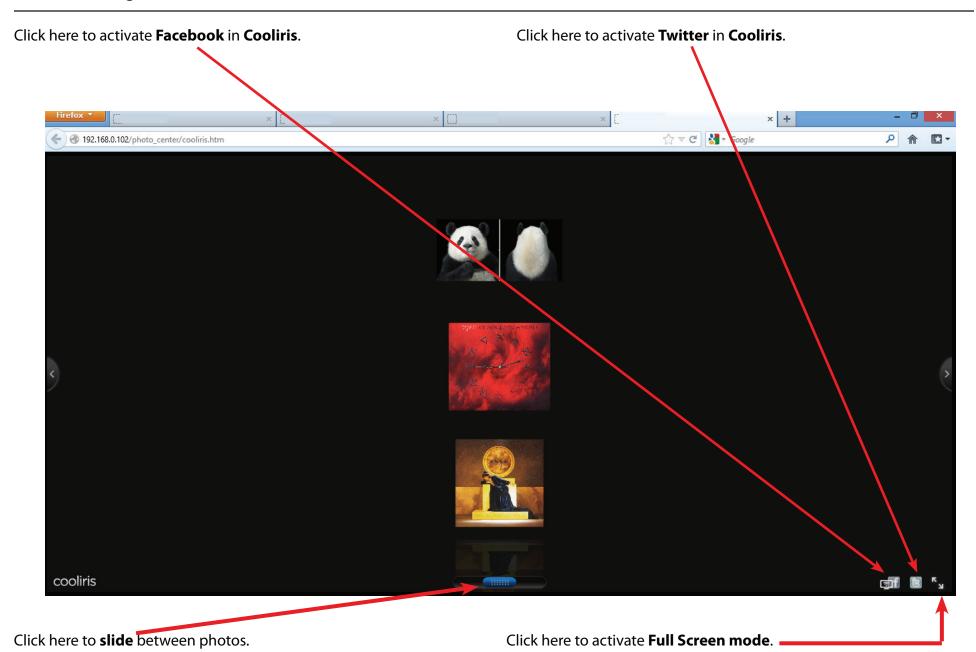


This feature **EXIF** information of your **Slideshow**.

This feature **rotates** the image of the **Slideshow**. This feature pops up the browser window of the **Slideshow.** ▽ C Google 192.168.0.102/photo_center/fullscreen.htm 1/3 me5.png

This feature **EXIF** information of your **Slideshow**.



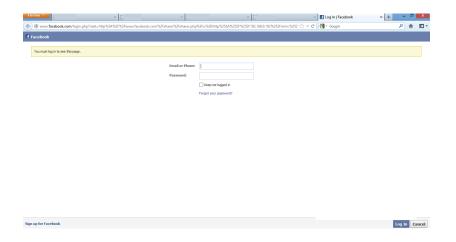


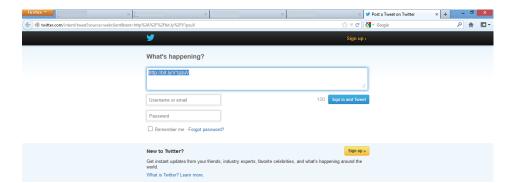
Click on each photo to view separately. The photo is enlarged. On the Click here to close **Single-Image view**. Click here to enlarge into **Full**right-hand side of each image are the social network links. screen mode. x + ☆ ▼ C Soogle **₽** ♠ □ ▼ 🛑 闭 192.168.0.102/photo_center/cooliris.htm cooliris

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

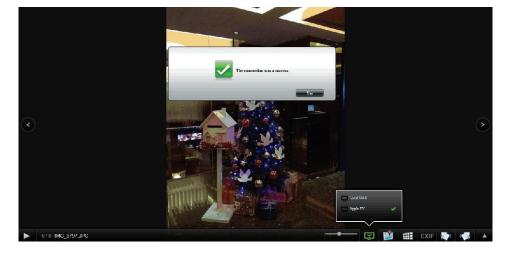


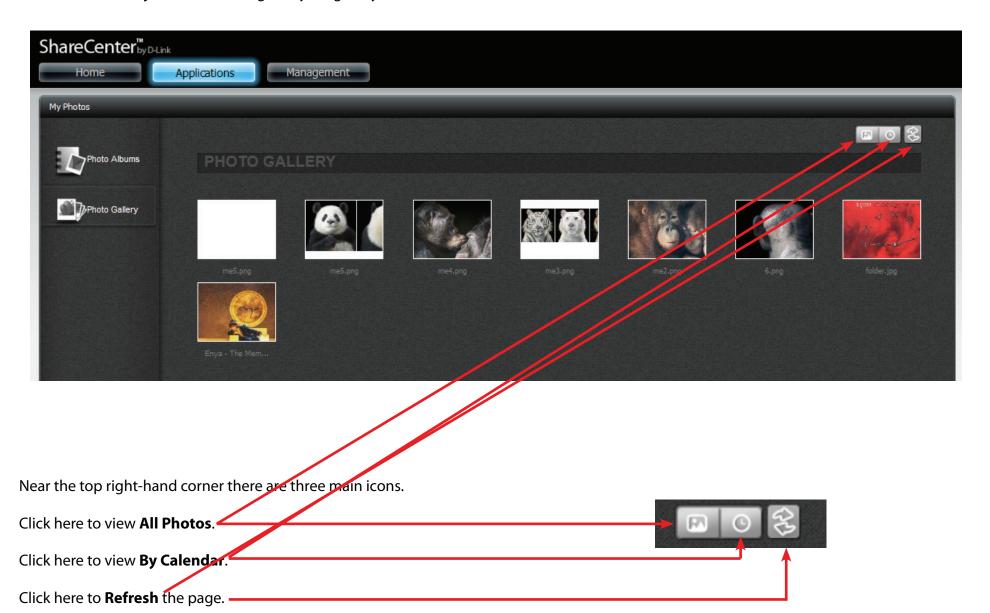






Photo Gallery

Click **Photo Gallery** to view the images in your gallery.



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.

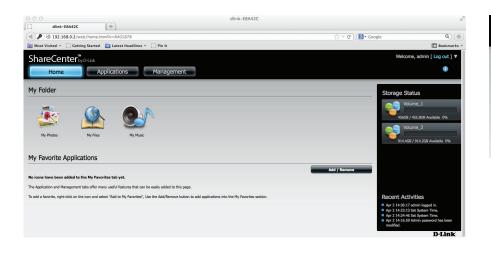


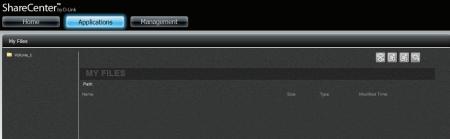
My Files

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.

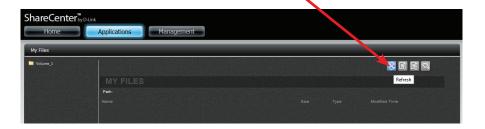
The My Files window provides a list of all the Volumes created on the NAS. Click on any Volume you created to see a directory listing of the files.



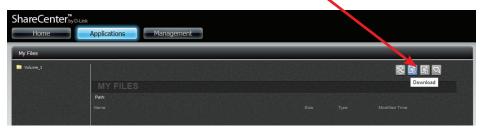


My Files - Icons

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.

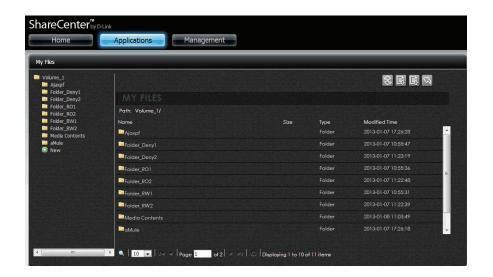


Click the **icons** near the right-hand side of the panel to access the **My Files** features. Click this button to **Return** to the previous screen.



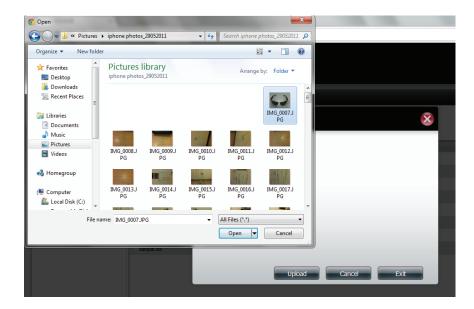
Upload

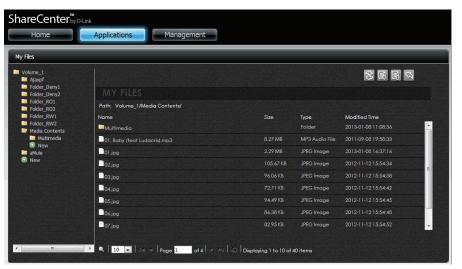
To upload more files to the volume you have selected, click the **Upload** button. Click the **Browse** button to find files on your computer to upload to the NAS. Locate the path of the file you want to upload and click **Open**.





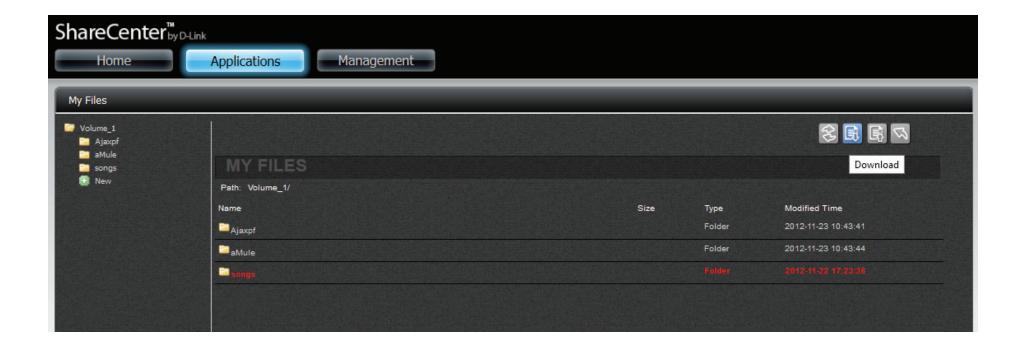
Click **Upload** to start the uploading process. Then click **Exit** to close the upload window. The file updates to the NAS and is displayed on the directory table.



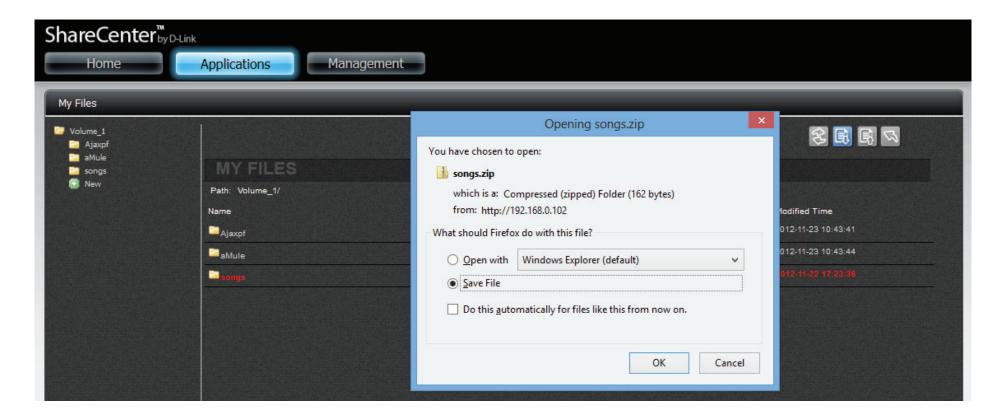


Download

To download files from the NAS to your computer, select the file you want to download (lighlighted in red) and click the **Download** button. Depending on your browser download settings, the browser automatically downloads the file to your saved location.



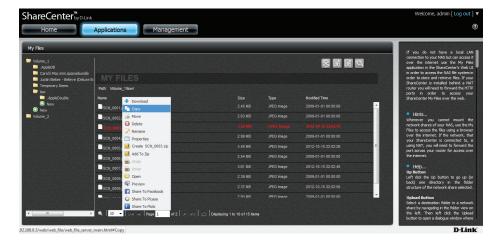
Alternatively, click the **Save File** button and **OK** to continue.



Copy

To Copy files from one folder to another folder of the NAS, select the file you want to copy (lighlighted in red) and right-click. From the drop-down list click Copy.

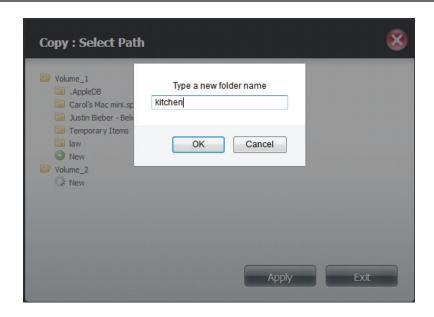
Go to **Applications**, **My Files**. Browse any of the folders on the left pane, right click any of the files in the right pane. Select **Copy** (it turns blue).



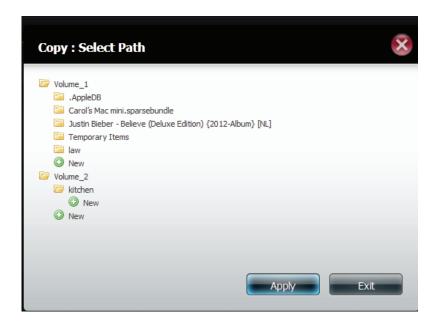
Under Copy, select a Destination Path or create a new Path.



Enter a name for the new **Folder**. Click **OK**.



Select the newly created folder and click **Apply**.



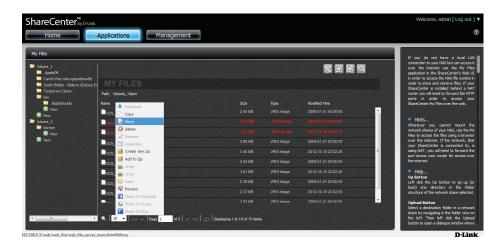
To verify that the file did copy to the destination, browse to the folder in question.



Move

To Move files from one folder to another folder of the NAS, select the file you want to move (lighlighted 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.



Selct a folder from one of the **Volumes** and click **Apply.**



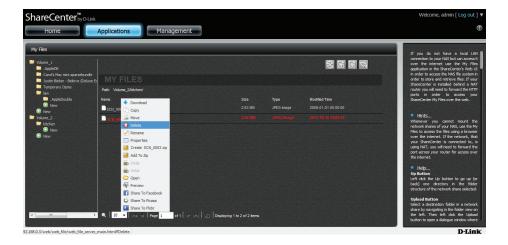
Browse to where you moved the file.



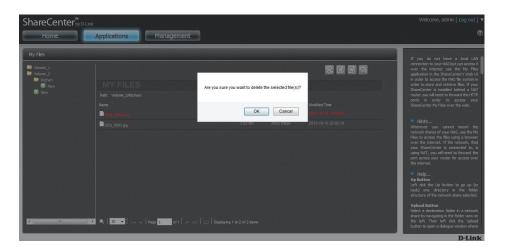
Delete

To Delete files from the NAS using your computer, select the file you want to delete (lighlighted in red) and right-click. From the drop-down list click Delete.

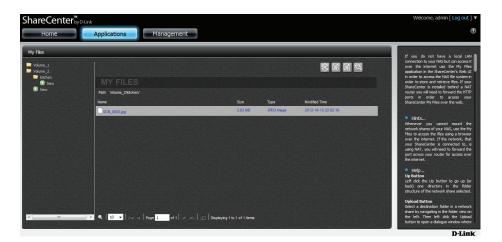
Go to **Applications**, **My Files**. Browse any of the folders on the left pane, right click any of the files in the right pane. Select **Delete** (it turns blue)



A verification message appears asking for you to verify your selection. Click **OK** to confirm.



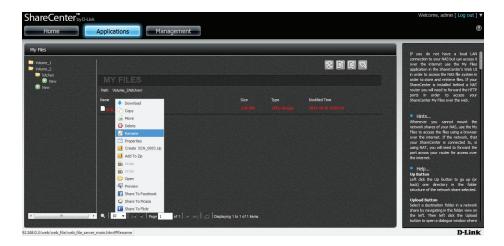
The file no longer exists in the folder.



Rename

To Rename files from the NAS, select the file you want to rename (lighlighted 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)



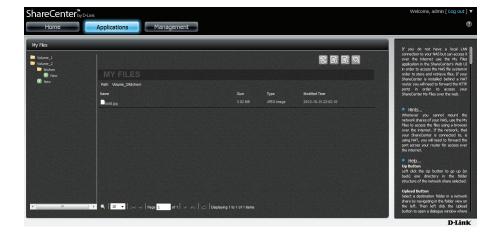
The Rename window displays the original name.



Enter a new name for the file. Click **Apply**.



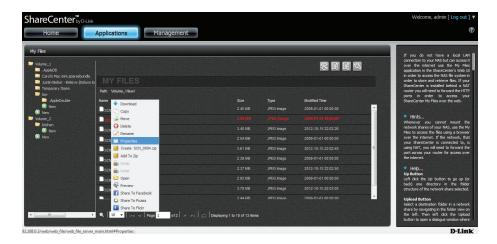
The **Renamed** file is now accessable from its original location.

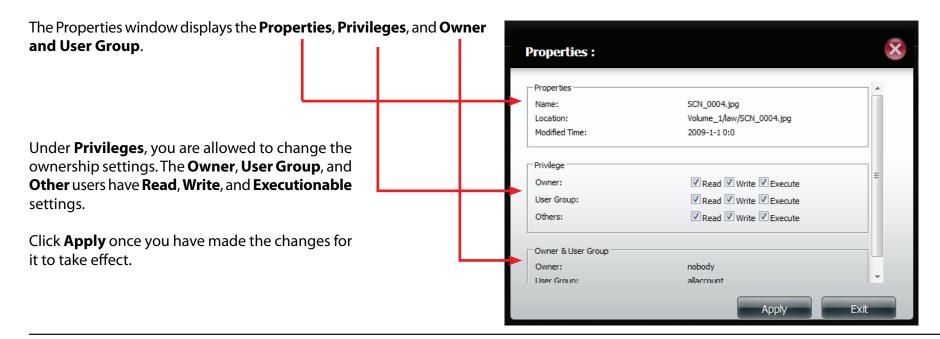


Properties

To get general information about a file(s) from the NAS, select the file (lighlighted 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)

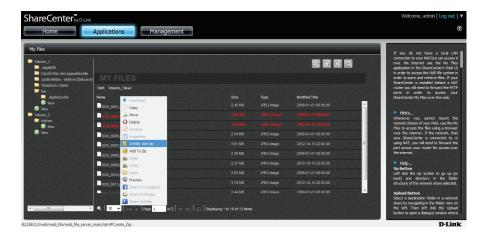




Create a Zip file from the Selected Folder

To Zip a file(s) from the NAS, select the file you want to zip (lighlighted 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.





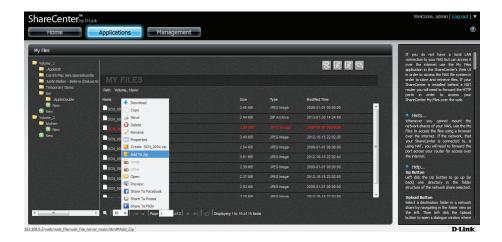
Add to Zip

To make a file zipped from the NAS, select the file you want to zip (lighlighted in red) and right-click. From the drop-down list click Add to Zip.

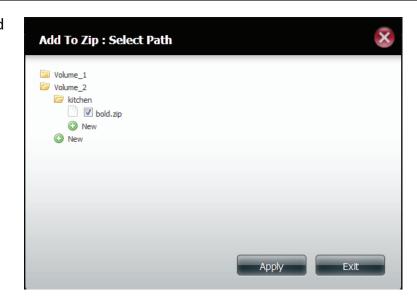
Add to zip allows you to add to an existing zipped file. So, take an existing zip (look at the file size). In our example, "bold.zip" (the original file size) is 3.01MB



Right click the file you want to "Add to zip"



Under **Add to Zip**, select the zipped file you want to have the file added to. Click the checkbox and click **Apply**.



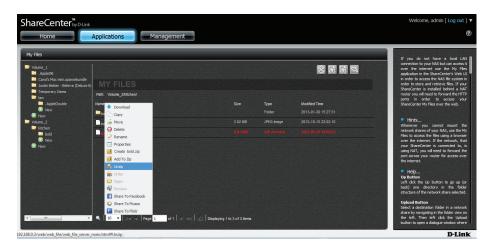
The Wizard adds the new file to the zipped file. In the example, you can see the new file size.



Unzipping a Zipped File

To unzip a zipped file on the NAS, select the file you want to unzip (lighlighted 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 (lighlighted in red) and right-click. From the drop-down list click Untar.

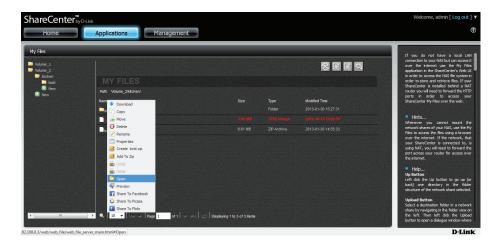
An unzipped TAR file works when your workstation is Linux-based. The unzipping process works similar to unzipping a normal file.

Opening a File

To open a file on the NAS, select the file you want to open (lighlighted 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.

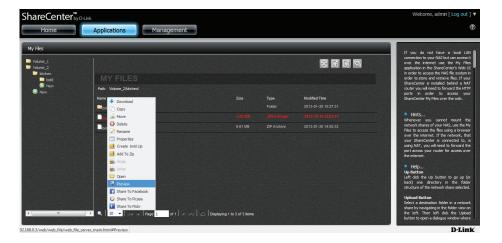




Previewing a File

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 (lighlighted in red) and right-click. From the drop-down list click Preview.

Select the file you want to Preview, right-click it.



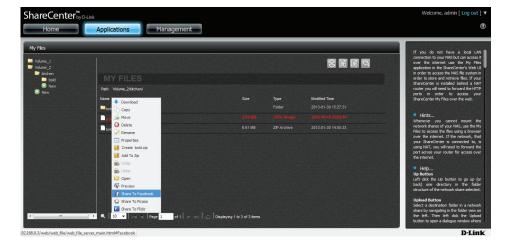
The file opens in a new Gallery-like window. Use the left/right slider to view the image or resize the image from the corner points.



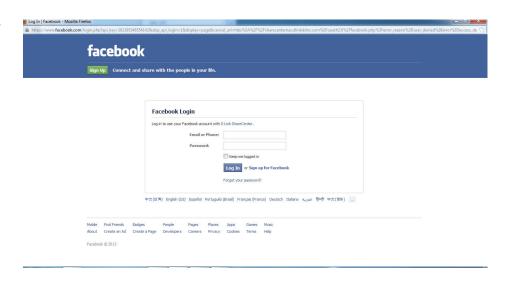
Share to Facebook

To Share an image file on the NAS to Facebook, select the file you want to share (lighlighted 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.



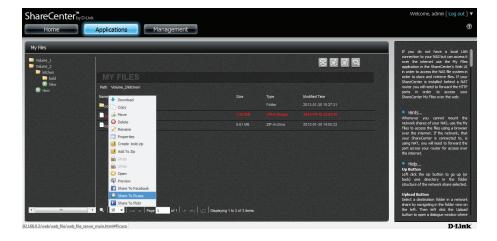
The browser opens a new Window and redirects you to Login with your Facebook account to automatically upload files to Facebook.



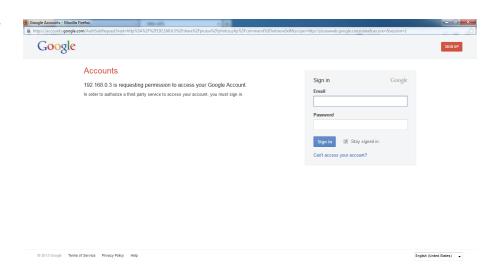
Share to Picasa

To Share an image file on the NAS to Picasa, select the file you want to share (lighlighted in red) and right-click. From the drop-down list click Share to Picasa.

Select the file you want to Share toPicasa, right-click it.



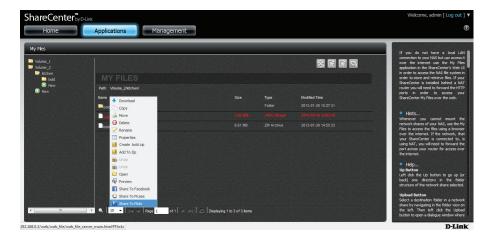
The browser opens a new Window and redirects you to Login with your Google account to automatically upload files to Picasa.



Share to Flickr

To Share an image file on the NAS to Flickr, select the file you want to share (lighlighted 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.

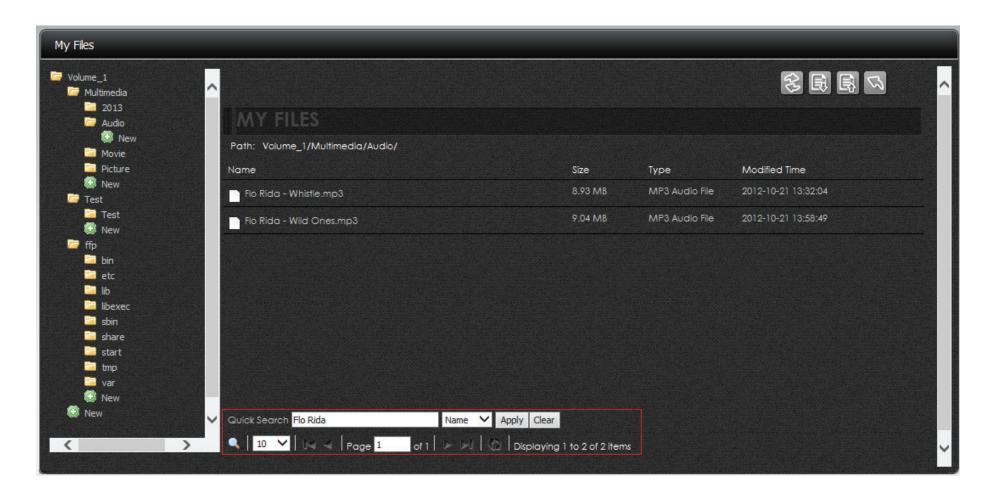


The browser opens a new Window and redirects you to Login with your Yahoo account to automatically upload files to Flickr.



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.

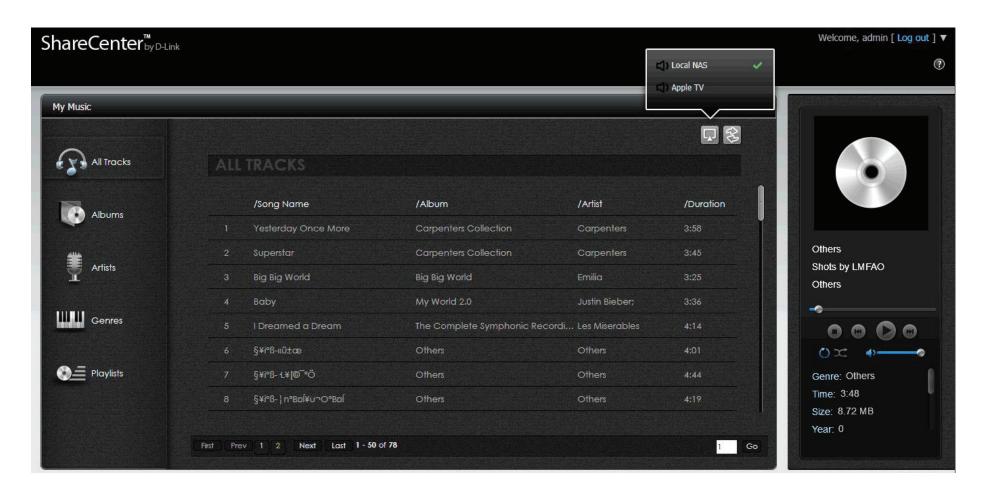


My Music

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.



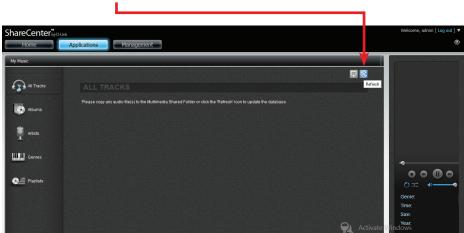
Click My Music to view the My Music features



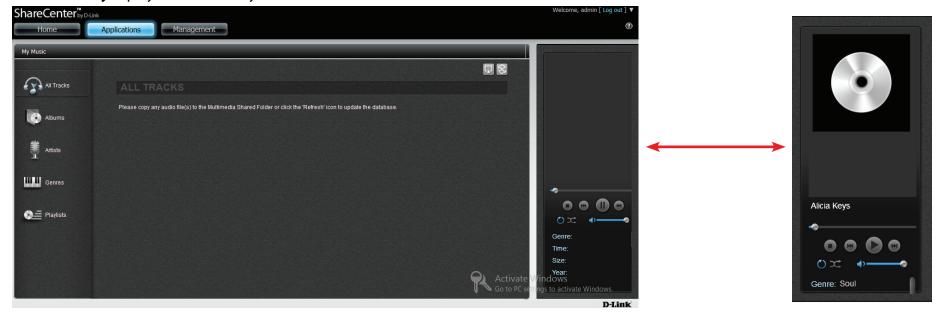
My Music - The Interface

Click here to playback music to a Local Device or to an AirPlay enabled Click here to **Refresh** the screen. Apple Device.





The Music Player plays tracks directly off the DNS-320L

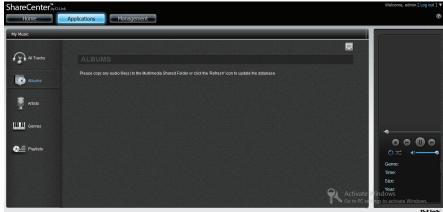


My Music - The Categories

Click **All Tracks** to view all the audio tracks on the DNS320L.



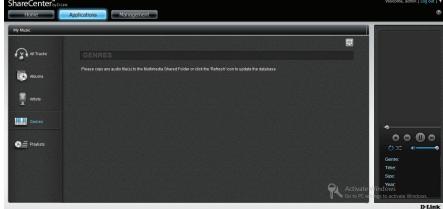
Click **Albums** to view all the albums on the DNS320L.



Click **Artists** to view the playlist by artist on the DNS320L.



Click **Genres** to view the playlist by genre on the DNS320L.



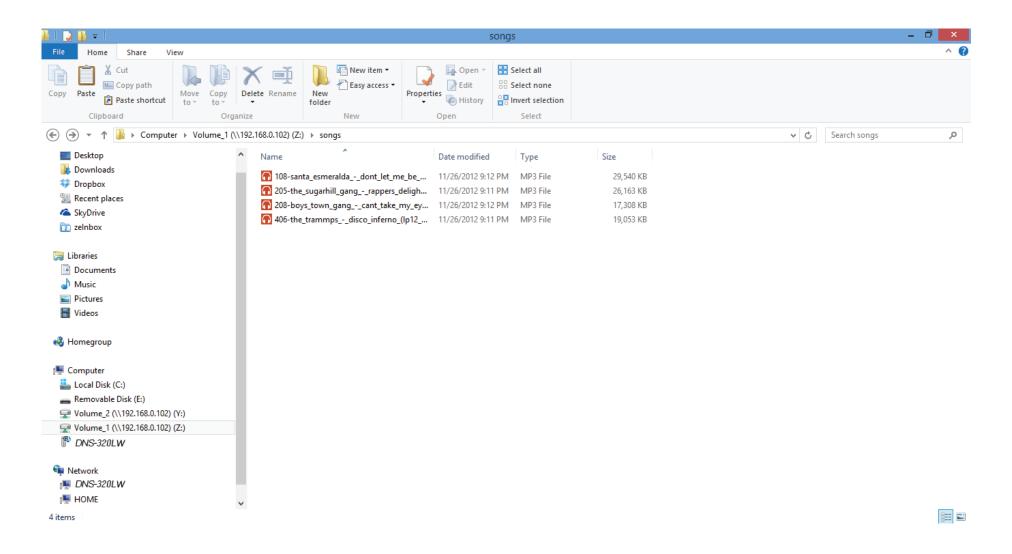
My Music - The Categories

Click **Playlists** to view all playlists and create new playlists on the DNS320L.

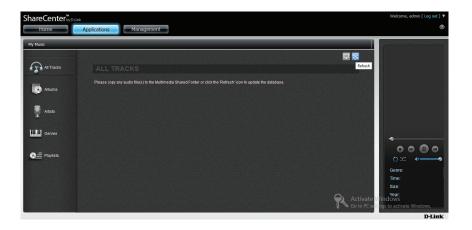


My Music - Music on your DNS-320L

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



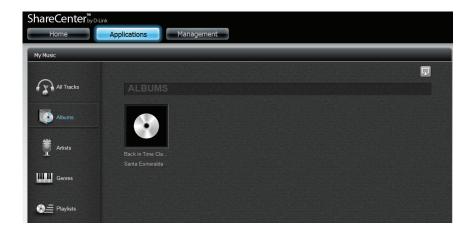
View your **All Tracks** window and click the **Refresh** button.



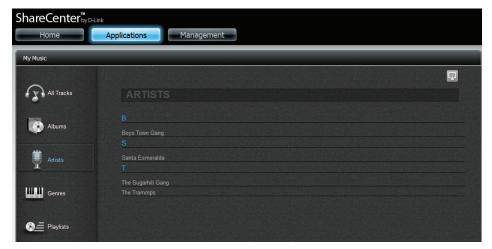
The Playlist is populated with the same tracks you copied and pasted to before.



Click **Albums** to view it in album view.



Click **Artists** to view all the artists in your playlist.

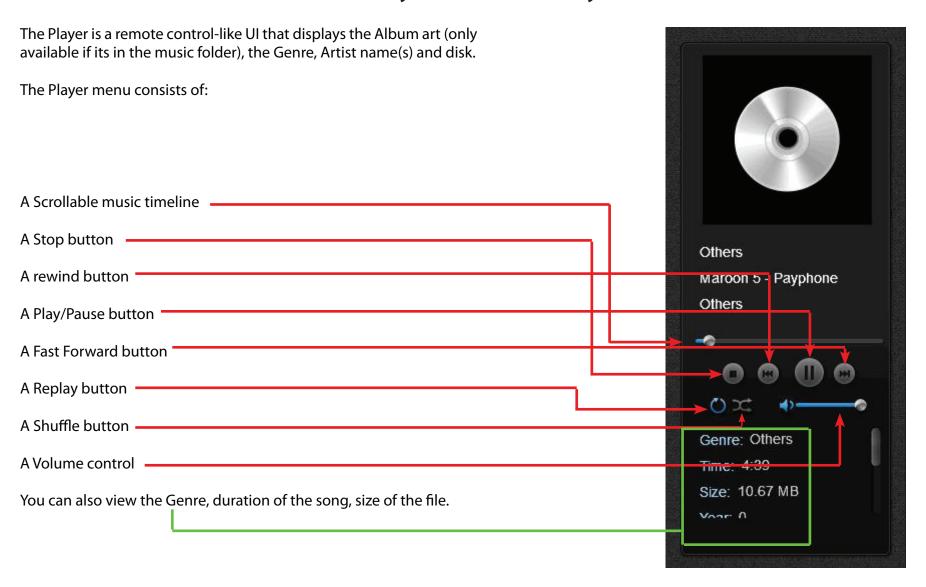


My Music - Playback Music on an Apple device

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.



My Music - The Player



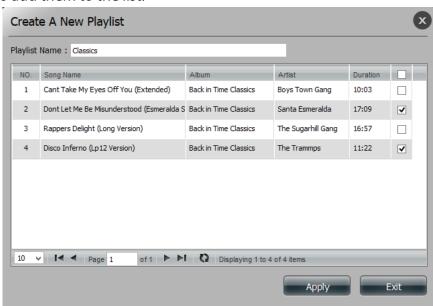
My Music - Create a Playlist

Click the **Playlist** tab at the bottom of **My Music**.



Click the **Plus** icon at the top right-hand corner.

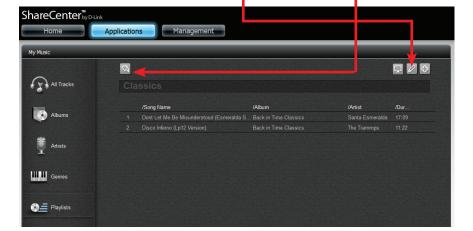
The **Create a New Playlist** menu appears. Enter a name under **Playlist Name** and click the songs you wish to add to the playlist. Click **Apply** to add them to the list.



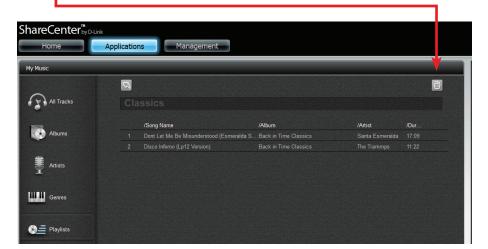
The new playlist is created under the **Playlists** window.



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 Surveillance

The My Surveillance app works with D-Link Cloud-enabled cameras. It manages your IP cameras from the NAS and allows all streaming video to be saved to the NAS. My Surveillance can connect up to 4 cameras. Click the **My Surveillance** icon under the My Folder window in the Home tab. By default, My Surveillance is disabled. To enable it, right-click the icon and click **Enable**. Right-clicking only applies to this app and icon.

My Folder

My Folder

My Foundament

A colored icon indicates that the My Surveillance feature is enabled.

To enable, right-click the icon and click **Enable**.

A greyed-out icon indicates that the My Surveillance feature is disabled.



Please Note: My Surveillance is compatible with the following D-Link cameras:

DCS-930/930L, DCS-932/932L, DCS-1100/1100L, DCS-1130/1130L, DCS-5230/5230L, DCS-942L, DCS-2103/2130, DCS-2210/2230, DCS-5222L/5211L

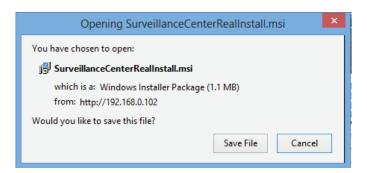
More cameras will be supported in the future. Please visit your local D-Link support site for an updated list of supported cameras.

After you have enabled **My Surveillance**, it opens up in a new browser window. Before you can proceed, you should to make sure you have the correct browser plug-ins to view the streaming video. If required, the browser will prompt you to install the new plug-in. Click the plug-in advisory to continue.

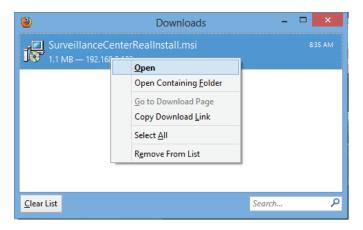


Click Save File to accept the SurveillanceCenterRealInstall.msi file.

Note: My Surveillance supports the following web browsers: Internet Explorer 8 or higher Mozilla Firefox 4 or higher Apple Safari 4 or higher (Windows) Google Chrome 13 or higher



Once the file is downloaded, **double-click** or **right-click**, select **Open** and install the program from your browser's Downloads window.



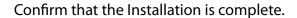
The **Surveillance Center Real Install** setup wizard will begin.

Click **Next** to continue.

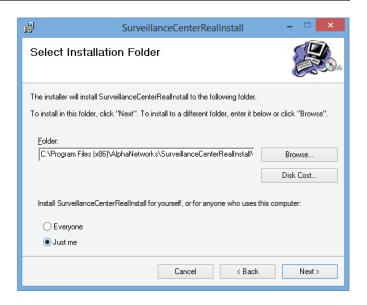


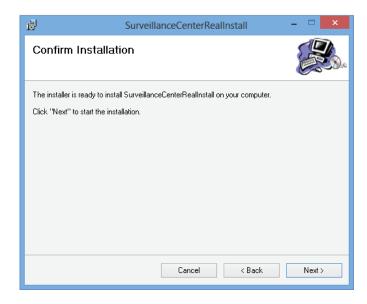
Select an **Installation Folder** location.

Click **Next** to continue.



Click **Next** to continue.



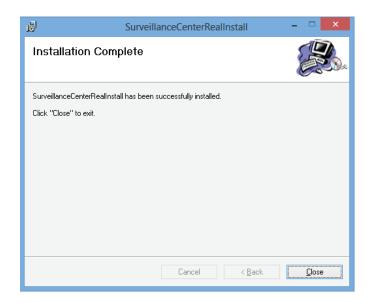


Section 4 - Configuration

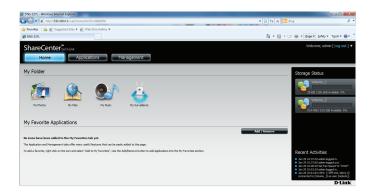
The installation is complete.

When you connect one of the supported cameras to the network, the My Surveillance software will detect the camera automatically. The software is able to recognize the IP address, model number, and bit rate speed

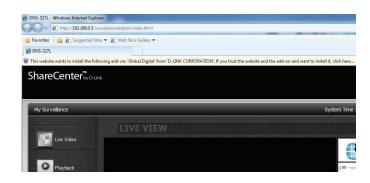
Click **Close** to continue.



To view the Surveillance utility in a browser, open your web browser. When you log in, you will see the **My Surveillance** icon under the **Home**>>**My Folder** screen.



Logging into My Surveillance for the first time using Internet Explorer, requires an add-on. The add-on pops up at the top of the browser.



Click the pop up and click Install This Add-on for All Users on This Computer.

The **Global Digital, D-Link Corporation** add-on warning message pops up. Click **Yes** to confirm the installation.



Once confirmed, Internet Explorer will display the live camera feed.



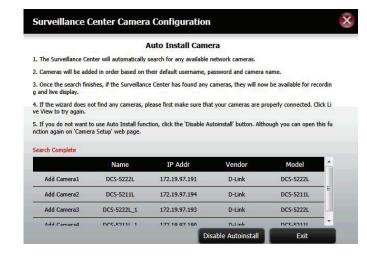
After the program is installed, the **Surveillance Center Camera Configuration** window automatic camera detection wizard searches for any known cameras. The program is launched by default and automatically when you access the Live Video Page.

A red notification appears if you do not have any detected cameras. Read the Auto Install Camera instructions to configure cameras for later use.

If you wish to disable auto-install click the **Disable Autoinstall** button.

Click **Exit** to continue.

Please Note: The Autoinstall Camera function will not work if you modify the password on the IP cameras.



Section 4 - Configuration

Configuration is complete.

Click Yes to continue.



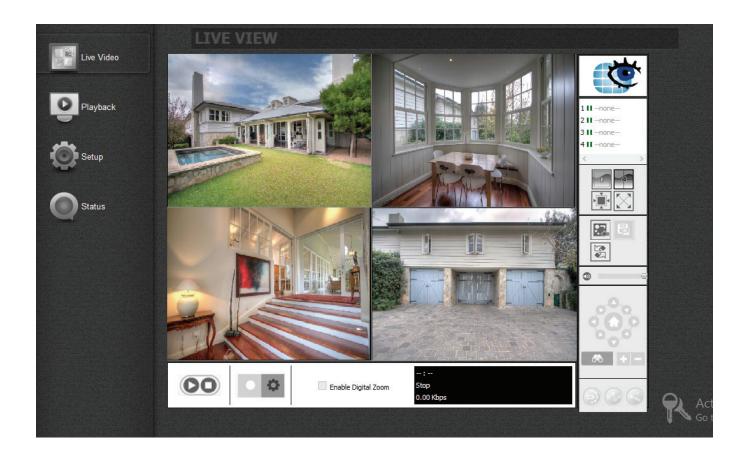
The browser will now display the **Live View**. However, if you do not have any cameras connected, the live view window will have no video stream to show.

Close the browser tab to exit.



My Surveillance

The My Surveillance interface is based on the surveillance and camera features. Normal operation is also dependant upon the camera's functionality. The interface features navigation tabs in the left-hand column which can be used to access the various functions of the My Surveillance app.



My Surveillance - Live View

The Live View window will show up to four live video streams from your connected IP cameras. There are also various controls and functions on this page which can help you to customize your video view.

- My Surveillance
- Camera Name & IP Address
- Camera View
- E-map, Snapshot,
- Mute and Volume Slider
- Pan-Tilt-Zoom Control
- Zoom
- Patrol Mode for PTZ
- Stop/Start Manual
- Digital Zoom
- Camera details



My Surveillance - Live View

FUNCTION	ICON	DESCRIPTION
Live Video Screen		View the live video of cameras connected to the DNS-327L via the network
Stop/Start	00	To stop or start camera live view
Manual Recording & General Settings Tab	• •	Click the "Manual Recording" button to stop or start camera manual recording Click the "gear cog" to set up the basic configuration
Enable Digital Zoom	Enable Digital Zoom	Enable the use of digital zooming on the selected camera.
Camera Details Display	192.168.0.101 : DCS-942L Play 1493.62 Kbps	This screen indicates the currently selected camera's IP address, name, status, and bit rate
Patrol Mode	900	Use the patrol buttons to set the camera's patrol mode. You can instruct the camera to undertake a constant patrol through it's pan/tilt range, specify a preset point for quick reference, or instruct the camera to go to it's preset point.
Pan-Tilt-Zoom Control		Used for cameras that support Pan-Tilt-Zoom (PTZ) controls. You can use these controls to control the direction of the camera lens.
Zoom	000	Click the + or - button to zoom in or zoom out. This option is only available when digital zoom is enabled.
Mute and Volume Slider	Ø + −	The mute button can be used to mute the sound from the camera and the slider bar used to adjust the volume.
E-map	•	Use the E-map button to toggle between the live camera view and the E-map display
Snapshot		Take a live snapshot of the live streaming video
Auto Scan		Activate auto scan to rotate through the camera live views on the display.
View as 1x1		View one screen at a time
View as 2x2	2	View four cameras at a time
Actual Size		The button lets you view cameras with the actual size
Full Screen		View a live video stream of any camera in full screen mode, press escape to return to the user interface.
Camera Name and IP Address		These icons show the status of each camera and allows you to double-click to toggle the status of each camera.

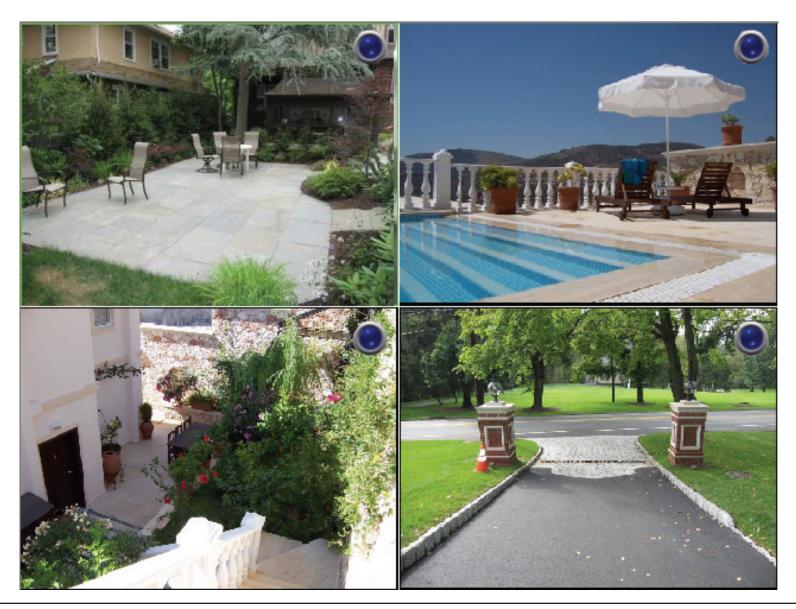
My Surveillance - Single Camera Live Video Mode

Click the 1x1 button () to enter Single Camera Mode. The live video for the selected camera will expand to cover the full live viewing area. Click the 2x2 button () to return to Split Camera Mode. Click on the camera you wish to view in the Camera Name and IP Address window.



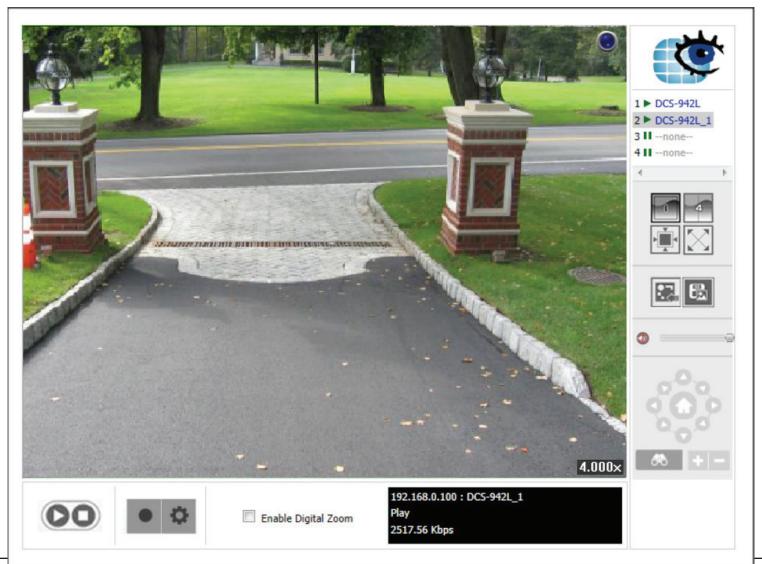
My Surveillance - Full Screen Live Video Mode

Click the Full Screen button (\boxtimes) to enter Full Screen Camera Mode. The viewing angle expands to cover the entire screen. Click the 2x2 button (\blacksquare) to return to Split Camera Mode. This full-screen mode can be used in 2x2 mode and 1x1 mode.



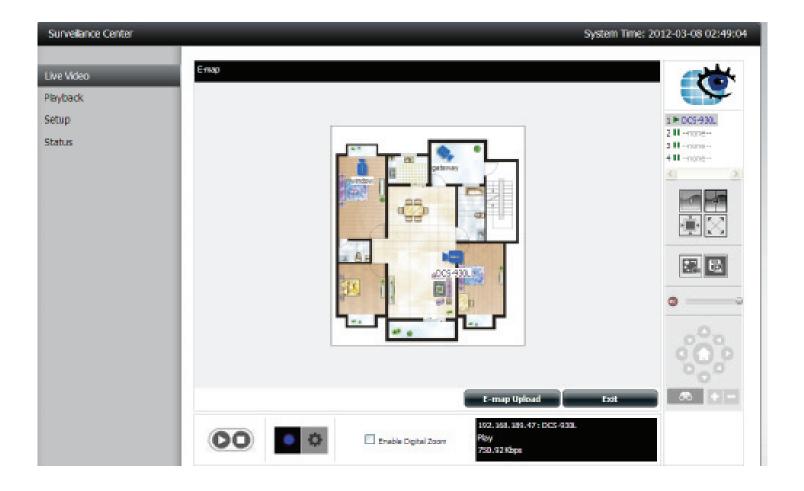
My Surveillance - Digital Zoom Video Mode

When **Enable Digital Zoom** is checked, the software allows you to zoom in and out on an area of the image. You can place the mouse pointer in the bottom right corner of the image to click and drag the box around to view different parts of the video. You can also click directly on the part of the main image you want to focus on. Use the mouse wheel to control the level of zoom.



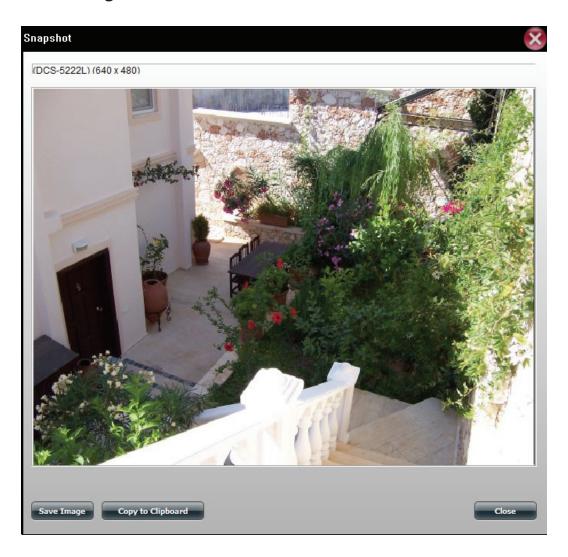
My Surveillance - E-Map View

You can access the E-map from the Live Video screen by clicking the button. Note: you must have installed E-map JPEG files in order to use this feature. Click the **E-map Upload** button to upload images into the database. When you click this button you will be directed to the E-map Upload window.



My Surveillance - Snapshot View

You can access Snapshot from the Live Video screen by clicking the snapshot button (). This will take a snapshot of your current live screen. You can copy this image to the clipboard by clicking the **Copy to Clipboard** button, or you can save the image to disk by clicking the **Save Image** button. Click the **Close** button to exit this mode.



My Surveillance - Motion Detection Camera Mode

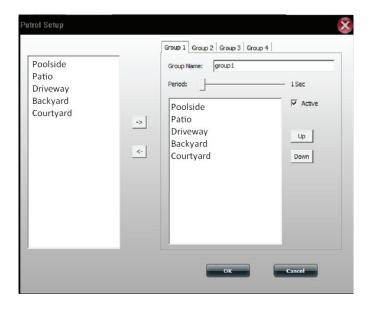
If the camera is configured to record when motion is detected, the camera icon on the E-map will change to red when an alarm is sounded or motion is detected, as shown below. When motion is detected or an alarm is triggered, click on the red camera icon on the E-map to play the recorded event.



My Surveillance - Configuring Patrol Settings

Patrol Settings are dependent upon the capabilities of the camera you are using. The Surveillance Center works with the following D-Link PTZ cameras: DCS-5230/5230L, and DCS-5222L/5211L¹. Click the Patrol icon) to configure the Patrol settings. Scroll down and click **Set Patrol**. The **Patrol Setup** window will pop up.





¹ Please check your local D-Link support site for an updated list of camera models which support the Patrol function.

My Surveillance - Configuring Patrol Preset Points

Click the **Preset Point** icon (). A drop-down list will appear. Select **Clear All** to clear the list or select **Add Preset Point** to create a new Preset Point. This brings up the PTZ Preset Point box. Enter a **Preset Name** and click **OK**.



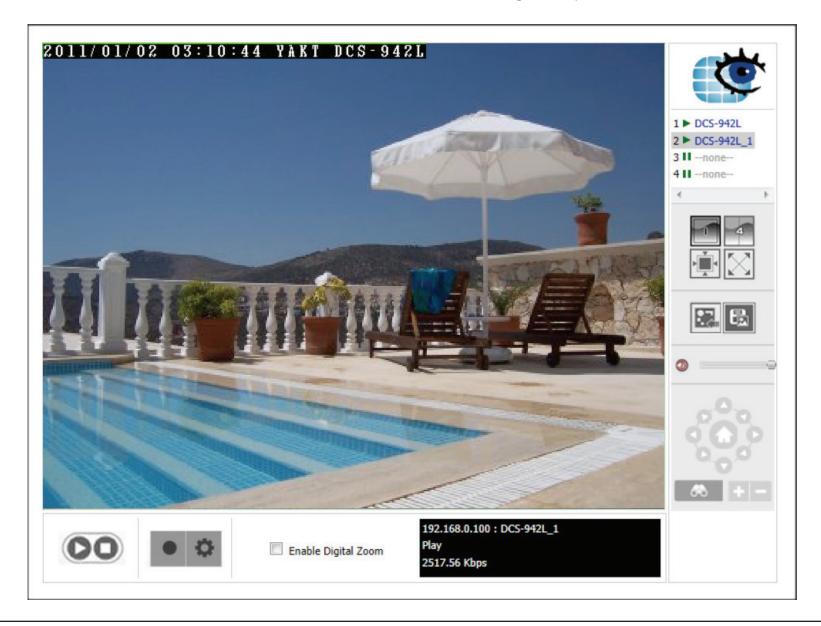


To edit the presets click the **Preset Point** icon and select whichever preset you wish to delete.



My Surveillance - Viewing Preset Points

Click the **Go to Preset Point** icon (ⓐ). This icon directs the camera to the designated points.



My Surveillance - Live Video/Playback Settings

You can access this window from the Live Video window by clicking the Settings (cog) icon.

Record Display

The Record Display function is only available when accessed from the Playback screen. The Record Display options allow you to modify what is displayed when using the Open Recording button on the Playback screen, a calendar month highlighting dates with recordings or a simple list of folders with recordings.

Play Interval

Use this setting to determine how many minutes one click on the Next Minutes or Previous Minutes buttons on the control panel advances or rewinds the video playback.

Capture Image

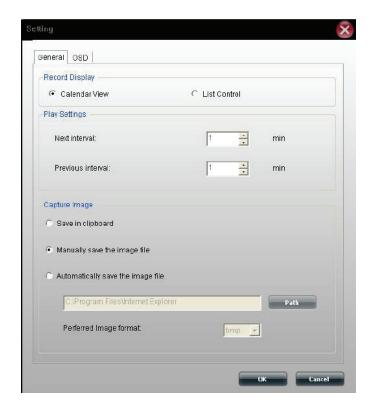
This allows you to select where to save the snapshots taken using the snapshot button on the live video screen and the format they are stored in:

Save in Clipboard - Snapshots will automatically be copied to the clipboard. You should use the *Paste* function to save the copied image.

Manually save the image file - You will be prompted with a *Save File* dialog each time you take a snapshot. You can then choose where to save the captured image.

Automatically save the image file to - Use the **Path** button to select a folder to automatically save each snapshot to.

You can also select the **Preferred Image Format** from the drop-down menu.



My Surveillance - OSD Settings

You can access this window from the Live Video window by clicking the Settings button and then selecting the OSD tab at the top. The On Screen Display settings window allows you to adjust settings for the display of an overlay of information on the video.

If you want to enable this overlay, check the **Enable camera OSD** box.

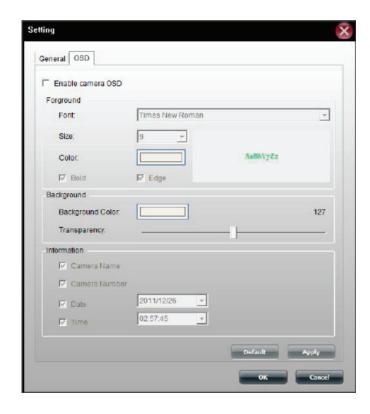
Foreground - You can adjust the font type, size, and color of the foreground box. There are also options to make the text bold and choosing the edge option will apply the selected color to the text.

Background - In the background section you can select a color for the OSD box, and the level of transparency.

Information - The information box allows you to select the information to display. You may display the camera name, camera number, the date and time. There are several date and time formats to select on and this may be done by using the drop down menus.

If you have made changes and want to revert back to the default settings, click the **Default** button at the bottom. Click **Apply** to save the current configuration.

Click **OK** when you are done to save your settings.



My Surveillance - Playback

In this section, you can play back previously recorded videos.



My Surveillance - Playback

COMPONENT	ICON	DESCRIPTION
Recorded Video Playback		View the recorded video here
Playback Controls		Control the playback video from here (clockwise): Play/Stop/Pause/ Previous Second/Previous Minute/ Next Minute/Next Second / Speed Up/Speed Down / Zoom In/Zoom Out
Camera Details		This area displays the time and date of the recording, the playback speed and the current state of playback.
Enable Digital Zoom	Enable Digital Zoom	Enable this on individual cameras
Mute and Volume Slider	3	The mute button can be used to mute the sound from the recorded video and the slider bar to adjust the volume
Settings	⇔ o	This configures general setting
Snapshot	E	Take a live snapshot of the recorded video
Synchronous Playback		This syncs four video channels to playback at the same time
View as 1x1		View one screen at a time
View as 2x2	4	View four cameras at a time
Actual Size		The bottom lets you view cameras with the actual size
Full Screen	\boxtimes	View a live video stream of any camera in full scream mode and press Escape to return to the user interface.
Open Recording	**	Click this button to open an existing recording.

My Surveillance - Recording Information

When you click the Open Recording button on the Playback screen, you are presented with this screen. This screen allows you to see at a glance the recordings that have been from with the connected cameras.

Depending on your settings, you may see a calendar month or list of recordings by date at the top left of the screen. Use this calendar or list to select a recording. In calendar view, days highlighted in green are ones which have a recording.

In calendar view, clicking the icon selects the current date, allowing you to browse through calendar months and quickly return to the current date.

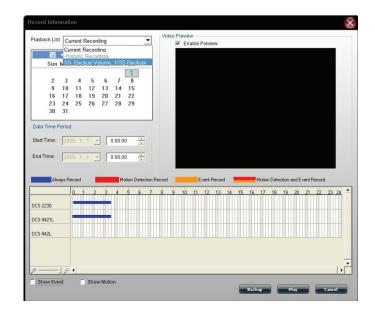
The **Playback List** drop down menu provides various options:

Current Recording - This shows camera videos recorded by the Surveillance Center module.

Historic Recording - This shows camera recordings backed up by the user. The number of entries below this will depend on how many recordings you have backed up.

The Date Time Period section allows you to narrow down the time and date for which to show recordings.

The timeline at the bottom of the window plots the selected day and displays the different types of recordings and the times they were recorded. The recordings are all color-coded to differentiate between the types. You can play any of these recordings by simply clicking on the point on the timeline that you want to play. Use the two checkboxes at the bottom of the window to toggle whether to **Show Events** and **Motion Detection** on the graph.



Click the **Backup** button at the bottom of the window to go to the Backup Setup screen where you can backup the selected recording.

Click the **Play** button at the bottom of the window to play the selected recording on the main playback screen.

Note: You can backup or play up to 4 selected recordings at the same time.

My Surveillance - Setup



Note: See descriptions later in this Manual.

My Surveillance - Setup - Camera Setup

Once you click Setup, Camera Setup is the first screen to configure. On the left side are the sub-menus while on the right are the configurable options. Camera Setup is divided into four sections. Wizard, Camera List, Camera Search, and Auto Install. Let's take a look at Wizard first.



Click Run Wizard.

The **Camera Setup Wizard** introduction configuration box appears.

Click **Next** to continue.



The **Wizard** searches for your camera. Make sure you have connected your camera to your router, and you have enabled **DHCP** on your router to detect your camera.

You may attempt to skip this process using the **Skip** button. However, once you do this, you will be unable to detect your camera.



The next screen appears blank if the camera wizard was unable to find your camera.



If you have set up your camera properly, the camera wizard should have detected your camera. The camera then appears in the **Search** box.



Select the camera and click **Next**.



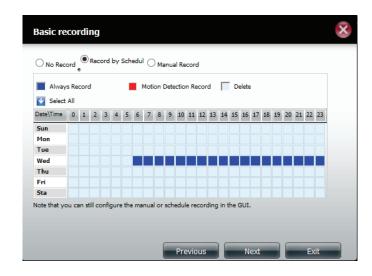
As previously indicated, if you haven't setup your camera on the network then the camera wizard will not be able to detect your IP camera. However, if you have, the Device Information window is automatically populated with your device information.

Click the **Test Camera** button to view streaming video from the connected camera.



Under Basic Recording, select your recording method. In this instance, we have chosen, **Record By Schedule**. Click and drag your mouse over the selected area you wish to record. The recorded area is highlighted in blue. Click Motion Detection Record if you wish to apply recording based on motion detection by the camera.

Click **Next** to continue.



Set your **Quota Information.**

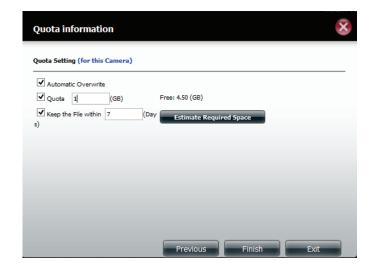
By default, the NAS will keep the last 7 days of recordings and automatically overwrite the old recordings with new ones.

Select **Automatic Overwrite** to overwrite the earliest recorded video with the latest video if it reaches the quota limitation or if the disk space is full.

Select the **Quota** disk size based on your available disk space.

Check **Keep the File within**, and enter a number of days to keep recordings for. Click the **Estimate Required Space** button to see how much space you would require to keep video for this period of time.

Click **Finish** to complete the Wizard.



The Camera List now shows your configured camera.



If you want to modify the camera settings, select a camera from the camera list. The camera appears in the chosen slot in the section above and you are able to adjust some settings. You can modify the **Name, IP Address** and **Port** if they are incorrect. Enter the username and password for the camera if there is one. Select the desired **Video Format** (dependent on your camera). Finally, confirm if the **Vendor and Model** are correct for your chosen camera.

Click **Modify** to confirm the changes.

You can also click **Test Camera** to view the live feed from the camera.



Section 4 - Configuration

Click **Save Settings** to continue.

Click **Yes** to exit confirm.



You can also delete the camera from the list.

Select a camera from the camera list, click the **Trash** button. A confirmation message will pop up.

Click **Yes** to remove the camera from the list.



A message will pop up to confirm the changes. Click **Yes** to exit.



My Surveillance -Search and Add Camera

Click the **Search** button to search all available cameras on the LAN.



Select one camera and click **Add To** to add the camera to the list (Camera2)



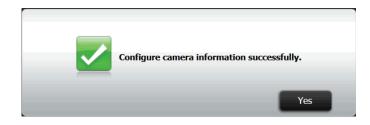
Click the **Test Camera** button to view streaming video from the connected camera.



Click **Modify** to add the camera to the camera list then **Click Save Settings** to continue.



A message pops up to confirm the changes. Click **Yes** to exit.



Under Auto Install, click **Enable Auto Install** to detect other IP cameras next time you access the Live Video Page.



My Surveillance -Setup - Audio and Video

Audio and Video configures all your audio and video settings on each camera. Let's take a look at a single camera configuration.

Click **Audio and Video.** Here you can view all camera audio and video settings.



Click on the device to see the configuration options.



Video Profile: Select a profile to use or edit.

Video Format: Choose the video format to use for your recordings. Each format has different size and quality characteristics.

Frame Rate: This is the number of frames per second recorded. A higher number of frames per second means smoother video and results in a larger file size.

Resolution: The resolution is the number of pixels that the video will include. This varies according to your camera video quality.

Quality: Select between **Very Low**, **Low**, **Medium**, **High**, and **Very High**. Selecting **Fixed Quality** will give you this setting and is a rough guide to determine the output video quality.

Bitrate: This is the number of kilobits (Kbps) per second the video recording will contain. A higher bitrate means a larger output file.

Audio Settings: Click the checkbox to enable audio.

Click Save Settings to continue.

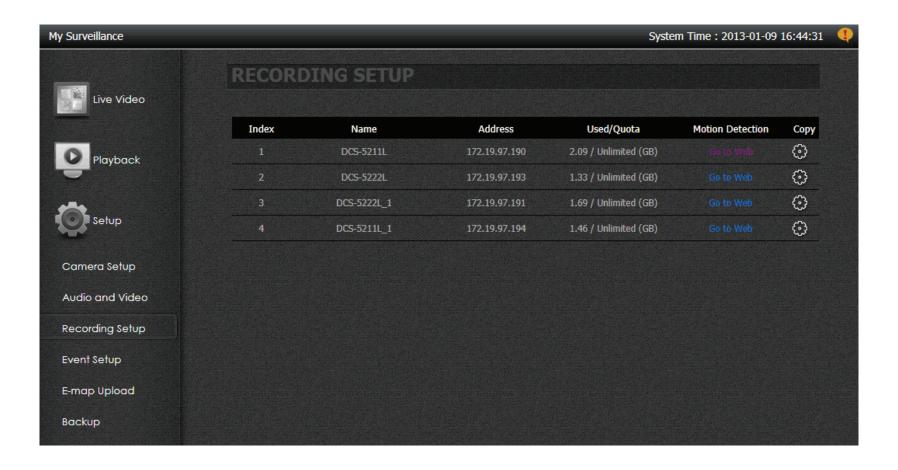




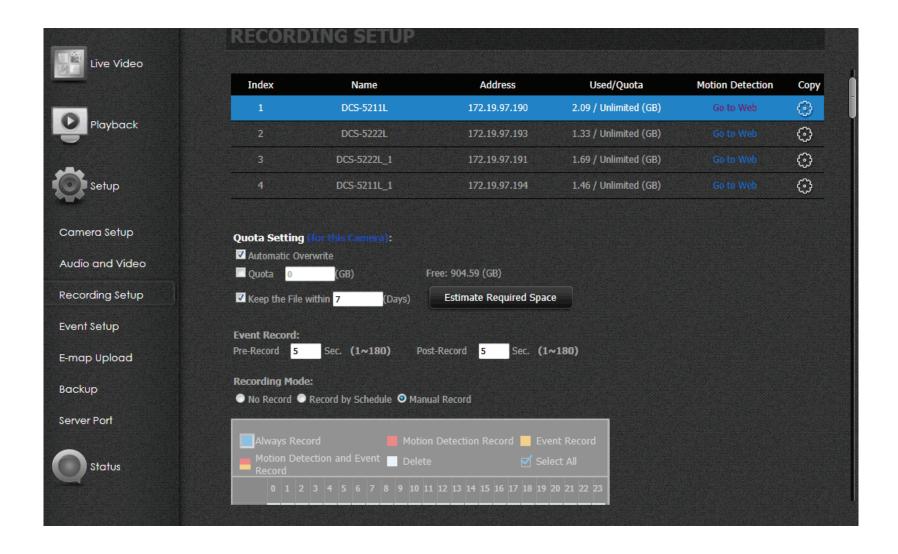


My Surveillance - Setup - Recording Setup

The Recording Setup configuration tool displays options for each camera. The settings including Quota Setting, Event Record, and Recording mode.



Double-click the camera to expand the configuration options.



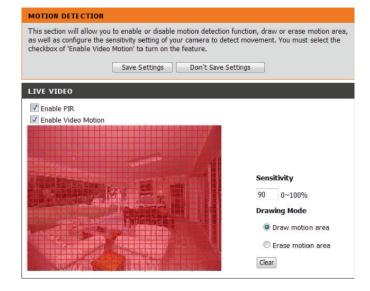
COMPONENT	DESCRIPTION		
Motion Detection	When using the Record by Schedule mode together with the Motion Detection function, you must first click the Go to Web link and log in to the camera's web interface and enable the motion detection function on that camera. Please refer to the manual of your camera for more information on enabling motion detection.		
Сору	Copy the camera recording setup to other similar cameras		
Quota Settings	Configurable per camera. Indicates the maximum amount of disk space will be used for recordings.		
Automatic Overwrite	Click this checkbox if you wish to overwrite the earliest recorded video with the latest video if reaches the quota limitation or disk space is full.		
Quota	Click this checkbox to set the amount of storage you want to allocate to each camera. Next to it is displayed the remaining free disk space		
Keep the File within	This indicates how long you want to keep the recorded camera video files before it is overwritten.		
Estimate Required Space	Click this button to find out how much disk space is required for video storage with the current settings.		
Event Record: Pre-record	If required, select how long video should be recorded for prior to an event alarm being triggered (1-180 seconds).		
IF/IGHT ROCORD: POST ROCORD	If required select how long video should be recorded for following an event alarm being triggered		
Record Mode	No Record - no recording is made		
Record Mode	Record by Schedule - Drag and drop on the weekly map below • Always Record means that the camera will always record for the specified period. • Motion Detection Record will wait for motion on the camera to be detected before it begins recording • Event Record will wait for event on the camera to be triggered before it begins recording		
Record Mode	Manual Record - requires you to manually click a record button to begin recording.		

Clicking the **Go to Web** link under the Motion Detection column will take you to the camera's motion detection configuration page, where you can configure motion detection settings for that camera. These settings will then be used when recording motion detection events on the ShareCenter.



Here is an example of a camera's motion detection configuration page.

Note: The appearance and/or functions of this page may vary depending on the camera model you are using.



By clicking the **Copy** button, you can copy the camera recording settings to similar cameras. Check the boxes of the cameras you wish to copy recording settings to, and click **Save** to continue.

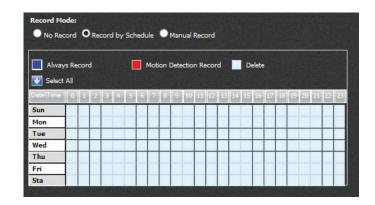
Click **Yes** to continue.



Select your Recording Mode.

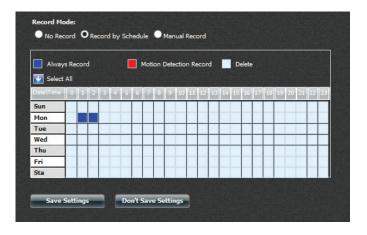
Record by Schedule

Click the **Always Record** (blue) box to set normal recording mode.



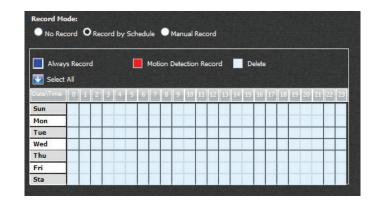
Click or click and drag your mouse over the time frame(s) you want to set for constant recording. The selected frames turn to blue to indicate the recording duration.

Click Save Settings to finish



Motion Detection Record

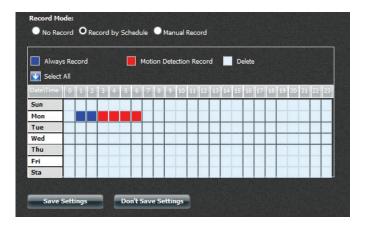
Click the **Motion Detection Record** (red) box to set recording only when motion is detected by the camera.



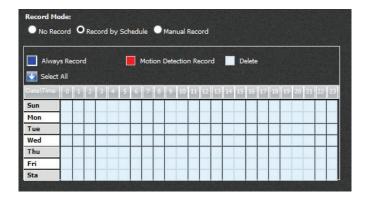
Section 4 - Configuration

Click or click and drag your mouse over the time frame(s) you want to set for motion detection recording. The selected frames turn to blue to indicate the recording duration.

Click Save Settings to finish



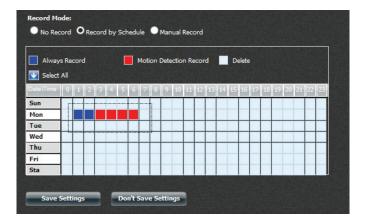
To delete recording schedule frames, click the light blue **Delete** box.



Section 4 - Configuration

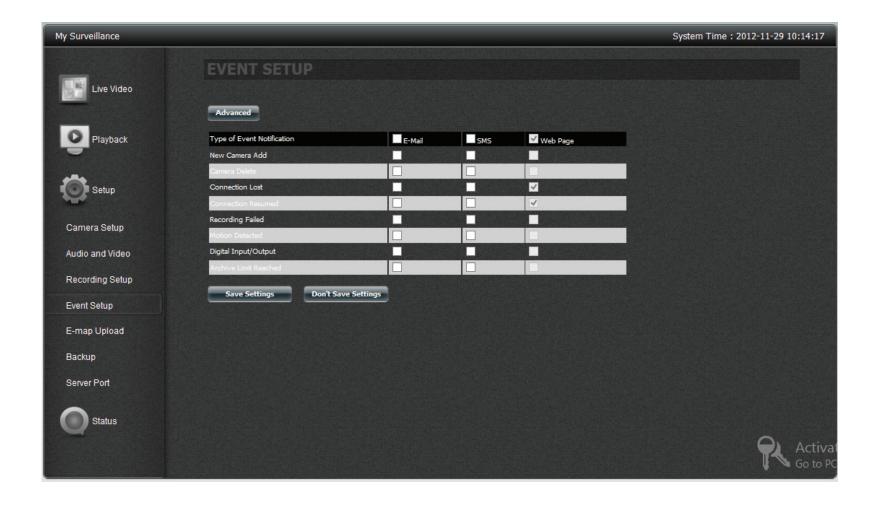
Click or click and drag your mouse over the time frame you want to delete. The selected frames will return to light blue to indicate no recording schedule. You can also check **Select All** to select all frames.

Click Save Settings to finish



My Surveillance - Setup - Event Setup

The Event Setup configuration tool displays options for each camera. The basic settings relate to how you want event notifications to be sent. Click Advanced to configure accounts for Email and SMS notifications.

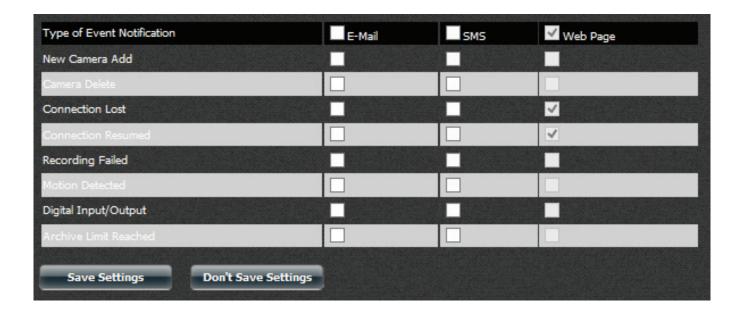


Section 4 - Configuration

NOTIFICATION TYPE	DESCRIPTION
Add New Camera	Notifies you when a new camera is connected
Delete Camera	Notifies you when a camera is deleted from the connected cameras
Connection Loss	Notifies you when there is a network error
Resumed Connection	Notifies you when the network comes back online
Failed Recording	Notifies you when there has been an error in the recording
Motion Detection	Notifies you when motion detection has started or ended
Digital Input/Output	When an event is triggered from the D/I port of the camera, the D/O port of the camera will begin sending a signal
	to My Surveillance. My Surveillance will then notify you accordingly.
Archived Limit Reached	Notifies you when your history (archive) material has reached or exceeded the disk space allocated to it

Use the checkboxes to select whether you would like each event type notification to be sent by **E-mail**, **SMS**, or **Web Page**. You can select more than one notification method for each event type.

Click **Save Settings** to finish.

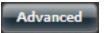


To activate advanced features, click the **Advanced** button

By default, the Advanced configuration window pops up. However, if you wish to return to it later, click the Advanced button.

Fill in the required information for the email account to which you wish to send notifications. For a detailed explanation of these settings, please refer to "Email Settings" on page 173 of this manual.

Click Save Settings when done and click Exit.



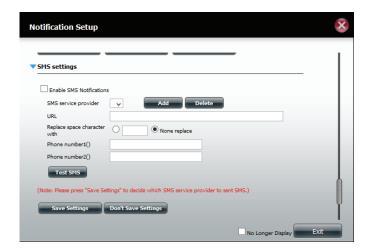


Click the blue arrow next to SMS Settings to extend the SMS configuration options.

Check the box to enable SMS notifications, and enter the required information for your SMS service provider. For a detailed explanation of these settings, please refer to "SMS Settings" on page 175 of this manual.

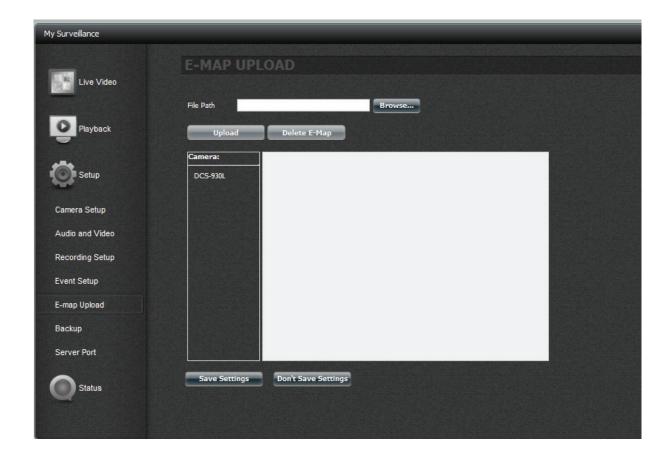
Click Save Settings when done and click Exit.

Note: Make sure your SMS service provider supplies you with the correct information, otherwise this feature will not work properly

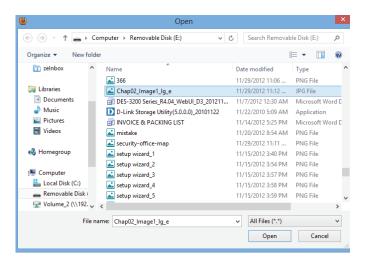


My Surveillance - Setup - E-map Upload

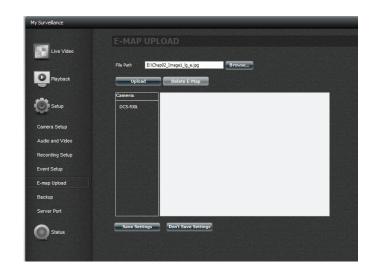
The E-map Upload configuration panel allows you to import a schematic illustration of the area/office space you want to monitor using your IP cameras. The E-map, in JPEG, BMP, GIF and PNG format, is uploaded to the DNS-327L and configured to work with the camera(s) installed.



Click the **Browse** button to find the E-map you want to use.



Select the E-map and click **Upload**



The file is now displayed on right side of the camera.



Click and drag a camera from the camera list on the left of the image. When you have placed the camera in the correct location, double-click the icon to change the orientation of the camera.



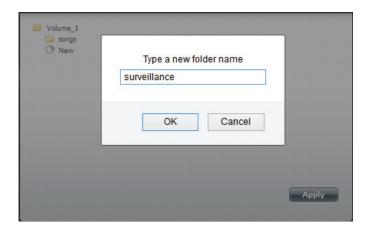
My Surveillance - Setup - Backup

The Backup Setup page allows you to configure the ShareCenter NAS to backup and restore the IP Camera recordings.

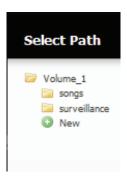


Under Create New Backup, start creating your new backup folder and destination.

Enter a **Folder Name** in the field provided. Click **Browse** to select a destination path. If you do not have a folder, click the + sign to create a new folder. Type a new folder name then click **OK** to continue.



Select the path, on the NAS, where you want the backup to reside.



You should have the Folder name and the Destination configured.



Configure a **Start Date/Time** and a **Stop Date/Time**.



Section 4 - Configuration

Click the **Camera** checkbox (next to the camera's name) to activate the camera you want to use as a backup.

Click Save Settings to finish.

The archive table at the bottom will populate as you collect data.



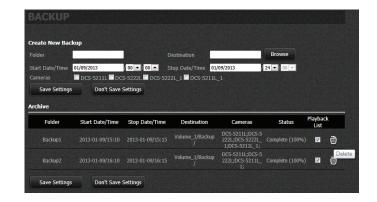
A message will pop up to confirm the configuration. Click **Yes** to continue and the DNS-327L starts to backup the IP camera recordings.



The list is now displayed in the table.

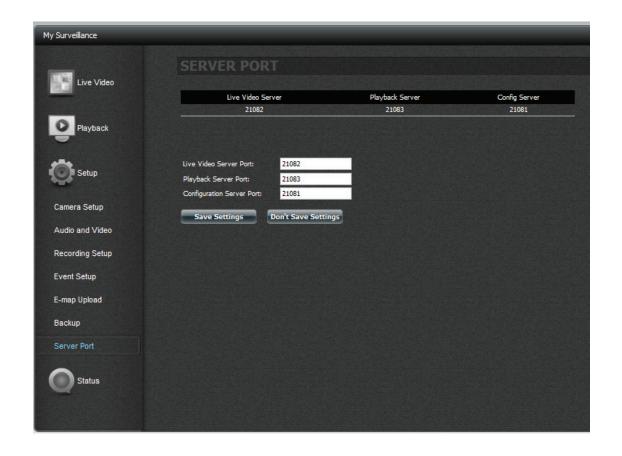


When you have created a new backup, it will appear in the Archive section. From here you can check which archives to include in the playback list on the playback screen by adding or removing a check from the Playback List column. If you want to delete the archive, click the trash can icon for the folder you want to delete.



My Surveillance - Setup - Server Port

This page allows you to modify the ports that the Live Video Server, Playback Server, and Config Server operate on. You may wish to do this if you have port restrictions on your local network. To change the port numbers, use the provided fields and click **Save Settings**.



My Surveillance - Status



My Surveillance - Status

The Status configuration window displays two sets of information about the camera - Camera Status and Log. The Camera Status shows the current status of all cameras connected to the network, and Log shows a history of all significant events of the Surveillance Center software. You can filter the events shown in the log by checking the checkbox for **Type**, **Camera** or **Date**. You also have the option to back up the log to a text file and clear the log.

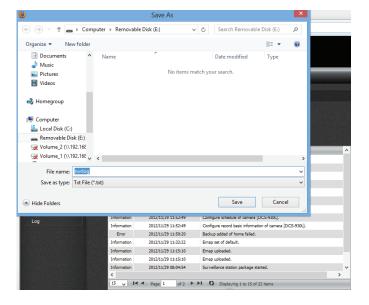




To backup your files, click the **Backup Log** button.

Select the location that you wish to save the log file to, and click **Save**.





A notification will appear to confirm that the log file has been successfully saved.

Click Yes to continue.



To clear your the, click the **Clear Log** button.

Clear Log

You will be prompted to verify that you want to clear the log. Click **Yes** to continue.

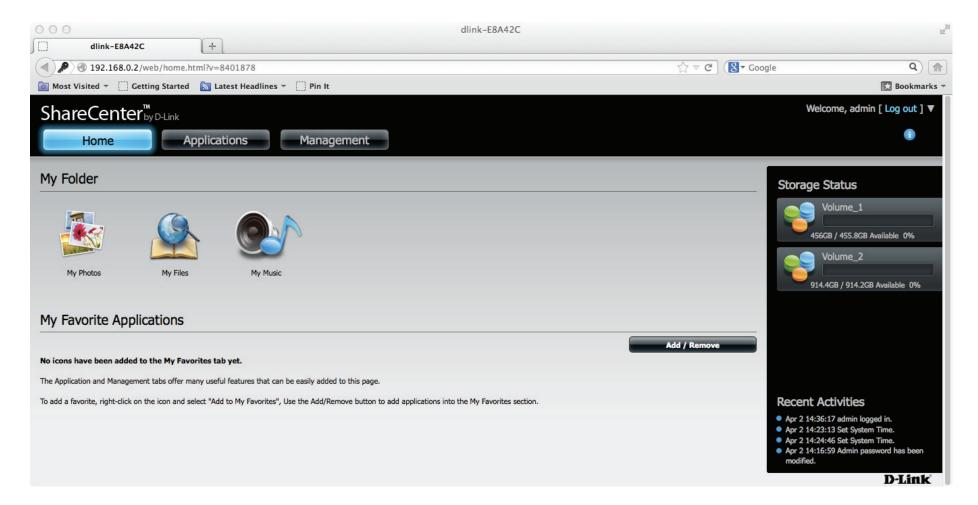


Now you can see that your previous log disappears.



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 dropdown list, you must specify the exact file in the URL path, including the file extension. (e.g. http://example.com/test/testfile.txt).





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.

If you would like to rename a file after it has been Rename:

> downloaded from the specified HTTP/FTP server, enter the name you would like the file to be renamed

to in this field.

Use the drop-down menu to select the language used Language:

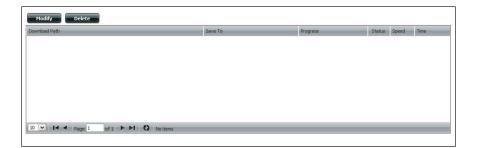
in the file or folder that you are trying to download.

Select the date and time for the download to occur. When:

If you wish to schedule a recurring backup, select the Recurring desired interval (daily, weekly, or monthly) and the Backup:

time you want the backup to start.

Schedule Pending and completed download events will be **Download** listed here. The current status for each event is **List:** 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 Check this box to enable the remote backup backup service: 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 This is the list of remote backup jobs.

list:

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.





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.

Displays the steps of the wizard. Welcome:

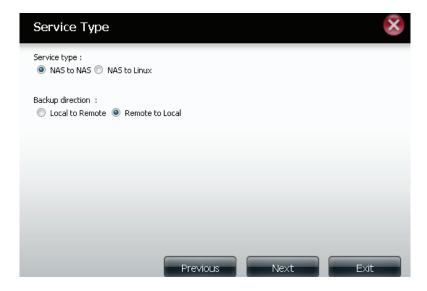


Service Type: NAS to NAS: backup from the local NAS to a remote NAS or vice versa.

> 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:

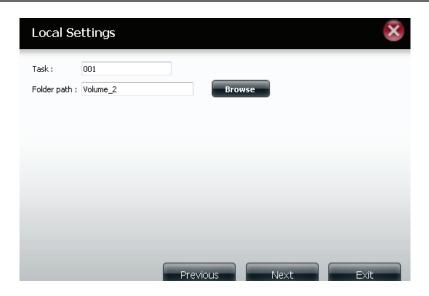
Remote IP: The backup process uses Rsync protocol and needs to know the IP address of the destination source or target device for the backup. Input the IP of the remote NAS or Linux file system.

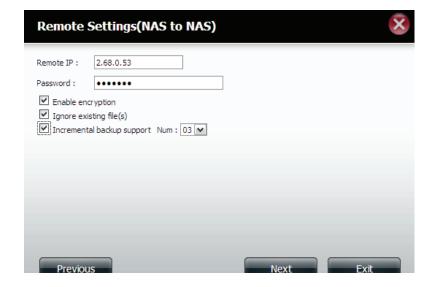
Password: Enter the password that is used by the remote backup server on the remote NAS or Linux file system.

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.





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:

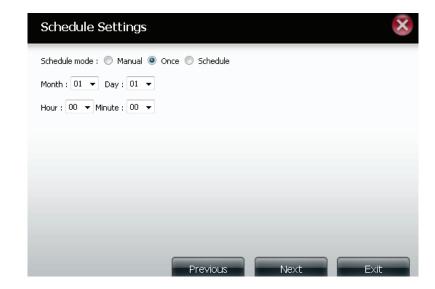
Schedule Scheduled Mode:

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.





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 Task: The name of the Remote Backup job.

Backups list: 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.

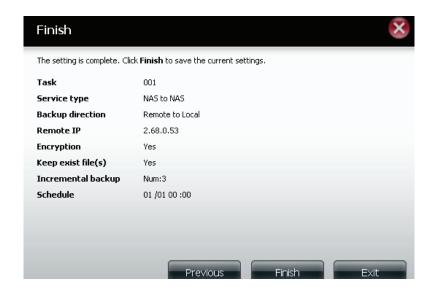
Enable/Disable: If the button shows a red circle the remote backup job is enabled. Clicking the red button will disable the remote backup job and the button will change to a green right pointing triangle. Clicking the green triangle will enable the job again.

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.

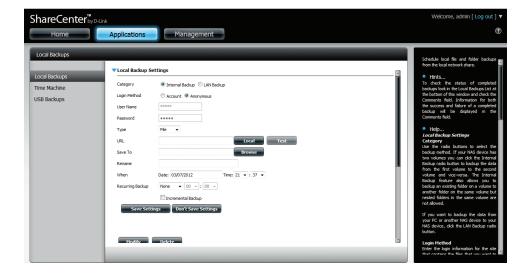
Type: Select File or Folder, depending on what you want to

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 Designate the interval and time you want the backup or **Backup:** download to run unattended.

backup. download to full dilatteride

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 Click this to enable the Time Machine function to Machine: work with a Mac OS® X Time Machine. The Time Machine Settings list will appear when this checkbox is checked.

Machine

Time A list of destination folders on the Network Shares associated with the Time Machine backup.

Settings list:

Adds a NAS folder as a Time Machine destination. New:

Delete: Deletes a NAS folder setup as a Time Machine

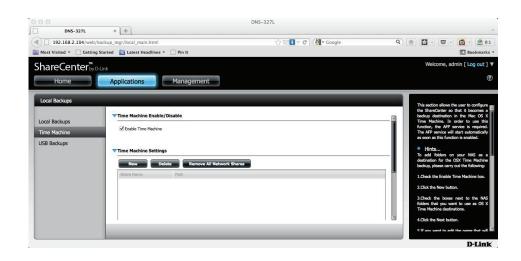
destination.

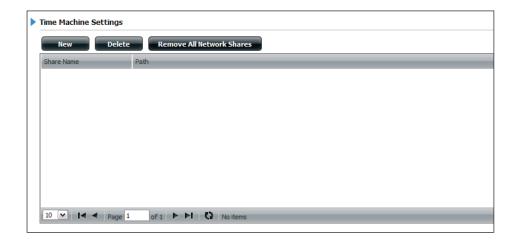
Remove all Network

Delete all the NAS folders in the list configured as

Time Machine Destinations.

Shares:





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.

■ ▶ 192.168.0.3/web/backup_mgr/local_main.htm

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.

ShareCenter by Delink

Home Applications Management

This section allows the user to configure the ShareCenter so that it was been configured to the Machine Enable/Disable

Fenable Time Machine

USB Backups

Time Machine Settings

Path

Callick the New Deleta

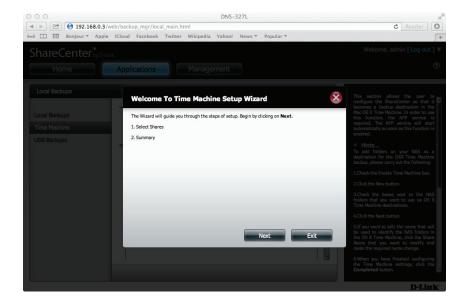
Remove All Network Shares

Callick the New Deleta

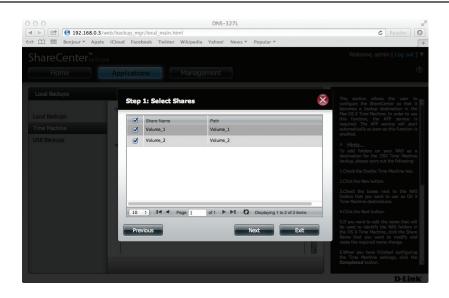
Callick the

Click **New** under **Time Machine Settings** to access the **Setup Wizard for Time Machine.**

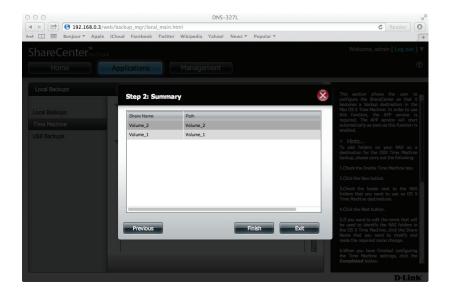
Click **Next** to continue.



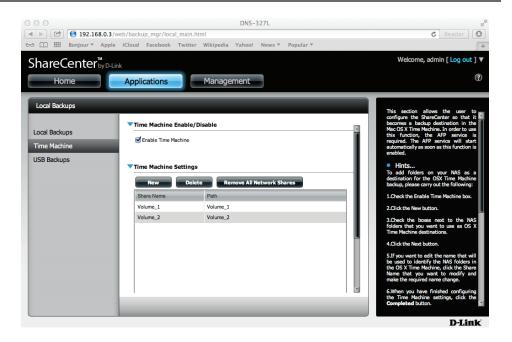
Select the Volume you want to use for Time Machine and click Next

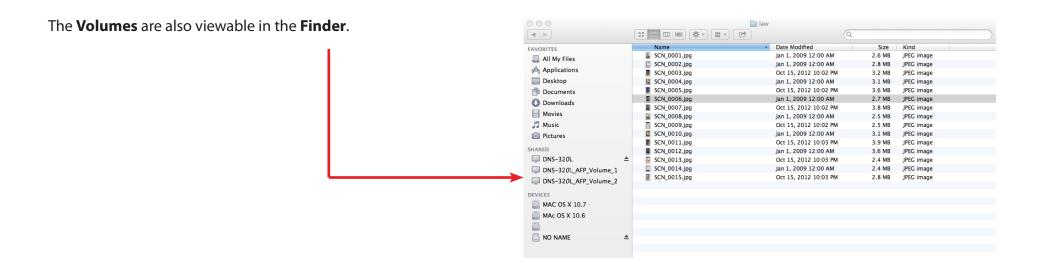


A summary displays your backup options. Click Finish.

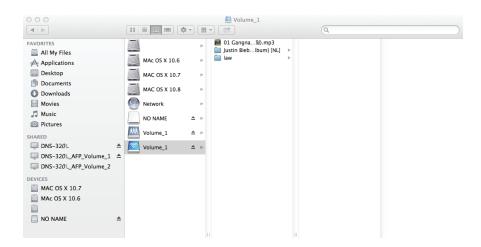


The wizard returns to the Time Machine table. It displays the Volumes you just selected for the backup process.





You can also browse the Volume in **Finder**.



Go to **System Preferences**, click **Time Machine**.



In Time Machine, click Select Backup Disk.



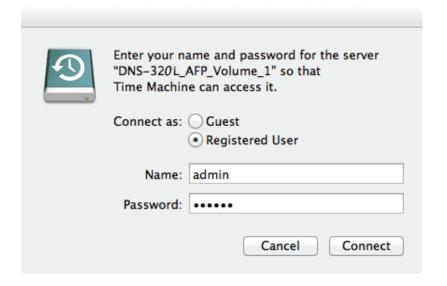
View the DNS-320L Volumes.



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

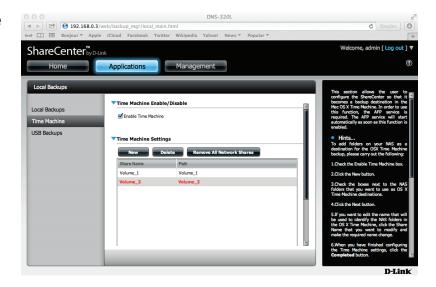
The Time Machine backup process is now complete. View your settings once you have set your disk.

To deactivate **Time Machine**, move the slider to **OFF**. This, however, doesn't delete the **Volumes** from the **DNS-320L** settings.

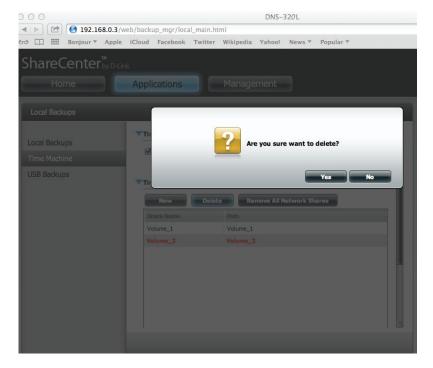


Time Machine - Delete a Volume

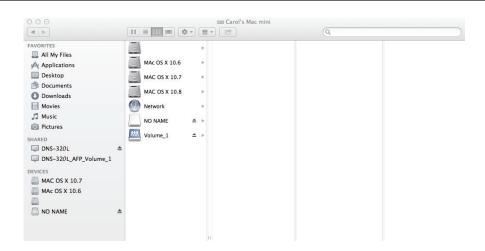
To delete a **Volume** under **Time Machine Setting**s, select the **Volume** you want to delete - it turns red. Click the **Delete** button.



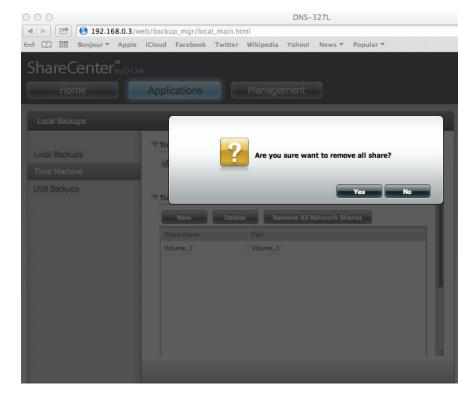
A warning message prompts you to verify if you want to delete the Volume. Click **Yes**.



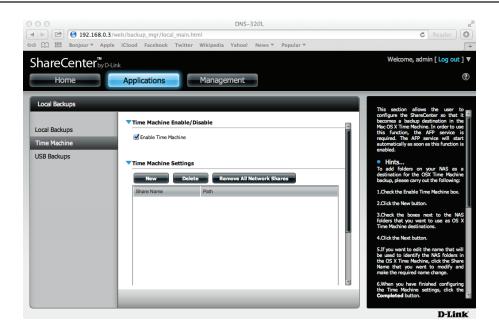
The **Volume** is no longer visible in **Finder.**



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.



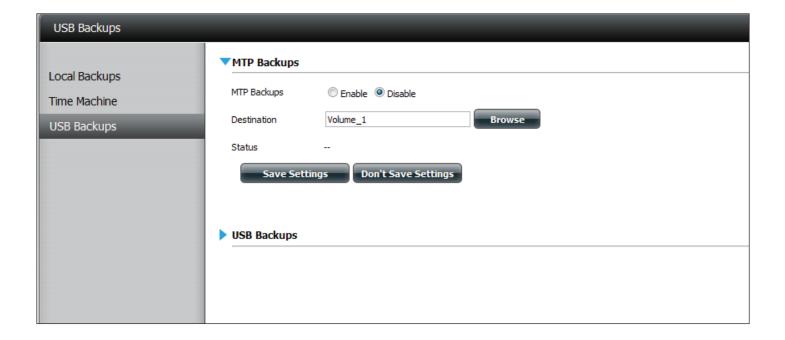
The **Time Machine** wizard shows an empty **Time Machine Settings** window.



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 $^{\text{TM}}$. USB Backups allows you to backup data from a USB storage device to the ShareCenter $^{\text{TM}}$ to a USB storage device.



MTP Backups

MTP Click **Enable** to allow your ShareCenter[™] to copy

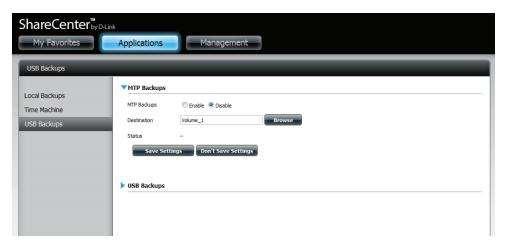
Backups: digital media content from a MTP USB device.

Destination: Click **Browse** to select a folder on your ShareCenter

[™] for the backup data to be saved to.

Displays the current MTP backup status. Status:

Click on the **Save Settings** button to save the MTP Backups settings.



USB Backups

Click **Enable** to allow your ShareCenter[™] to copy data USB

Backups: from/to a USB storage device.

Select either **USB to NAS** (backup from the USB storage Category:

device to the ShareCenter[™]) or **NAS to USB** (backup

from the ShareCenter[™] to the USB storage device).

Click **Browse** to select a folder as the source folder for Source:

the backups.

Click **Browse** to select a folder as the destination folder **Destination:**

for the backups.

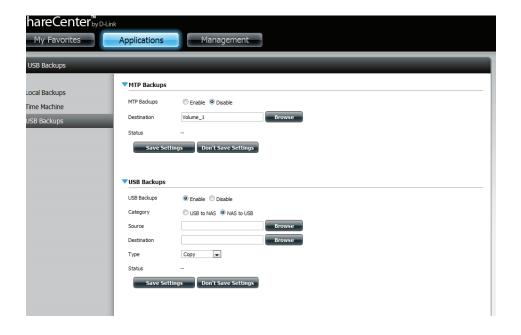
Select **Copy** to create a new folder in the destination

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.

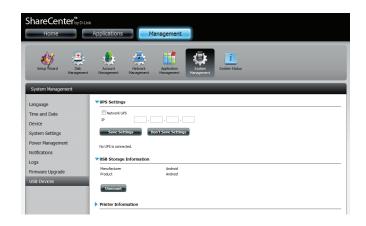


2. Press the **USB** button to start the backup process. The white USB LED flashes briefly to display that the backup is in the process. The ShareCenter™ will create a new folder in the destination folder that you selected in the MTP backups settings and will copy all the media files from the MTP USB 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.

Select **Enable** or **Disable**.

In the block provided the user can configure the Download running schedule for P2P downloads. Simply select Schedule:

the **Start** and **Stop** block for the appropriate Time

and Date.

Auto Here the user can enable or disable the automatic

Download: download option.

Port The user can choose whether to allow the device

Settings: to automatically choose an incoming connections

port or configure the incoming connections port

manually.

Seeding: Select one of the three seeding options.

Displays the volume where the Torrent will be saved. **Torrent Save**

Path:

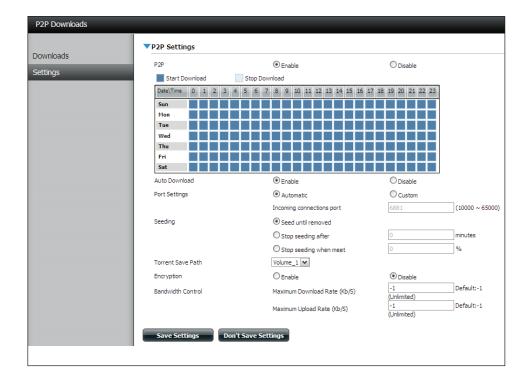
Encryption: Here the user can choose to enable or disable the

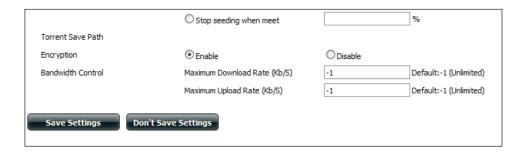
encryption.

You can manually configure the maximum download Bandwidth **Control:**

rate and maximum upload rate. Enter the value -1 to

set the respective field to unlimited.





Downloads

Here the user can add torrents and view P2P download lists.

Add Torrent from In the field provided you can copy and paste a URL: link to a torrent file hosted on the internet. The

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, The **Top, Up, Down** and **Bottom** buttons allow **Down,Bottom:** you to move the selected P2P download in

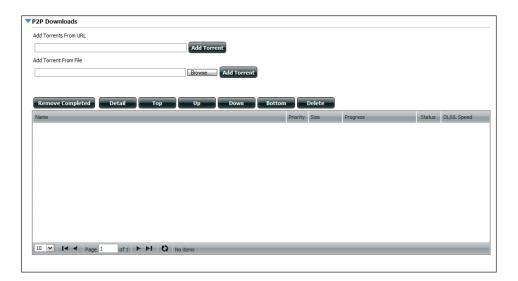
the task list. The downloads at the top of the list have a higher priority than the one listed

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.

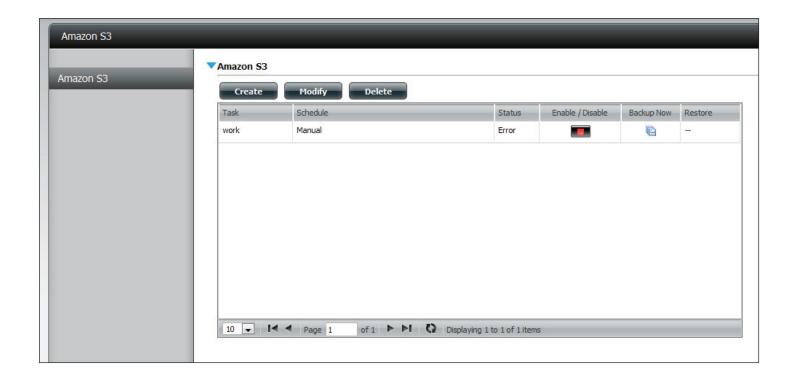
The **Refresh** button allows the user to refresh the P2P task list so it displays the most updated

statistics.

Refresh:

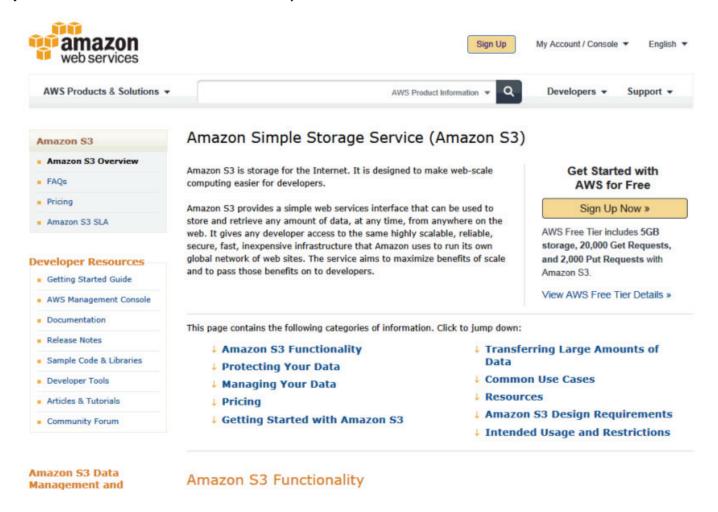
Amazon S3

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.



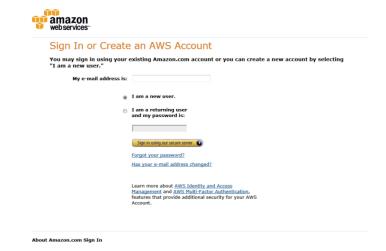
Section 4 - Configuration

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.



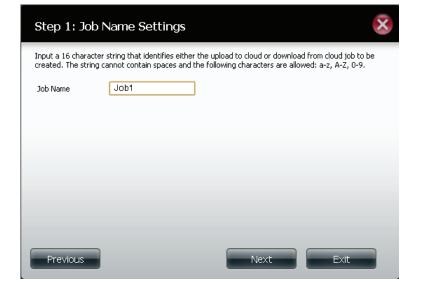
Create Button

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.



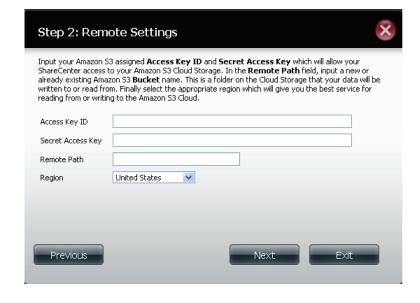
Step 2: Remote Settings

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.

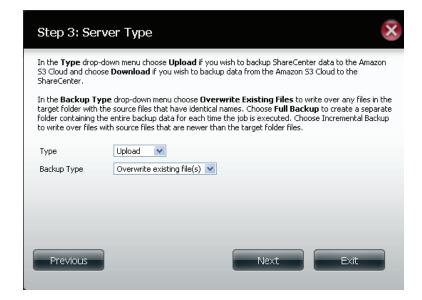
Region: Select your Region from the drop-down menu.



Step 3: Server Type

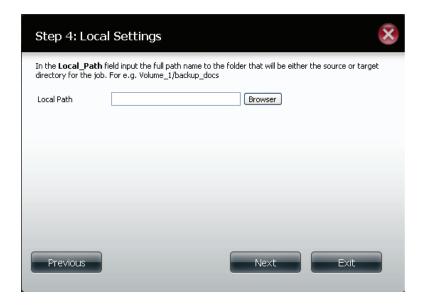
Type: Select **Upload** or **Download** from the drop-down menu.

Backup Type: Use the drop-down menu and select **Overwrite Existing Files, Full Backup** or **Incremental Backup**.



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.



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).



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.

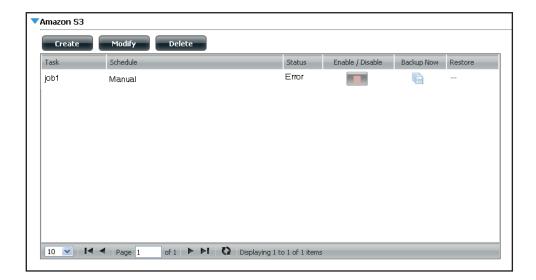
Note: The Job Name cannot be modified.

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^m 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

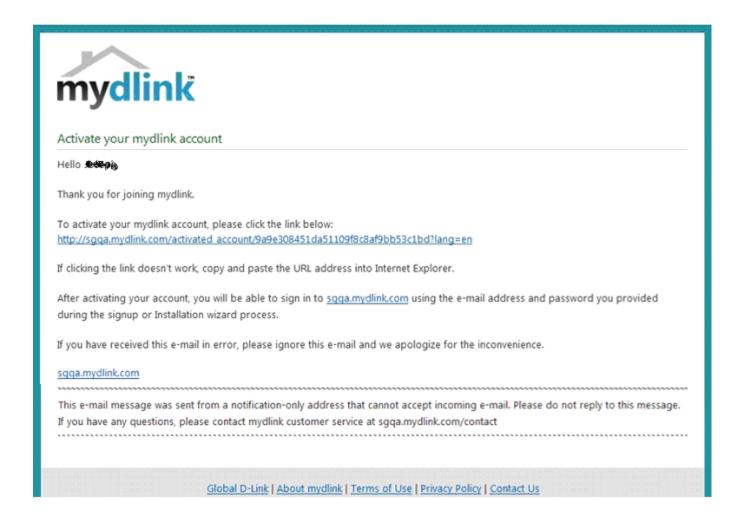
The mydlink service offers a cloud service to DNS-320L users. Connect to the mydlink service from any location and using any operating system. If you are not connecting to the service directly from the DNS-320L, open your browser and type in www.mydlink.com. Sign into your account on the home page.



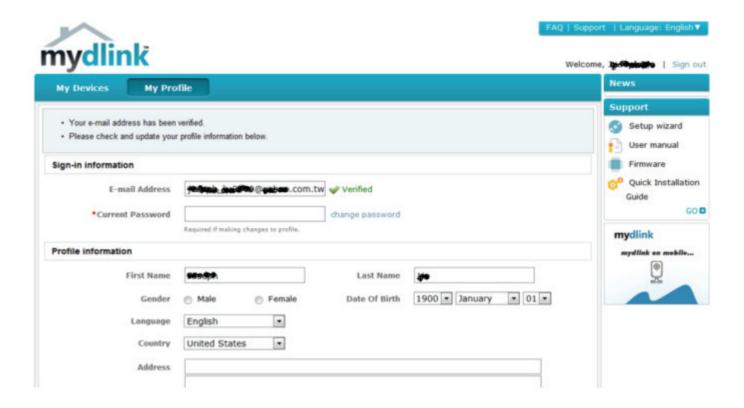
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mydlink Verification

Check your e-mail box and click the weblink to activate mydlink account.

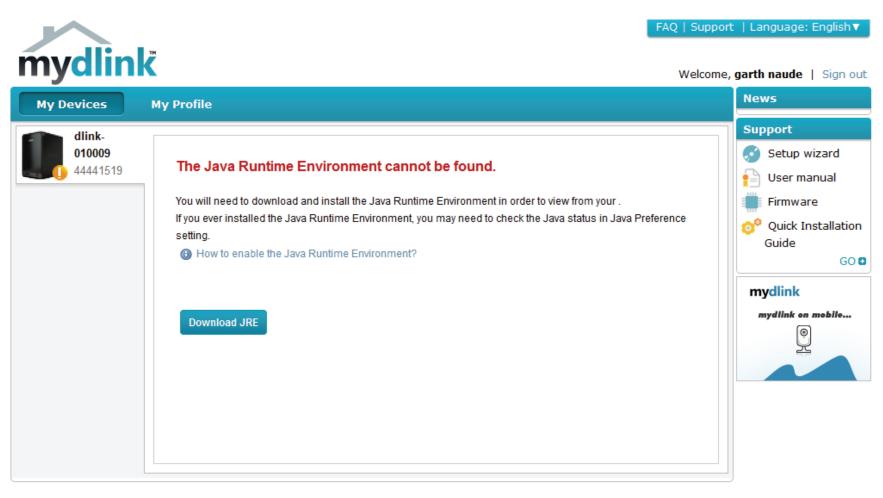


mydink is verified

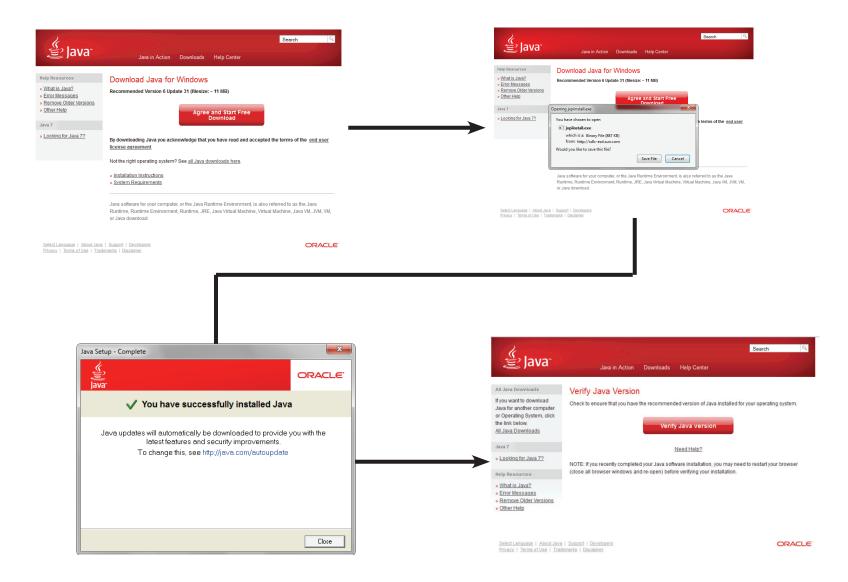


mydlink Java Runtime Machine

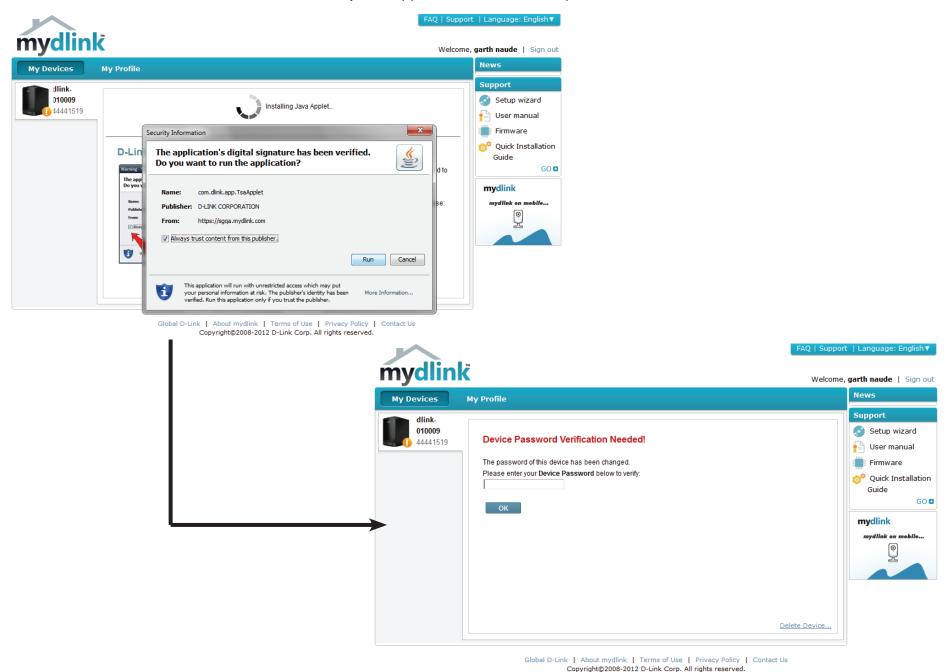
Once you log into your account, you will need the Java Runtime machine. The screen provides directions in order for you to download it.



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:



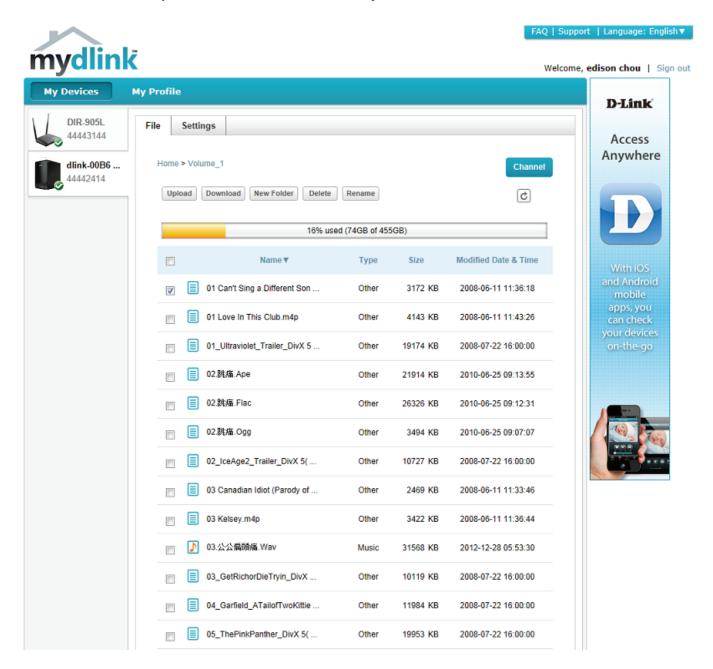
After the Java Runtime machine is installed, run the mydlink application and enter the password.



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.



Click Volume 1 to see its contents. Here you can create a New Folder, Upload and Download files, Delete and Rename files.

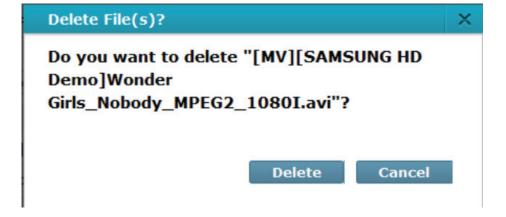


Creating a New Folder

Click the **New Folder** button to create a new folder. Enter a name for the folder and click **Create**.



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.

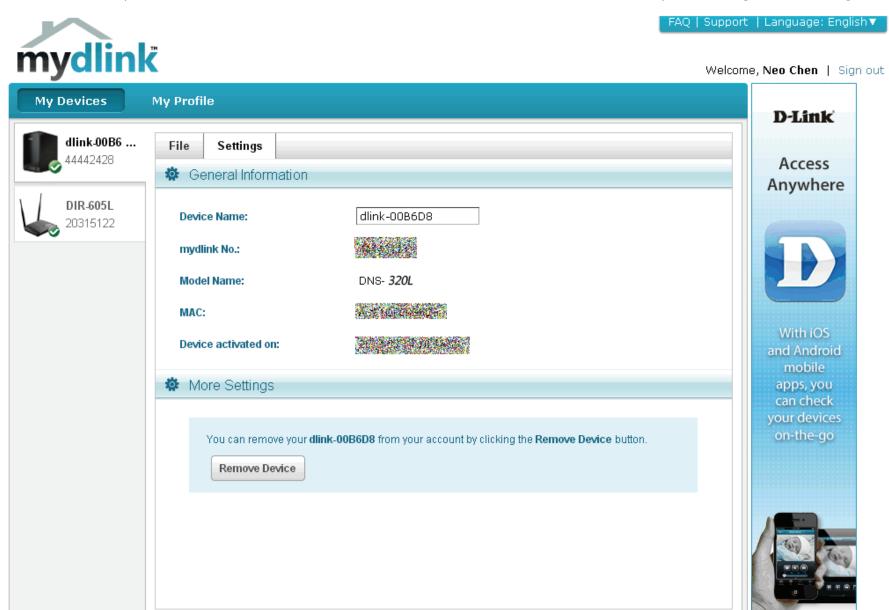


To rename a file or folder, click the checkbox next to the file/folder you wish to rename. Click the Rename button. A confirmation window will appear for you to rename the file. Enter a new name and click Rename.



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.



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 exclaimation 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:

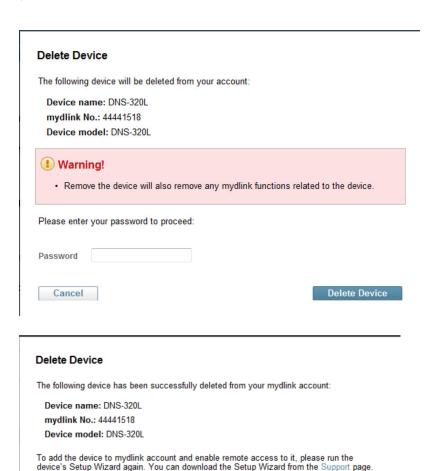
- Check to make sure that the internet connection to your ShareCenter[™] NAS is working properly.
- Try restarting your internet router.
- Check your ShareCenter[™] NAS cable connections and make sure they are secure.
- Check to make sure that the LED on your ShareCenter[™] NAS is lit solid blue.

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.

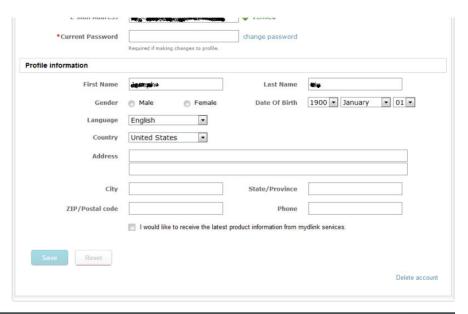
Enter your admin password to delete the device. Click **Delete Device** to proceed. An acknowledgement message appears to confirm the deletion.

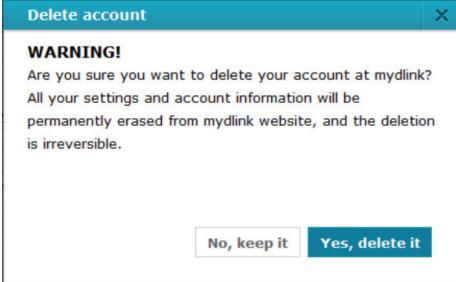


Deleting a mydlink account

Under **Profile Information**, click the **Delete account** link at the bottom.

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.



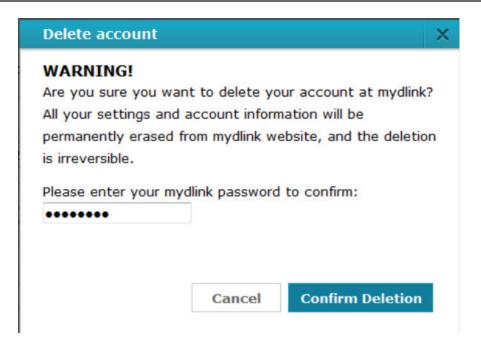


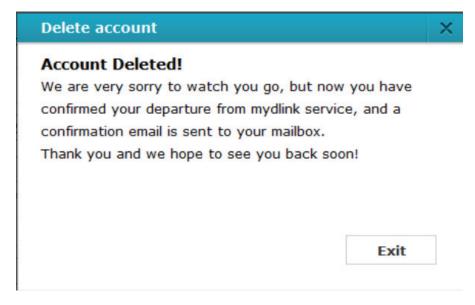
Section 4 - Configuration

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.

The Account is deleted.





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.



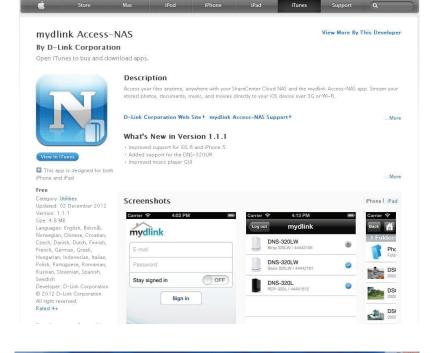




You can download the app from below link:

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.

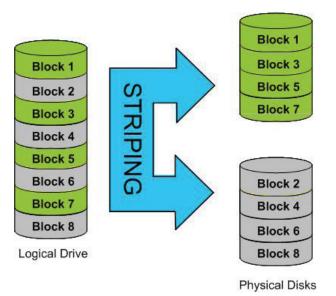
Although performance is improved, the lack of any RAID or mirroring means that if one drive fails, all data on the volume will be lost. **JBOD**

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..

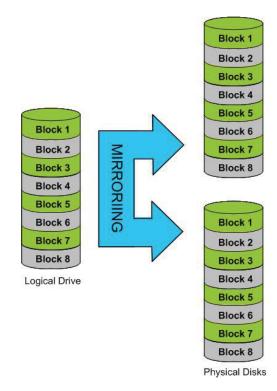
RAID 0 RAID 0 provides data striping, which spreads out blocks of data over all the drives, but does not provide data redundancy.

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

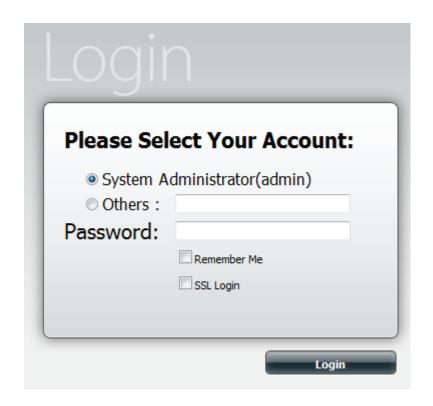
Copies exactly one of the data disks and produces a mirrored copy on another disk.

UPS Connectivity

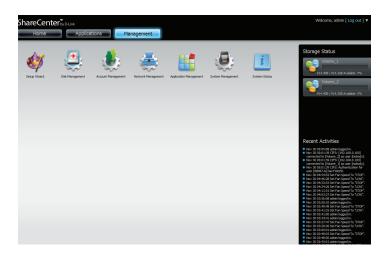
The DNS-320L supports USB UPS, giving users the ability to share the UPS on their local network and protect from an abnormal shutdown due to a power failure. Connect a UPS to the USB port on the back of the ShareCenter $^{\text{TM}}$.

Standalone and Network Master Mode:

Log into the DNS-320L.



Click Management.



Click System Management and then USB Devices.

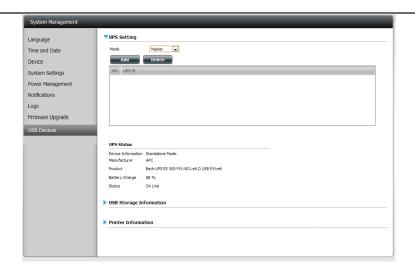
Click the blue arrow next to UPS Settings. There are two modes - **Standalone** and **Master**.

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**.



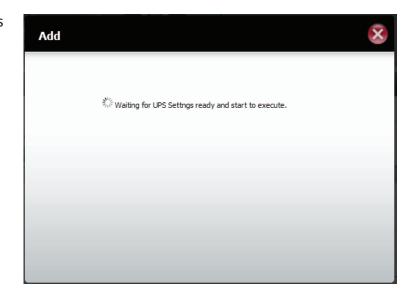
Enter the IP address of the other UPS slave on the network.

Click the + button to add more IP addresses.

Make sure the DNS-320L and the UPS slaves are on the same physical network.

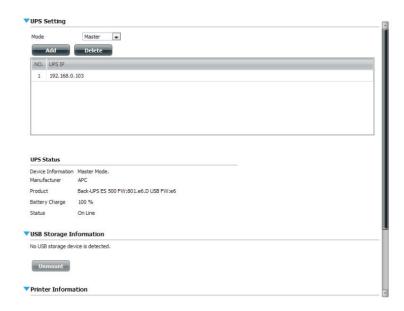


Once you have entered an IP address, the system will check its database for IP address records.



The UPS Settings table will display the IP address(es) you added.

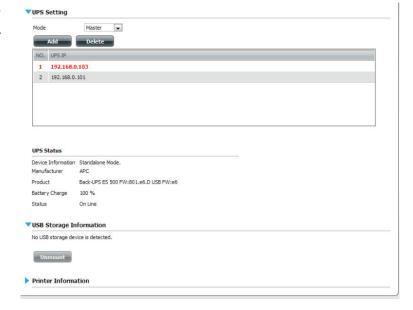
Your DNS-320L is now setup as the network master to notify the network slaves about critical power status.



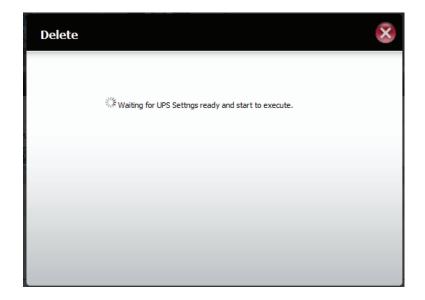
Deleting a UPS Slave

Under Management > System Management > USB Devices > UPS Setting, select the IP address. Your selection will turn red.

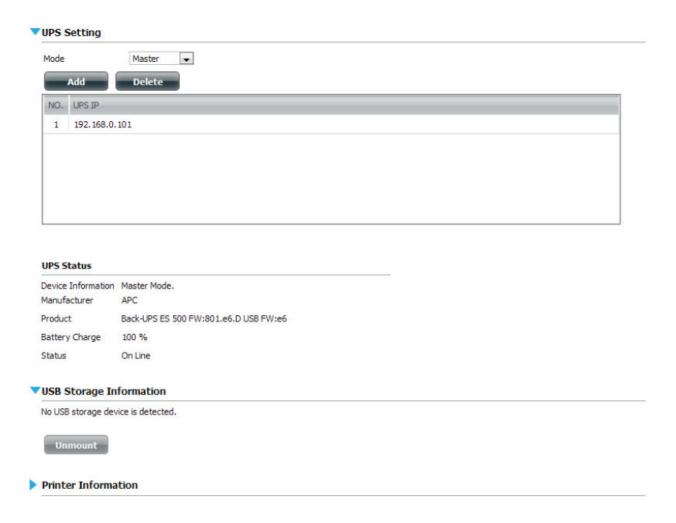
Click **Delete**.



The DNS-320L will process your request.



The IP address will no longer be listed in the table.



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:



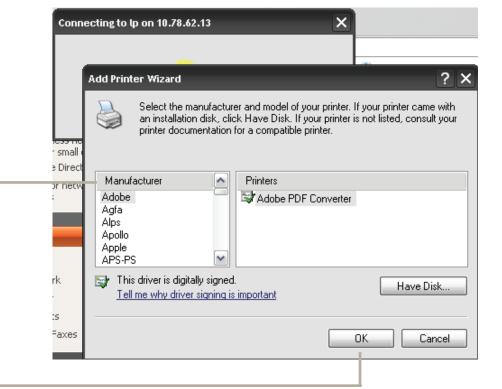
The printer should appear in the USB Devices menu of the System Management icon.

Connect to your device with Samba and then double-click the lp icon.

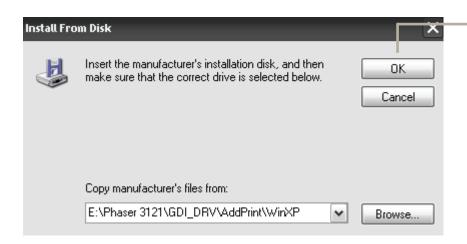


The Windows® Add Printer Wizard will launch:

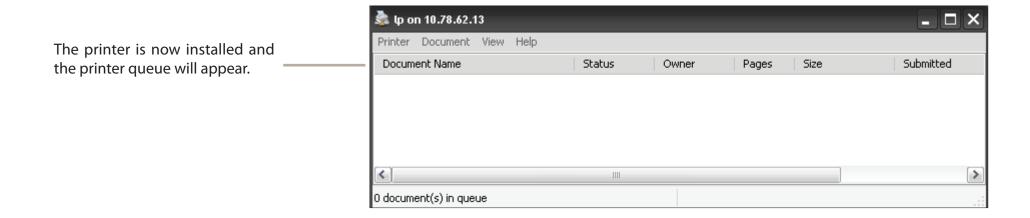
Select the printer driver from the installed Manufacturer list or use the **Have Disk** button to browse for the printer driver file.



Click **OK** to continue.



Once you have selected the proper driver as shown in the browse list then click **OK** to install the printer.



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.



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.

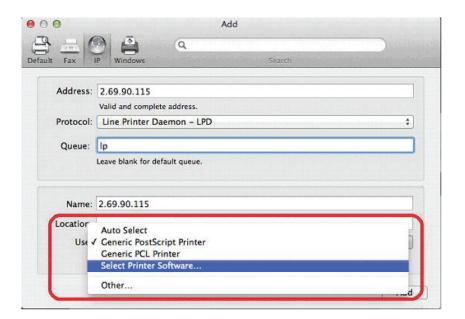


Under **Add Printer**, click the **IP** tab to add the shared printer which is connected to the NAS.

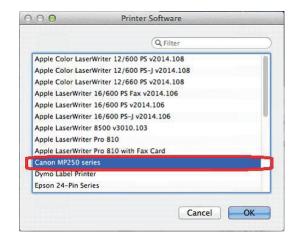


Enter the IP address and the Queue configuration. 000 Add Q Note: Under the Queue section, enter "lp", (where "lp" stands for Line Printer). Address: 2.69.90.115 Valid and complete address. Protocol: Line Printer Daemon - LPD Queue: Ip Leave blank for default queue. Name: 2.69.90.115 Location: Use: Generic PostScript Printer The selected printer software isn't from the manufacturer and may not let you use all the features of your printer. Add

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.

