



User Manual

ShareCenter™ 2-Bay Cloud Storage 2000

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Product Overview

SAFELY SHARE DIGITAL FILES LOCALLY AND OVER THE INTERNET

The D-Link DNS-320L 2-Bay Network Storage, when used with internal SATA drives¹, enables you to share documents, files, and digital media such as music, photos, and video with everyone on the home or office network. Remotely accessing files through the Internet is also possible with the built-in FTP server. Whether you are allowing access locally or over the Internet, keep data safe by only giving rights to specific users or groups. When configuring the DNS-320L, you can create users and groups and assign them to folders with either read, read/write or deny permissions.

This is ideal for an office environment with employee-specific sensitive data or for the home where you can ensure your children will only have access to age appropriate material. The DNS-320L will be accessable from any computer (PC, MAC, or Linux) on your network, without the need to install any software on the computer.

STREAM DIGITAL MEDIA CONTENT TO UPnP AV COMPATIBLE MEDIA PLAYERS

Back up your music, photo, and video collections to the DNS-320L for safekeeping. Then, enjoy the benefits of the built-in UPnP AV media server as you stream digital content to compatible media 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.

PROTECTION, PERFORMANCE, AND FLEXIBILITY

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

To further enhance your ShareCenter's capabilities, the DNS-320L supports a proprietary mydlink service, provided to D-Link customers only, serves as a portal to those users who wish to access their data from any location. mydlink.com portal 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.

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 7, Mozilla® Firefox® 3, Google® Chrome 3, or Apple® Safari® 4 and above
- Windows® XP (with Service Pack 2), Windows Vista®, Windows® 7
- Mac OS® X 10.5.6 or greater
- 3.5" SATA Hard Drive(s)

Package Contents

- D-Link ShareCenter™DNS-320L
- CD-ROM with Manual and Software
- Quick Installation Guide
- Power Cord and Adapter
- CAT5 Ethernet Cable
- Hard Drive Mounting Kit (2 straps, 4 screws)



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 File System Management port, 1000BASE-T support Half duplex and Full duplex mode
- Embedded two SATA II 3.5" HDD interface, support up to 3TB HDD
- 2-bay Serial ATA with RAID 0/1 and JBoD supported
- Equipped Ultra Cooler (Plastic housing + FAN speed control)
- Supports Green Ethernet
- Supports Smart FAN
- Supports Real time clock (RTC)
- Network Options
 - DHCP Client or Static IP
 - NTP Server
 - Windows 7/ Vista x32/64 PnP-X/ LLTD
 - Dynamic DNS
 - Bonjour
 - UPnP Port Forwarding
 - IPv6*
- Network File Services
 - Supports Windows XP/ Vista/ 7, Mac OSX 10.5+, Linux clients
 - CIFS/SMB for Windows and Mac OS X
 - NFSv3 for Linux and UNIX
 - AFP3.3 for Mac OS X
 - HTTP and HTTP/S for web browsers
- File System
 - EXT4 for internal HDD
 - FAT32, NTFS for USB external Storage

- - Unicode Support for both Samba and FTP server
 - File sharing: Windows/ Mac/ Linux
- FTP server
 - FTP over explicit SSL/TLS mode (FTPES)
 - FTP bandwidth and connection control
 - FTP support FXP
 - IP Blocking
- Download Management
 - HTTP/FTP schedule download
 - Peer to peer (P2P) downloader
- Disk Management
 - RAID: Standard, JBOD, 0,1
 - Raid 1 Auto/manual Rebuild
 - RAID migration: Normal to RAID 1
 - Disk Status Monitoring (S.M.A.R.T.)
 - HDD S.M.A.R.T test
 - Scandisk
 - Support Advanced Format HDD
- Power Management
 - Power Saving (Disk idle spin-down)
 - Schedule power on/off
 - Auto Power Recovery
 - Smart Fan Control
- Folder Management

- Share Folder Level Permission
- Public Folder
- Supports ISO Mount
- Remote File Sharing
 - Web File Server (My Files)
 - Allows user(s) to access files on the NAS using a web browser.
 - FTP Server
 - WebDAV
 - Smart phone access
 - Search and login to the NAS
 - List, download, upload, rename or delete files from a NAS
 - Play music, video, documents
 - Photo slideshow with background music playing support
 - Support mydlink portal
 - Users can list, download, upload or delete files/folders from a NAS
 - Users can see the status of a NAS.
- User/Group Management
 - User/group assignment for Network sharing and FTP server
 - Quota for user and group
 - Users can assign to multiple Groups
 - Batch User Creation/Import Users
- Backup Management
 - Schedule Backup from PC to NAS (D-Link ShareCenter Sync)
 - Apple Time Machine support
 - Local Backup
 - USB Backups (External storage and digital camera)
 - Remote network backup (Rsync, Remote Snapshot)

- Cloud Backup (Amazon S3)
- USB Copy Button
- System Management
 - Support mydlink portal
 - Support D-Link Storage Utility
 - OS support: Windows XP, Vista, 7, and Mac OS X
 - Two access modes supported: Open mode and Account mode,
 - Support Configuration file save/load
 - System status
 - Email/ SMS notifications
 - Network Recycle bin
 - System/FTP Log (Syslog Client)
 - Resource Monitor
- USB port support:
 - External Storage device
 - Print server
 - UPS monitoring
 - MTP/PTP
- Media Streaming
 - UPnP AV server:
 - Supports PS3/Xbox 360
 - Supports UPnP AV file > 4 GB
 - Complies with DLNA HNv1.5
 - D-Link new Media Player (including Boxee) compatible
 - iTunes Server
 - My Photos
 - Create albums and manage photos
 - Share photos through social networks (Google+ & Cooliris)
 - Slideshows

Table of Contents

- Supports Multilingual GUI
- Web Browsers Supported
 - Internet Explorer 7+
 - Mozilla Firefox 3+
 - Apple Safari 4+
 - Google Chrome3+
 - Opera 10+

Checking the Hardware Requirements

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

This section will help you:

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

Selecting Hard Drives:

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

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

Determining How Much Hard Drive Space you Need:

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

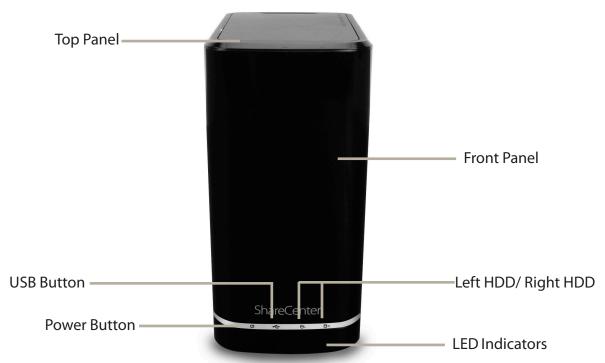
Using a Router or Switch:

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

Using an Uninterrupted Power Supply (UPS):

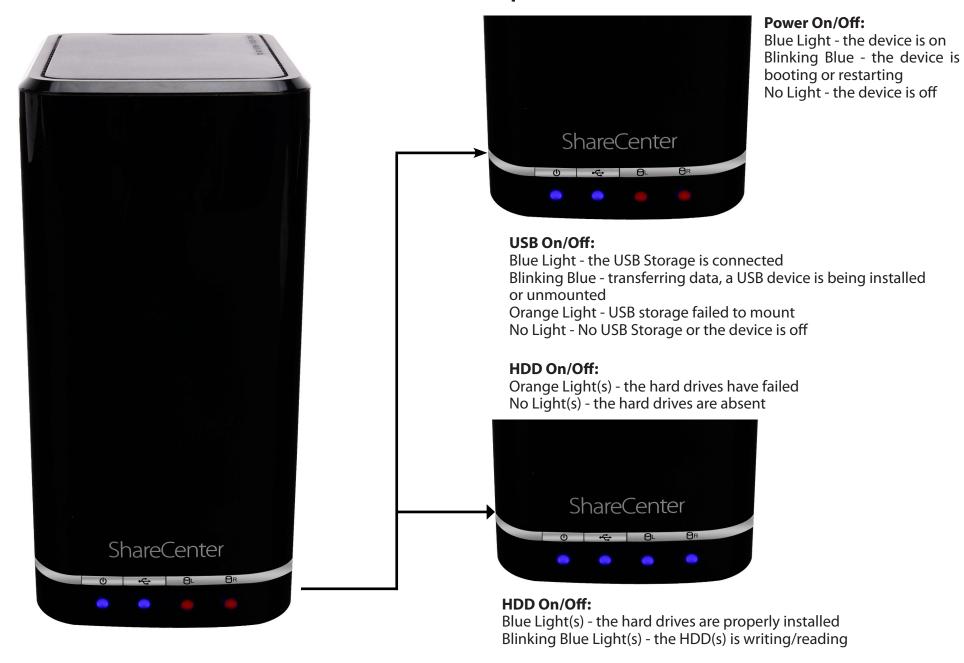
We highly recommend that you use your ShareCenter in conjunction with an uninterrupted power supply (UPS), which will protect against sudden loss in power and power surges.

Hardware Overview Front Panel



COMPONENT	DESCRIPTION
Top Panel	This panel unlatches simply by pressing the lever at the back. Unhook and lift up to insert or remove your hard drive(s).
Front Panel	The casing of the entire NAS
Power Button	Press once to power on the ShareCenter. Press and hold the button to power it down.
USB Button	Press once to activate USB or press and hold to release USB activity.
Left HDD/ Right HDD	Indicates the status 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 right 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 left 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 2.0 (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 lock to the ShareCenter NAS and a desk

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 16 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 drive 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).

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 automatically assign 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

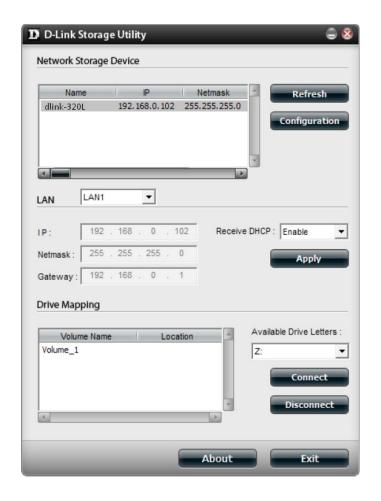
Letters: the selected volume. Click **Disconnect** to disconnect the

selected mapped volume.

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

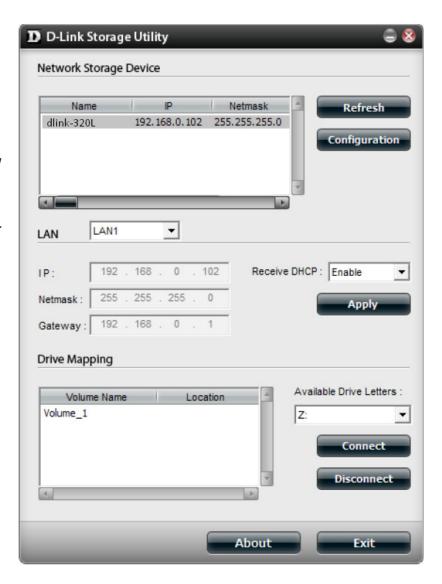
Search Utility.

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



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

D Setup Wizard

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

Click **Next** to continue.

1 Install
NAS
Pull The Top Out

Setup
NAS
Complete

Access the drive bays by sliding the top back until it unlatches from the device.
Click NEXT to continue.

Click NEXT to continue.

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_ | X

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, you can select the device from the list. This will cause the power LED to blink and confirm your selection.

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



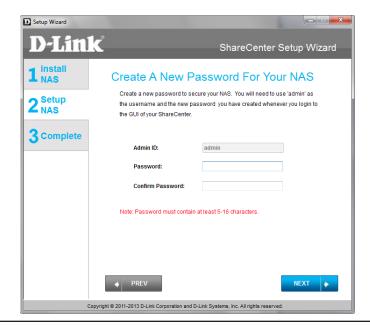
Admin Password

Step 10 - 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 11 - In this step you have to create a new password for the **Admin** username.



Networking Setup

Step 12 - You may either use Static IP or DHCP to configure the IP network settings of the ShareCenter. If you select Static IP, then enter the IP parameters as listed.



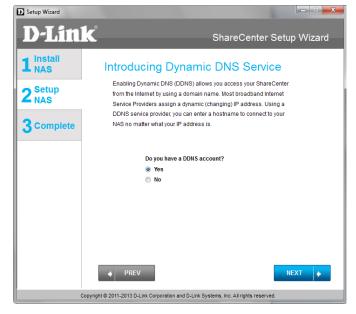
Device Information and Dynamic DNS

Step 13 - If you want your ShareCenter to be part of a Windows Workgroup network, enter the workgroup name, a name for the device, and a description. The name you entered will be used whenever you map one of the ShareCenter volumes as a Network Drive.

Click **Next** to continue.

Step 14 - Click the **Yes** radio button if you already have a DDNS account to use for the ShareCenter DDNS. Click the **No** radio button and proceed to step 15 to obtain a new DDNS account.

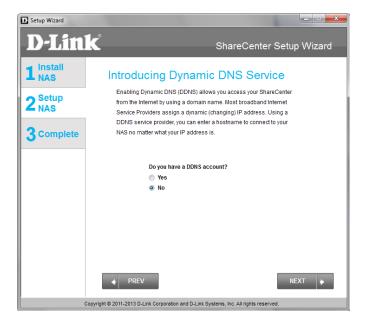




Dynamic DNS Account Setup

Step 15 - Enter the DDNS parameters requested in this window so that your ShareCenter can be accessed by a URL over the Internet.

Click **Next** to continue.



Step 16 - Click **Yes** to go to a Wizard with instructions and links on how to obtain a free DDNS account.

Click **No** skips the DDNS account setup wizard and transfers you back to the ShareCenter Setup Wizard.

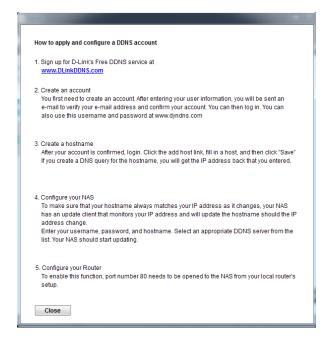


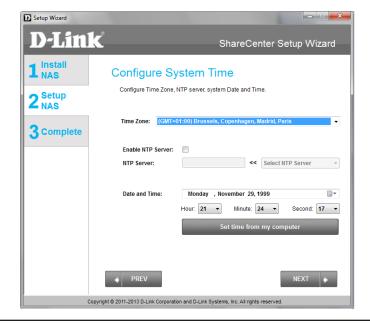
DDNS Account and System Time

Step 17 - Follow the steps listed here in order to create a DDNS account and configure your LAN equipment and ShareCenter to work with the new settings.

Click **Close** to continue.

Step 18 - Select your time zone and then set the time and date. You can set the time and date manually, from an NTP server, or from your computer.





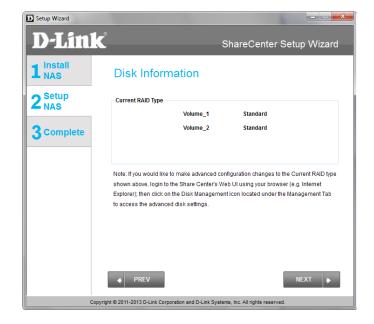
Email Settings and Volume Information

Step 19 - You can configure messages to be sent alerting you to certain operational conditions and drive status conditions to your e-mail account. These alerts can prove helpful with the management and safeguarding of important data.

Enter your e-mail information and settings and then click **Next** to continue. If you do not want to configure your e-mail settings, click **Skip** to continue.



Step 20 - This step is informational and shows any currently configured Volumes previously setup on the ShareCenter™.



RAID Configuration

Step 21 - Select one of the volume RAID types. Clicking on each RAID type radio button will display a description.

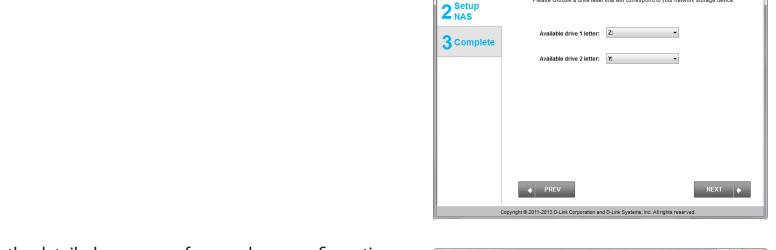
For more information concerning the different RAID Disk Formats please refer to the **Knowledge Base** section in this manual.



Mapping a Drive and Checking Volume Summary

Step 22 - This step allows you to map the volume(s) created as network drive(s) on your computer.

Click **Next** to continue.



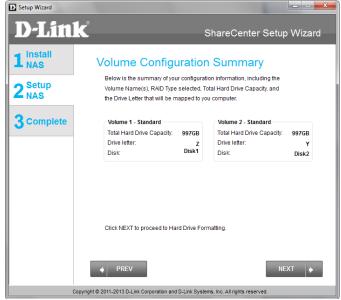
■ Setup Wizard

1 Install

D-Link

Step 23 - Review the detailed summary of your volume configuration here before clicking next and starting the drive format. If necessary use the **PREV** button to go back and reconfigure the RAID configuration of the volume(s).

Click **Next** to continue.



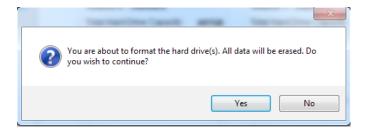
Map Drive To Network

Please choose a drive letter that will correspond to your network storage device.

ShareCenter Setup Wizard

Formatting Volumes

Step 24 - When you click **Next**, a warning message will appear to inform you that all data on the drive(s) will be lost. Click **Yes** to proceed or **No** to exit.



Step 25 - During the formatting process the wizard displays a percentage complete bar for each hard drive.



Formatting Hard Drives

Step 26 - The wizard will notify you when formatting has completed successfully.



Connecting to the mydlink

Step 27 - D-Link has provided a mydlink service that allows you to remotely access the files from your NAS through the mydlink portal or mobile devices. Read the installation instructions and wait for the process to complete.



Step 28 - The wizard connects you to the mydlink server to configure your cloud service.



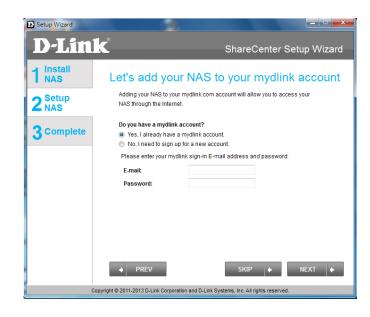
Step 29 - When the wizard fails to connect you to the mydlink server the following screen appears to warn you of your network configuration.



Step 30 - 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.

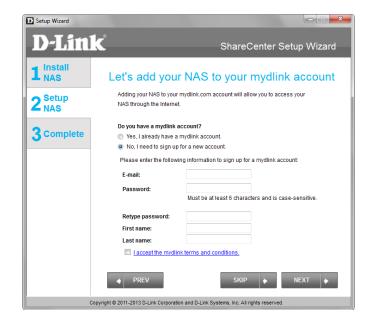


Step 31 - Alternatively, you can create a new account if you select "No, I need to sign up for a new account."

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

"I accept the mydlink terms and conditions."

Click **Next** to continue.



Step 32 - A message appears asking you to verify your email address and account.

Click **OK** to continue.



Wizard Complete

Step 33 - The mydlink section of the wizard installation is complete. The wizard provides you with a **mydlink number**. You can also click 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 34 - 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.

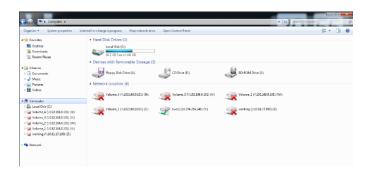


Mapping a Drive

Map a drive to your ShareCenter using Windows® 7 to access it through Windows® Explorer.

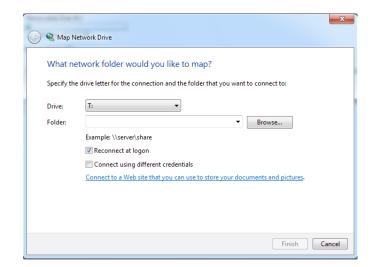
Step 1 - Click **Start**, then **Computer** (the name of your computer).

On the right-side panel is 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 - This screen shows some details on selecting a network drive.

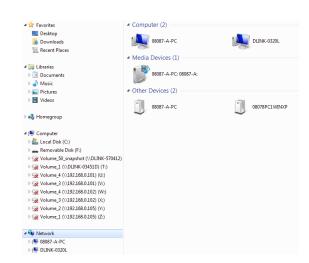
Click **Browse** to find your network.



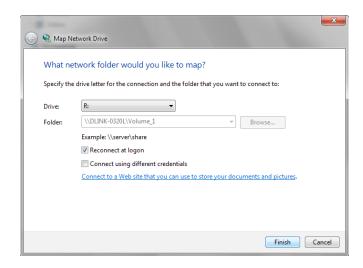
Step 3 - Windows will automatically detect all devices on your network including your ShareCenter.



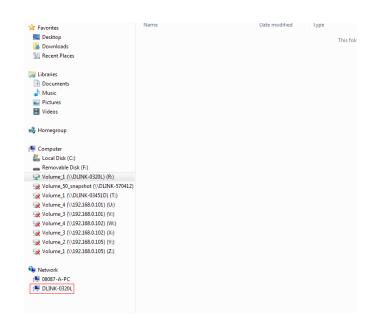
Step 4 - Click on your ShareCenter to see the volumes you created earlier. Then select the volume that you wish to access and click **OK**.



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.



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 Favorites Application	Add the favorite applications you use on a regular basis to the Home page
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, UPnP, iTunes server configurations, AFP, and NFS 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

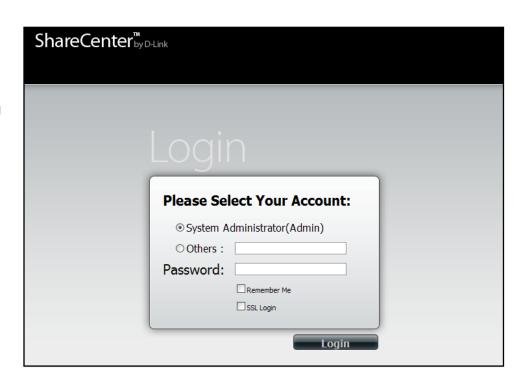
SECTION	OPTION	DESCRIPTION
Applications	FTP/HTTP Downloads	Configure FTP and HTTP download settings
	Remote Backup	Configure remote backup services
	Local Backups	Configures local backups, Time Machine© settings, and USB backups
	P2P Downloads	Configure your P2P downloads and control your download schedules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

Web UI Login

To access the Web UI, open a web browser, type in the IP address of your ShareCenter, and log in.

The following screen will appear:

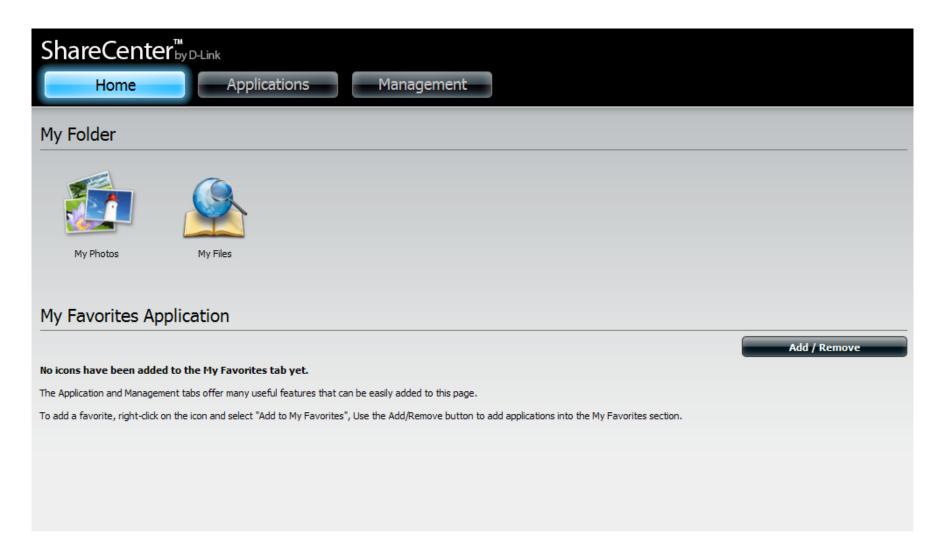
Select **System Administrator** and enter the password created during the Setup Wizard. Click **Login**.



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

Web UI General Layout Home

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



Applications

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



Management

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

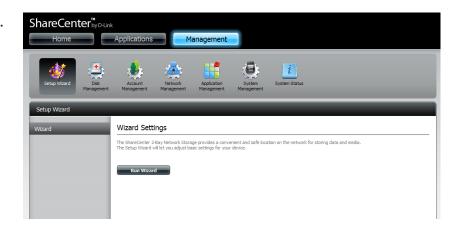


Management

Setup Wizard (Web UI)

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

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

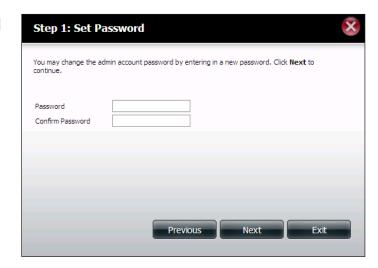


Step 2 - Click **Next** to continue.



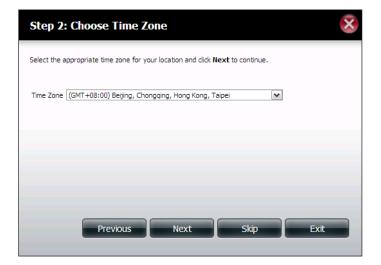
Step 3 - Update the administrator account password here and confirm the password.

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.

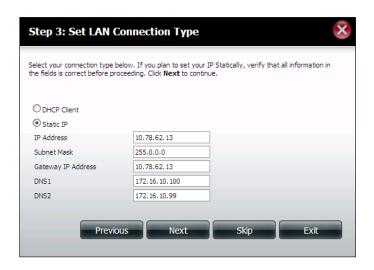
IP Address: Enter an IP address for the DNS-320L.

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).

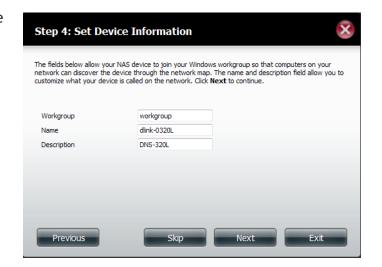
DNS Servers: Enter the IP address(es) of your DNS server(s). DNS1 is usually the IP address of your router.

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



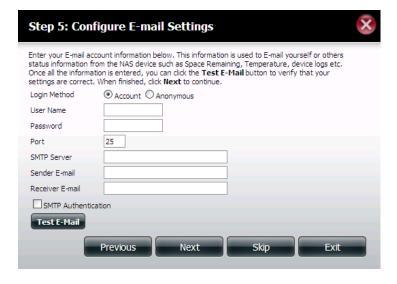
Step 6 - Here you can assign a workgroup and name to the ShareCenter with a short description.

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 **Anonymous** to create a random account with no specific settings.

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



Step 8 - 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.

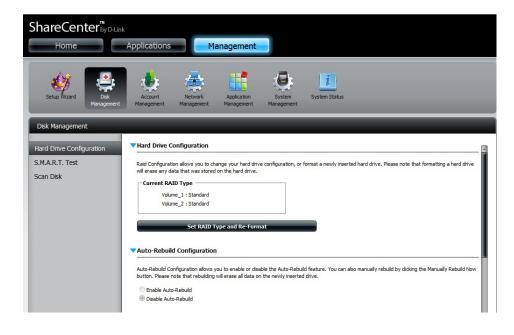
Note: You can still rebuild a drive using the RAID 1 functionality however you must initiate the

rebuild manually.

Manual Rebuild Now: If Auto-Rebuild is disabled then you can use

the Manual Rebuild option by clicking this

button.



Manually Rebuild Now

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'.



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

The Setup Wizard begins.





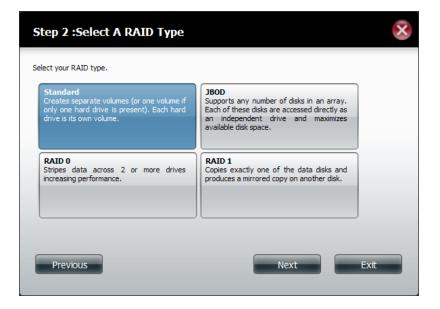
The 'Physical Disk Information' page displays all of the hard drives on the DNS-320L. It shows the array number, vendor, model, serial number, and drive capacity.

Click **Next** to continue.



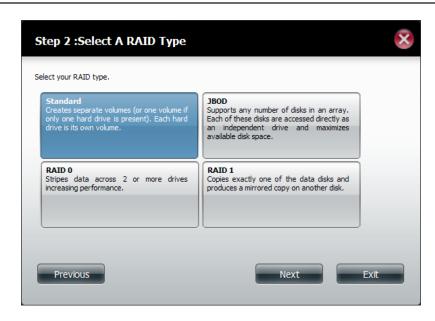
Select the format you want by clicking on the RAID type box (highlight in blue).

Click **Next** to continue.

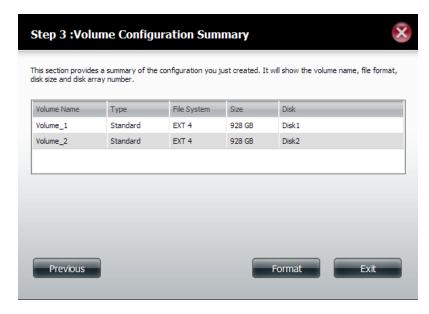


Select **Standard** to create separate volumes for each individual drive.

Click **Next** to continue.

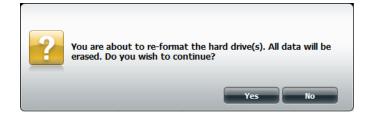


The 'Volume Configuration Summary' shows details on all of the configured drives. Check the details on the list and click **Format** to continue or click **Previous** to make changes.

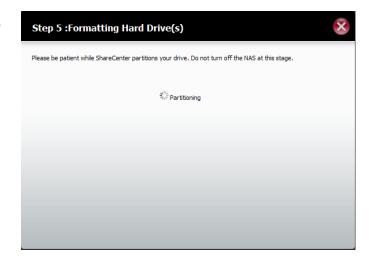


A warning message will appear to inform you that all volumes and data will be formatted and erased.

Click **Yes** to continue.

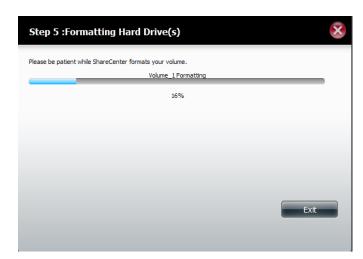


Partitioning will now begin. Please be patient while this process takes place. Do not turn off your NAS during this process.



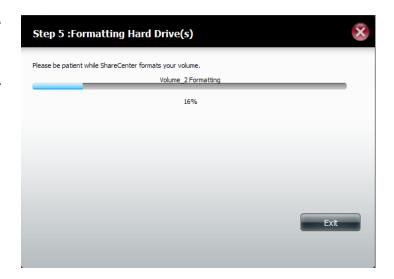
Once the partition is completed, the formatting process will begin. A graphical bar will show the volume being formatted. Do not turn off your NAS during this process.

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



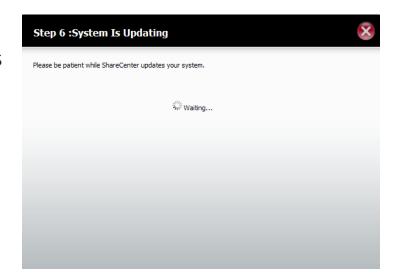
The Wizard starts to partition the second drive if you have installed it.

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



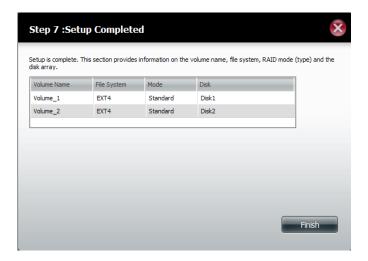
The system will now update all of the changes made.

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



The wizard is now complete. It will show the volume number(s), file system selected, the type of RAID, and the disk information in the RAID.

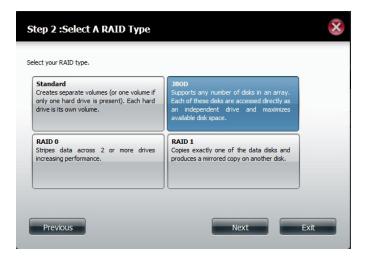
Click **Finish** to complete the process and start using your DNS-320L.



JBOD

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

Click **Next** to continue.



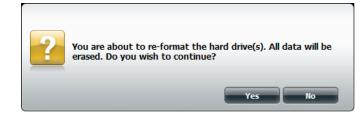
The wizard displays a Volume Configuration Summary of the drives you want to convert to JBOD.

Click **Format** to continue or **Previous** to make changes.

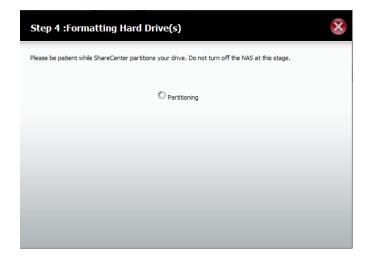


A warning message will appear to inform you that all volumes and data will be formatted and erased.

Click **Yes** to continue.

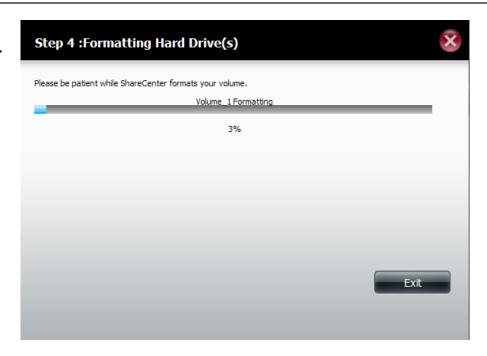


Wait for the Wizard to prepare the drive for configuration.

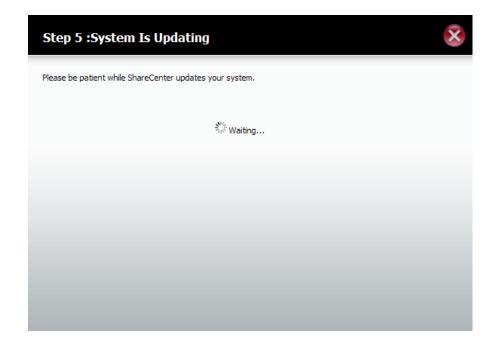


The Formatting process begins.

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

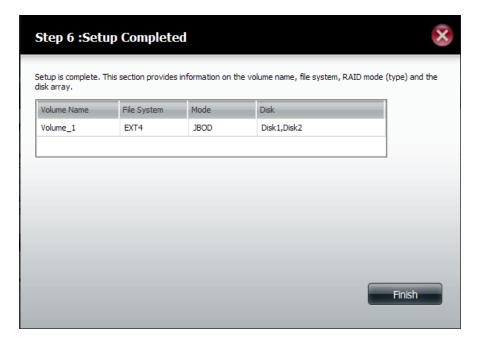


The System will now update all of the changes made.

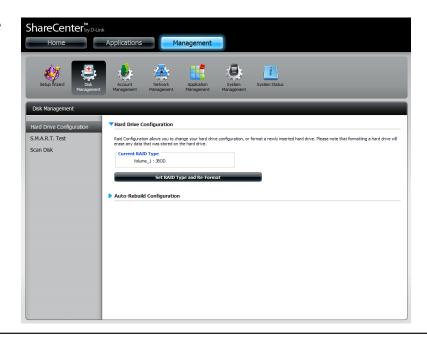


The wizard is now complete. It will show the volume number, file system, they type of RAID and the disk information in the RAID.

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



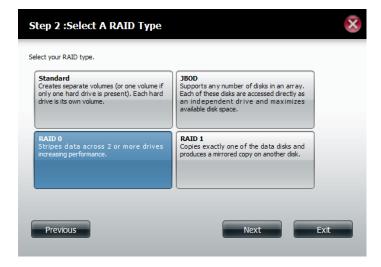
The wizard returns you to the main screen. Here you can see the current RAID Type.



RAID 0

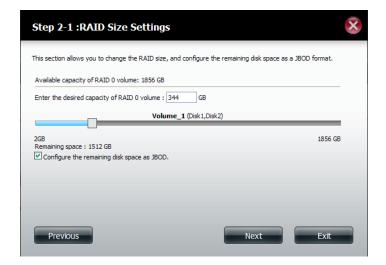
Select RAID 0 (stripes all of the drives).

Click **Next** to continue.



Enter the size (in GB) of RAID 0 and then check the box next to "Configure the remaining disk space as JBOD" if you wish to configure the remaining space as JBOD.

Click **Next** to continue.

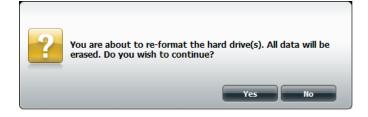


The 'Volume Configuration Summary' shows details on all of the configured drives. Check the details on the list and click Format to continue or click **Previous** to make changes.

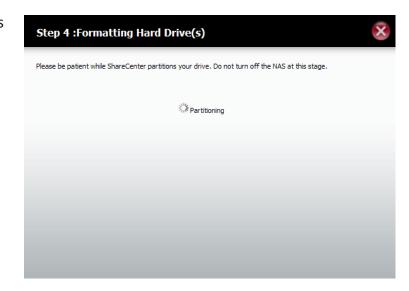


A warning message will appear to inform you that all volumes and data will be formatted and erased.

Click **Yes** to continue.

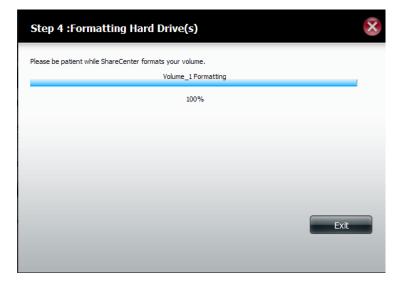


Partitioning will now begin. Please be patient while this process takes place. Do not turn off your NAS during this process.



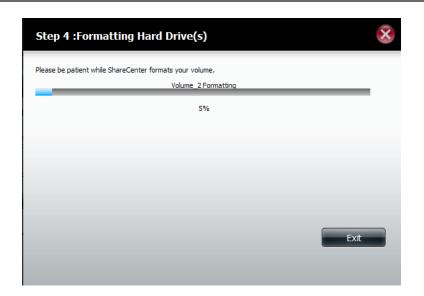
The system formats the First Volume.

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



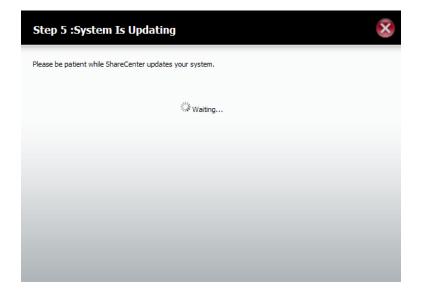
The system will now format the second Volume.

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



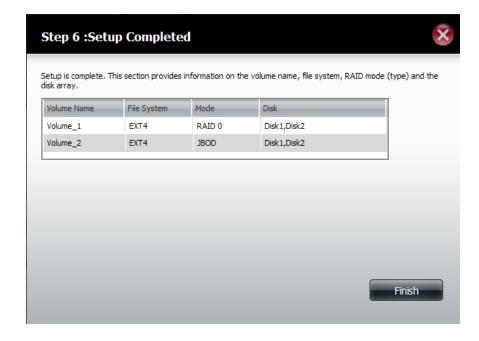
The system will now update all of the changes made.

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



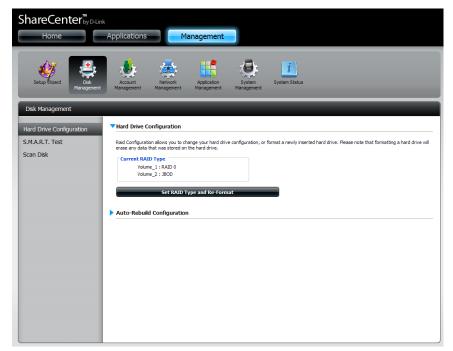
The wizard is now complete. It will show the volume number(s), file system selected, the type of RAID, and the disk formation in the RAID.

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



The wizard returns you to main Hardware Configuration page.

Under Current RAID Type, you can view your changes.



RAID 1

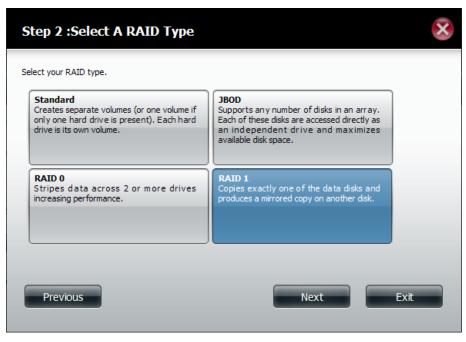
Select RAID 1 to mirror all the hard drives.

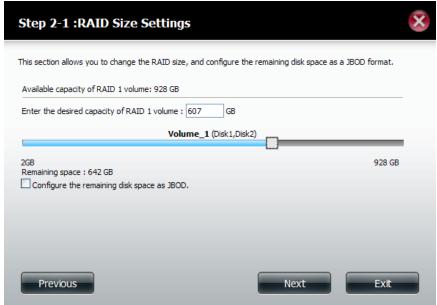
Click **Next** to continue.

Enter the amount of disk space you would like to assign to the RAID 1 volume.

Check the box next to "Configure the remaining disk space as JBOD" if you wish to configure the remaining space as JBOD.

Click **Next** to continue.

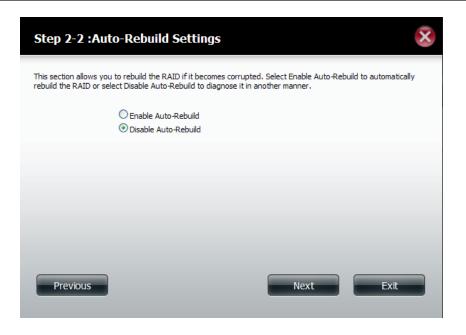




Click **Enable Auto-Rebuild** to automatically rebuild a failed drive if it has been replaced with a new one.

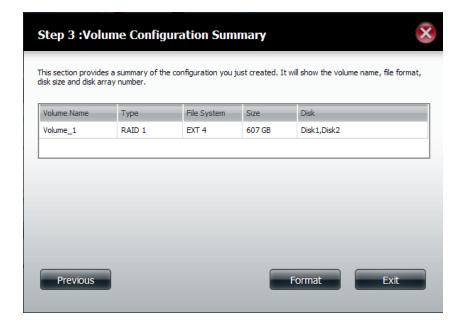
Select **Disable Auto-Rebuild** if you want to start the rebuild process manually after replacing a failed drive.

Click **Next** to continue.



The Volume Configuration Summary shows the Volume Name, Type, File System, and size of the RAID volume.

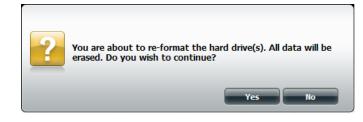
Click Format to continue.

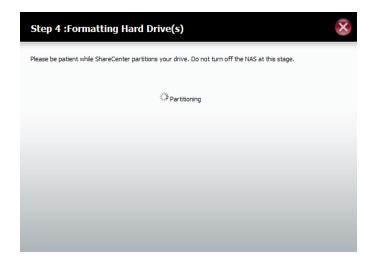


A warning message will appear to inform you that all volumes and data will be formatted and erased.

Click **Yes** to continue.

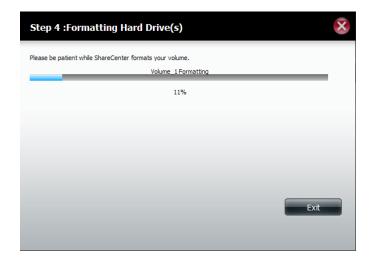
Partitioning will now begin. Please be patient while this process takes place. Do not turn off your NAS during this process.





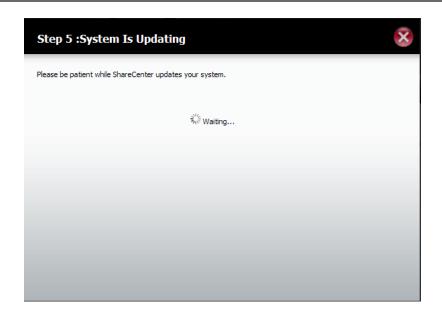
The system formats the Volume.

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



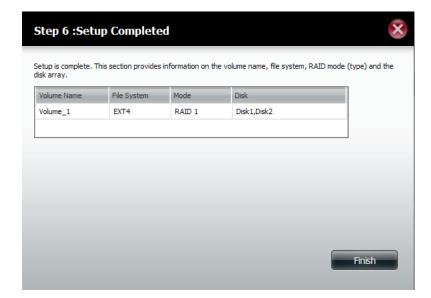
The system will now update all the changes made.

Click **Next** to continue.



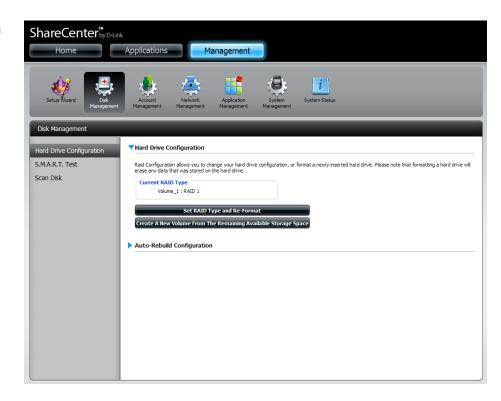
The wizard is now complete. It will show the volume number(s) file system selected, the type of RAID and the disk information in the RAID.

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



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

The RAID 1 configuration you just set will be displayed.



Migrating Data from Standard Mode to RAID 1

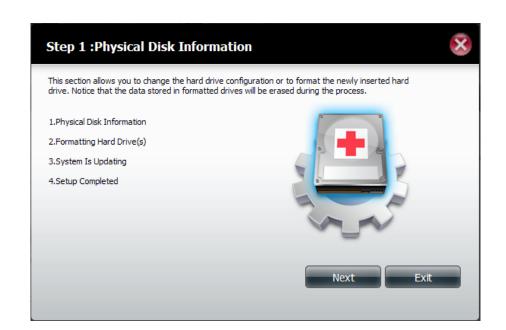
Standard Mode doesn't offer any redundancy and security of data. It is best then to migrate from Standard Mode to RAID 1. To do this follow these instructions:

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



Step 2 - Re-attach the top panel and restart the DNS-320L.

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.

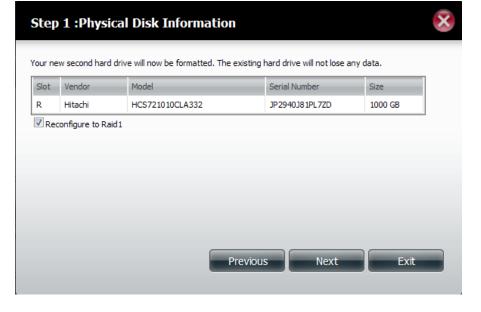


Format the new drive as Standard type.

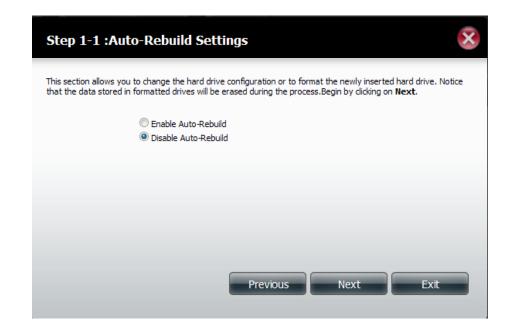
Step 4 - Under **Physical Disk Information**, you will be able to see the drive you just installed. It provides the **slot location**, **vendor**, **model number**, **serial number**, and **disk size**.

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



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

Click **Next** to continue.

Note: Only the newly inserted hard drives will be formatted. The data stored in the original hard drive will not be formatted.

This sthat

You are about to re-format the hard drive(s). All data will be erased. Do you wish to continue?

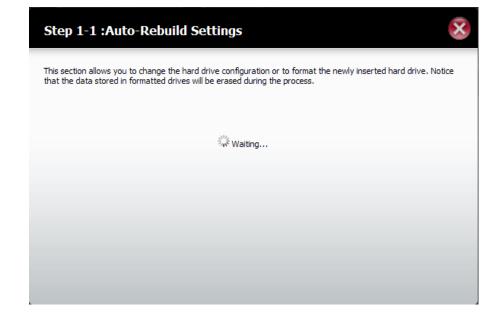
Notice

Previous

Next

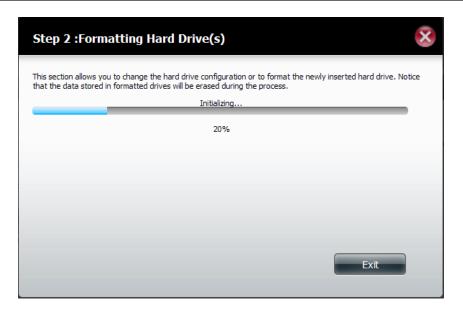
Exit

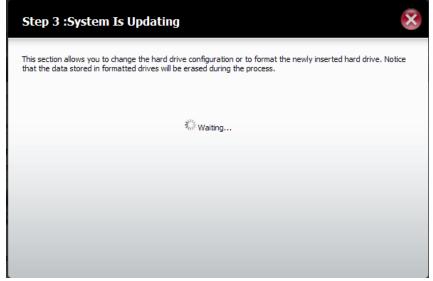
Step 7 - The software communicates with the hardware to build a list.



Step 8 - The Wizard formats the hard drive.

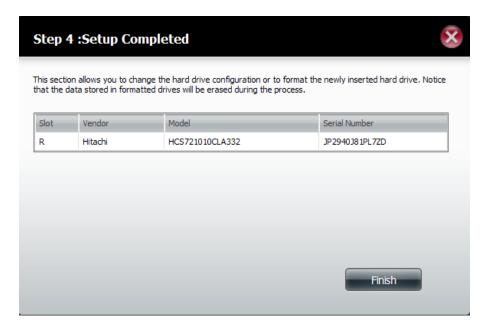
Step 9 - The System updates all of the changes made.



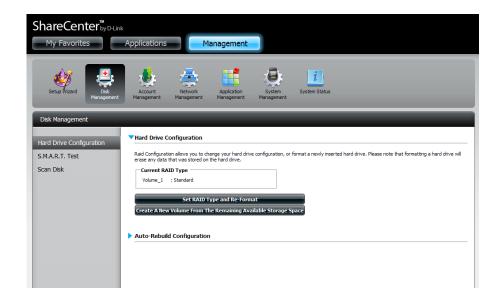


Step 9 - Setup is completed when it shows final information on the slot, vendor, model number, and serial number.

Click **Finish** to continue.



Step 10 - The wizard returns to the main Hard Drive Configuration .



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

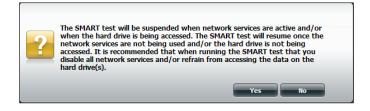
A warning message will prompt you to stop all services and network activity.

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.

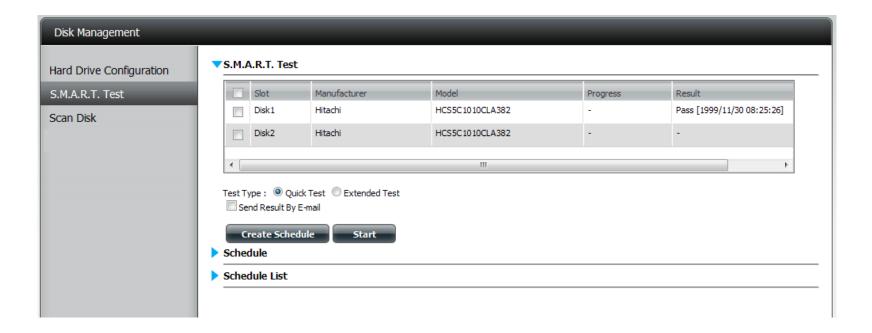
The Start button will change to a Stop button.







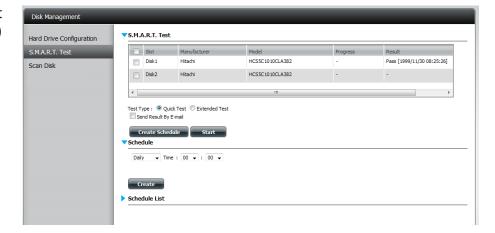
When the test is complete, the results will be displayed in the **Result** column.



Creating a Schedule

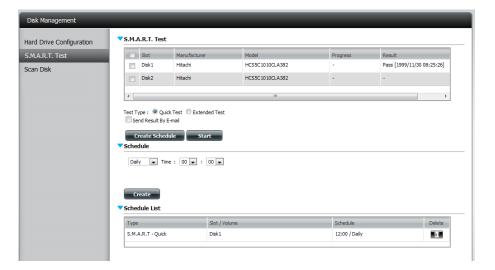
To create a schedule, select the disks/volumes to run the test on. Under Schedule, select the period (Daily/Weekly/Monthly) and then select the time from the drop-down menu.

Click Create



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

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



Scan Disk

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

Click Management, Disk Management, and then Scan Disk.



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

Click Scan Disk



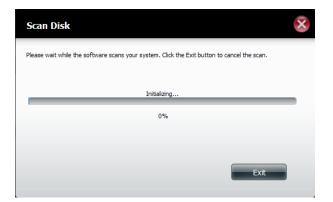
A warning message will prompt you to stop running all services (hard drive and network activity).

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



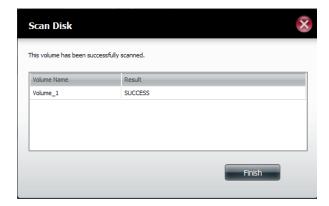
The DNS-320L will initialize the volume(s) and begin scanning.

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



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

Click **Finish** to exit.



Account Management Users / Groups

Creating a Single User

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

Click Management > Account Management.

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

ShareCenter Torpo-Link

Home Applications Management

Setup Wirterd Disk
Management Management Management Management System Status

Account Management

Users / Groups
Quotas
Network Shares
Admin Password

Vuser Settings

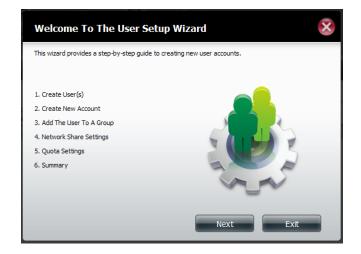
Group Name
John

Group Name
John

Group Name
John

Displaying 1 to 1 of 1 items

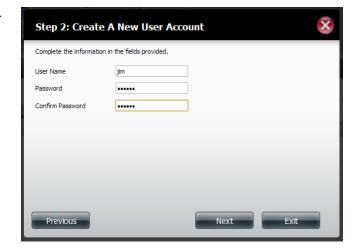
The User Setup Wizard will appear.



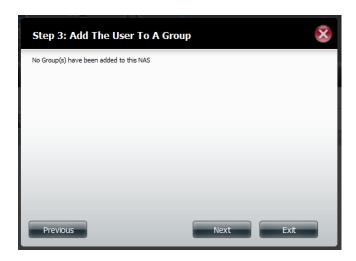
Step 1 - Select **Create a Single User** and then click **Next** to continue.



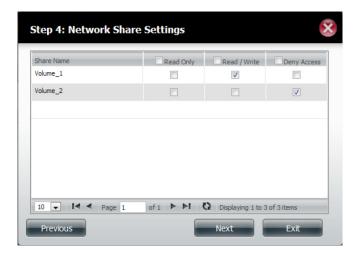
Step 2 - Enter the user name and password for the new user and then click **Next** to continue.



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.



Step 4 - 1: 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.

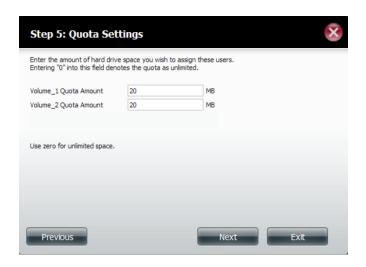
Click **Next** to continue.



Step 4-1-1: Select WebDAV **Read Only** or **Read/Write** rights for each volume.



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.

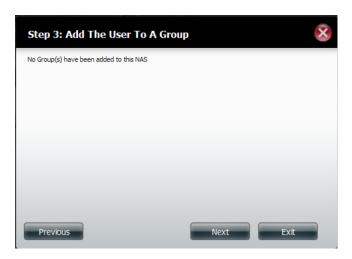
Enter the account prefix (Eg. this could be a department in the company).

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.

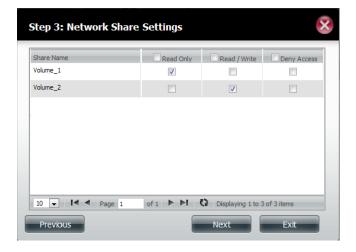
Enter a password and confirm it.



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



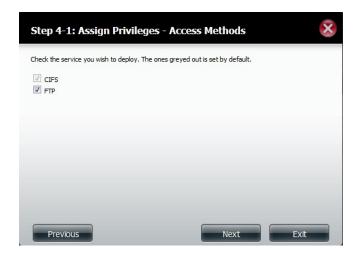
Step 4 - Select the network share settings. Select **Read Only**, **Read/Write**, or **Deny Access**. Click **Next** to continue.



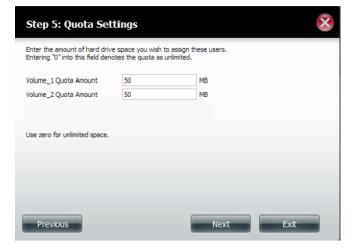
Step 4-1: Assign Privileges/Access Methods to the user(s). Select FTP. CIFS is set as default.

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

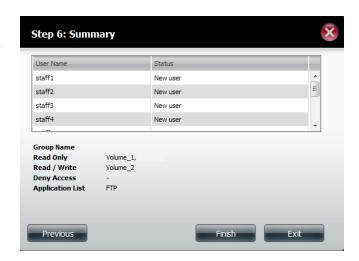
Click **Next** to continue.



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.



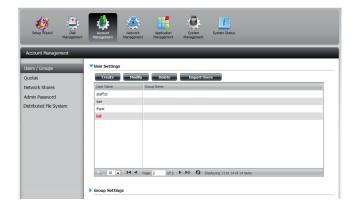
The User Settings window will show a list of the users created.



Modify Users

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

Click **Modify** to continue.



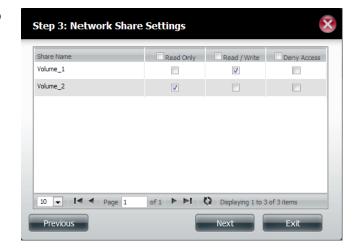
Step 2 - The User Setup Wizard will appear.



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



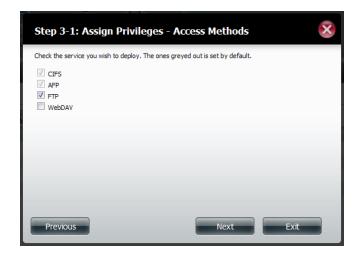
Step 4 - Change the Network Share Settings. Click **Next** to continue.



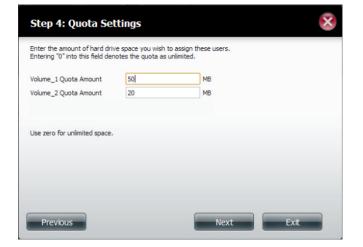
Step 5 - Assign Privileges/Access Methods for the user. Select either **FTP** or **WebDAV**. CIFS and AFP are set as default.

- 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.

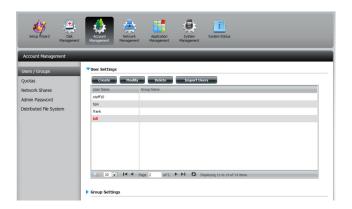


Step 8 - A message will appear stating the user details have been changed successfully. Click **Yes** to exit the wizard.



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.

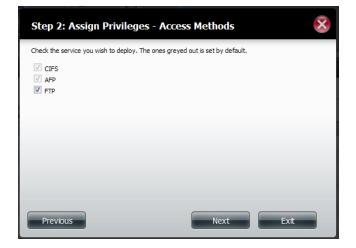
Check the **Overwrite Duplicate Accounts** box if this is necessary.

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

Click **Next** to continue

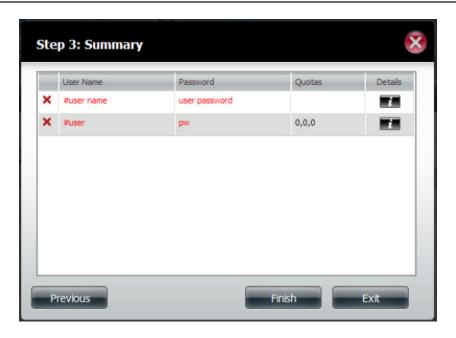


Step 4 - Assign the privileges and access methods.



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.



Creating a Group

Step 1 - Click Account Management > Users/Groups.

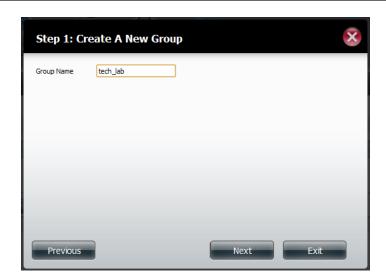
Click the blue arrow next to Group Settings and settings window will appear. Click **New** to create a new Group.



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



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

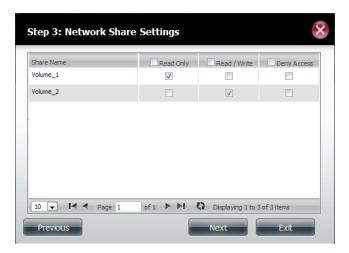


Step 4 - Click the checkbox to select the user(s) you wish to add to the group and then click **Next** to continue.

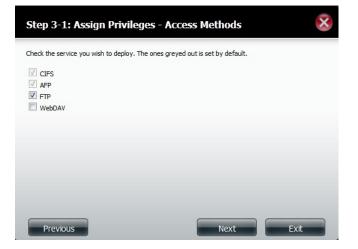


Step 5 - Select the Network Share Settings (read, read/write, deny access) for the corresponding disk volume for the group.

Click **Next** to continue.



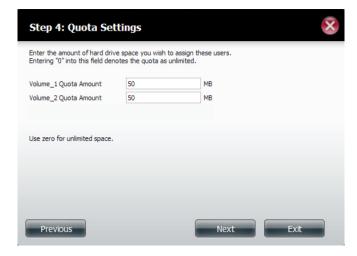
Step 6 - Select the Privileges/Access Methods you want to assign to the group. The greyed out selections are assigned by default.



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

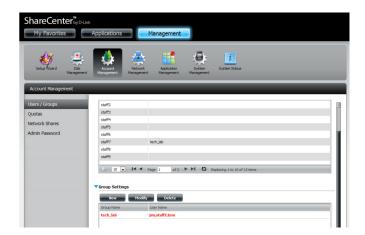
Step 1 - Click Account Management > Users/Groups.

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

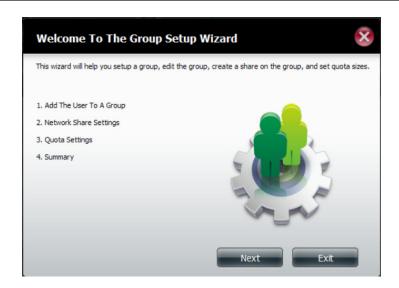


Step 2 - Select the group you want to modify. Your selection will turn red.

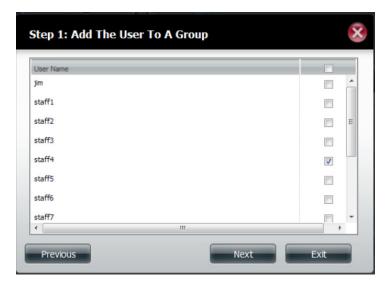
Click **Modify** to change the settings for the Group.



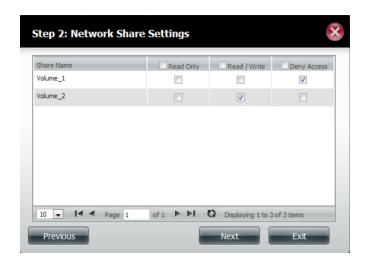
Step 3 - The Group Setup Wizard will now start. Click **Next** to continue.



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.

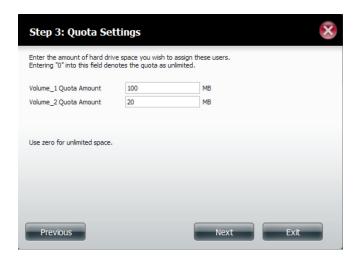


Step 6 - Select the appropriate privileges you want to assign to the group. The greyed out selections are assigned by default and cannot be modified.



Step 7 - Edit the amount of space you want to assign to the group for each volume. Enter zero to give unlimited disk space to the group.

Click **Next** to continue.



Step 8 - 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.



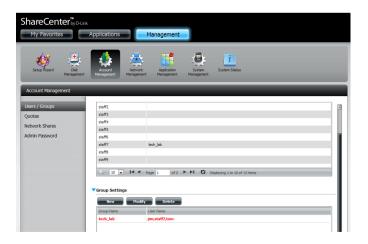
Step 9-The wizard is now complete and will display a summary of the group you edited.

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**.



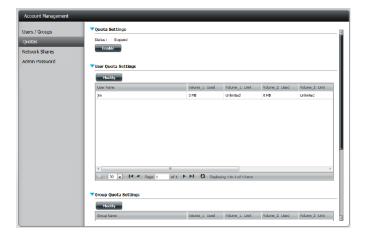
Step 2 - A warning message will appear asking you to verify if you want to delete the Group. Click **Yes** to delete the Group or **No** to cancel your decision.



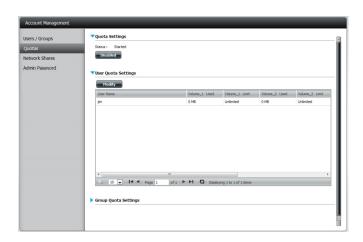
Quotas

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.

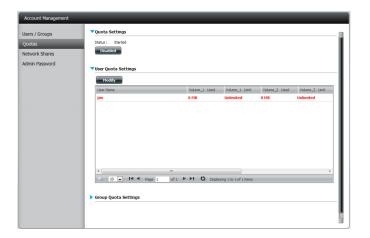
Click **Enable** to activate Quota Settings. The status will now display 'Started' notifying you that the Quota Settings are enabled.



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

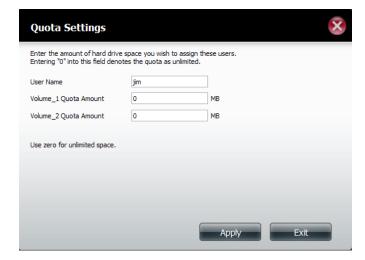


Select the User you want to modify. Your selection will turn red. Click **Modify** to change the user's settings.

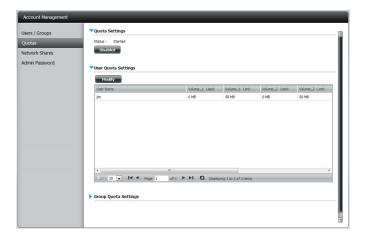


The Quota Settings configuration box will display the user account you want to modify. Enter a new quota amount for each volume.

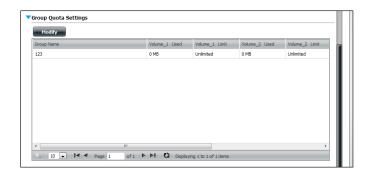
Click **Apply** to confirm your settings.



The modified quota settings will be displayed in the table.



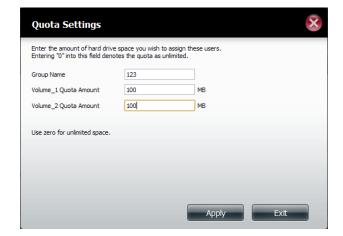
For Group Quota Settings, click the blue drop-down arrow next to Group Quota Settings to view the group quota table.



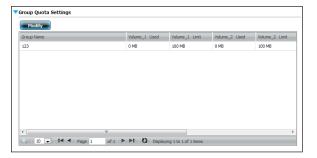
Select the group you want to modify. Your selection will turn red. Click **Modify**.



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. In order to create network access rules, the default rule must be removed first. This can be done simply by clicking on the **Delete** button. 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.

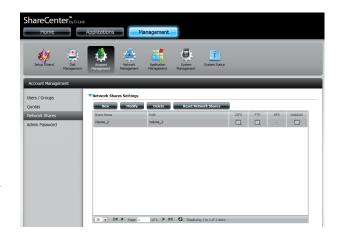
Network Share/ISO The Network Shares Settings window allows the Mount Shares: user to add, modify, and remove both new and existing Network Share and ISO Mount Share Settings.

> 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. 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.

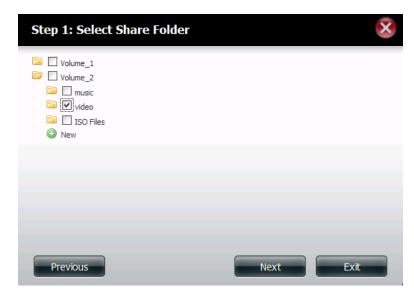
In this wizard the user will be able to:

- 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.

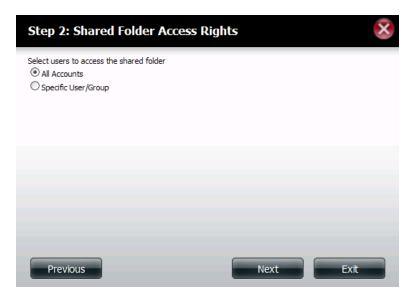






Step 3 - Select the user accounts or group which are allowed to access this folder(s). Select **All Accounts** to allow access to this folder to all the accounts. Select **Specific User/Group** to only allow certain users or groups access to this folder.

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.

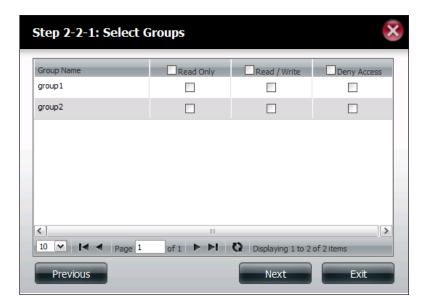


Step 5 - If you selected **Specific User/Group** in Step 3, then this step allows you to set the access rights for each User configured on the ShareCenter.

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 ShareCenter.

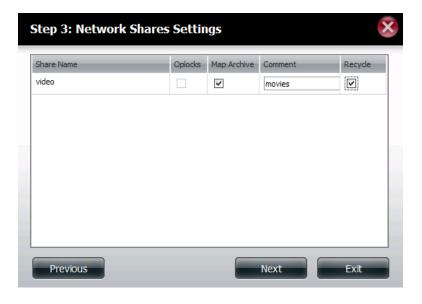


Step 7 - Here you can assign privileges to this share.

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

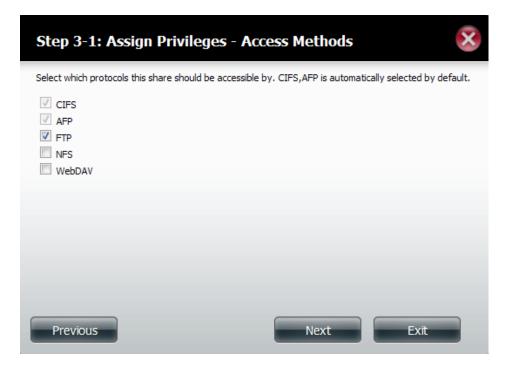
Oplocks are guarantees made by a server for a shared logical volume to its clients. These guarantees inform the Client that a file's content will not be allowed to be changed by the server, or if some change is imminent, the client will be notified before the change is allowed to proceed.

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, the file attribute "Map Archive" will be copied as the file is being stored on the ShareCenter.



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:

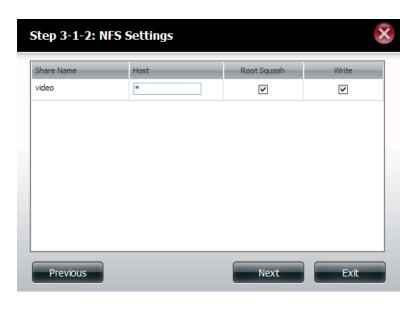
- 1) FTP Anonymous None (No Access).
- 2) FTP Anonymous Read Only (Limited Access).
- 3) FTP Anonymous Read/Write (Full Access).

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.



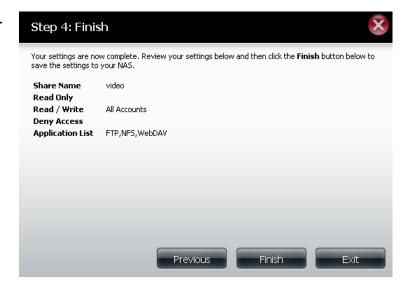
If you checked WebDAV as an access method, then this step will allow you to set the access parameters.

Click **Next** to continue.



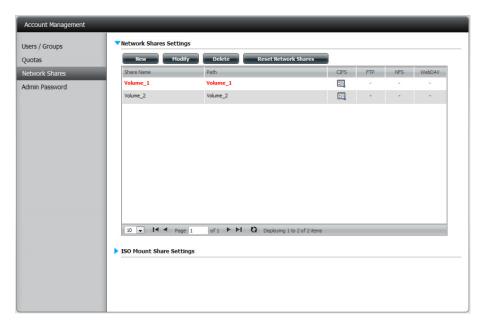
Step 10 - Here a summary of the created shares will be displayed.

Click **Finish** to save your settings.



Deleting a Network Share

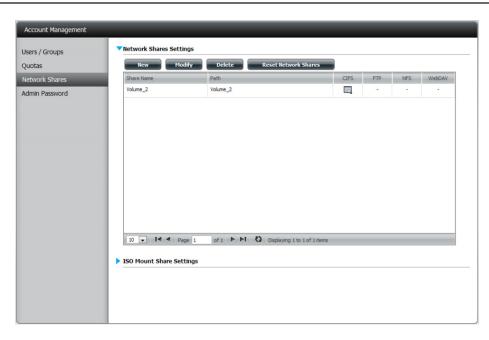
Select the Network Share you wish to delete. Your selection will turn red. Click **Delete** to remove the share.



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.

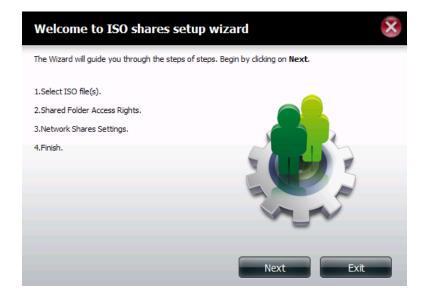
Click **Yes** to confirm or **No** to cancel.



ISO Shares Setup Wizard

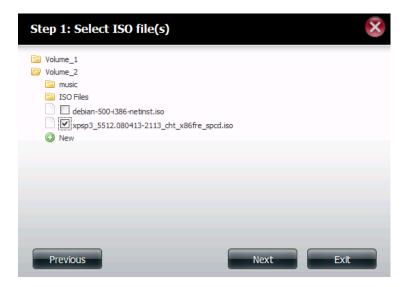
The following section will describe how to add a new ISO mount on the ShareCenter. To add an ISO Mount, click on the **New** button. An easy to configure wizard will launch.

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.

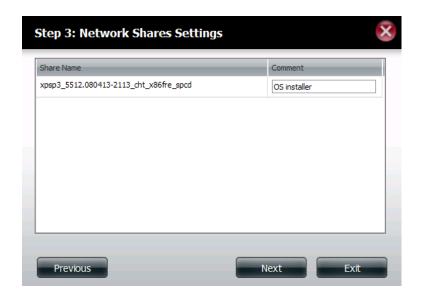


You can assign **Read Only** or **Deny Access** privileges to the ISO Mount share here. Click on the appropriate radio button for the privileges you would like to assign.



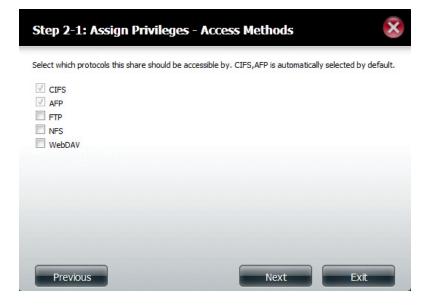
Add a comment that describes the ISO Mount Share.

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.

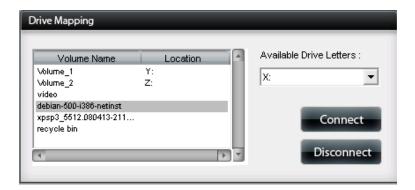


A summary of the share will be displayed.

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.

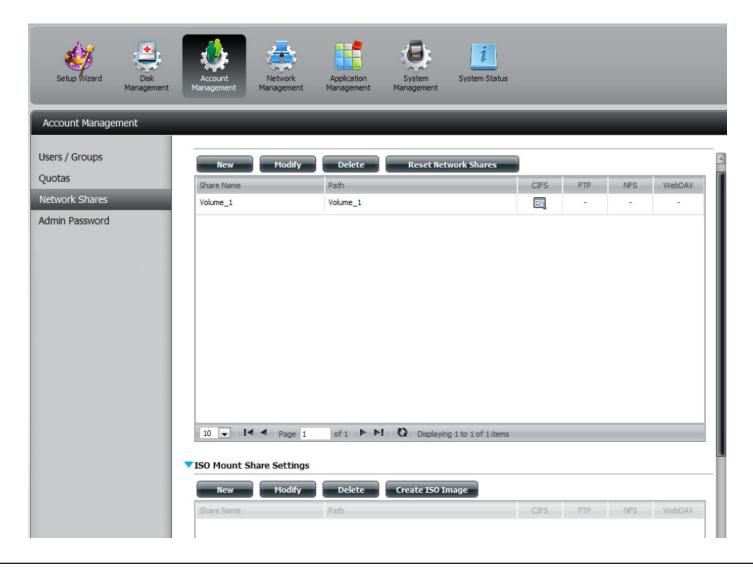


Creating an ISO Image

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.

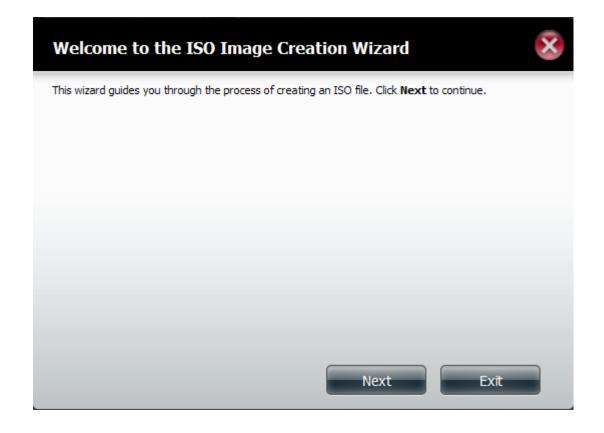
Click on the **Create ISO Image** button at the bottom.



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.

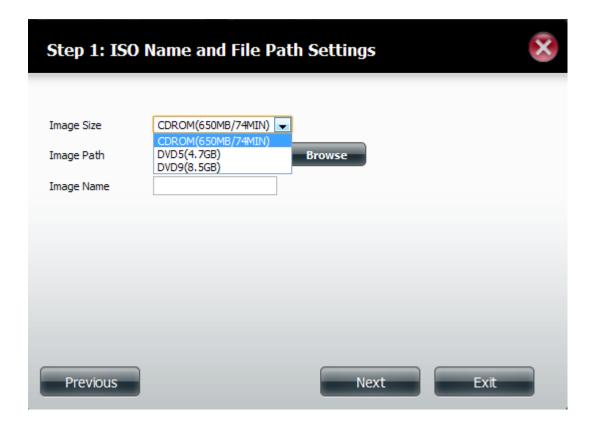


ISO Name and File Path Settings

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.



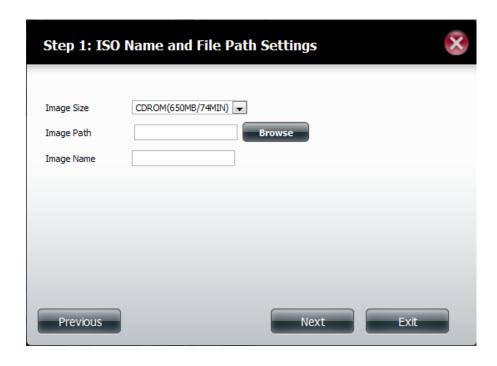
Select the **Image Path**.

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**.



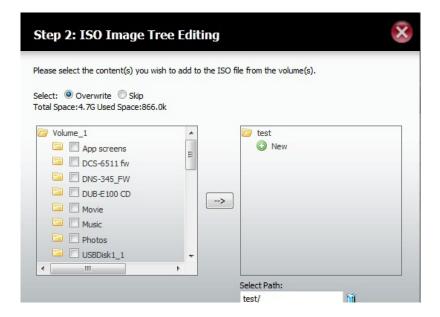
A warning message appears asking you to confirm your decision. Click **Yes** to continue or click **No** to cancel.



ISO Tree Editing

On the top of the **ISO Image Tree Editing** window you have the option to **Overwrite** a previous ISO file or **Skip** it. It also displays the total available space of the ISO file and the used space of the ISO. Select the file(s) from the main directory window and click the --> button to add the file(s) to the ISO image. At the bottom of the window it shows the **path** where the ISO file will be saved . You can click the trash can icon to remove the file(s) from the ISO image.

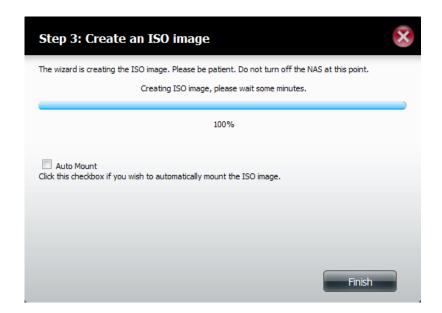
Click **Next** to continue.



The wizard will create the ISO image.

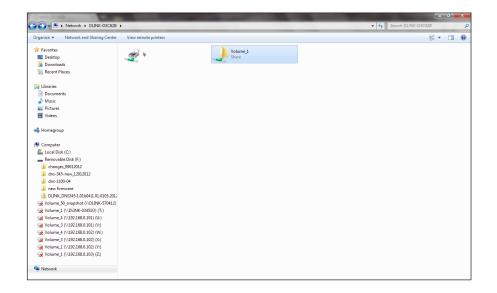
Click the **Auto Mount** checkbox if you want the ISO file to be mounted automatically.

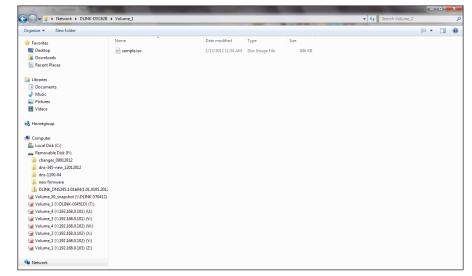
Click **Finish** to close the wizard.



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

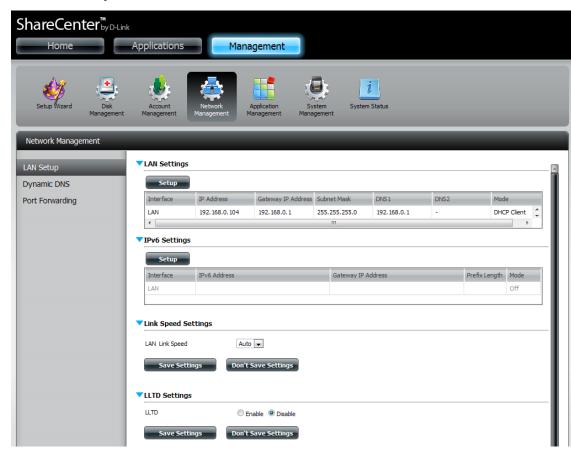
Click **Save Settings** to accept the changes or **Don't Save Settings** to cancel changes.



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.**



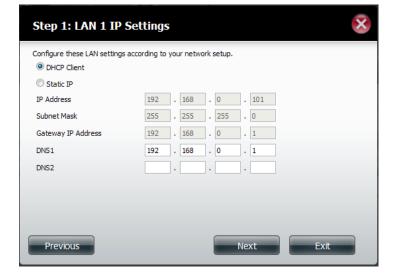
Click **Setup**.

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

Click **Next** to continue.

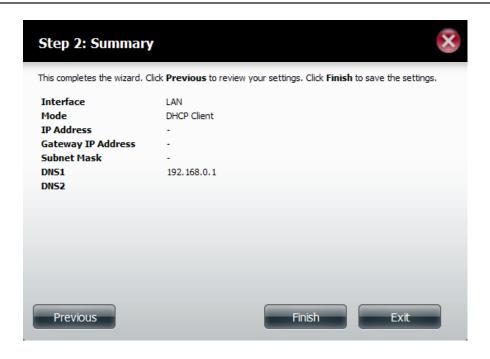


This step allows you to configure your LAN settings. Here you can choose between **DHCP Client** or **Static IP**. If you select Static IP, you will need to manually configure your own IP settings.



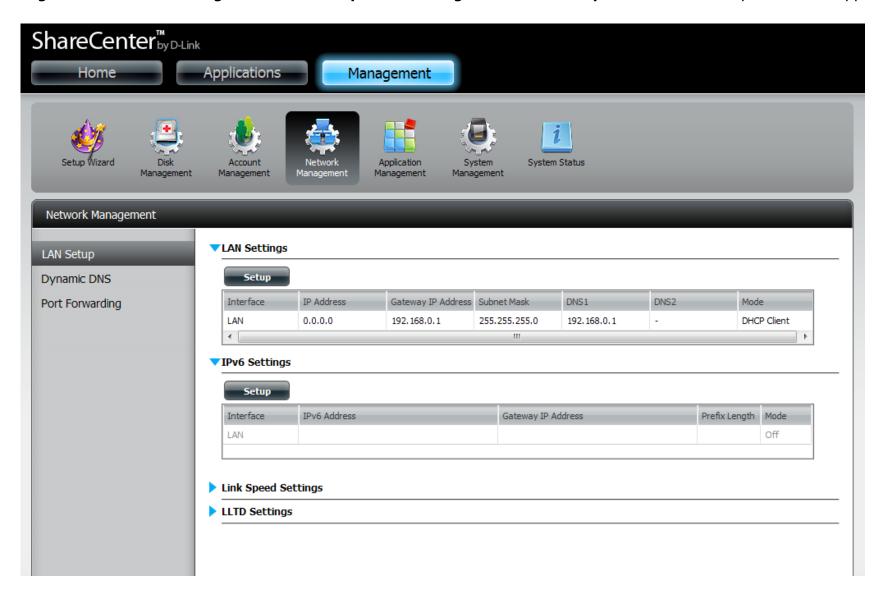
A summary of what you just configured will be displayed.

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

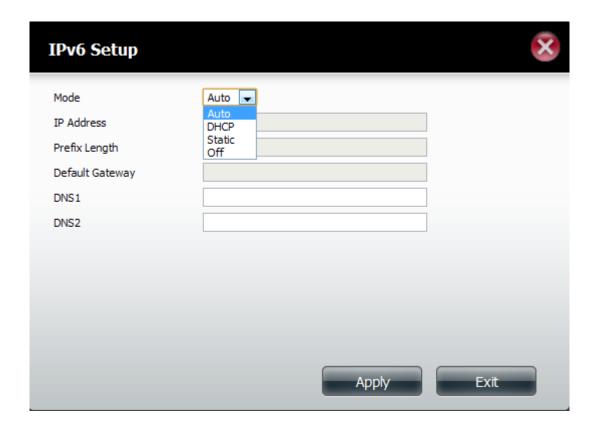
There are four connection modes to select from: Auto, DHCP, Static and Off.

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

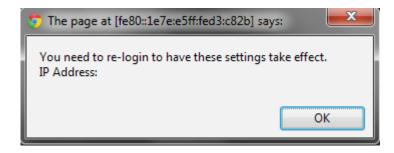
Off - Do not use IPv6

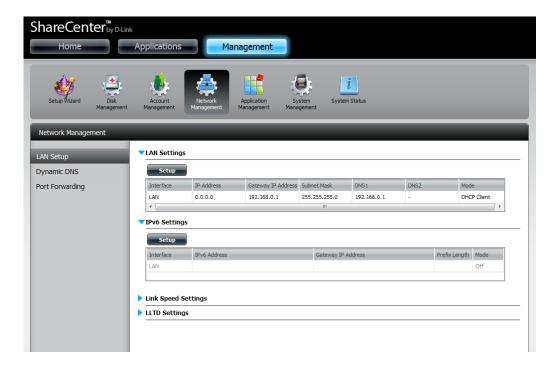


Section 4 - Configuration

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.



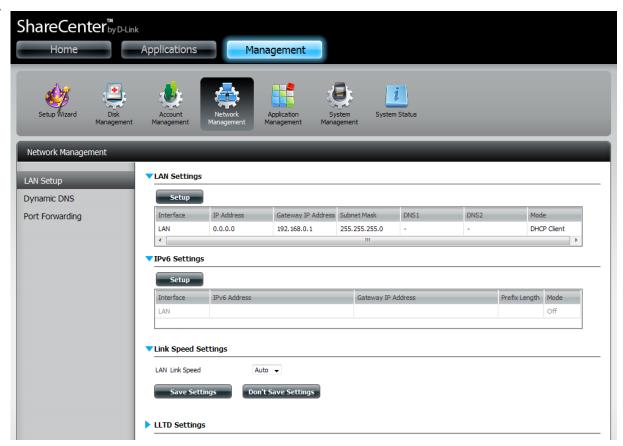


Link Speed and LLTD Settings

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.

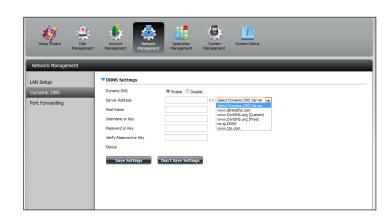
Password or Key: Enter your DDNS password or key.

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.



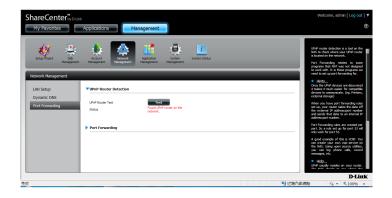


Port Forwarding

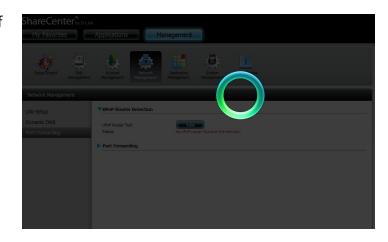
The DNS-320L supports UPnP port forwarding which configures port forwarding automatically on your UPnP-enabled router.

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.

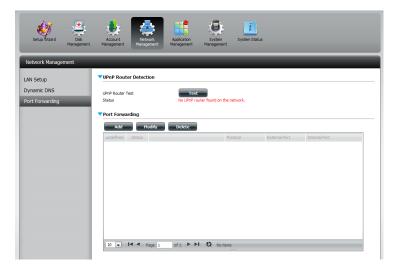


A message will notify you that the wizard has found a UPnP router on the network.

Note that you have to enable UPnP on your router.



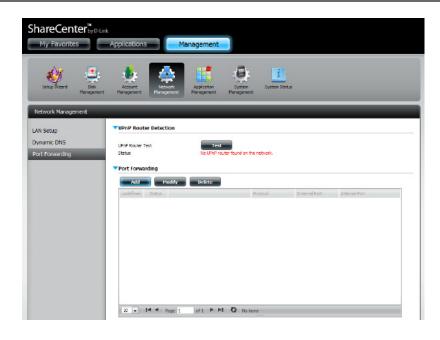
Click the blue arrow next to port forwarding to reveal the Port Forwarding options.

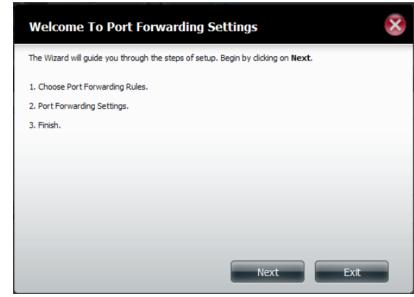


Click Add.

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.

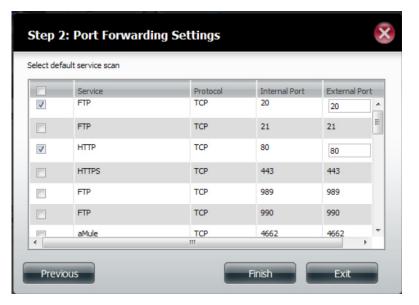
Click **Next** to continue.



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, UPnP AV server, iTunes server, AFP, and NFS 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.

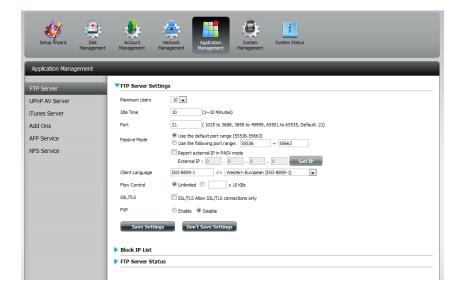
Client Language: Most standard FTP clients like Windows FTP, only support Western European code page when transferring files. Support has been added for non standard FTP clients that are capable of supporting these character sets.

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.

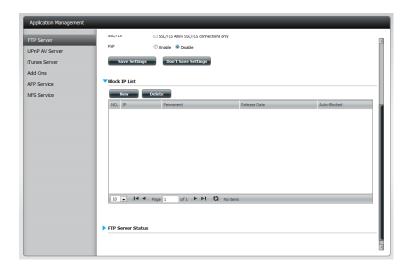
FXP: Enable or Disable File eXhange Protocol to transfer files from one FTP server to another.

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.



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.

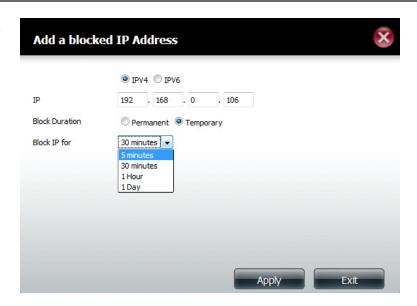


Select **IPv4** or **IPv6** and then enter the IP address of a machine you wish to block. Select **Permanent** if you wish to block the IP address permanently or **Temporary** if you wish to set a time frame.

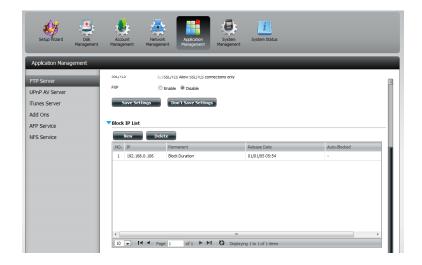
If you selected permanent, click **Apply** and continue.



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

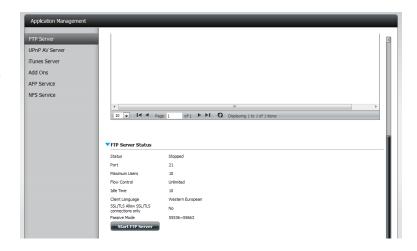


The Blocked IP list will display the IP addresses you blocked.



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.



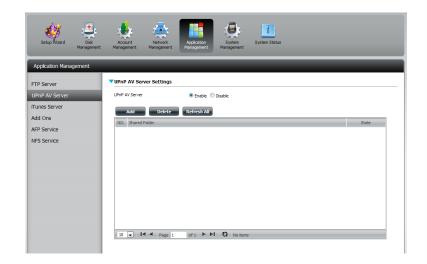
UPnP AV Server

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.

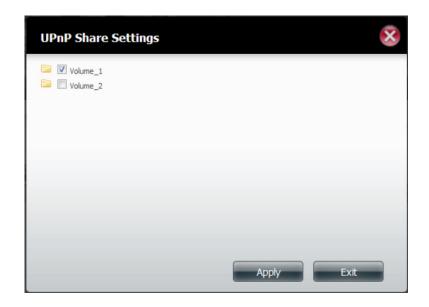
Click **Application Management**, then **UPnP AV Server**.

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

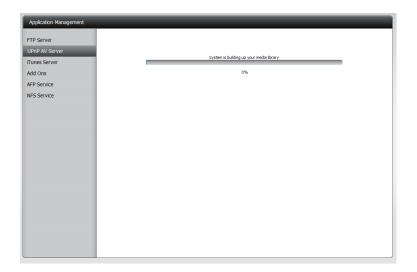
Click **Add** to configure the UPnP AV share.



Select the volume you like to share and click **Apply**.



The NAS is building the media library.

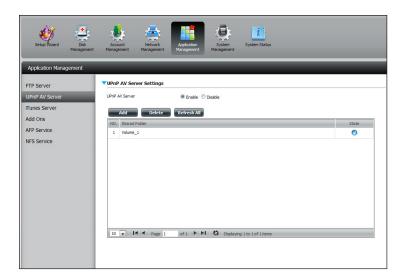


When the system has finished building the media library, a success message will appear.

Click **Yes** to continue.



The selected volume will appear in the table under the UPnP AV server.



iTunes Server

The DNS-320L features an iTunes Server. This server provides the ability to share music and videos 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 and videos contained in the specified directory will be available to stream over the network. Click the **Refresh All** button to update all the shared files and folder lists.

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

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

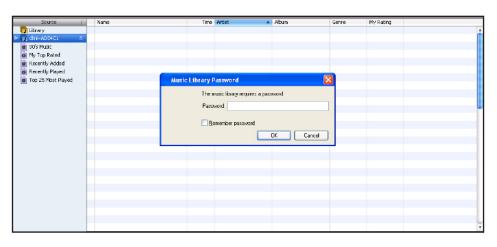
Password: Sets password for the iTunes server. (Optional)

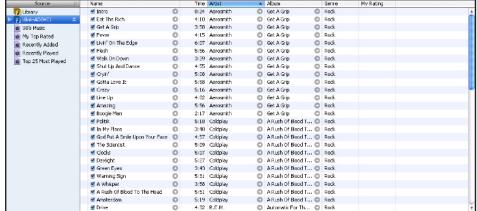
MP3 Tag Codepage: Here the user can select the MP3 Tag Codepage used by this device. Currently the Codepage is set to Western European.

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



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





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

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

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**.



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.

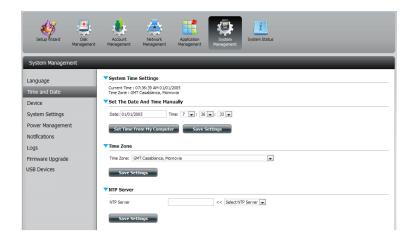
Click Yes to continue.



Time and Date

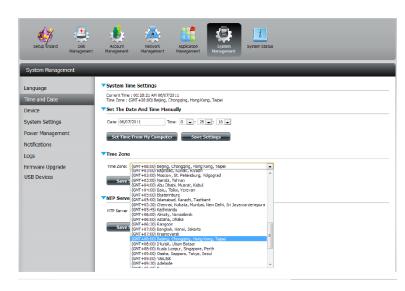
The Time and Date configuration option allows you to configure, update, and maintain the correct time and date on the internal system clock. In this section you can set the time zone that you are in, and set the NTP (Network Time Protocol) Server in order to periodically update your system time from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

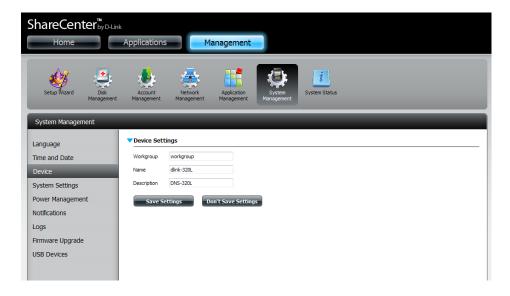
name should be the same as the computers on the network. Devices using the same workgroup will have additional file sharing methods available.

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-xxxxx**, 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.

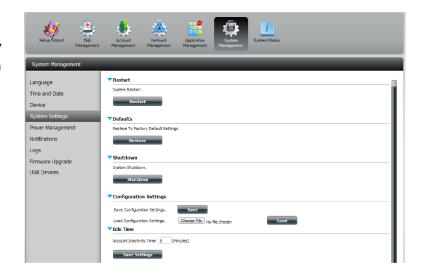
Click to reboot the DNS-320L. **Restart:**

Click to restore the device back to the factory Default:

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**.

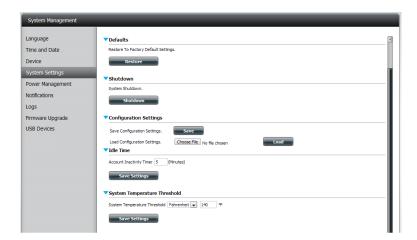
Idle Time: Enter the time (in minutes) that the administrator and

users will be allowed to remain idle while accessing

the web UI.

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

when it reaches the temperature set here.



Power Management

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

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

Hibernation:

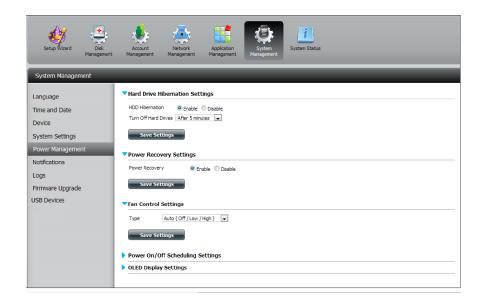
Turn Off Hard Set the amount of idle time before the drives go into

Drives: hibernation.

Power Recover: 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:

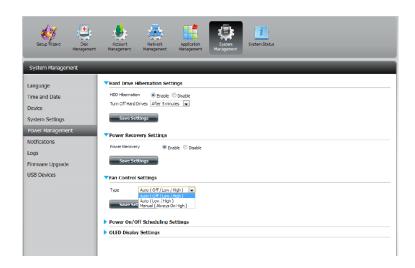
The speed of the fan can be controlled from this section.

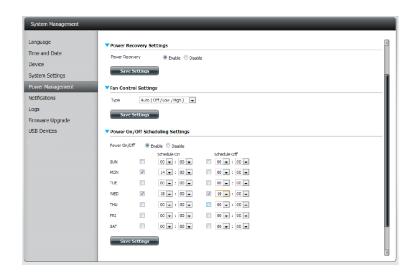
If you select **Auto** mode, the speed of the fan will change (Off/Low/High) depending on the internal temperature of the enclosure.

Power Off Scheduling:

Click **Enable** to turn on this function.

Enable or disable the power off days using the check box and configure the time for each day that the power 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

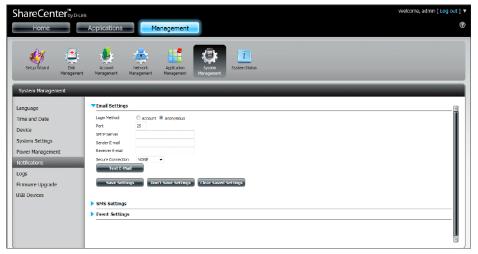
above.

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 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.

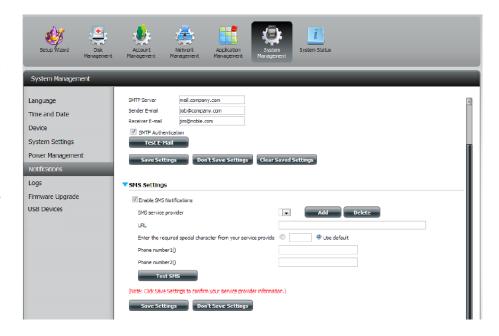
Replace space If required by your service provider enter a **character with:** character that will be used for the space.

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

Phone Number 2: Enter a second mobile telephone number.

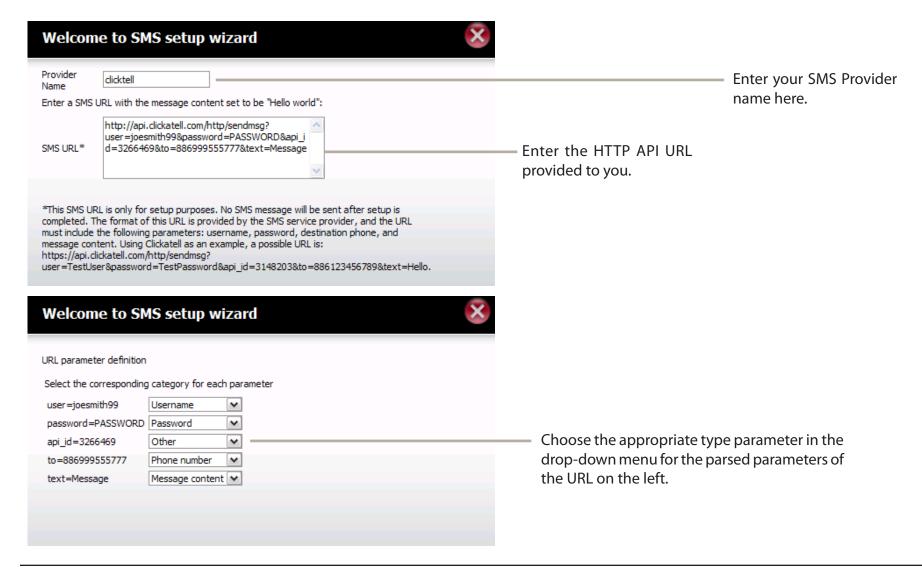
Verify that the number input is according to the configuration instructions from your Mobile Service Provider.

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

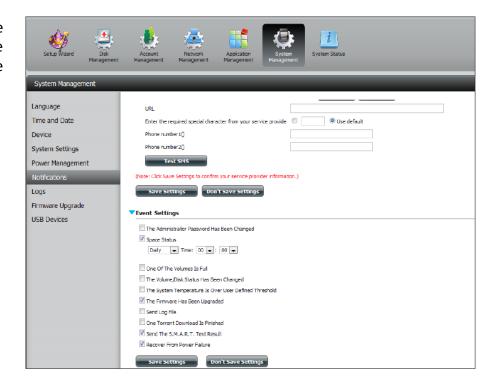
Once you have a SMS Service provide you with a HTTP API URL, enter it into the Add SMS Service Provider wizard. Enter the URL in the first window with an appropriate Provider Name. In the next window select the appropriate HTTP API URL parameter types definitions from the drop-down menus next to the 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 to receive Log Events from other ShareCenters or send the ShareCenter's log events to another ShareCenter or SysLog server. You can also view the NAS system logs and the FTP logs here.

Enable Syslog: Click to activate the Syslog server functionality of your device to be able to receive logs from other

ShareCenters.

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

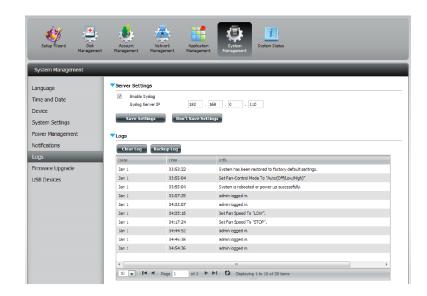
you wish to send the logs of this device to.

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 check for and upload new firmware releases to the device. This section provides a link to 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 ShareCenter is in the same network as the network UPS master.



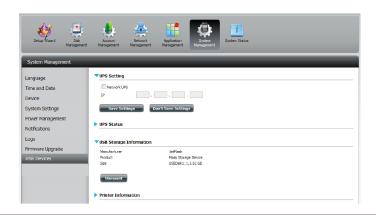
If a UPS device is connected to the USB port on your NAS, you can select either Stand-Alone or Master mode. If you select Master mode, you will have to enter the IP address(es) of the network UPS slaves to notify them in the event of a power failure. For more details, refer to the **UPS Connectivity**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

USB Storage Information

Click the blue arrow to reveal the USB storage Information.

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

Click the Unmount button to eject the USB device.

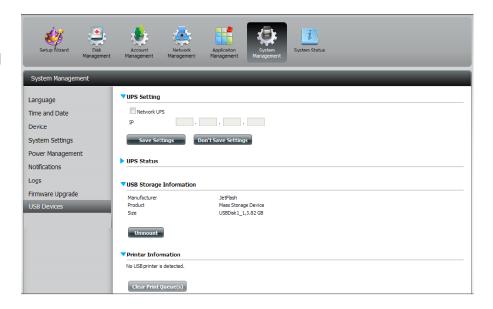


Printer Information

Click the blue arrow to reveal Printer Information.

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

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



System Status

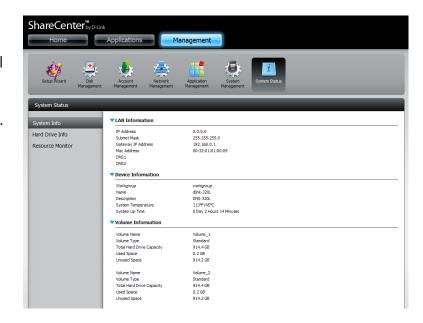
System Info

The System Status information screen provides information on the DNS-320L. System Info provides information on the LAN ports, 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.



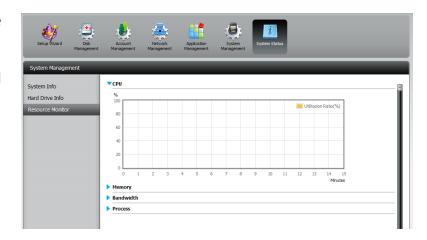
Click **System Status** and then **Hard Drive Info**.

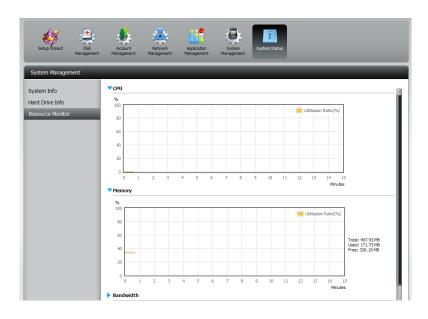
Click the blue arrow to reveal a table of hard drive information.

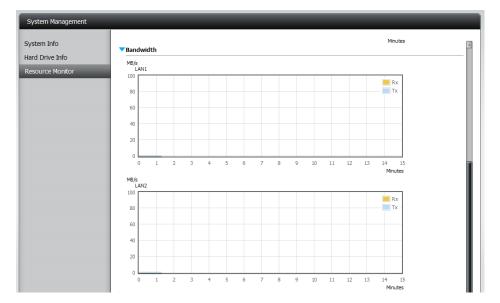


Click **System Status** > **Resource Monitor**, then click the blue arrow to reveal the resource details.

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

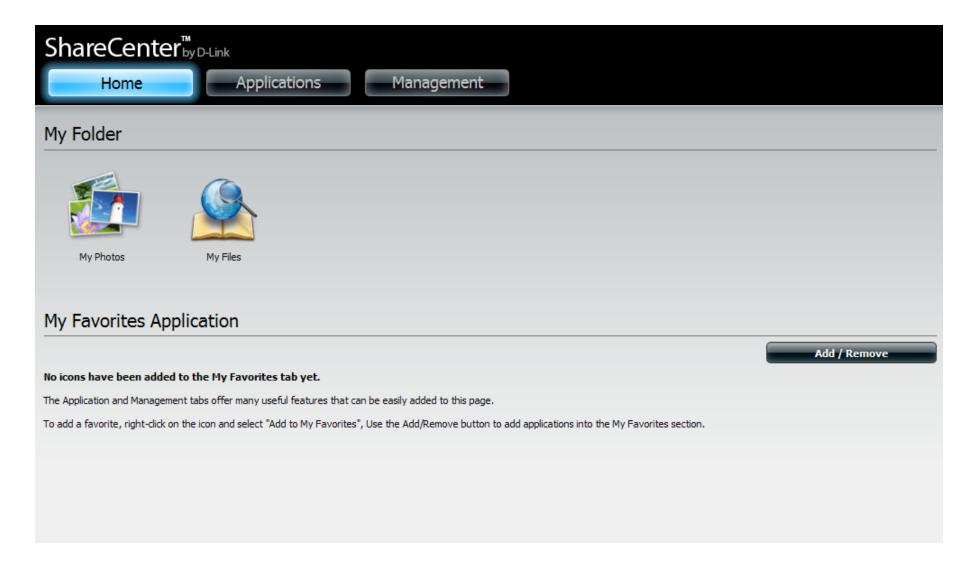






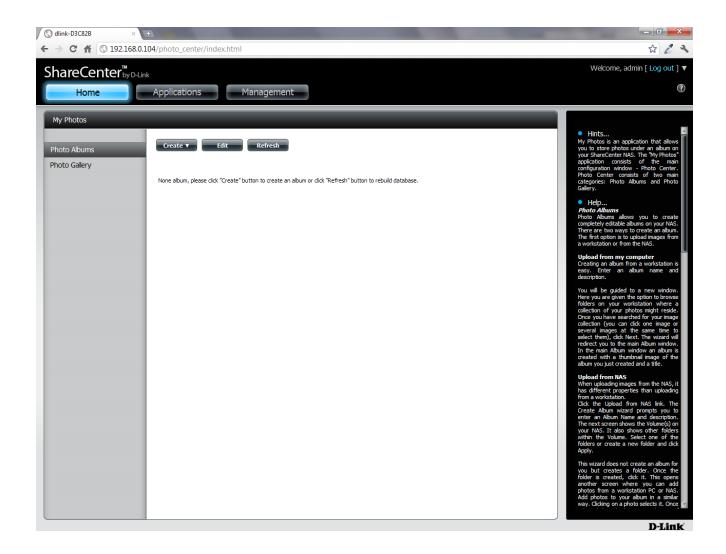
Home

The Home tab is the center for all files on your ShareCenter. You can also add your favorite applications to the Home Screen. Under My Folder resides two main utilities, My Photos, and My Files. Let's take a closer look at these two utilities independently.



My Photos

My Photos is an utility to create albums on the ShareCenter and share photos via Google+ and Cooliris. Click the My Photos icon to open the window (displayed below).



Creating an Album

Move your mouse and hover over the Create button. Two options become available: Upload from my computer and Upload from NAS.

Click **Upload from my computer.**

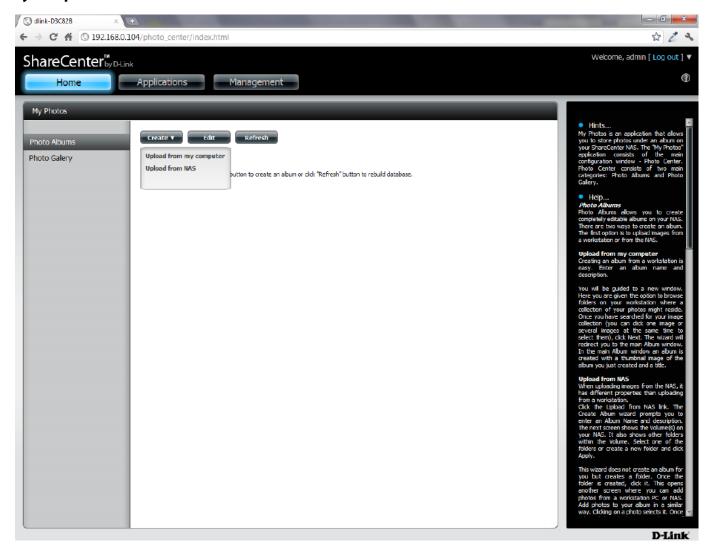
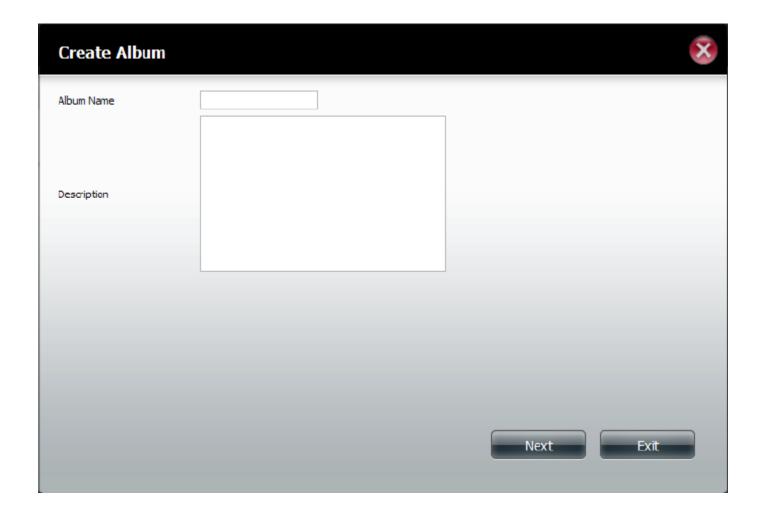


Photo Album Wizard

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.



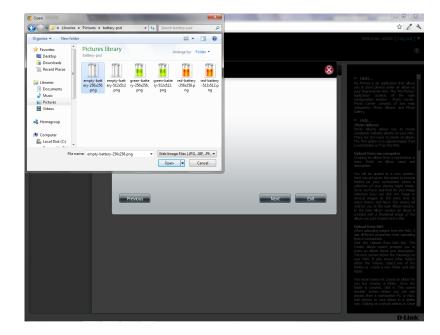
Section 4 - Configuration

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

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

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

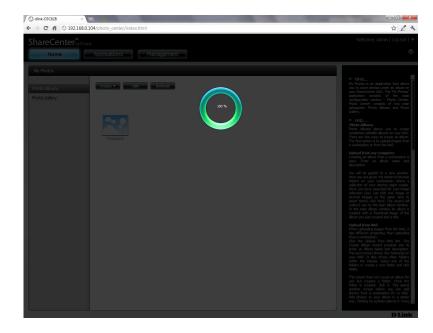




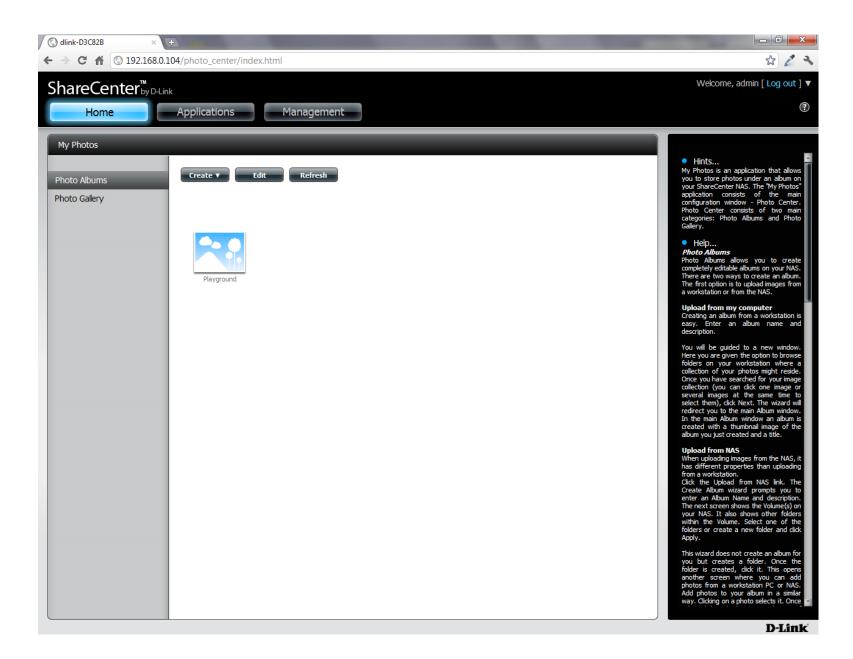
The **Photo Album Wizard** is now populated with the photos you have selected. Click **Next** to upload the photos.

ShareCenter automatically updates the photos to the NAS.





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

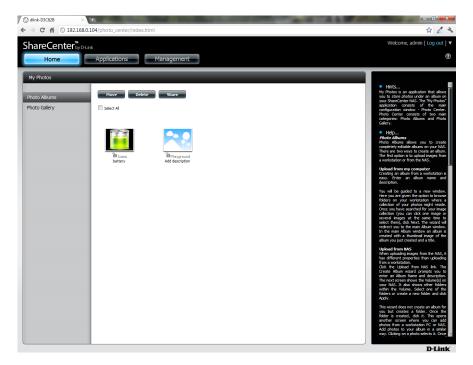


Editing the Photo Album

Go to **Home** > **My Photos** > **Photo Albums** and click **Edit.** The button set at the top changes to Move, Delete, Share.

Click the album(s) you want to edit or click the checkbox next to Select All.

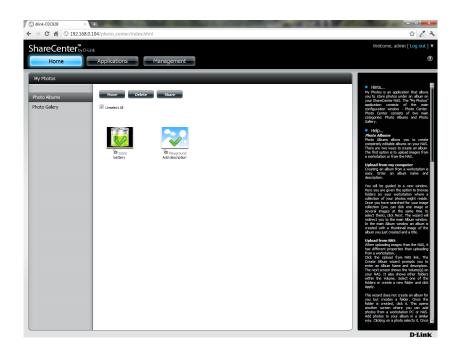


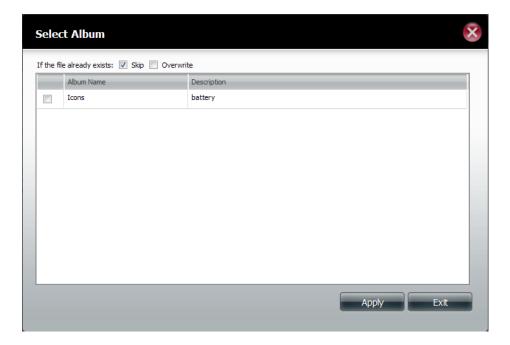


Moving a Photo

Select the **Album/photos** you want to edit and click **Move**.

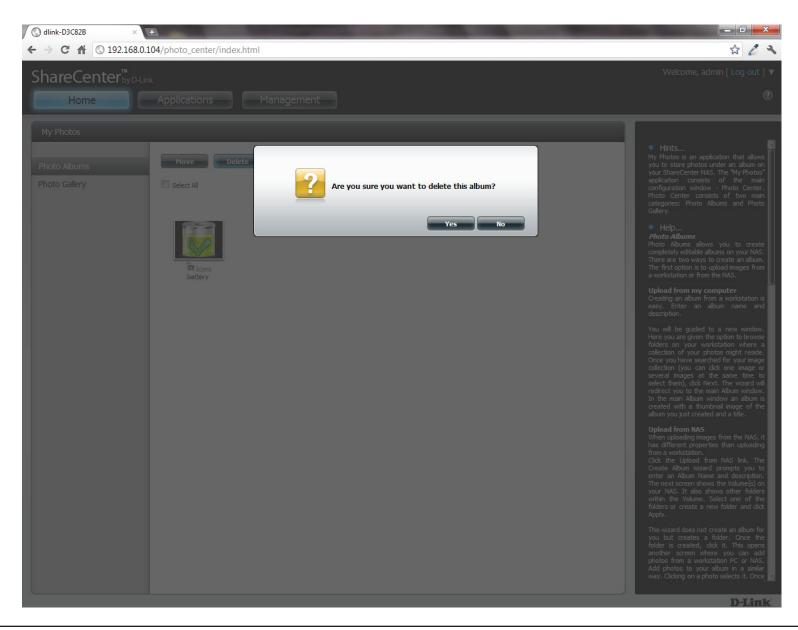
At the top of the editing wizard, you have the option to **skip** the file if it exists or **overwrite** it. Select an album that you want to move photos to and click **Apply**.





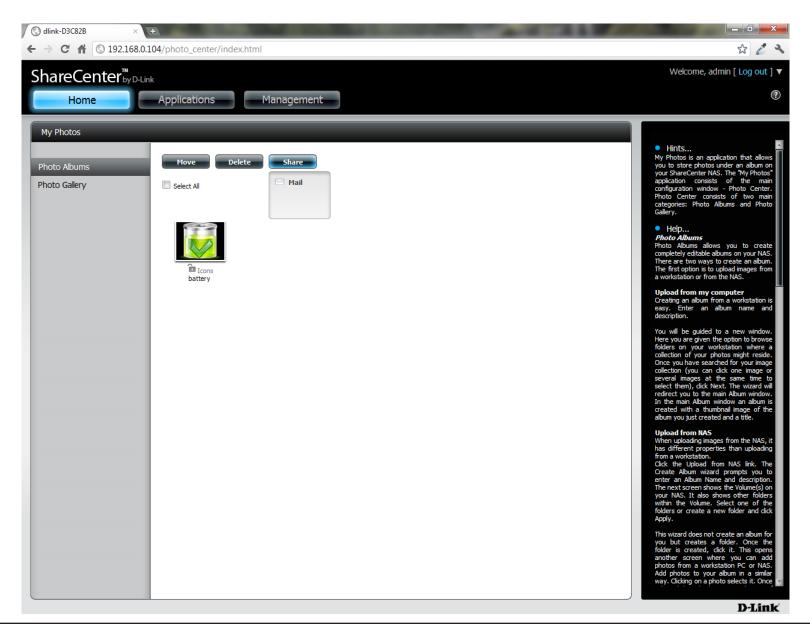
Deleting the Albums

Select the album you wish to delete or click the **Select All** checkbox. Click the **Delete** button. A warning message will appear to confirm whether you want to delete the album. Click **Yes** to delete the album or click **No** to not delete it.

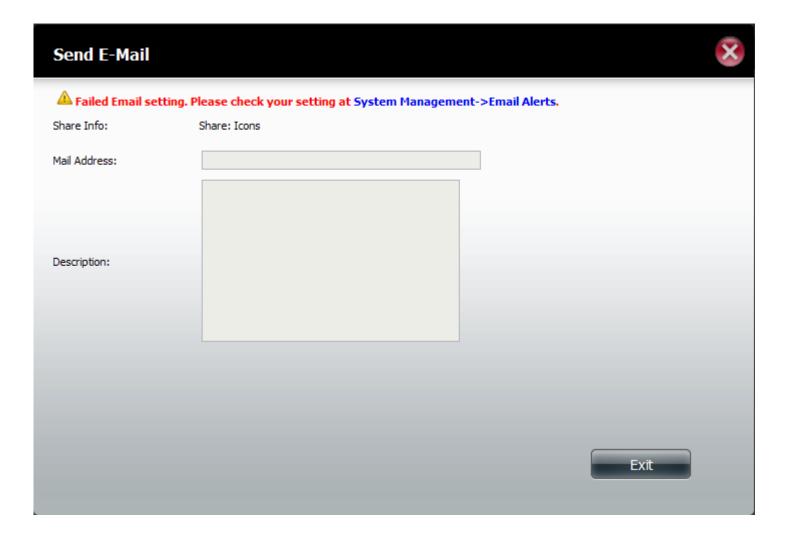


Sharing your Photos

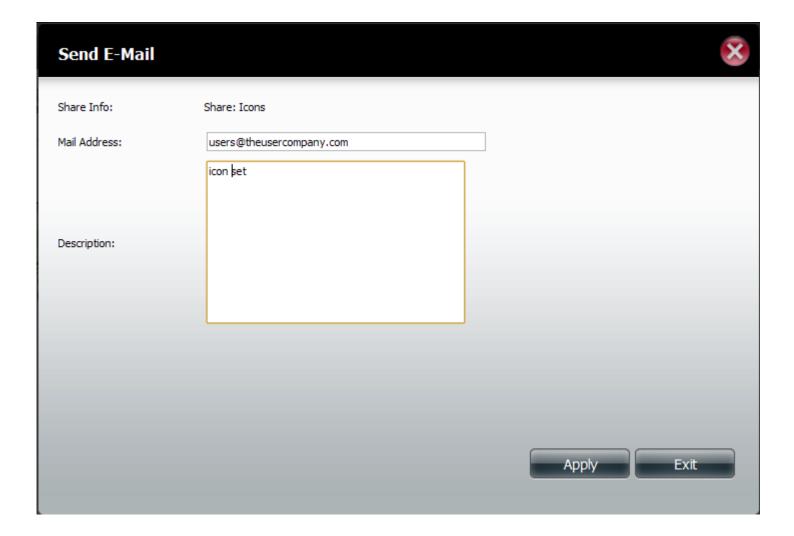
To share your photos select a photo album by clicking it. Then hover your mouse cursor over the **Share** button. Click **Mail** from the drop-down menu to continue. You must select a photo album before proceeding.



If you receive an error message, it means you haven't setup your email settings. Click the link provided to configure your email settings if you haven't configured it before.



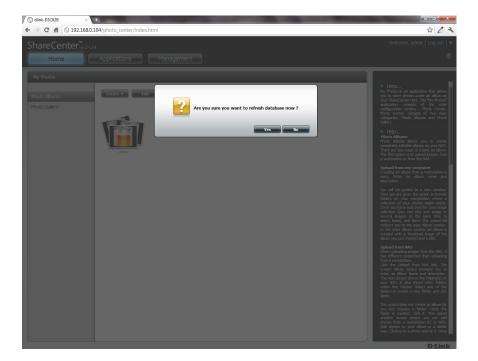
Alternatively, if you have already configured the email settings, enter the email address in the **Mail Address** field and enter a description in the **Description** field. Click **Apply** to send the mail.



Refresh your Photos

Click the **Refresh** button to refresh the images on the page. A warning message appears asking you if you want to refresh the database. Click **Yes** to continue or **No** to not refresh it.





Configuring an Album

Once you have completed adding photos to an album, you can view all the photos by clicking the album. You can add more photos to the album by moving your mouse over the **Add** button. Here you have two choices, similar to when you first added photos to the album, **Upload from my computer** or **Upload from NAS**. Follow the instructions on the wizard to proceed.





Selecting **Upload from my computer** allows you to browse your computer to find more photos to add to the album. Click **Browse** to find the photo(s). Click **Next** and the new photos will be added to the album.

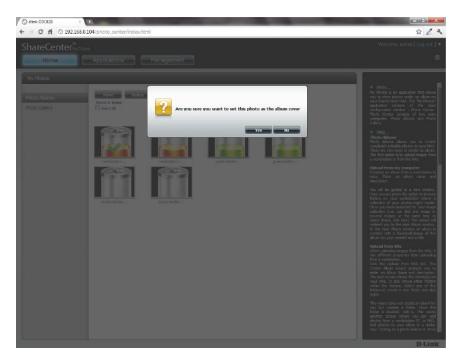




When you want to edit specific photos, click the album. The navigation bar at the top of the widow will change with the following options: **Add**, **Edit**, **Slideshow**, and **Cooliris**. Click the **Edit** button to show all the photos in the album. The navigation bar now changes to **Move**, **Delete**, **Set Cover**, and **Share**. We have already covered **Move** and **Delete** in earlier sections so please refer to those sections.

To change the cover of your album, select the photo and click **Set Cover**. A warning message appears asking you if you want to set the image as a cover. Click **Yes** to continue or **No** to not update it.

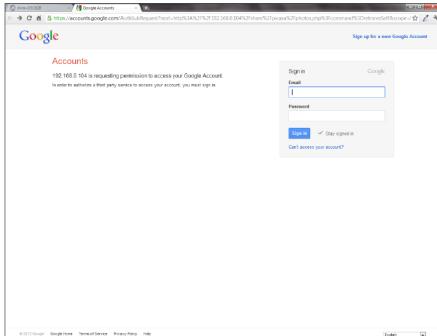




Sharing Photos on Google+

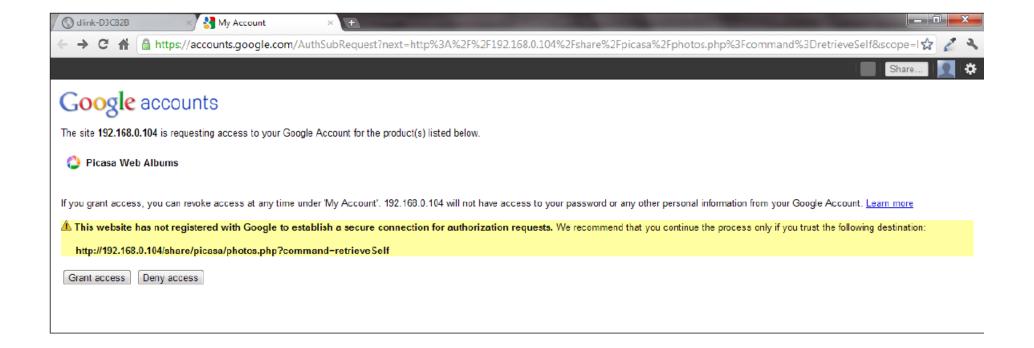
D-Link has created a direct link to **Picasa** so you can share your photos with one easy click. Select the photo(s) you want to share, move your mouse over the **Share** button and click the **Picasa** link. The browser opens a new **Tab** and directs you to your **Google Gmail** account if you are not logged in. The message informs you that your **ShareCenter** has directed you to the **Gmail** site. It will also show the IP address of your NAS.





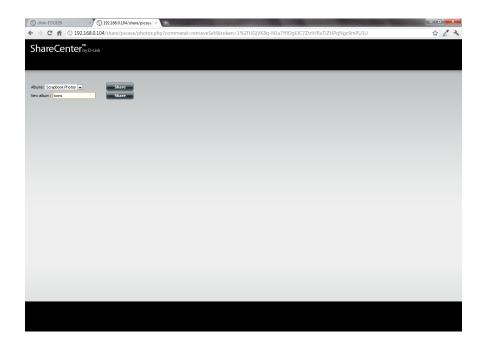
Section 4 - Configuration

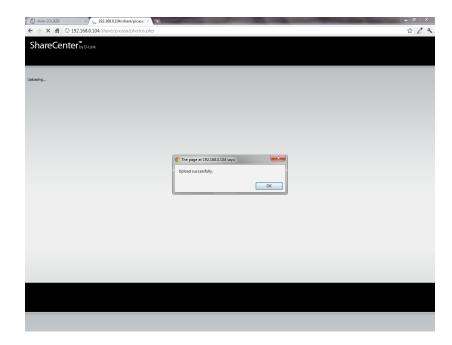
Next, you will be asked whether you want to grant Google access to Picasa and the photos on your ShareCenter. If you select **Grant access** then you will be automatically redirected to another page on your ShareCenter. If you select **Deny Access** then you will be directed away from **Google**.



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.

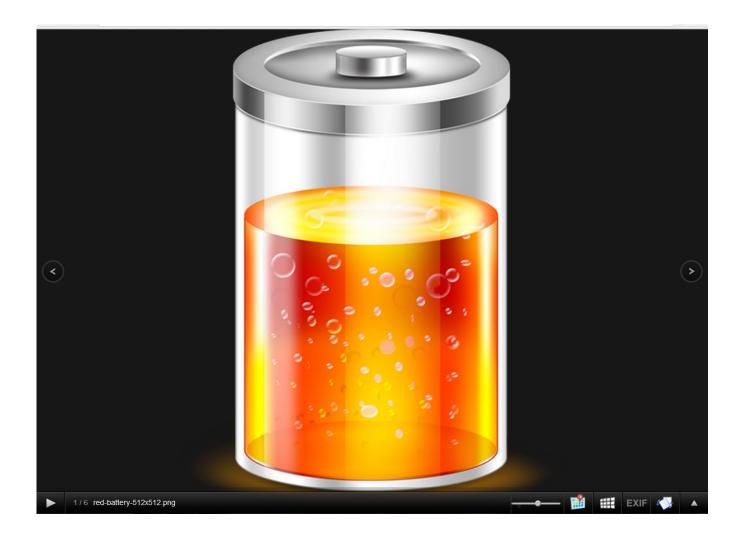
Note: You will have to enable Photos (Picasa Web Albums) with your Google account.





Slideshow

After you have created your **Album** click the album once. This takes you to the full display of images in the album. Click the **Slideshow** button. Depending on the size and scale of your images, the browser will open a new tab and provide a full screen display of your images on the NAS. At the bottom of the image is a toolbar with information on how to view your album.



Slideshow Toolbar

The **toolbar** consists of the:

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



Photo information: View the image name and file format.

1 / 6 red-battery-512x512.png

Gallery speed slider: Toggle the slideshow speed between slow and fast.



GPS information: Click this button to get GPS information about the image (if your camera supports this function).



Cooliris link: Click this button to display your images on the Cooliris website.



EXIF: View detailed information about the image (File Name, Size, Image Date, Resolution, Camera, Camera Model, ISO, Exposure Time, & Aperture).



Rotation button: This rotates the image at 90 degree angles.



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



Cooliris

Cooliris allows you to share photos and images on the Cooliris site. This function allows you to stream images from the DNS-320L to the Cooliris server. Please visit www.cooliris.com/desktop for more details about photo sharing with Cooliris.

Click the **Cooliris** button to stream images to **Cooliris**. **Cooliris** is also accessible via the Photo Gallery. You will need to install the free Cooliris plugin on your browser before you can use it.

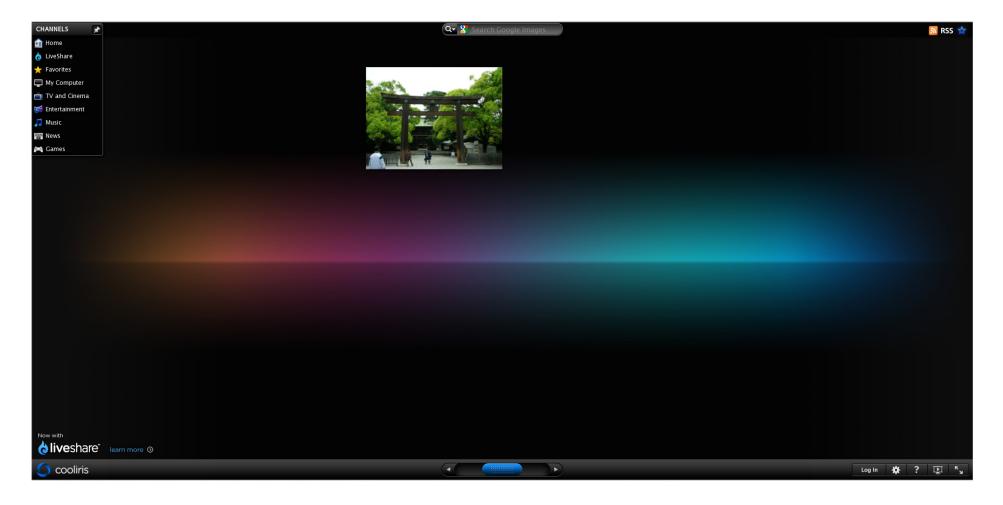
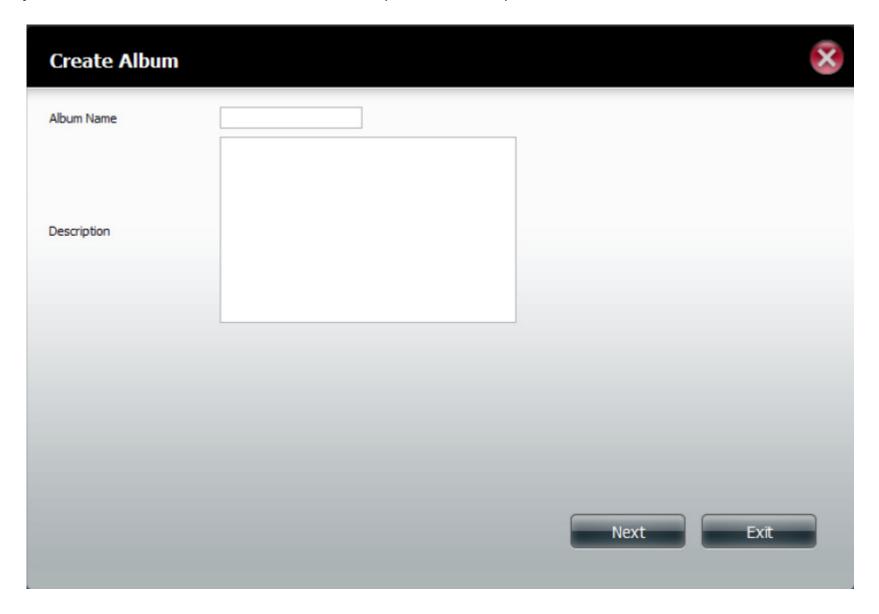


Photo Album - Upload from NAS

The My Photos also allows users to upload images that already reside on the NAS. Move your mouse over the **Create** button under **Photo Album**. Click the **Upload from NAS** link. Enter a **Album Name** and Description in the fields provided. Click **Next** to continue.



The next screen displays the **Volumes** on your NAS. Click the name of your Volume and select the photo(s) on the right side of the pane. Click **Next** to continue.



This creates a new Photo Album.

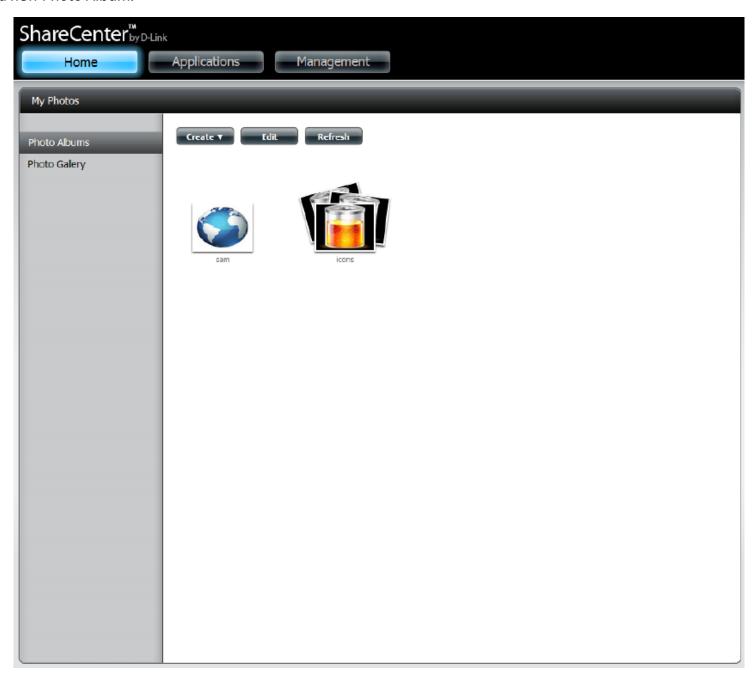
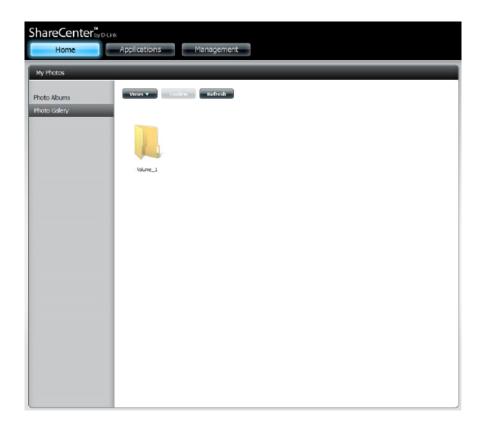


Photo Gallery

The **Photo Gallery** has several options available. View the **Gallery** by **Folder** or view it **by Calendar** date. By default the **Photo Gallery** is in **Folder** view. Click the folder to view the images inside the **Folder** on your **NAS**. View by **Calendar** to see the dates under each image. You can also **refresh** your screen in **Photo Gallery** by clicking the **Refresh** button.



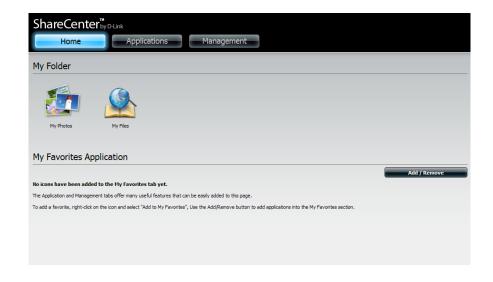


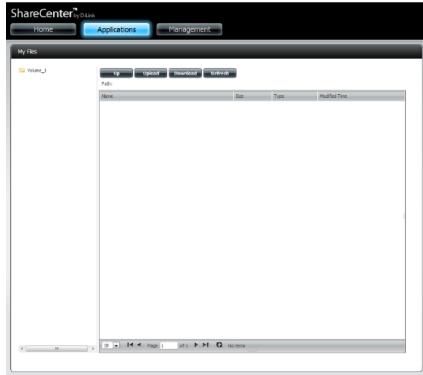
My Files

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 volumes created on the NAS. Click on any Volume you created to see a directory listing of the files.

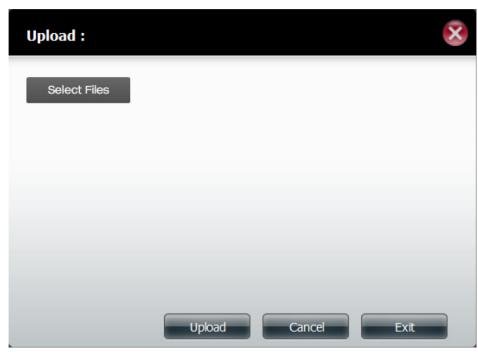




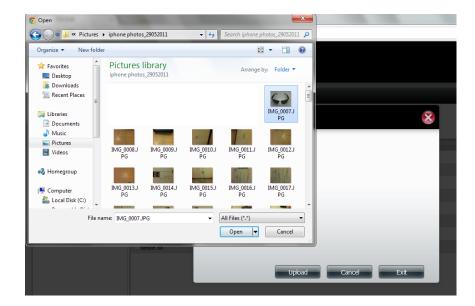
Upload

To upload more files to the volume you have selected, click the **Upload** button. Click the **Select Files** 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**.





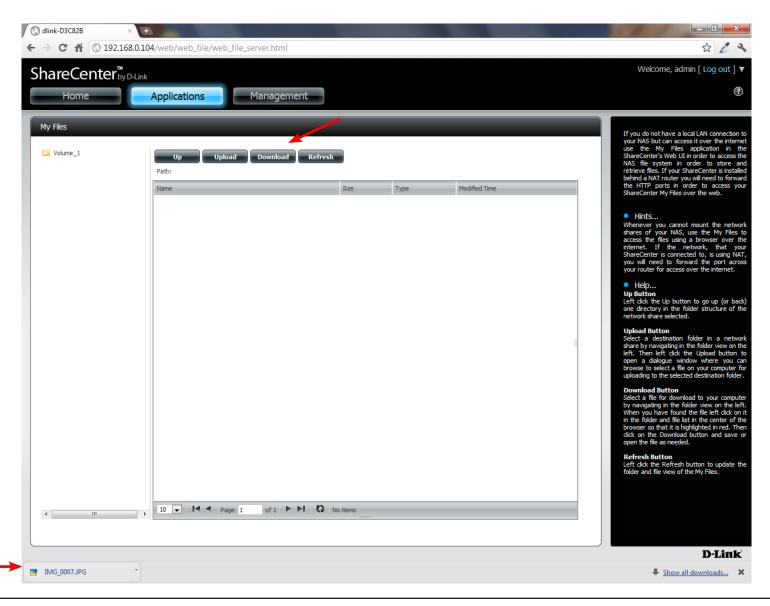
Click **Upload** to start the uploading process. Then click **Exit** to close the upload window. The file updates to the NAS and is displayed on the directory table.





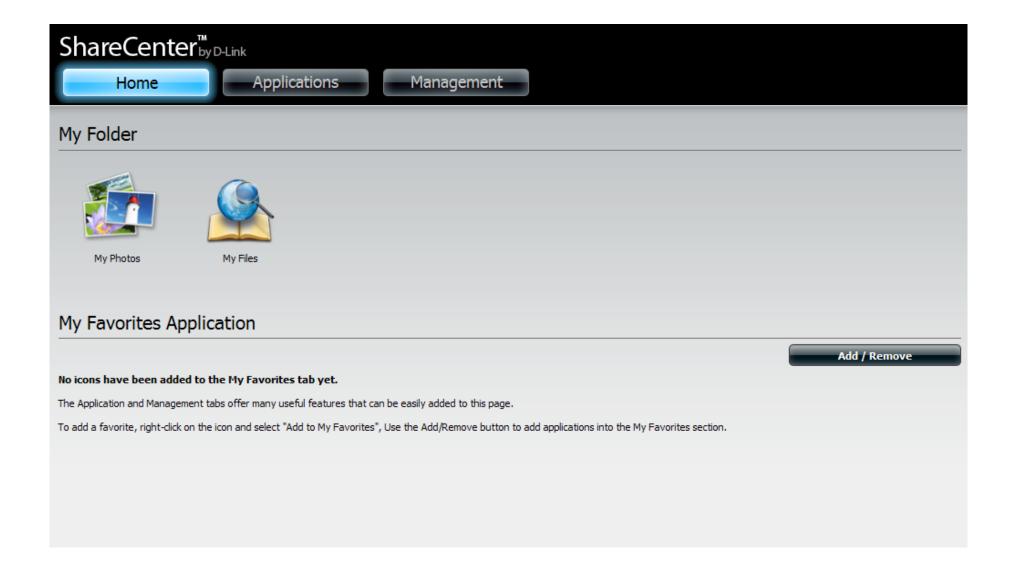
Download

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



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 a 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.

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

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

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

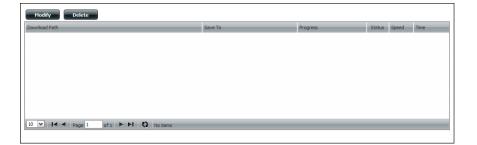
Recurring: If you wish to schedule a recurring backup, select the

desired interval (daily, weekly, or monthly) and the

time you want the backup to start.

Schedule

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:

Click the **Create** button to build a new remote Create:

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.

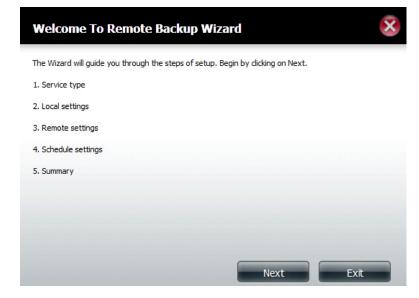




Create Wizard

When you click the **Create** button above the Remote Backup list a wizard will start, guiding you to configure a new Remote Backup job.

Welcome: Displays the steps of the wizard.



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

NAS to Linux backup from the local NAS to a Linux file system or vice versa.

Local to Remote: sets the backup source as the local NAS and the target destination for the backup files as the remote NAS or Linux file system.

Remote To Local: sets the backup source as the remote NAS or Linux file system and the target destination for the backup files as the local NAS.



Local Settings:

Task (Name): the name used to refer to the backup job which will be listed later in the Remote Backup list.

Folder Path: select a local network share folder or file as the target or source for the backup job.

Remote Settings:

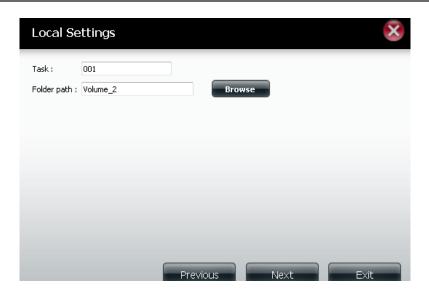
Remote IP: The backup process uses Rsync protocol and needs to know the IP address of the destination source or target device for the backup. Input the IP of the remote NAS or Linux file system.

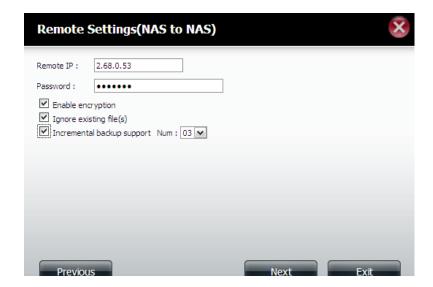
Password: Enter the password that is used by the remote backup server on the remote NAS or Linux file system.

Enable Encryption: Checking this box will enable SSH encryption of the files that are transferred (backed up) over the network between the local and remote devices.

Ignore existing file(s): Checking this box prevents the backup process from writing over any files in the target file system that are not part of the backup files or folders. Therefore any existing files in the target system are preserved.

Incremental backup support Num (#): Checking this box provides multiple backup-capability at scheduled times. The first backup in an incremental series captures all the files for backup. Subsequent backups are incremental in that only the files and the folders that have changed in the backup source since the last incremental backup will need to be backed up. Each incremental backup builds a complete snapshot of the backup source however only the initial backup contains all the original files and folders. The subsequent backups in the incremental series contain new files and folders plus the links to the first incremental backup.





Remote Settings:

Remote Path: Using the **drop-down menu**, select the file system (folder) path to the remote target or source system for backup.

Schedule Settings:

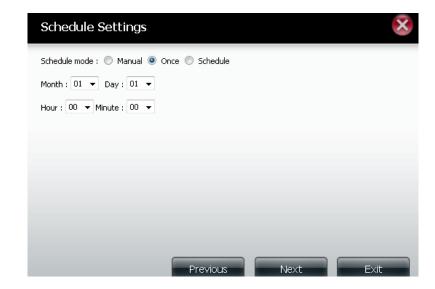
Schedule Scheduled Mode:

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 download.

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 downloads 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.

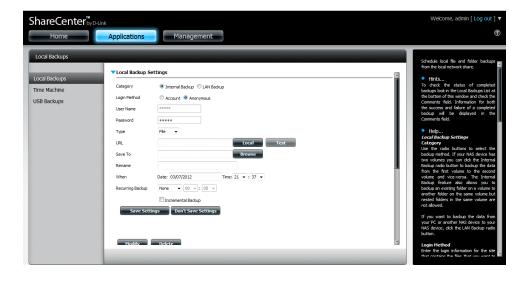
URL: Enter the path of the site or server you are initiating a

transfer from. (e.g. Volume_1/Test or \\192.168.0.32\

Volume_1\Test\test.txt).

Save To: Enter a valid destination path on the ShareCenter, or click

Browse to select the destination.



Rename: Enter the renamed file name here.

When: Enter the date and time you want the scheduled backup

or download to initiate.

Recurring Backup:

Designate the interval and time you want the backup or

download to run unattended.

Incremental Backup:

By default all local backups and file/folder downloads are in Overwrite mode, meaning that identical files in the destination folder will be overwritten by the source files. Checking Incremental Backup will have the ShareCenter compare identical file names at the source and destination. Files will only be overwritten if the source file is more recent.

Time Machine

This section allows the user to configure the ShareCenter so that it becomes a backup destination in the Mac OS® X Time Machine. In order to use this function, the AFP service is required. The AFP service will start automatically as soon as this function is enabled.

Enable Time 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.

Settings list:

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

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

Delete: Deletes a NAS folder setup as a Time Machine

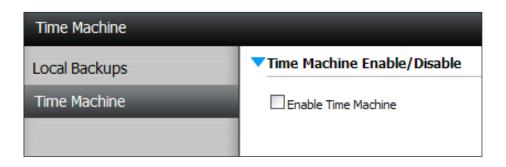
destination.

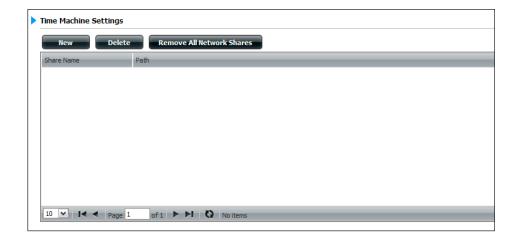
Remove all

Delete all the NAS folders in the list configured as

Network Time Machine Destinations.

Shares:

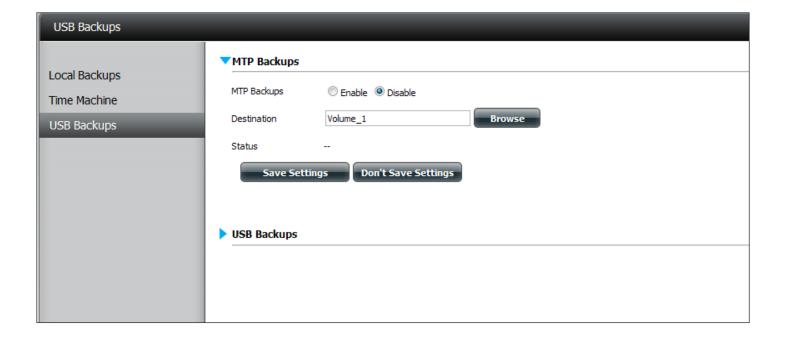




USB Backups

This section allows the user to configure the ShareCenter so that it becomes a backup destination for a USB device that is connected to your DNS-320L.

MTP Backups (Media Transfer Protocol) basically backup digital media content from a MTP compatible USB device such as digital cameras, MP3 players, and smartphones to your ShareCenter. USB Backups allows you to backup data from a USB storage device to the ShareCenter or from the ShareCenter to a USB storage device.



MTP Backups

MTP Click **Enable** to allow your ShareCenter to copy

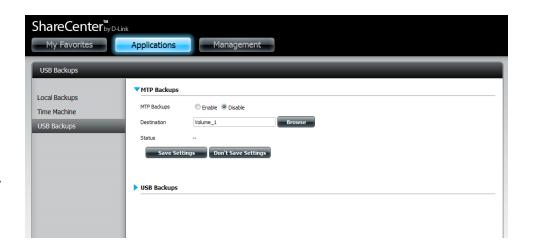
Backups: digital media content from a MTP USB device.

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

for the backup data to be saved to.

Status: Displays the current MTP backup status.

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



USB Backups

USB Click **Enable** to allow your ShareCenter to copy data

Backups: from/to a USB storage device.

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

device to the ShareCenter) or NAS to USB (backup from

the ShareCenter to the USB storage device).

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

the backups.

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

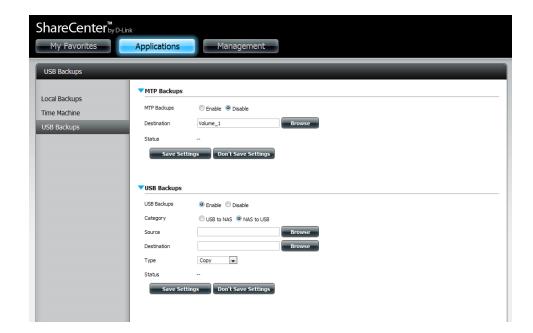
for the backups.

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

folder. Select **Synchronize** to overwrite all the files in

the existing USB folder named USBDisk1_1.

Status: Displays the current USB backup status.



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

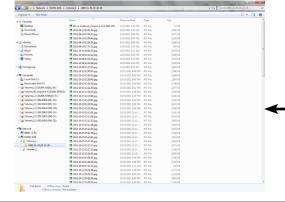
MTP Backup Process

1. Connect a MTP USB device to the USB port on the back panel of the device. The DNS-320L will enter backup mode if MTP Backups has been enabled in the MTP backup settings.

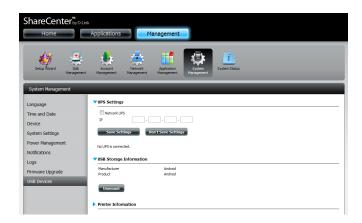


2. Press the **USB** button to start the backup process. The blue USB LED flashes briefly to display that the backup is in the process. The ShareCenter will create a new folder in the destination folder that you selected in the MTP backups settings and will copy all the media files from the MTP USB device to this folder. At this time the USB LED remains blue 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 blue LED will become solid blue. Click and hold the USB button at the front 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 to display 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 if you've selected Synchronize in the USB Backup settings.

3. When the backup is complete, the flashing blue LED will become solid blue. To unmount the USB storage device, you can click and hold the USB button at the front of the DNS-320L 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**.

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

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

and Date.

Auto Here the user can enable or disable the automatic

download option. Download:

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.

Select one of the three seeding options. Seeding:

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

Path:

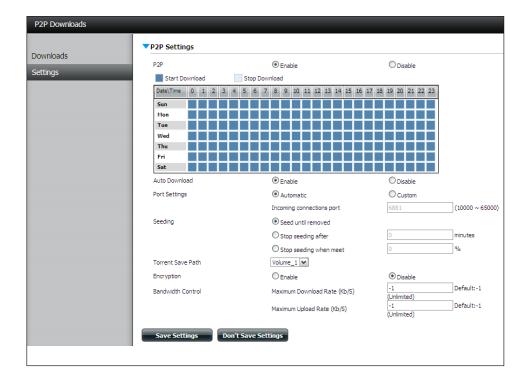
Here the user can choose to enable or disable the **Encryption:**

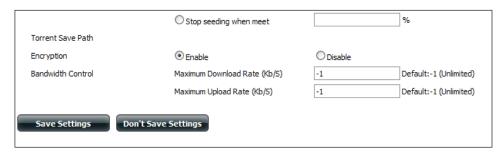
encryption.

Bandwidth You can manually configure the maximum download **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 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 you to move the selected P2P download in

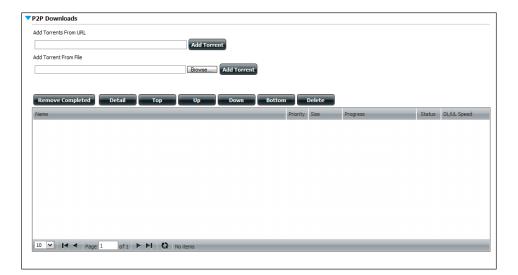
the task list. The downloads at the top of the list have a higher priority than the one listed

below them.

Delete: The **Delete** button allows the user to remove

a selected download. This will remove not only the torrent file, but also the partially

downloaded files too.



Start / Stop: The **Start** and **Stop** buttons allow users to

start and stop selected P2P downloads in the

task list.

Navigation: At the bottom of the P2P Task window there

are a couple of navigation controls. When multiple tasks exist, the user can select how many tasks will be displayed by using the drop-down menu. The user can also navigate to other pages when more than one page exist.

Refresh: The **Refresh** button allows the user to refresh

the P2P task list so it displays the most updated

statistics.

My Files

Whenever you cannot mount the network shares of your NAS, use My Files to access the files using a browser over the internet. If the network, that your ShareCenter is connected to is using NAT then you will need to forward HTTP port 80 across your router for access over the internet.

Up: Left click the **Up** button to go up (or back) one directory in the folder structure of the selected network share.

Upload: Select a destination folder in a network share by navigating in the folder view on the left. Then click the **Upload** button to open a dialogue window where you can browse to select a file on your computer for uploading to the destination folder.

Download: Select a file to download to your computer by navigating in the folder view on the left. When you find the file click on it in the folder. Your selection will be highlighted in red. Next click on the **Download** button and save or open the file as needed.

Refresh: Left click the **Refresh** button to update the folder and file view of My Files.

Download: Downloads the file to your computer.

Copy: Copies the file to the clipboard and opens a wizard to allow you to select the folder to paste the file into. Once you have chosen the folder clicking **OK** to paste

the file into the folder.

Move: Moves the file to a new folder on the disk.

Delete: Removes the selected file from disk.

Rename: Allows you to configure a new file name for the

selected file.

Properties: Displays the file properties such as ownership, access

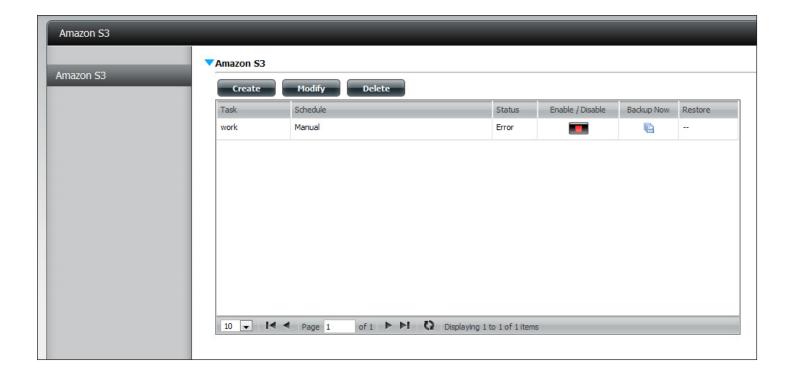
rights, and modify time.





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.

Click the "Sign Up Now" button and follow the instructions to select the amount of desired storage and create your Amazon S3 account.

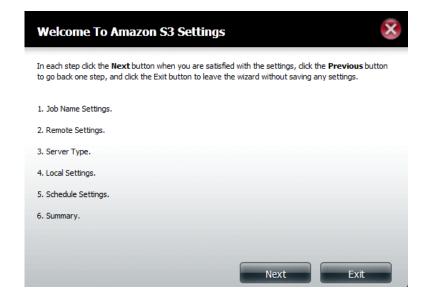
You will be issued the following keys as credentials to give you access to the account:

- 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.

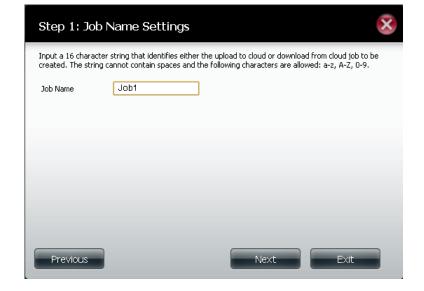
Create Button

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. Eg. Nas backup. A bucket is the root directory on Amazon S3.

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

ShareCenter access to your Amazon S3 Cloud Storage. In the Remote Path field, input a new or already existing Amazon S3 Bucket name. This is a folder on the Cloud Storage that your data will be written to or read from. Finally select the appropriate region which will give you the best service for reading from or writing to the Amazon S3 Cloud. Access Key ID Secret Access Key Remote Path Region United States Next Exit

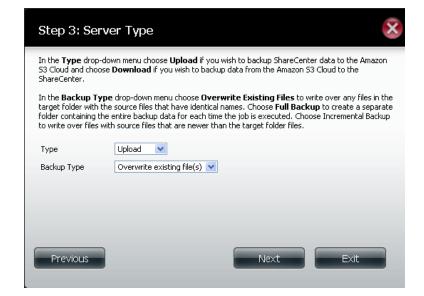
Input your Amazon S3 assigned Access Key ID and Secret Access Key which will allow your

Step 2: Remote Settings

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).

Click Finish to complete the setup.

Note: If the device system clock is incorrect, an error message will prompt "connection error". Make sure that your ShareCenter system clock is set correctly according to your time zone. It is suggested to configure your NAS to automatically synchronize with the system clock using the Network Time Protocol (NTP).



Modify Button

Once a job is created, the **Modify** button is used to change any of the settings described in the **Create Button** section. Click on a created job in the Amazon S3 table so that its text turns red. Then click the **Modify** button to edit the job settings in a wizard that appears.

Note: The Job Name cannot be modified.

Delete Button

The **Delete** button is used to delete any backed up or restored job listed in the Amazon S3 table. Click on a created job in the Amazon S3 table so that its text turns red. Then click the **Delete** button to remove the job from your ShareCenter configuration.

Enable/Disable Column

This field of the jobs controls whether the job will execute or not. If the button shows a green triangle, clicking it enables the job to function. If the button shows the red square, clicking it disables the job from executing.



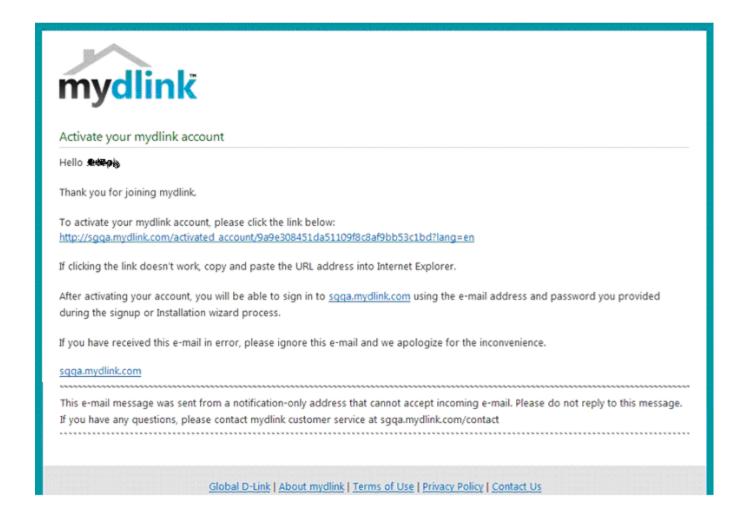
mydlink

The mydlink portal offers a cloud service to DNS-320L users. Connect to the mydlink service from any location via Internet browser. Simply open your browser and type in **www.mydlink.com**. Sign into your account on the home page and get access to all your files stored on the ShareCenter from anywhere.

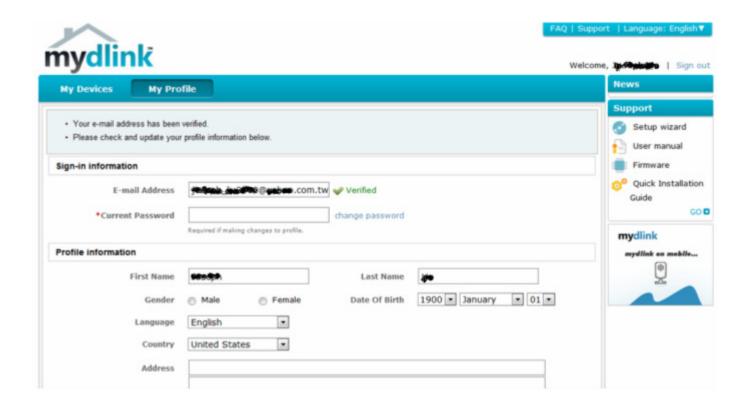


mydlink Verification

If this is your first time login in, you have to check your e-mail box and click the weblink to activate mydlink account.

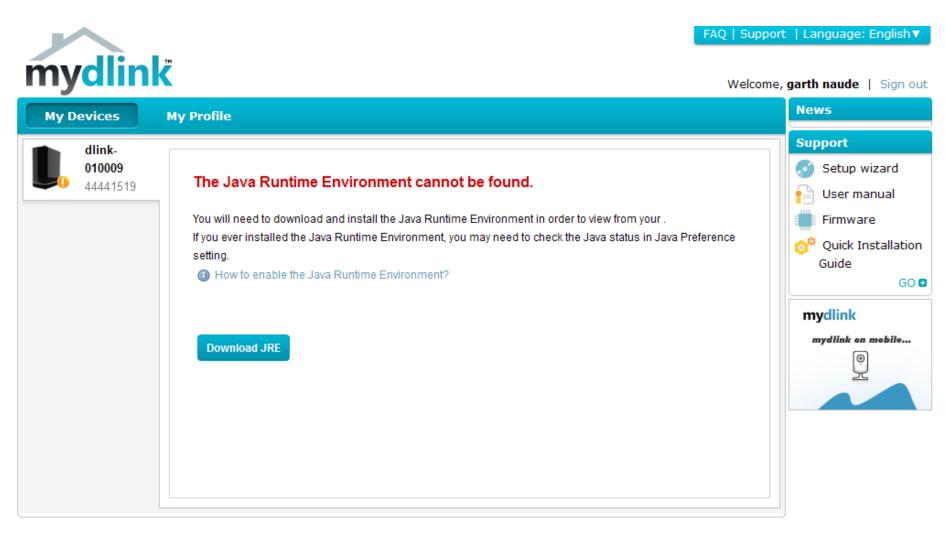


mydink is verified

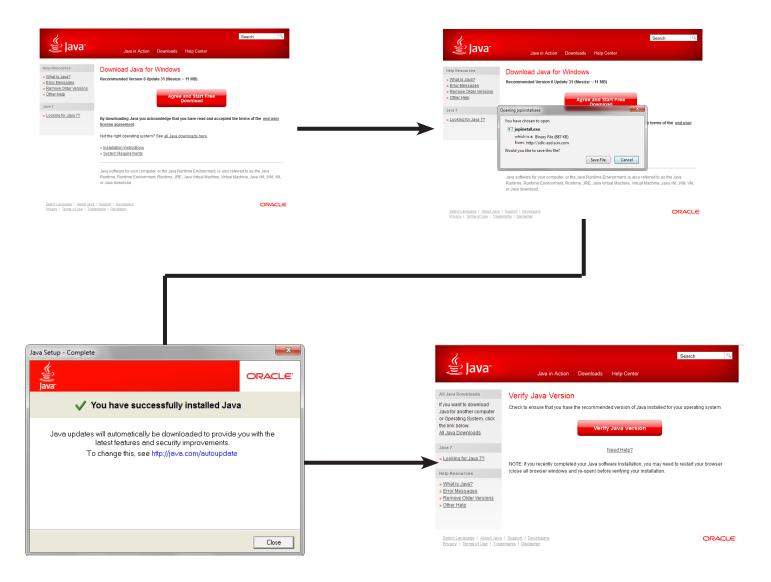


mydlink Java Runtime Machine

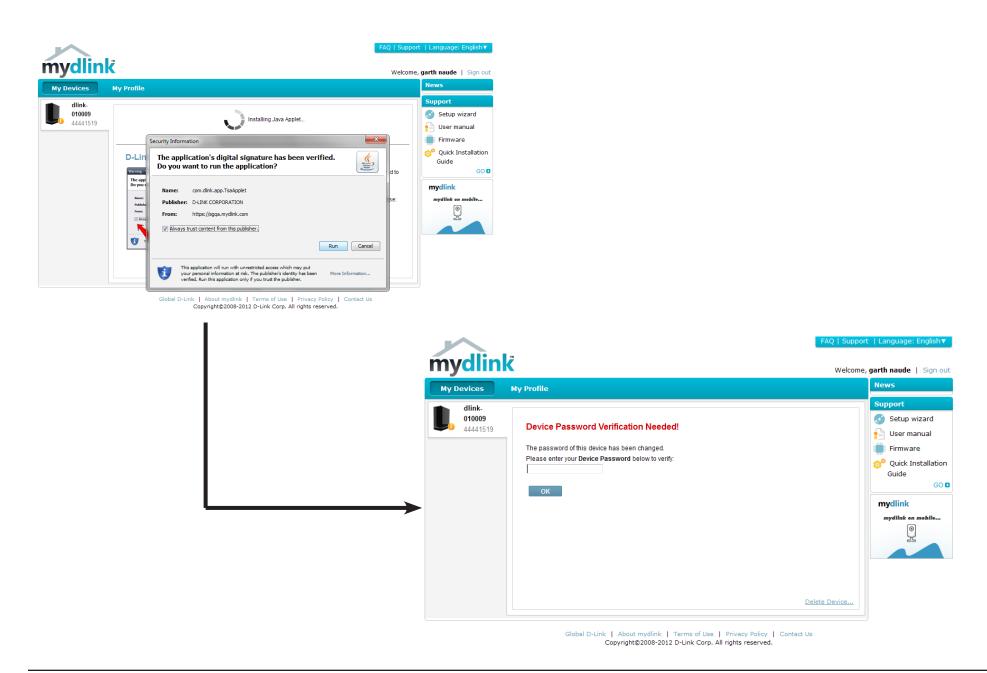
Once you log into your account, you will need the Java Runtime machine. The screen provides the download link in order for you to download it.



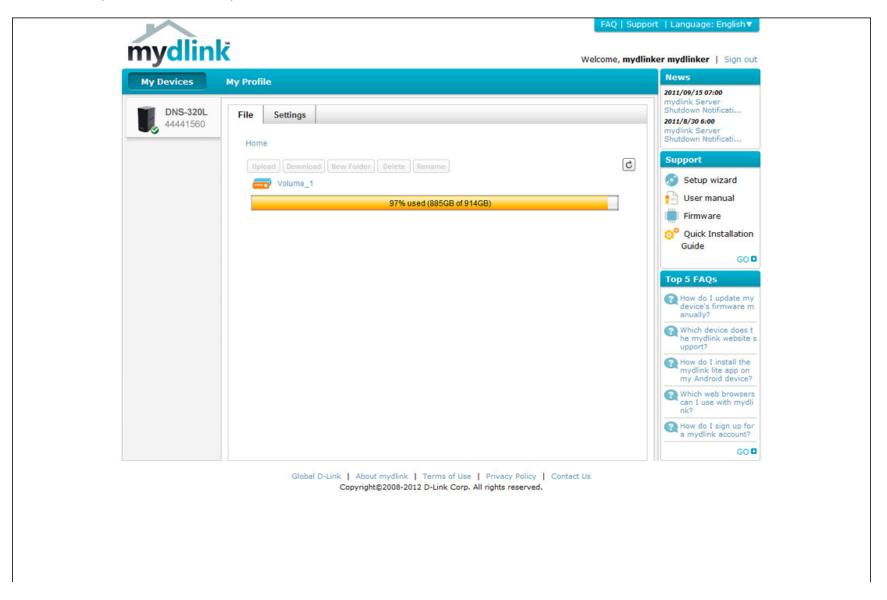
Global D-Link | About mydlink | Terms of Use | Privacy Policy | Contact Us Copyright©2008-2012 D-Link Corp. All rights reserved. The Java Runtime machine takes a few steps. Follow the instructions:



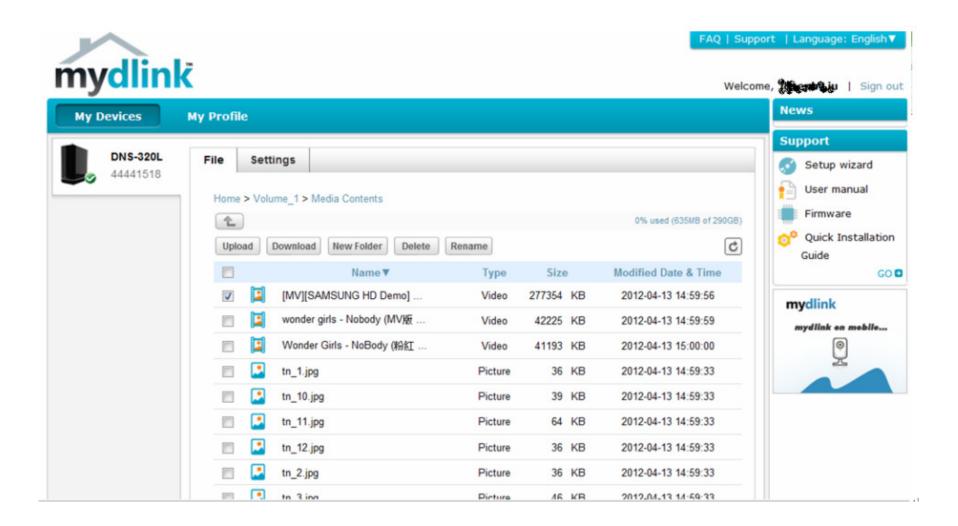
After the Java Runtime machine is installed, run the mydlink application and enter the password of the device (admin's password).



Once you are connected you can view all the volumes created on the DNS-320L and the total/used storage space on each volume. You can also upload, download files, 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/ Deleting/ Renaming Folder

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



To delete a file/folder, click the checkbox next to the file/folder you wish to delete. Click the Delete button. A confirmation window will appear for you to confirm the deletion. Click **Delete** to proceed.

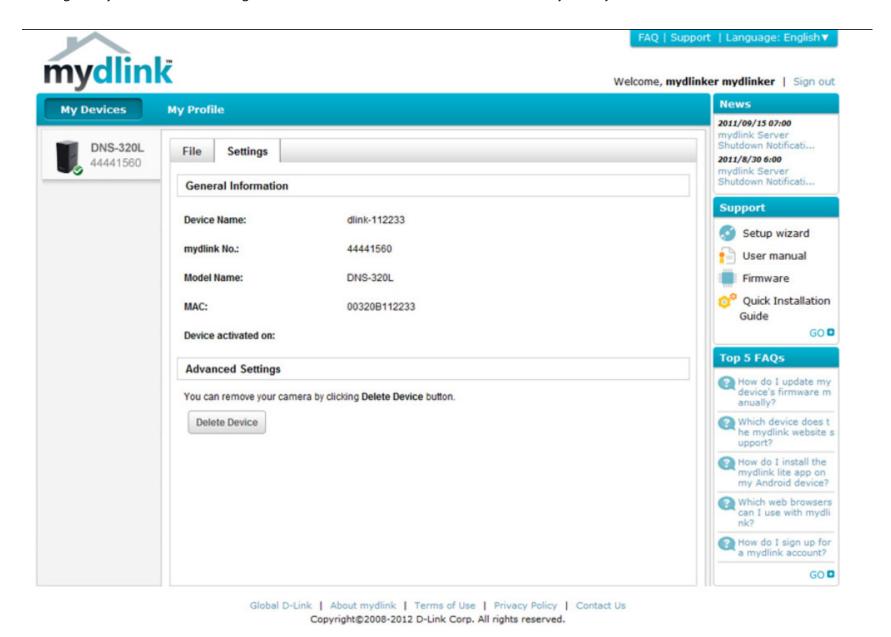


To rename a file or folder, click the checkbox next to the file/folder you wish to rename. Click the Rename button. A window will appear for you to rename the file. Enter a new name and click Rename.



mydlink Settings Details

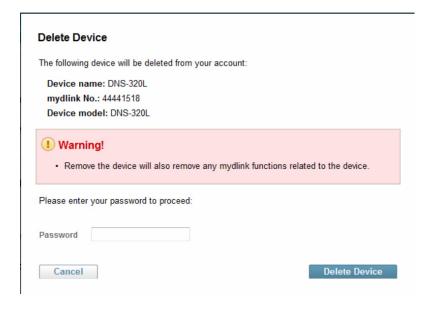
Under the Settings tab you are able to change the device name and delete the device from your mydlink account.



Deleting the device from mydlink account

Uder **Settings**, click **Remove Device**. A warning message appears for you to verify your deletion.

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



Delete Device The following device has been successfully deleted from your mydlink account: Device name: DNS-320L mydlink No.: 44441518 Device model: DNS-320L To add the device to mydlink account and enable remote access to it, please run the device's Setup Wizard again. You can download the Setup Wizard from the Support page.

ShareCenter NAS Status

On the left panel, 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 device's password has been changed. You will need to enter your new device 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.

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.

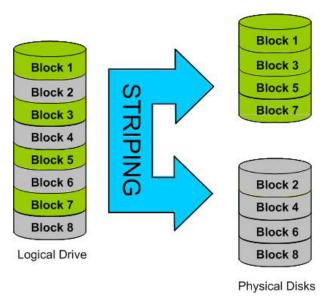
Although performance is improved, the lack of any RAID or mirroring means that if one drive fails, all data on the volume will be lost. **JBOD**

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..

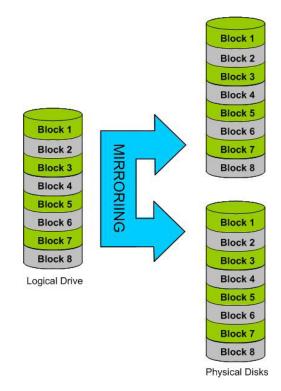
RAID 0 RAID 0 provides data striping, which spreads out blocks of data over all the drives, but does not provide data redundancy.

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

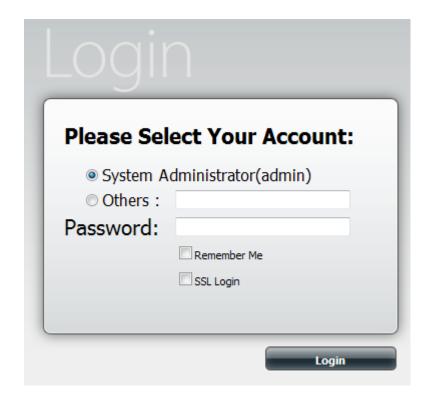
Copies exactly one of the data disks and produces a mirrored copy on another disk.

UPS Connectivity

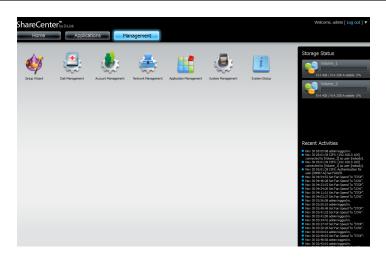
The DNS-320L supports USB UPS, giving users the ability to share the UPS on their local network and protect from an abnormal shutdown due to a power failure. Connect a UPS to the USB port on the back of the ShareCenter $^{\text{TM}}$.

Standalone and Network Master Mode:

Log into the DNS-320L.



Click Management.

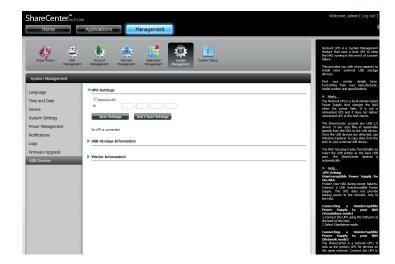


Click System Management and then USB Devices.

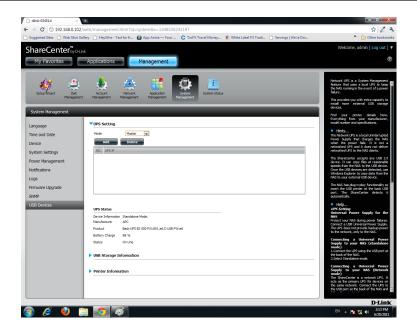
Click the blue arrow next to UPS Settings. There are two modes - **Standalone** and **Master**.

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**.



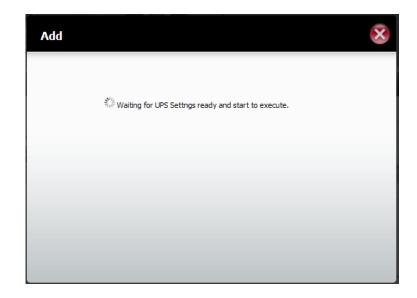
Enter the IP address of the other UPS slave on the network.

Click the + button to add more IP addresses.

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

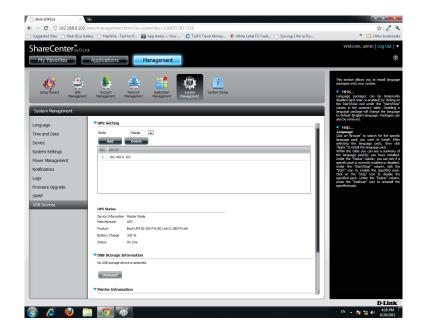


Once you have entered an IP address, the system will check its database for IP address records.



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.



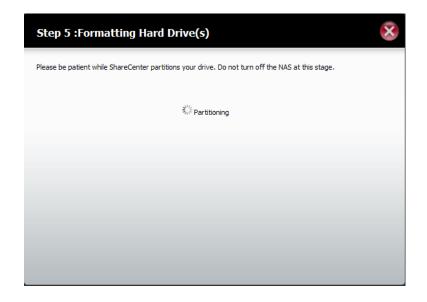
Deleting a UPS Slave

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

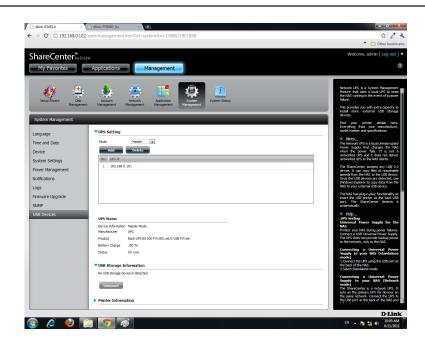
Click **Delete**.

The metal above to be read imposed to the filter of the control of

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.

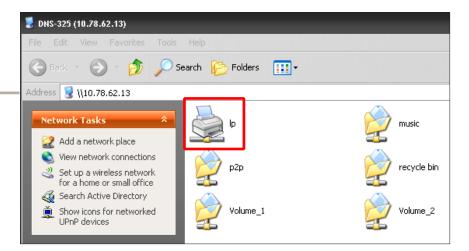
Note: Only the print function is supported. The device does not support the copy and scan functions of Multi-Function Printers.

To add a printer, connect your printer via USB cable to the USB port of your device:



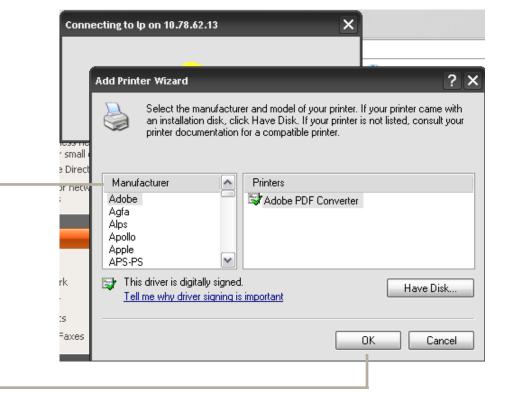
The printer should appear in the USB Devices menu of the System Management icon.

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

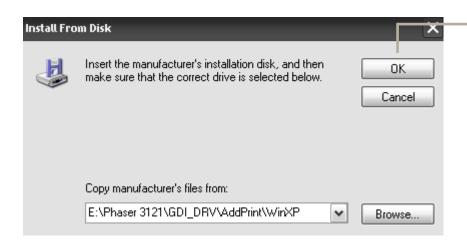


The Windows® Add Printer Wizard will launch:

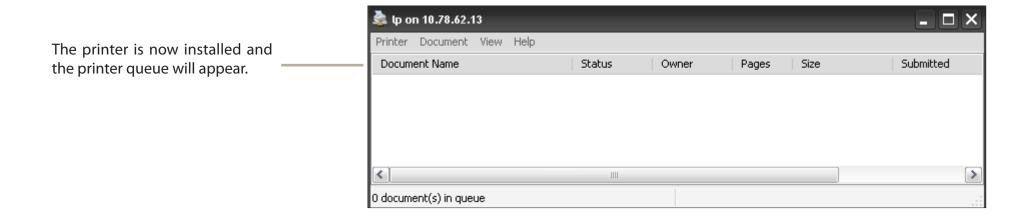
Select the printer driver from the installed Manufacturer list or use the **Have Disk** button to browse for the printer driver file.



Click **OK** to continue.



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



Contacting Technical Support

Canadian customers can contact D-Link technical support through our website or by phone.

Before you contact technical support, please have the following ready:

- Model number of the product (e.g. DNS-320L)
- Hardware Revision (located on the label on the bottom of the switch (e.g. rev A1))
- Serial Number (s/n number located on the label on the bottom of the device).

You can find software updates and user documentation on the D-Link website as well as frequently asked questions and answers to technical issues.

For customers within the United States:

Phone Support: (877) 453-5465

Internet Support: http://support.dlink.com

For customers within Canada:

Phone Support: (800) 361-5265

Internet Support: http://support.dlink.ca

Warranty

Subject to the terms and conditions set forth herein, D-Link Systems, Inc. ("D-Link") provides this Limited Warranty:

- Only to the person or entity that originally purchased the product from D-Link or its authorized reseller or distributor.
- Only for products purchased and delivered within the fifty states of the United States, the District of Columbia, U.S. Possessions or Protectorates, U.S. Military Installations, or addresses with an APO or FPO.

Limited Warranty:

D-Link warrants that the hardware portion of the D-Link product described below ("Hardware") will be free from material defects in workmanship and materials under normal use from the date of original retail purchase of the product, for the period set forth below ("Warranty Period"), except as otherwise stated herein.

- Hardware (excluding power supplies): Three (3) years
- Free Technical Support Basic Installation: Ninety (90) days

The customer's sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link's option, to repair or replace the defective Hardware during the Warranty Period at no charge to the original owner or to refund the actual purchase price paid. Any repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement hardware need not be new or have an identical make, model or part. D-Link may, at its option, replace the defective Hardware or any part thereof with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. Repaired or replacement hardware will be warranted for the remainder of the original Warranty Period or ninety (90) days, whichever is longer, and is subject to the same limitations and exclusions. If a material defect is incapable of correction, or if D-Link determines that it is not practical to repair or replace the defective Hardware, the actual price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware or part thereof that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.

Limited Software Warranty:

D-Link warrants that the software portion of the product ("Software") will substantially conform to D-Link's then current functional specifications for the Software, as set forth in the applicable documentation, from the date of original retail purchase of the Software for a period of ninety (90) days ("Software Warranty Period"), provided that the Software is properly installed on approved hardware and operated as contemplated in its documentation. D-Link further warrants that, during the Software Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. The customer's sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link's option, to replace the non-conforming Software (or defective media) with software that substantially conforms to D-Link's functional specifications for the Software or to refund the portion of the actual purchase price paid that is attributable to the Software. Except as otherwise agreed by D-Link in writing, the replacement Software is provided only to the original licensee, and is subject to the terms and conditions of the license granted by D-Link for the Software. Replacement Software will be warranted for the remainder of the original Warranty Period and is subject to the same limitations and exclusions. If a material non-conformance is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to replace the non-conforming Software, the price paid by the original licensee for the non-conforming Software will be refunded by D-Link; provided that the non-conforming Software (and all copies thereof) is first returned to D-Link. The license granted respecting any Software for which a refund is given automatically terminates.

Non-Applicability of Warranty:

The Limited Warranty provided hereunder for Hardware and Software portions of D-Link's products will not be applied to and does not cover any refurbished product and any product purchased through the inventory clearance or liquidation sale or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product and in that case, the product is being sold "As-Is" without any warranty whatsoever including, without limitation, the Limited Warranty as described herein, notwithstanding anything stated herein to the contrary.

Submitting A Claim:

The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.
- The customer must obtain a Case ID Number from D-Link Technical Support at 1-877-453-5465, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization ("RMA") number by completing the RMA form and entering the assigned Case ID Number at https://rma.dlink.com/.

- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package
 o ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package.
 Do not include any manuals or accessories in the shipping package. D-Link will only replace the defective portion of the product
 and will not ship back any accessories.
- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery ("COD") is allowed. Products sent COD will either be rejected by D-Link or become the property of D-Link. Products shall be fully insured by the customer and shipped to D-Link Systems, Inc.
- **USA residents** send to 17595 Mt. Herrmann, Fountain Valley, CA 92708. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via UPS Ground or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in the United States, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link's reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.
- Canadian residents send to D-Link Networks, Inc., 2525 Meadowvale Boulevard Mississauga, Ontario, L5N 5S2 Canada. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via Purolator Canada or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in Canada, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link's reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming. RMA phone number: 1-800-361-5265 Hours of Operation: Monday-Friday, 9:00AM 9:00PM EST

Disclaimer of Other Warranties:

EXCEPT FOR THE LIMITED WARRANTY SPECIFIED HEREIN, THE PRODUCT IS PROVIDED "AS-IS" WITHOUT ANY WARRANTY OF ANY KIND WHATSOEVER INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.

IF ANY IMPLIED WARRANTY CANNOT BE DISCLAIMED IN ANY TERRITORY WHERE A PRODUCT IS SOLD, THE DURATION OF SUCH IMPLIED WARRANTY SHALL BE LIMITED TO THE DURATION OF THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE. EXCEPT AS EXPRESSLY COVERED UNDER THE LIMITED WARRANTY PROVIDED HEREIN, THE ENTIRE RISK AS TO THE QUALITY, SELECTION AND PERFORMANCE OF THE PRODUCT IS WITH THE PURCHASER OF THE PRODUCT.

Limitation of Liability:

TO THE MAXIMUM EXTENT PERMITTED BY LAW, D-LINK IS NOT LIABLE UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY FOR ANY LOSS OF USE OF THE PRODUCT, INCONVENIENCE OR DAMAGES OF ANY CHARACTER, WHETHER DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF GOODWILL, LOSS OF REVENUE OR PROFIT, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, FAILURE OF OTHER EQUIPMENT OR COMPUTER PROGRAMS TO WHICH D-LINK'S PRODUCT IS CONNECTED WITH, LOSS OF INFORMATION OR DATA CONTAINED IN, STORED ON, OR INTEGRATED WITH ANY PRODUCT RETURNED TO D-LINK FOR WARRANTY SERVICE) RESULTING FROM THE USE OF THE PRODUCT, RELATING TO WARRANTY SERVICE, OR ARISING OUT OF ANY BREACH OF THIS LIMITED WARRANTY, EVEN IF D-LINK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE SOLE REMEDY FOR A BREACH OF THE FOREGOING LIMITED WARRANTY IS REPAIR, REPLACEMENT OR REFUND OF THE DEFECTIVE OR NONCONFORMING PRODUCT. THE MAXIMUM LIABILITY OF D-LINK UNDER THIS WARRANTY IS LIMITED TO THE PURCHASE PRICE OF THE PRODUCT COVERED BY THE WARRANTY. THE FOREGOING EXPRESS WRITTEN WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ANY OTHER WARRANTIES OR REMEDIES, EXPRESS, IMPLIED OR STATUTORY.

Governing Law:

This Limited Warranty shall be governed by the laws of the State of California. Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the foregoing limitations and exclusions may not apply. This Limited Warranty provides specific legal rights and you may also have other rights which vary from state to state.

Trademarks:

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FCC Statement:

This equipment has been tested and found to comply with the limits for a Class B device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

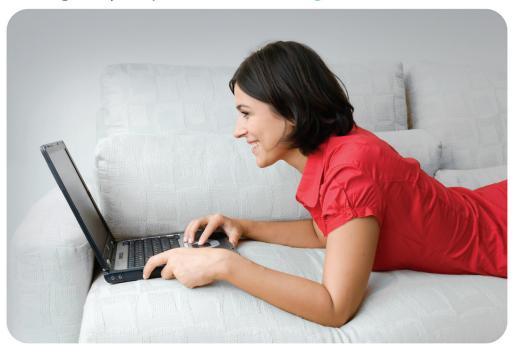
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

For detailed warranty information applicable to products purchased outside the United States, please contact the corresponding local D-Link office.

Registration

Register your product online at registration.dlink.com



Product registration is entirely voluntary and failure to complete or return this form will not diminish your warranty rights.

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