# USER MANUAL DNS-343

**VERSION 1.4** 



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# Product Overview Package Contents

- D-Link DNS-343 ShareCenter<sup>™</sup> 4-Bay Network Storage
- CD-ROM with Manual and Software
- Quick Installation Guide
- Power Adapter (19V / 7.89A)
- Power Cord
- CAT5 Ethernet Cable





#### Please Note:

Using a power supply with a different voltage than the one included with the DNS-343 will cause damage and void the warranty for this product.

If any of the above items are missing, please contact your reseller.

# **System Requirements**

For best results, the following system requirements are recommended:

- Computer with: 1GHz processor / 512 MB RAM / 200 MB available space / CD-ROM drive
- Internet Explorer version 6.0 or Mozilla Firefox 1.0 and above
- 3.5" SATA Hard Drive(s)Windows® XP (with Service Pack 2) or Vista™

## Introduction

The D-Link DNS-343 ShareCenter<sup>™</sup> 4-Bay Network Storage shares your documents, photos, music, and videos across the network and on the Internet so family members, friends, or employees can access them. This ShareCenter, which can hold four 3.5" SATA hard drives of up to 2TB capacity each¹, creates a central network point for backing up valuable files.

The DNS-343 shares files over the Internet via the built-in Secure FTP server<sup>2</sup>. Users and groups can be created and assigned to folders with either read or read/write permissions. Quotas can be set per user or group to restrict space usage. In addition, the DNS-343 can be used to stream photos, music, and videos to UPnP AV compatible network media players<sup>3</sup>, Xbox 360, and Playstation 3.

The included CD contains D-Link's Easy Search Utility. This utility allows you to locate the DNS-343 on the network and map drives to your computer. Backup software is also included on the CD. This software allows you to backup your files from a computer to the DNS-343 manually or by a schedule.

Combining ease of use with practical, high performance features, the DNS-343 is an organized solution for any network. Free up drive space on computers and centralize data on your network with the DNS-343 ShareCenter<sup>™</sup> 4-Bay Network Storage!

The DNS-343 ShareCenter<sup>™</sup> 4-Bay Network Storage also includes new features like the USB Print Server allowing users to use this unit as a print server on their network. The DNS-343 also includes UPS monitoring via it's USB port.

Another feature added is called Remote Replication, which allows the user to backup files remotely safely and fast.

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

<sup>2</sup> Note that use of an FTP Server to access files over the Internet does not provide for secure or encrypted transmissions.

<sup>3</sup> D-Link cannot guarantee full compatibility or proper playback with all codecs. Playback capability depends on the codec support of the UPnP™ AV media player.

## **Features**

The DNS-343 ShareCenter<sup>™</sup> 4-Bay Network Storage is an easy to install data storage platform used for remote access through a private network or from the Internet. The DNS-343 supports up to 4 SATA hard drives and includes the product features listed below:

- Four hard drive bays for 3.5 inch SATA hard drives of up to 2TB capacity each
- Single volume support for up to 8TB disk capacity
- Simplified Hard Drive Installation Process No Tools Required
- Five Hard Drive Configurations: Standard, JBOD (Linear), RAID 0, RAID 1, and RAID 5
- High performance Gigabit Ethernet connectivity
- Equipped with an informative OLED display screen
- Equipped with aluminium housing and smart FAN speed control
- USB port supports Printer server and UPS monitoring
- Power Management for Conserving Energy and Extending Hard Drive Life
- Built-in secure FTP Server for File Access over the Internet
- UPnP AV Server for Streaming Music, Photos, and Video to compatible network media players, Xbox 360, and Playstation 3
- Automatic E-mail Notification
- Supports HTTPS management function
- iTunes Software will be able to automatically find and play music directly from the DNS-343
- Users and Groups can be assigned to folders with read or read/write permissions
- Supports Quotas for Users and Groups
- Supports Group Assignment for Network Sharing and FTP Server
- Supports DHCP server

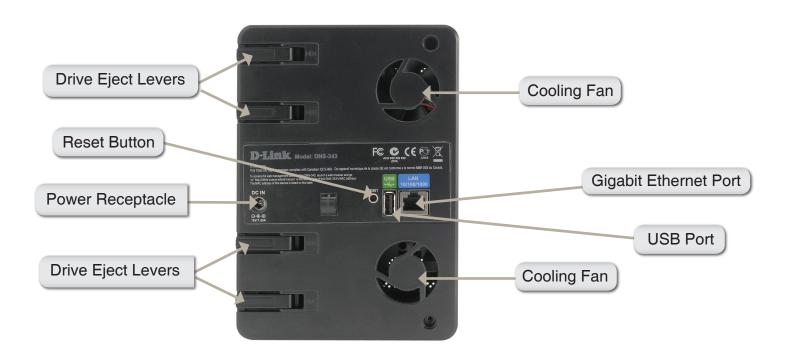
- Supports Configuration file save/load
- Supports DDNS
- Supports Jumbo Frame
- Supports Auto Power Recovery Function
- Supports Active Directory
- Supports Multi-language File Name
- Supports Schedule Download
- Supports Easy Search Utility
- Full or Incremental Backups
- Supports Yahoo! Widget
- Supports UPnP for Windows® XP
- Supports PnP-X / LLTD
- Supports Remote NAS to NAS backup (Remote Replicate)
- Supports System Logging/FTP Logging
- Supports Add-On software and multi-language packages
- Supports NFS Server
- FTP Server supports FTP over SSL/TLS, and FXP
- Recover your computer using the bundled backup software

# Hardware Overview Front View



COMPONENT	DESCRIPTION
OLED Screen	This screen displays detailed information about the following:
	System Information
	HD Status
	Server Status
	RAID Status
Power Button	Use this button to switch the device on or off.
	To switch on the device press the button once.
	To switch off the device hold the button down for 5 seconds.
Next Button	Use this button to display the System Information (system state), HD Status (hard drive state)
	and Server Status (server status state) on the OLED.
	Press the button once to alternate between the different Status screens.

# **Rear Panel (Connections)**



COMPONENT	DESCRIPTION
Drive Eject Levers	Use the provided levers to eject the SATA hard drives.
Reset Button	Press this button for over 5 seconds to reset the unit to factory defaults.
Power Receptacle	Connect the 19V / 7.89A power supply to the receptacle.
USB Connector	1x USB 2.0 (Type A) connector. USB Host port for Print Server or USB UPS monitoring.
Gigabit Ethernet Port	Use the Gigabit Ethernet Port to connect the DNS-343 to the local network.
Cooling Fans	The cooling fans are used to cool the hard drives and feature speed control. When the unit is first powered on, the fans rotate at a low speed and they will switch to a high speed when the temperature rises above 49° C.

# Using the OLED

The DNS-343 ShareCenter™ 4-Bay Network Storage features an OLED that enables the administrator to easily view information about the DNS-343. The OLED display screen displays information about the network connection status and the number of hard drives installed and the bay ID's they are installed in. The OLED has four different screens:

#### **System Information**- This screen shows the following information:

- The hostname of the DNS-343.
- The Firmware version.
- The IP address of the DNS-343.
- The operating temperature.

#### Hard Drive Status- This screen shows the following information:

The percentage of space used on the hard drives.

#### **Server Status**- This screen shows the following information:

- Whether a printer is connected to the server.
- The status of the UPNP server.
- The status of the iTunes server.
- The status of the FTP Server.

#### **RAID Status-** This screen shows the following information:

- The RAID health status.
- The status of the rebuilding progress.

Click the **Next** button once to alternate between the different Status screens.

# Installation Hardware Setup

This section provides unpacking and installation information for the DNS-343. Open the shipping carton for the DNS-343 and carefully unpack its contents. If this is the first time using the DNS-343 or if a new hard disk is installed, use the Easy Search utility located on the Installation CD and follow the instructions for setting up, configuring and formatting the new drive.



1. Access the drive bays by sliding the faceplate up until it unlatches from the device.



2. Once the faceplate is unlatched, pull it off the device, exposing the drive bays.



3. Insert a 3.5" SATA hard drive into each available drive bay. Make sure to align the drive connectors to the SATA connectors on the bottom edge inside the drive bay of the DNS-343. Gently push the drive in until it connects. When a drive is inserted properly, you will feel it "seat" into the connector. Some hard drives that are thin or oddly shaped may need to be guided carefully into position.



5. Connect an Ethernet cable to the available Ethernet port. This cable should connect the DNS-343 to your local network via a router or switch, or directly to a computer for configuration.



4. Attach the faceplate to the front of the device.



- 6. Connect the supplied power adapter to the power receptacle.
- 7. Connect a USB printer. (Optional)

# **Configuration Easy Search Utility**

When first powered on, during the initial boot sequence, the DNS-343 will wait to be assigned an IP address via DHCP. If it does not receive a DHCP assigned IP address, by default it will have a self-assigned IP address of 192.168.0.32. It is recommended to use the included D-Link Easy Search Utility when accessing and configuring the DNS-343 for the first time. If you want to change the IP address before logging in, or are unable to connect to the DNS-343 IP address, you can use the Easy Search Utility provided on the product CD to locate the device on your network and make any needed changes.

Network Storage The Easy Search Utility displays any DNS-343

**Device:** device that it detects on the network.

**Refresh:** Refreshes the device list.

Configuration: Click Configuration to access the Web based

configuration of the DNS-343.

LAN: Configure the LAN Settings for the DNS-343.

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

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

Available Drive Choose an available drive letter. Click Connect

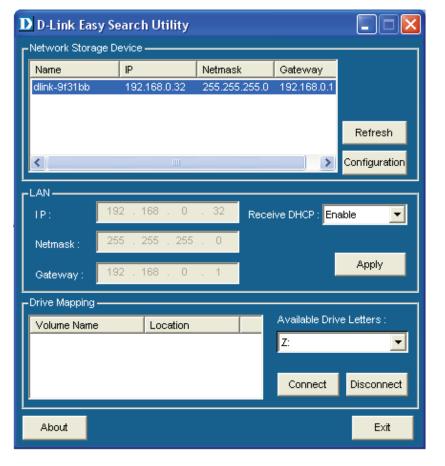
Letters: to map the selected volume. Click Disconnect to

disconnect the selected mapped volume.

About: Click About to view the software version of the

Easy Search Utility.

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



# **Getting Started**

To run the Easy Search Utility, insert the DNS-343 CD into your CD-ROM drive:

**Step 1** - Click **Easy Search Utility**.



**Step 2** - Select the listed **DNS-343** 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.

The first window that appears will require the user to login for Configuration or Application menus. The Applications menu is described later in this guide in the section titled Applications on page 65.



#### Please Note:

The computer used to access the DNS-343 web-based configuration manager must be on the same subnet as the DNS-343. If your network is using a DHCP server and the computer receives IP settings from DHCP, then the DNS-343 will automatically be in the same subnet.



Step 3 - The Login screen will appear:

Type 'admin' for the username and leave the password field blank. Click Configuration.

If the web browser is unable to connect to the web manager of the DNS-343. For example, if the DHCP server is inactive, your computer will need an IP address in the 192.168.0.0 subnet. Your computer should have an IP address of 192.168.0.x where x equals a number from 1 to 31 or 33 to 254.

When logging into the DNS-343 for the first time, you will be asked to choose a drive configuration (Basic or Custom) and format the drives.

**Step 4** - Basic Configuration offers four options: Standard, JBOD, RAID 1 and RAID 5. Standard configures each disk as a separate volume, while JBOD combines all disks into a single volume.

Custom Configuration offers three combination methods:

RAID 0 + JBOD, RAID 1 + JBOD and RAID 5 + JBOD.

When prompted to configure the Hard Drive Settings, select from one of the basic types of hard drive configurations below:

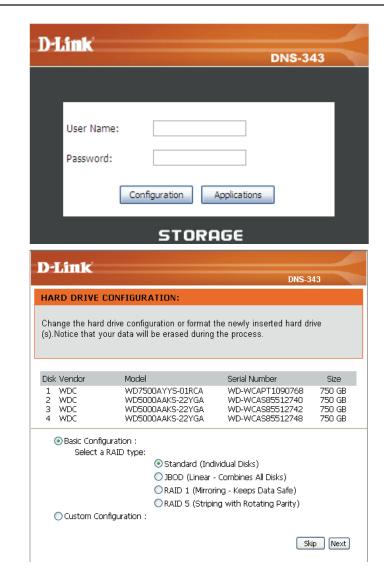
- Standard
- JBOD
- RAID 1
- RAID 5

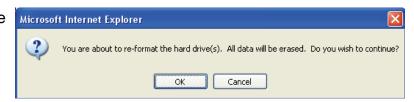
Or select Custom Configuration and then click Next.

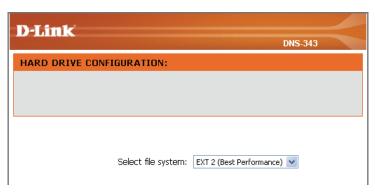
**Note:** All data will be erased off of the hard drives installed in the DNS-343 during the formatting process.

**Step 5** - A warning message appears informing you that your drives will be formatted and all data erased.

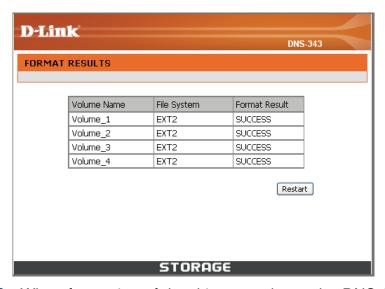
Click **OK** to continue.



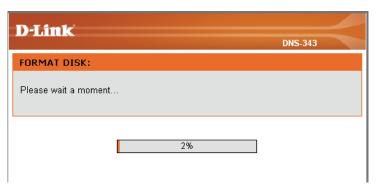




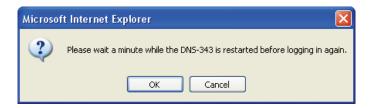
**Step 6** - Choose whether to use the EXT2 or EXT3 file system on the DNS-343 from the drop-down. Click **Next** to continue.



**Step 8** - When formatting of the drive completes, the DNS-343 will display the results of the disk formatting. Click **Restart** to restart the DNS-343.

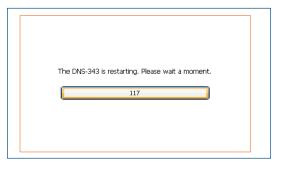


**Step 7** - The following window appears to indicate the progress of the disk formatting.



**Step 9** - A warning message informs you that it will take a minute for the DNS-343 to restart.

Click **OK** to restart the DNS-343.



**Step 10** - When the restart is complete, the login screen will appear. **Note:** After logging in to the DNS-343 for the first time, it is recommended to add a password to the admin account (See Step 3).

# **Web User Interface**

The DNS-343 web UI defaults to the Setup page. The main categories for configuration are located in the menu tabs at the top of the page. These categories include:

- Setup Contains the DNS-343 setup Wizard, LAN Setup, Time and Date settings and Device settings.
- Advanced Allows the DNS-343 administrator to configure RAID options, Users, groups of users and their storage quotas. The FTP Server, UPnP AV server, iTunes server, LLTD, DHCP Server, LLTD and Remote Backup settings are also contained here.
- Maintenance Allows the DNS-343 administrator to reset the Admin Password, perform System maintenance tasks, carry out Firmware Upgrades, configure e-mail alerts, configure Power Management options, configure Dynamic DNS, change the OLED Display settings and get diagnostic information about the installed Hard Disks.
- Status Shows current information about the LAN configuration, Device, Printer and Hard drives installed.
- Support Contains help files for your DNS-343.

# **Setup Section**

D-Link

Wizard: The DNS-343 ShareCenter™ 4-Bay Network

Storage provides a convenient and safe location on the network for storing data and media. The Setup Wizard will let you adjust basic settings for

your device.

LAN Setup: The LAN Settings allow you to configure the Link

Speed and to configure the IP address as a DHCP

client or Static IP.

Time and Date: The Time configuration option allows you to

configure, update, and maintain the correct time on the internal system clock. From this section you can set the time zone that you are in and set the NTP (Network Time Protocol) Server to periodically update your system time from the NTP Server. You can also copy your computer's time as the system

time.

Mizerd

LAN Setup
Time and Dete
Device
Logout

Mixerd

Run Mizerd

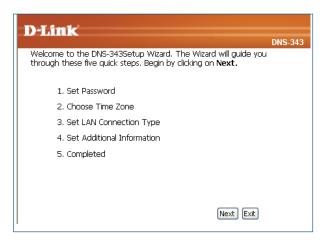
Mixerd

Mix

**Device:** Workgroup and Active Directory configuration can be done here.

# Wizard

The DNS-343 has a setup Wizard that allows you to quickly configure some of the basic device settings.



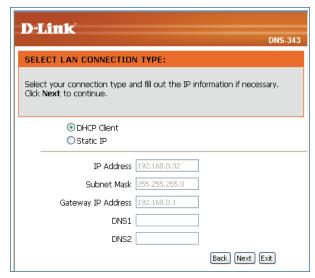
1. When running the DNS-343 setup wizard, the welcome screen details the five steps of the wizard. Click **Next** to continue.



3. Set the appropriate Time Zone and click **Next** to continue.



2. It is recommended you set an admin password here. Enter the new password and re-enter it for confirmation. Click **Next** to continue.



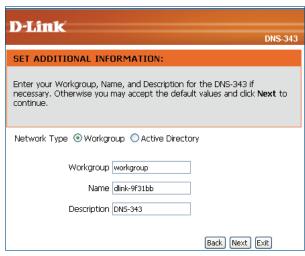
4. Edit or change the DNS-343 LAN information, or to keep the current settings, click **Next** to continue.



5. The following screen allows you to choose your network type.



7. If your DNS-343 will be connected to an Active Directory network, click the **Active Directory** radio button. Enter the information about your Active Directory. Click **Next** to continue.



6. If your network is configured as a workgroup, click the **Workgroup** radio button. Enter the Workgroup, Name and Description for your DNS-343, or leave the default values. Click



8. When the wizard completes, click **Back** to go back and make changes or click **Completed** to save the current settings.



10. The DNS-343 will restart.



11. When the login prompt appears, log in using the new administrator password.

# LAN

LAN SETTINGS:

Speed 100 Mbps

O DHCP Client

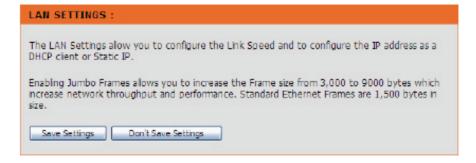
Link Speed 

Auto 

100 

1000 Apply

The Local Area Network settings for the DNS-343 are configured on the LAN Setup page.



Link Speed: The LAN Link Speed is set to Auto by default, but can be manually set to 100Mbps or

1000Mbps.

**DHCP Client:** Selecting DHCP Client will cause the DNS-343

to obtain an IP address from the local DHCP

server.

Static IP: Selecting Static IP requires you to assign the IP

information for the DNS-343 manually.

Jumbo Frames: The DNS-343 can support Jumbo Frames that

are between 3000 and 9000 bytes in size. In order to enable Jumbo Frames on the DNS-343, click the **Enable** radio button and select the MTU size from the drop-down menu. Click the **Apply** button to save any changes made.

● Static IP

IP Address: 192.168.69.32

Subnet Mask: 255.255.255.0

Gateway: 192.168.69.1

DNS1:

DNS2:

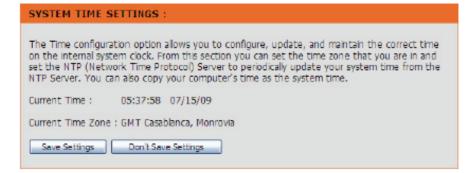
JUMBO FRAME SETTINGS:

Status: □ Enable □ Disable

Apply

## **Time and Date**

The Time and Date of the DNS-343 can be set manually or be configured automatically using an NTP Server.



Time Zone: Choose the Time Zone of where you are located from the drop-down menu.

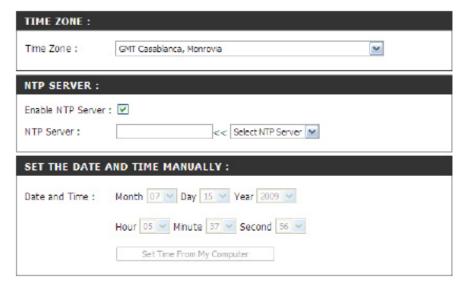
NTP Server: Select the Enable NTP Server check box to enable NTP. Network Time Protocol (NTP) synchronizes the DNS-343 with an Internet

time server.

Type the URL of the NTP Server in the NTP Server check box or use the drop-down menu to choose one of the two time servers that D-Link provides for your convenience.

Time Manually:

Set the Date and To set the date and time manually, ensure that the Enable NTP Server is deselected and select the **Date and Time** using the drop-down menus.



# **Device - Workgroup**

The device settings page allows you to configure the Workgroup or Active Directory settings of your network on the DNS-343. If your network is configured as a Workgroup, click the **Workgroup** radio button. Configure the parameters as described below:

**Workgroup:** The Workgroup is used by Microsoft Windows®

Network to organize available network groups

within the same network.

Name: The unique Name appears for other network services including shared libraries on iTunes® and other media players.

The name can be used to access your device from a web browser instead of using an IP address, for example, http://dlink-xxxxxx. This is useful when there is more then one DNS-343

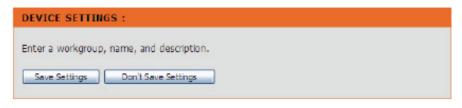
on the network.

By default the device name is d-link-xxxxxx, where xxxxxx is the last six digits of the MAC Address.

Description: Assign a device description to help identify the

DNS-343 in the workgroup.

Click the **Save Settings** button when you have finished configuring the Workgroup settings.





# **Device - Active Directory**

If your network is configured in an Active Directory make sure the following conditions are true:

Ensure that the Time and Date is synchronized between the DNS-343 and the Windows Active Directory server. The DNS-343 and Active Directory server will only tolerate a maximum time difference of 5 minutes.



• Ensure that you can get the IP address of the 2003 AD server from the DNS server. The DNS1 and DNS2 settings are the same as the LAN Setup. Please make sure this is working properly.

To configure the DNS-343 to use Active Directory, click the **Active Directory** radio button and configure the parameters as described below:

Username: Input the username of an account setup on the

Active Directory that requires access to the

resources on the DNS-343.

Password: Input the password of the chosen Active Directory

user account.

Host Name: Input a Domain Name Service (DNS) name for

the DNS-343. If the device connecting to the DNS-343 is a browser or logon server, this will be the name that these services are advertised

by.



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.

Realm Name: Input the FQDN (Fully Qualified Domain Name) of the Active Directory Domain in this field. This option specifies

the Kerberos realm to use.

AD Server Name: Input the name of the Active Directory Server in this field. When the Windows® user attempts to access the

DNS-343 at login time, the DNS-343 will connect to the 2003 AD Server and attempt to authenticate the given

user with the given password.

Click the Save Settings button when you have finished configuring the Active Directory settings.



#### Please Note:

For this feature to be enabled the user has to install the ADS Add-on available for this device.

## **Advanced**

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

drive.

Users / Groups: This option allows you to create and manage user

and group accounts. This is used for user access and read/write privileges for a specified folder on the network drive, or to setup FTP access and

privileges.

Quotas: This option allows you to assign a quota to a

group or user, to limit the amount of storage they are allocated. By default, users and groups do

not have a quota.

D-Link DNS-343 ADVANCED STATUS Helpful Hints HARD DRIVE CONFIGURATION Users / Groups RAID CONFIGURATION allows you to change your hard drive configuration, or format a newly Quotas inserted hard drive. Please note that formatting a hard drive will erase any data that was stored AUTO-REBUILD CONFIGURATION allows you to enable or disable the Auto-Rebuild feature. You can also manually rebuild by clicking the Manually Rebuild Now button. Please note that UPnP AV Server rebuilding will erase all data on the newly inserted drive. HCP Server RAID CONFIGURATION Current RAID Type: emote Backup Volume\_1: JBOD Add-ons ogout Re-configure All Existing Hard Drive AUTO-REBUILD CONFIGURATION O Enable Auto-Rebuild

**Network Access:** This option allows you to assign the access rights for your users and groups to a specific folders or volumes.

**FTP Server:** This option contains the configuration settings for the built-in FTP server.

**UPnP AV Server:** This option allows you to configure the UPnP AV server function.

iTunes Server: This option allows you to configure the iTunes server function.

DHCP Server: This option allows you to enable the built-in DHCP server to issue IP addresses to devices on your local

network.

**LLTD**: This option allows you to enable or disable the LLTD support.

Remote Backup: This option allows you to backup files on the DNS-343 to one or more remote NAS devices in order to prevent data

loss in the event of a failure. You can securely backup or recover your data over an encrypted SSH connection.

Add-ons: This option allows you to install application packages onto your system. In addition, you can also install language

packages to suit your local language needs.

## RAID

The DNS-343 supports the following configuration types: Standard, where each drive is a unique volume, JBOD, which combines both drives in a linear fashion to create one volume, RAID 1 and RAID 5 with a Basic Configuration and a combination of RAID 0/JBOD, RAID 1/JBOD and RAID 5/JBOD for Custom Configuration.

RAID Configuration: Click Set RAID Type and Re-Format to change the current drive configuration.

> If you already have one drive installed and intend to install additional drives, the DNS-343 allows you to change the drive configuration from Standard to JBOD, RAID 1, RAID 5 or a combination of RAID0/JBOD, RAID1/JBOD or RAID5/JBOD.

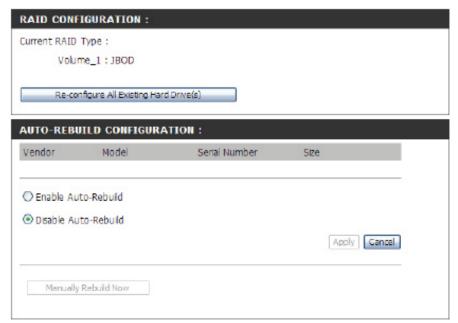
Configure Newly If you have installed an additional hard drive and **Inserted Hard** chose not to do the configuration, you will see drive(s); an additional option allowing you to configure the new hard drive. This will erase the entire data stored on the new hard drive.

Auto-Rebuild Select to Enable or Disable Auto-Rebuild Configuration: Configuration. When the DNS-343 has been configured as a RAID array the Auto-Rebuild function allows a degraded RAID array to rebuild when the failed hard drive is replaced by restoring data from the existing hard drives to the newly inserted hard drive.

#### HARD DRIVE CONFIGURATION :

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

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



#### Please Note:

Rebuilding will erase all the data on the newly inserted drive.

Carry out the following to configure the RAID settings on the DNS-343:

# Drive(s):

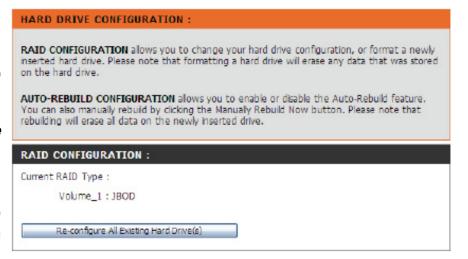
Re-configure All Click Re-configure All Existing Hard Drive(s) **Existing Hard** to setup the RAID configuration.

> **Note:** All data will be lost when changing the drive configuration.

The following screen appears showing the disks installed in the system. This screen also allows the administrator to choose a RAID configuration type for this device. Select either Basic Configuration or Custom Configuration.

#### **Custom Configuration**





#### **Basic Configuration**



# **Users / Groups**

The Users/Groups menu is used to create and manage user and group accounts. This is used for user access and read/write privileges for specified folders on the network drive (using the Network Access menu), or to setup FTP access and privileges. When the DNS-343 is connected to a Workgroup, up to 64 users and 10 groups can be created. When the DNS-343 is connected to an Active Directory, a combined total of 500 users and groups can be displayed. By default all users have read and write access to all folders but access rules can be created in the Network Access menu.

User and Group This section contains required attributes for Creation: a new user, including group, user name and password.

Select Group: Select User or Group and enter a user or

group name, password and then click Add.

Users in Group: Select a group from the drop-down menu.

Select the All accounts check box to add

all the listed users to the group.

List of All Users: Users that are assigned to the selected group

will be listed here.

Displays the list of users that you may assign

to the selected group.

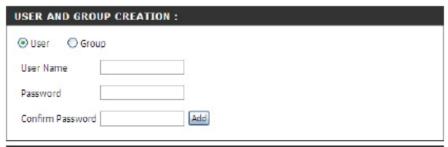
To add a user to the selected group, click the

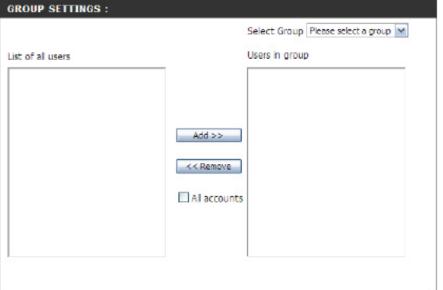
user and then click Add >>.

To remove a user from the group, click the

user and then click << Remove.

USERS / GROUPS This section allows you to create and manage user and group accounts. There are used for user access and read / write privileges for specified folder on the network drive, or to setup FTP access and privileges. Up to 64 users and 10 groups can be created.







# Quotas

The DNS-343 supports storage quotas for both groups and individual users. Assigning a quota to a group or user will limit the amount of storage they are allocated. By default, users and groups do not have a quota.

Please see Knowledge Base Section for a Quota Configuration example.

User Quota Settings: User quotas are displayed here. Quotas can

be edited by clicking on the **Notepad** icon.

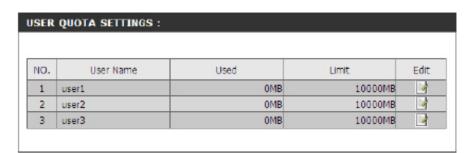
**Group Quota** Group quotas are displayed here. Quotas can **Settings:** be edited by clicking on the **Notepad** icon.

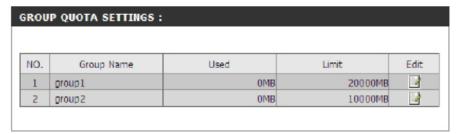
Quota Status: Displays the current status of the quota

feature. The quota function can be started or stopped here.

**OUOTA SETTINGS:** 

This section allows you to assign a quota to a group or user to limit the amount of storage they are allocated. By default, users and groups do not have a quota.







# **Network Access**

The Network Access settings allow you to assign permissions for users and groups to specific folders or volumes. By default, all volumes are open to anyone on the local network with read/write access. Before specific user or group rules can be created, the default rules must be deleted.

#### NETWORK ACCESS SETTINGS:

This section allows you to assign the access rights for your users and groups to a specific folders or volumes. By default, all volumes are open to anyone on the local network with read/write access. Before specific user or group rules can be created, the default rules must be deleted.

NFS Server Settings: Choose whether or not to enable or disable NFS

(Network File System).

Network Access Assign permissions for users and groups on the

**Settings:** local network here.

Category: Determines whether the access rule will apply to a

group or individual user.

User / Group: Select the user or group the access rule will apply

to.

Folder: Browse to and select the folder or directory you are

controlling access to.

Permission: Set the user or group permission to Read Only or

Read/Write.

**Oplocks:** 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

NES SETTINGS: Apply **NETWORK ACCESS SETTINGS:**  SMB ○ NFS Type O User O Group Category User Please select a user 💌 All accounts Folder Browse Permission Read only Oplocks No M Map archive No w Comment Save Settings SMB LIST:

☑:Read/Write □: Read only □: Modify Settings □: Delete

User/Group Comment Oplocks

ALL

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.

Path

Volume 1

Share

Volume 1

Oplocks are designed to increase network performance when it comes to network file sharing, however when using file-based database applications it is recommended to set the share oplocks to **No** (off). By default Vista® has Oplocks enabled and can not be disabled. If you are having network performance issues with applications sharing files from the DNS-343 you may try to improve performance by setting Oplocks to **No** (off).

Map Archive: When enabled, the file attribute "Archive" will be copied as the file is being stored on the DNS-343. Certain backup

software attach this attribute to files that are being stored as backups.

**Comment:** Enter a comment for reference or description of the rule.

SMB List: Lists all defined access rules.

## **FTP Server**

Category

The DNS-343 is equipped with a built in FTP Server. The server is easy to configure and allows users access to important data whether they are on the local network or at a remote location. The FTP server can be configured to allow user access to specific directories, and will allow up to 10 users to access the DNS-343 at a time.

Category: Determines whether the FTP server rule will

apply to an individual user or a group.

User / Group: Select the user or group the FTP server rule will

apply to.

Folder: Browse to and select the folder or directory you

are granting FTP access to. Selecting the root

check box grants access to all volumes.

**Permission:** Use the drop-down menu to set the user or group

permission to Read Only or Read/Write.

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.

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

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.

#### Please Note:

To be able to use this function, the FTP port must be set. The default option is port 21.

This section contains the configuration settings for the build in FTP server. The server is easy to configure and allows up to 10 users to access the server locally or remotely at the same time.

FTP ACCOUNT SETTINGS:

● User Group



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Modify Setting: Click the Notepad icon next to the Access List

you want to modify.

**Delete:** Click the **Trashcan** icon next to the Access List

you want to delete.

Status: Displays if the FTP server service has started

or not.

Port: Displays the FTP port.

Max User: Displays the maximum number of users.

Flow Control: Displays the flow control status.

Idle Time: Displays the idle time before disconnecting the

user.

**Client Language:** Displays the client language set for the FTP server.

Start / Stop FTP Click to Start or Stop the FTP server.
Server:

In order to use FXP (File Exchange Protocol) for server-to-server data transfer, please make sure to change the port from 21 to some other port as listed in the Port section of the web UI. Also, please make sure to open the corresponding port on your router and forward that port from your router to the DNS-343.



### FTP Server behind a Router

If you are behind a router, you will need to forward the FTP port from the router to the DNS-343. Additional filtering and firewall settings may need to be modified on your router to allow FTP Access to the DNS-343 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.

If you are using a D-Link router, such as the WBR-2310 used in the example below, your port forwarding rule should be similar to the following:

Name: Type a name for the DNS-343 FTP server

rule.

**IP Address:** Enter the IP address of the DNS-343.

Public Port: Enter the public FTP port. By default, the port

is 21.

**Private Port:** Enter the private FTP port. By default, the port

is 21.

**Traffic Type:** Set the traffic type to TCP.



If you use an FTP port other than 21, then users accessing the FTP server using an FTP client will have to specify the non-standard port, and users who are using a browser will have to specify the port in the URL (e.g. ftp://ftp.dns343.com:3000, where the FTP port is 3000).

### FTP over TLS

Below we'll examine FTP over TLS. FireFTP is an open-source, cross platform FTP client for Mozilla Firefox users who want to use FTP or FTPS.

- **Step 1:** From the **Tools** menu click **FireFTP** to open the application in Mozilla Firefox.
- Step 2: Go to the Quick Connect drop down menu and choose Create an Account.





#### **Step 3: Account Name:**

Enter a name for this FTP connection here.

#### Host:

Enter the IP of the DNS-343 in here.

#### Login:

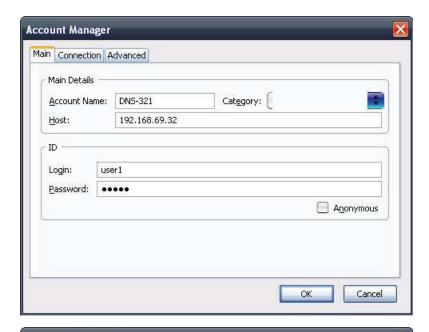
Enter the user's username in here.

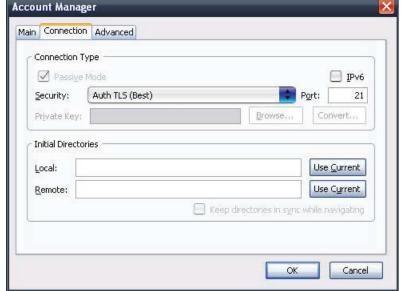
#### Password:

Enter the user's password in here.



Then click **OK** to finish the setup.





**Step 5:** Firefox and FireFTP will now start a series of security confirmations.

The first warning should look like this.

Click the **Or you can add an exception...** button to accept the security change.

The second warning should look like this.

- **Step 6:** Click the **Add exception...** button to accept the security change.
- **Step 7:** The next step is to get the certificate for the connection. Click the **Get Certificate** button to acquire the certificate.







- Step 8: After the certificate has been acquired click on the Confirm Security Exception button to finish the security confirmations.
- Step 9: Select the newly added FTP connection and click on the **Connect** option if it has not already connected by itself.

If you can see your files on the right block from the DNS-321, the connection has been established successfully.





### **UPnP AV Server**

The DNS-343 features an 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 DNS-343 will be automatically detected by UPnP AV compatible media players on your local network.

When content is added or deleted from the available folders, click the **Refresh** button and the DNS-343 will scan for file updates. While the update scan is underway, the AV media will not be available for use by clients on the network.

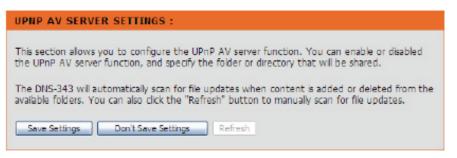
**UPnP AV Server:** Select **Enable** or **Disable** to enable or disable

the DNS-343 UPnP AV server.

Folder: Specifies the folder or directory that will be

shared by the UPnP AV server. Select root to share all files on all volumes, or click **Browse** 

to select a specific folder.





### iTunes Server

The DNS-343 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 DNS-343 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.

iTunes Server: Select Enable or Disable to enable or disable

the DNS-343 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

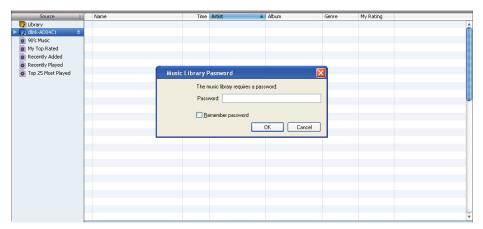
specific folder.

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

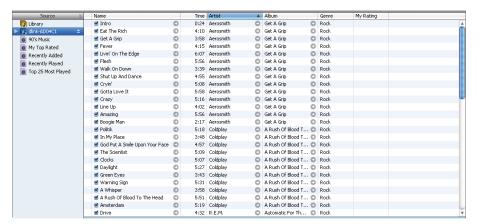
ITUNES SERVER SETTINGS :
This section allows you to configure the iTunes server function. You can enable or disable the iTunes server function, set the password for the service, and specify the folder or directory that will be shared.
The DNS-343 will automatically scan for file updates when content is added or deleted from the available folders. You can also click the "Refresh" button to manually scan for file updates.
Save Settings Don't Save Settings Refresh

ITUNES SERVER SETTINGS:		
iTunes Server		
Folder	✓ Root	
	dlink-9f31a6_SHARE	
Password		

After enabling the iTunes server on the DNS-343, launch iTunes. When iTunes detects the DNS-343, select it and you will be prompted to enter the iTunes server password if required.



Select the **DNS-343**. When prompted, enter the iTunes server password and click **OK**.



Media stored on the DNS-343 will then be available for use in iTunes.

### **DHCP Server**

The DNS-343 can be used as a DHCP Server. As a DHCP server, it can be used to serve IP addresses to devices on your local network, but this feature should not be enabled if you already have a DHCP server, such as a router on your local network.



DHCP Server: Enables or Disables the DNS-343 DHCP

Server.

Starting IP Address: Enter the starting IP address for the range of

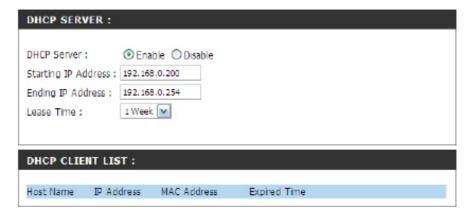
addresses assigned by the DHCP server.

Ending IP Address: Enter the ending IP address for the range of

addresses assigned by the DHCP server.

Lease Time: Sets the duration of time that an IP address will

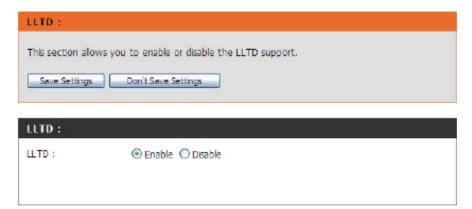
remain assigned to a device.



### **LLTD**

The DNS-343 supports LLTD. LLTD stands for Link Layer Topology Discovery and is used to discover network devices by the Network Map application that is included in Windows Vista®.

Click the **Enable** or **Disable** radio button to enable or disable the DNS-343 LLTD service.



# Remote Backup

The Remote Backup window allows you to backup the files stored on the DNS-343 to one or more remote NAS devices in order to prevent data loss in the event of a failure.

The Remote Backup feature has the following benefits:

- 1. Uses a Secure Shell (SSH) connection that dynamically creates secure key pairs to encrypt the data, ensuring that your data is reliably backed up or restored securely.
- 2. Supports 10 concurrent downloads to multiple destination devices, providing efficient and comprehensive backups.
- 3. If configuring the DNS-343 to be a Destination device, the Remote Backup feature allows you to browse to the shared backup folders setup on a Source device.
- 4. The shared backup folder located on the Source device is encrypted before being sent to the Destination devices.

Remote Backup Click the Source radio button to specify that **Settings:** you want to backup the files stored on the DNS-343 to a remote NAS device.

> Click the **Destination** radio button to specify that the DNS-343 should be used as a destination device for a remote NAS device to back its files onto.

> Please consult your router's manual for information on port forwarding or virtual server settings.

### REMOTE BACKUP SETTINGS This section allows you to backup files on the DNS-343 to one or more remote NAS devices in order to prevent data loss in the event of a failure. You can securely backup or recover your data over an encrypted SSH connection.

REMOTE BACK	UP SETTINGS :			
Туре	Source	on		
Password				
				Apply
SOURCE SHAR	Е РАТН ·			
SOURCE SHAR				
Dest, Backup Fold	er Name			
Backup from				Browse
				Apply
				Apply
SOURCE STATUS:				
Status	Stopped			
	Start Remote Server			
SOURCE SHAR	E LIST :			
S S S S S S S S S S S S S S S S S S S			D	
Backup from		Dest. Folder Name		Settings 🕅 : Delete
Duckup II'diii		Described Hame		



### **Please Note:**

To be able to use this function, port numbers 22, 873, and 62057 need to be forwarded to this unit from your local router's setup.

### **Remote Backup - Source**

If configuring the DNS-343 to be a Source device, configure the parameters as described below:

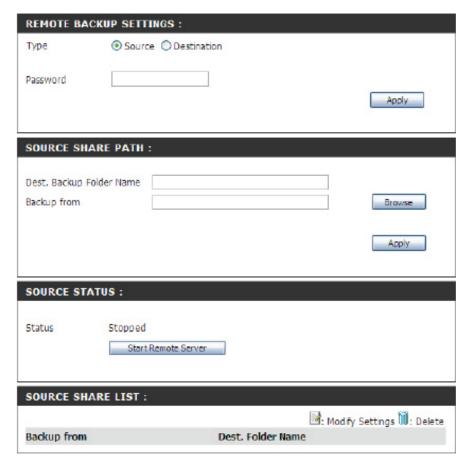
Remote Backup Type a password that will be used by the **Settings:** destination NAS device to authenticate with the

DNS-343 before copying the files.

**Destination Backup** Type a name for the folder that you want to back Folder Name: the data up to on the remote device.

Backup from: Click the Browse button to specify the folders that you want to backup on the DNS-343. Click the Apply button to add the folder to the Source Share List.

Source Share List: Displays the list of folders that will be backed up onto the destination NAS device. To modify the source folder, click the Notepad icon next to the folder you want to modify and change the required settings. To delete a source folder, click the Trashcan icon next to the folder you want to delete.



### **Remote Backup - Destination**

If configuring the DNS-343 to be a Destination device, configure the parameters as described below:

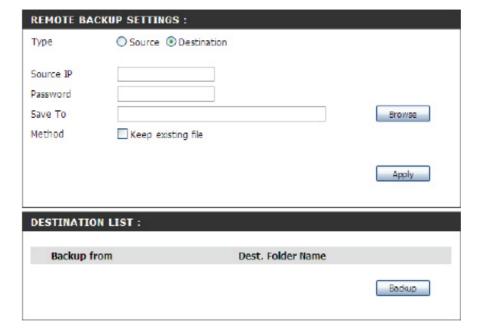
**Source IP:** Type the IP address of the NAS device that is storing the files you want to backup.

**Password:** Type the password that has been setup on the source device for the Remote Backup feature.

Save to: Click the **Browse** button and select the folder where you want to back the data up to. Click the **Apply** button to add the folder to the Destination List.

**Method:** Select the **Keep existing file** check box to stop any existing files stored on the destination folder from being deleted.

**Destination List:** Select the check boxes next to the folders that you want to back the data up to.



### Add-ons

In this section you will be able to install application and language packs to further enhance the functionality of your DNS-343. This powerful new feature on the DNS-343 allows users to customize the interface and usability of this unit. Adding features to the unit now only requires an Add-on installation as soon as new features are available.

Application Pack: Click on Browse to search for the specific application pack you want to install. After selecting the application pack, then click **Apply** to install the application pack.

Language Pack: Click on Browse to search for the specific language pack you want to install. After selecting the language pack, then click Apply to install the language pack.

### **Add-Ons Summary:**

In this section you can see a summary of the application/language pack(s) you have installed. Under the Status column, you can see if a specific pack is currently enabled or disabled. Under the Start/Stop column, click the **Start** icon to enable the specified pack.

Click on the **Stop** icon to disable the specified pack. Under the *Remove* column, click the **Trashcan** icon to uninstall the specified pack

The two Add-ons listed here are BitTorrent Client Application and ADS.

### ADD-ONS:

This section allows you to install application packages onto your system. In addition, you can also install language packages to suit your local language needs.







### Please Note:

Keep a keen lookout on D-Link's local website for new Add-on releases.

# **Language Pack**

After loading a language pack you must activate it on the Add-Ons page. After activating a language pack the interface of the DNS-343 will change to the language loaded. Below is an example of a running Chinese language pack.





### Please Note:

Please contact the local vendor (D-Link) to find out if there is a language pack available for your local language.

### **Maintenance**

Admin Password: This section allows you to set a password for your

admin account.

**System:** The System Settings section allows you to restart the

system, shutdown the system, or restore the device

to the factory default setting.

Firmware Upgrade: A new firmware upgrade may be available for your

DNS-343. It is recommended to keep your DNS-343 firmware up-to-date to maintain and improve the functionality and performance of your storage

device.

E-mail Alerts:

This section allows you to configure e-mails to alert

you to certain operational conditions and drive status

conditions.

**Power Management:** 

This section allows you to enable or disable the Hard Drive Hibernation and Power Recovery function.

Dynamic DNS: The Dynamic DNS feature allows you to host a server (Web, FTP, Game Server, etc...) using a domain name that

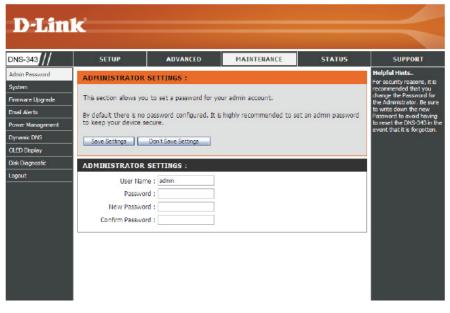
you have purchased (www.whateveryournameis.com) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. Using a DDNS service provider, your friends

can enter your host name to connect to your NAS no matter what your IP address is.

**OLED Display:** This section allows you to configure the OLED display screen to turn to standby mode after a specified idle time.

Disk Diagnostics: This section allows you to perform a health test on your hard drives. In addition, you can set a schedule for your

tests and receive e-mail notifications.



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## **Admin Password**

The Admin menu allows you to set a password for the admin account. It is recommended to set an admin account password when first configuring the DNS-343.

ADMINISTRATOR SETTINGS:

This section allows you to set a password for your admin account.

By default there is no password configured. It is highly recommended to set an admin password to keep your device secure.

Save Settings

Don't Save Settings

User Name: The administrator user name is 'admin', and this

cannot be changed.

Password: Enter the current password. Leave this blank if you

have not set a password yet.

New Password: Enter a new password.

**Confirm Password:** Enter the new password again for confirmation.

Click **Save Settings** to save the new password.



# **System**

SYSTEM SETTINGS:

settings, including any rules that you have created.

The DNS-343 System menu provides options for system restarts, saving and loading configuration settings, and setting idle times.

**Restart:** Click **Restart** to reboot the DNS-343.

Restore Defaults: Click Restore to reset the DNS-343 to its factory

default settings. This will erase all previous

configuration changes.

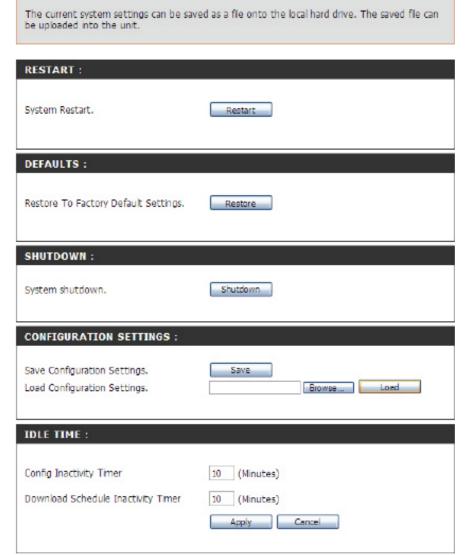
**Shutdown:** Click **Shutdown** to turn off the DNS-343.

**Configuration** Click **Save** to save the current DNS-343 configuration **Settings:** settings to a file on the local 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 will be allowed to remain idle while accessing the DNS-343 configuration settings, or that users will be allowed to remain idle while accessing the download schedule settings.

Click **Apply** to save the settings.



The System Settings section allows you to restart the system, shutdown the system, or restore the device to the factory default setting. Restoring the unit to factory settings will erase all

# Firmware Upgrade

The DNS-343 Firmware Upgrade menu makes it simple to check for new firmware releases and upload them to the device.

### FIRMWARE UPGRADE:

A new firmware upgrade may be available for your DNS-343. It is recommended to keep your DNS-343 frmware up-to-date to maintain and improve the functionalty and performance of your storage device.

Click D-Link Support Page to check for the latest available firmware.

To upgrade the firmware on your DNS-343, please download and save the latest firmware version from the D-Link Support Page to your local hard drive. Locate the file on your local hard drive by clicking the Browse button. Once you have found and opened the file using the browse button, click the Apply button to start the firmware upgrade.

Firmware Upgrade: This section provides a link to check for new firmware on the D-Link support website.

> If a new firmware is available, download the file to your local computer.

**Current Firmware** This section provides information about the current Info: DNS-343 firmware.

> When upgrading the firmware, click Browse to select the new firmware file on your local computer.

> Click **Apply** to begin the firmware upgrade process.

**Current OLED** This section provides information about the current Firmware Info: DNS-343 OLED firmware.

> See the OLED Firmware Upgrade page for details on how to upgrade the OLED Firmware.



# **OLED Firmware Upgrade**

The latest firmware for the DNS-343 has a function that verifies if the OLED Firmware is up to date or not. When the OLED Firmware is out dated, after the firmware update, the user will be prompted to update the OLED firmware automatically.

**Start:** Go to the **MAINTENANCE** > **FIRMWARE UPGRADE** page to verify the current firmware version.

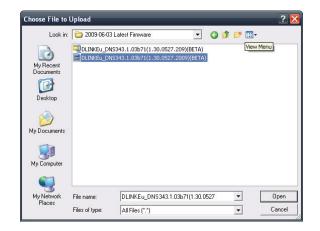
**Step 1:** To upgrade the firmware, click on the **Browse** button and select the latest firmware available for the upgrade.

Notice that you can go to your local D-Link web site to find out what the latest available firmware is for the DNS-343. In this example, we upgraded to the firmware version 1.03.

Once you've selected your firmware file, click on the **Apply** button to begin the firmware update process.





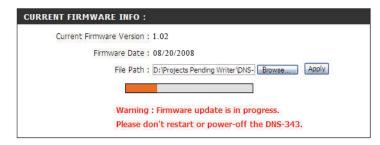


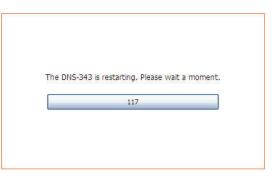
**Step 2:** After the firmware update has been completed, you'll be prompted to click the **Restart** button.

After clicking the **Restart** button, wait 120 seconds for the device to restart.

**Step 3:** After the restart, you can connect to the web configuration again. The latest firmware evaluates the current OLED firmware and will prompt you to upgrade it if it's out dated.

If prompted to upgrade, click the **Start** button to begin the OLED firmware upgrade.







**Step 4:** The update will automatically go through the steps of erasing and programming the OLED firmware of your device.

Step 5: After the update has been completed, you'll be prompted to remove the power cord from the DNS-343, wait for 5 seconds and then insert the power cord back into the DNS-343 again.

After this, updating the firmware and the OLED firmware will be complete.





▲ To complete the OLED firmware upgrade process, please disconnect the power cord from the NAS.

After unplug the power, please wait for 5 seconds before replugging the power back the the NAS. You can then turn on the system.

### **E-Mail Alerts**

With the DNS-343 E-Mail Alerts, you can configure e-mails to be sent alerting you to certain operational conditions and drive status conditions. These alerts can prove helpful with the management and safeguarding of important data.

The Alert Settings section contains the configuration settings for your e-mail account and alert preferences. Once configured, use the **Test E-Mail** button to send a test e-mail and confirm your settings are correct. The Alert Types section contains the alert options and their configuration settings.

**Login Method:** Select either **Account** or **Anonymous**. Anonymous

does not require a User Name or Password.

User Name: Enter the appropriate user name for your e-mail

account.

Password: Enter the appropriate password for your e-mail

account.

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@dns343.

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

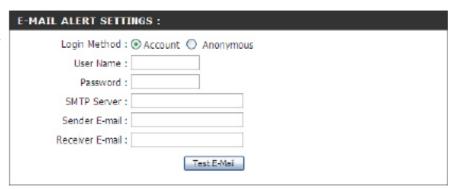
received.

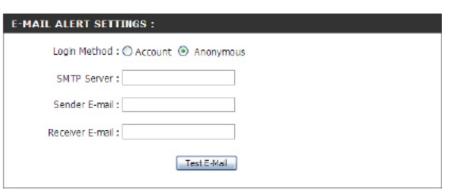
Receiver E-Mail: Enter the e-mail address you want to send the alerts to. This address must correspond with the SMTP server

configured above.

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







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Space Status: Select an interval in hours and minutes to have a ALERT TYPES : status of space remaining on the drives e-mailed. ☐ Space Status Interval: □ M(Hours) □ M(Minutes) One Of The Volumes Is Full A Volume Is Full: An alert will be sent when the hard drive is full. One Of The Hard Drives Has Failed ■ The Administrator Password Has Been Changed A Hard Drive Has An alert will be sent if a critical error occurs on one Firmware Has Been Upgraded Failed: of the drives. Send log file Send S.M.A.R.T. Test Result Administrator An alert will be sent if the admin password System Temperature Has Exceeded Fahrenheit ■ 140 °F Password Change: changes. Enabling this feature will cause the DNS-343 to shut down after the selected temperature is exceeded and an e-mail is sent. **Firmware Upgraded:** An alert will be sent if the firmware is upgraded. **Send Log File:** A log file will be sent daily, weekly or monthly.

System Temperature An alert will be sent if the DNS-343 device temperature exceeds the set threshold. After the alert has been sent, the

**Exceeded:** DNS-343 will power off for safety.

S.M.A.R.T. Test S.M.A.R.T. information and result will be sent.

RAID Degraded An alert will be sent if a degraded RAID status is detected.

Status:

Result:

**RAID Rebuilding** An alert will be sent if the RAID rebuilding process is complete.

Status:

# **Power Management**

The DNS-343 Power Management feature allows you to configure the drives to shut down while power remains constant to the device. The drives will power up again when data is accessed.

HDD Hibernation: Use the radio buttons to Enable or Disable the

Hard Drive Hibernation feature.

Turn off Hard Drives: Use the drop-down menu to set the amount of time

before idle drives will be shut down.

Power Recovery Click the Enable radio button to automatically

Settings: restart the DNS-343 after an unexpected shutdown

or after a power failure.





# **Dynamic DNS**

The Dynamic DNS feature allows you 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 in your domain name to connect to your server no matter what your IP address is.

**DDNS:** Select **Enable** or **Disable**.

Server Address: Enter the DDNS server address or select from the

dropdown menu.

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 Password or Key: Re-enter your password or key.

**Status:** Displays your DDNS status.

# The Dynamic DNS feature allows you 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 host name to connect to your NAS no matter what your IP address is. Sign up for D-Link's Free DDNS service at www.DLinkDDNS.com. Save Settings Don't Save Settings

DDNS SETTINGS:		
Dynamic DNS	○ Enable	
Server Address:		<< Select Dynamic DNS Server
Host Name :		(e.g.: me.mydomain.net)
Username or Key :		
Password or Key:		
Verify Password or Key :		
Status:		

# **OLED Display**

The OLED Display settings allows the administrator to change the time it takes for the OLED screen on the front of the DNS-343 to power off. Click on the drop-down box below to change the time it takes for the OLED screen to power off. Click the **Save Settings** button to apply the settings.

OLED DISPLA	AY SETTINGS :
This section allo specified idle tin	ws you to configure the OLED display screen to turn to standby mode after a ne.
Save Settings	Don't Save Settings
OLED DISPL	AY SETTINGS :
Sleep:	After 30 secs ₩

# **Disk Diagnostics**

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.

### DISK DIAGNOSTIC SETTINGS

S.M.A.R.T TEST:

This section allows you to perform a health test on your hard drives. In addition, you can set a schedule for your tests and receive email notifications.

Quick Test: Runs a quick S.M.A.R.T test. The 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

email alert.

**Extended Test:** Runs an extended S.M.A.R.T test. This test requires

a lot more time to complete. However, it is a more thorough and complete test when compared to the

Quick Test.

Send Result By Enable this function in order to have the results of

**Email:** the S.M.A.R.T test sent to you by e-mail.

Create Schedule: Click on this button in order to create a scheduled

S.M.A.R.T test. You will be able to schedule a test

on a daily, weekly, and monthly basis.

Slot Manu. Model Progress Result 1 WDC WD2500AAKS-00L9 Pass [ 2009/07/15 09:15:48 2 WDC WD5000AAKS-22YG 3 Hitachi HD5728080PLA380 HDS728080PLA380 4 Hitachi Test type: 
 Quick test Extended test Send result by E-mail Create Schedule



Scan Disk: Scan Disk will scan your system's file system for errors and/or corruption. After completion, any errors on your file system will be displayed accordingly.

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. Then select whether to run a Quick or Extended S.M.A.R.T test. Then click the Start button to run the test.

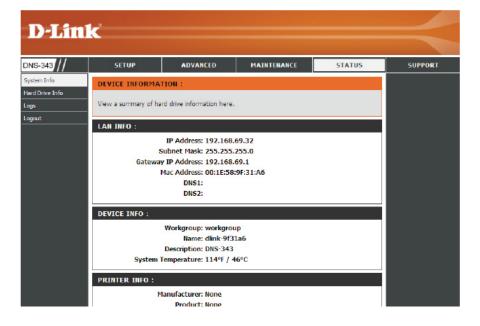
# **Status**

**System Info:** View a summary of system information here.

Hard Drive Info: View a summary of hard drive information here.

Logs: Use this option to view the NAS system logs and

the FTP logs.



### **Device Information**

View a summary of system information here.

**LAN Info:** Displays the local network settings of the DNS-343.

Device Info: Displays the workgroup, name, description and

current temperature of the DNS-343.

**Printer Info:** Displays information for a connected USB printer.

If your computer is having problems printing to the DNS-343, you can click the **Clear Print Queue(s)** button to remove any print jobs that are unable to

print.

Hard Drive Info: Displays the total number of hard drives installed

in the DNS-343.

Physical Disk Info: Displays the hard drive information, including the

disk mode, total size, used and remaining drive

space.

### DEVICE INFORMATION:

View a summary of hard drive information here.

### LAN INFO:

IP Address: 192.168.69.32 Subnet Mask: 255.255.255.0 Gateway IP Address: 192.168.69.1 Mac Address: 00:1E:58:9F:31:A6

DNS1: DNS2:

### **DEVICE INFO:**

Workgroup: workgroup Name: dlink-9f31a6 Description: DNS-343 System Temperature: 113°F / 45°C

### PRINTER INFO:

Manufacturer: None Product: None

Clear print queue(s)

### HARD DRIVE INFO:

Volume Name: Volume\_1
Volume Type: JBOD

Total Hard Drive Capacity: 894113 MB

Used Space: 88 MB

Unused Space: 894024 MB

# Connecting a UPS to the DNS-343

To add an Uninterruptible Power Supply (UPS), carry out the following steps:

- Turn off the DNS-343 if it is not already powered down.
- Connect the UPS to the USB port on the back of the DNS-343.
- Connect the power of the DNS-343 to the UPS.
- Turn on the UPS.
- Turn on the DNS-343.
- Verify the UPS is properly connected and powered on by going to the Device Information window.

**UPS Info:** The UPS Information screen displays information

about the UPS Manufacturer and the Product

name.

**Battery Charge:** Battery Charge indicates the battery power state

of the UPS (not all UPS' support this function).

state of LDC (not all LDC) arranged this function

**Status:** The Status field will display one of the three messages below:

- 1. OL: This indicates that the UPS is online.
- 2. OB: This indicates that the UPS is running on battery, meaning that there has been a power failure. The DNS-343 is consuming the battery power of the UPS and any data should be saved immediately to prevent any work being lost.

**UPS INFO:** 

Manufacturer: American Power Conversion

Battery Charge: 100 %

Status: On Line

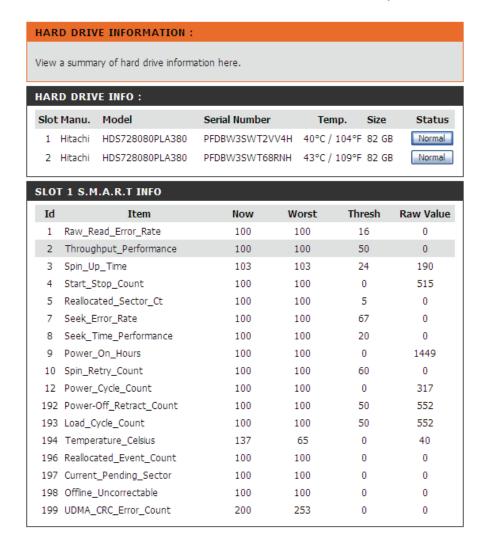
Product: Back-UPS CS 500 FW:806.q8.D USB FW:q8

3. LB: This indicates that the UPS has low battery power.

When a UPS (Uninterruptible Power Supply) USB management connection is connected to the DNS-343, the Status screen hides the printer information and displays information about the UPS connected. The screenshot on the right-hand side shows the Status screen when a UPS is attached to the DNS-343. The parameters shown above are displayed in the UPS Info section.

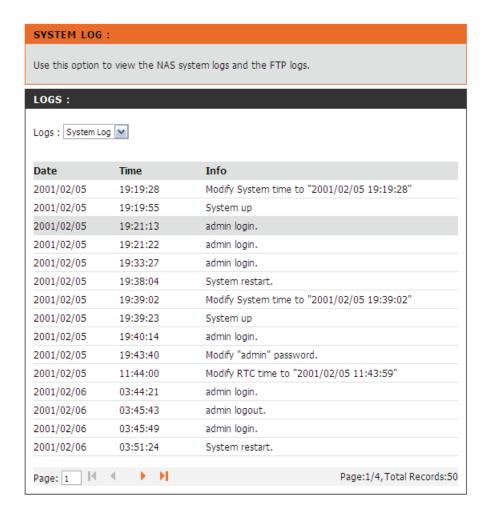
## **Hard Drive Information**

This section will display a summary of the hard drive(s) currently installed in the DNS-343. The summary will include information such as the hard drive manufacturer, model, serial number, temperature, total capacity size, and status. The **Status** of the hard drive will display the health of the hard drive. If your hard drive is healthy, the status will display *Normal*. If your hard drive is not healthy, the status will display *Abnormal*. At any time, if you wish to view the S.M.A.R.T table of the hard drive, you can click the **Normal/Abnormal** button.



# Log

Use the Log window to view a summary of the System and FTP Log Events on the DNS-343. Select **System Log** from the drop-down menu to view the System Log events. Choose FTP Log from the drop-down menu to view FTP Log events.



# **Support**

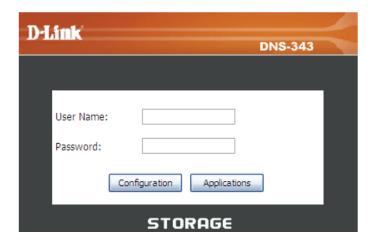
The DNS-343 Support page provides a menu of Support topics explaining the features of the device.



# **Applications**

When the Login screen appears, type 'admin' for the username and leave the password field blank.

Click Applications.



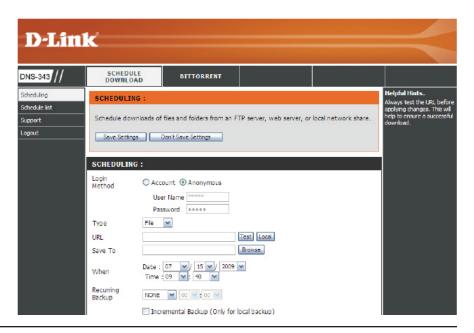
# **Scheduled Downloads**

**Scheduling Settings:** Configure download and backup schedules here.

Schedule List: The Schedule List will display all completed,

active, and pending scheduled downloads and

backups.



# **Scheduling Settings**

Schedule downloads of files and folders from an FTP server, web server, or local network share.

Login Method: Select the appropriate login method to access

the files for download. If the site requires login credentials, select **Account** and enter a valid

username and password.

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

to download or backup.

**URL:** Enter the URL of the site or server you are initiating

a transfer from.

E.g. ftp://123.456.789/Test

http://www.test.com/test.txt

Test: Click Test to test the URL is valid and the user name

and password are correct.

**Local:** Click **Local** to set the source file or folder from one

of the internal drive volumes. Browse to the file or folder, and click **OK** to accept the network path.

Save To: Enter a valid destination drive on the DNS-343, or

click **Browse** and browse to the destination.

When: Enter the date and time you want the scheduled

backup or download to occur.

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. Ticking Incremental Backup will have the DNS-343 compare

identical file names at the source and destination. Files will only be overwritten if the source file is more recent.

Schedule List: The Schedule List will display all completed, active, and pending scheduled downloads and backups.







# **Scheduling List**

Pending and completed download events will be listed here. The current status for each event is displayed here. In addition, there is an option to delete a download event at any time. Current download statistics, such as % completed and download speed, are displayed for each event. A refresh button is also provided to produce updated listings at any time.



- Download Success.
- Download Fail.
- Download has not yet occurred.
- Waiting.
- Link File.
- The file is downloading.



## **BitTorrent**

BitTorrent is a peer-to-peer file sharing protocol used for distributing large amounts of data.

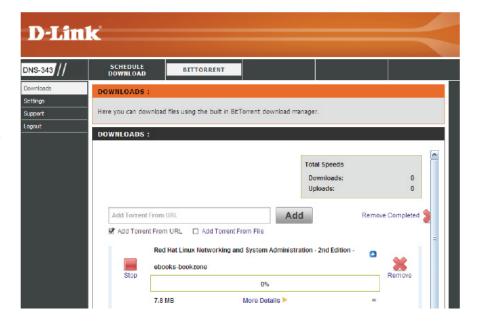
Downloads: Download files using the built-in BitTorrent

download manager.

Settings: Configure your BitTorrent download manager

settings.

**Support:** Locate support for this section.



### **Downloads**

Here you can download files using the built in BitTorrent download manager.

Total Speeds: Total download and upload speed will be displayed

here for torrents that are active.

Add Torrent: Add Torrent from URL: In the field provided you

can copy and paste a link to a torrent file hosted on the Internet. The BitTorrent download manager will add the torrent file to the download manager

for downloading.

Add Torrent from File: Here you can browse for a torrent file you have downloaded onto your PC. This allows you to load the torrent file from your

local PC.

Remove Completed: By clicking the Remove Completed option you can

remove all downloads that have transferred 100% of the data to your DNS-343. This allows you to see

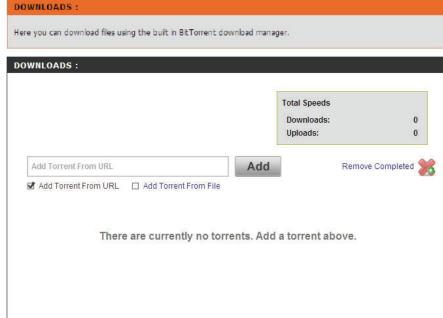
what downloads are still active.

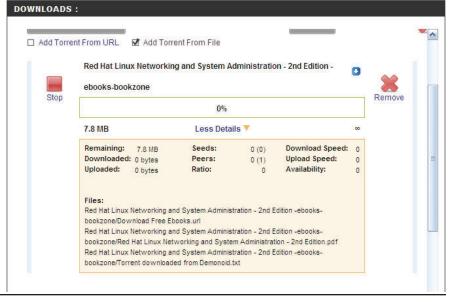
**Start:** After you have added a torrent file to your BitTorrent download manager, you can click the **Start** button

to begin downloading your files.

**Stop:** Once you have added a torrent file and clicked the **Start** button, the **Stop** button will now be available.

In the event that you need to pause the download on your DNS-343 you can click the **Stop** button and later resume the download again by clicking **Start**.





More Details: View download details like the number of peers and seeds you are connected to, and what download and upload speed the selected file is transferring at. Details on the remaining amount of data and how long until your download finishes are also displayed.

Remove: Once you have added a torrent file to the BitTorrent download manager, you will have the option to remove the download. This will delete any partial data downloaded as well as the associated torrent file.

# **Settings**

Here you can configure your BitTorrent download manager settings.

Port Settings: Here you can select the default port setting of 6881, or if your ISP blocks port 6881 you can select a custom port number and enter it in the provided field.

**Bandwidth** Select between **Automatic** or **Manual**. If you select Management: the Manual bandwidth control, you must specify the maximum download, upload, and maximum upload seeding speeds.

Seeding - Remove: While you are downloading the files associated with your torrent, there are other users also downloading this same data. Seeding allows other users to start a peer to peer connection to your torrent client and download parts of data that you have already received. This allows users to accelerate their download speeds by receiving data from multiple locations at once.

> There are three options to choose from in the BitTorrent download manager that can be selected. You can select to Seed until removed from your BitTorrent download manager, or you can Stop seeding when ratio reaches a certian percentage, or you can Stop seeding after a specific amount of time (minutes) has passed.

SETTINGS : Here you can configure your BitToment download manager settings.

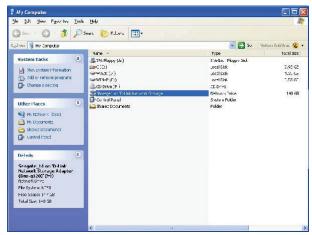
SETTINGS:	
Port Settings:	
<ul><li>Default (6881)</li></ul>	
O Custom	
Incoming connections port	
Bandwidth Management:	
<ul> <li>Automatic</li> </ul>	
O Manual	
Maximum download rate (kB/s):	default: -1 (unlimited)
Maximum upload rate (kB/s):	default: -1 (unlimited)
Max. upload rate when seeding (kB/s)	default: -1 (unlimited)
Seeding:	
<ul> <li>Seed until removed</li> </ul>	
<ul> <li>Stop seeding when ratio reaches</li> </ul>	96
O Stop seeding after	(Minutes)
	Save Cancel

# **Knowledge Base**Mapping a Drive

You can use the D-Link Easy Search Utility to map drives to your computer. Insert the DNS-343 CD into your CDROM drive.



 Click Easy Search Utility. The Easy Search Utility will load and detect any DNS-343 devices that are on the local network. If the DNS-343 you are working with does not show up in the device list, click Refresh.



3. Double-click the **My Computer** icon on your desktop, and then double-click the mapped drive to access the files and folders.



 Highlight an available DNS-343. Available volumes will be displayed under Drive Mapping. Highlight the volume you want to map, select an available drive letter from the drop-down menu and click **Connect**. Once connected, your mapped drive(s) will appear in My Computer.

## **Yahoo! Widget Configuration**

D-Link provides an added feature to the ShareCenter called a Yahoo! Widget.

#### What is a Yahoo Widget?

Yahoo! Widgets are free application platforms that can be used in Microsoft Windows® and Mac OS X. The engine uses a JavaScript runtime environment combined with an XML interpreter to run small applications referred to as widgets, and hence is part of a class of software applications called widget engines.

## Yahoo! Widget Installation

Step 1: Install the Yahoo! Widget downloaded. Once the Yahoo! Widget is installed, a D-Link icon will appear in your Widget Dock.



**Step 2:** Click the **Configuration** button to configure the Widget.

Enter the IP Address of your DNS-343 and click the **Save** button.

Now you are ready to use your new D-Link Yahoo! Widget!



### **Yahoo! Widget Display**

The D-Link Widget is mainly used for monitoring the activities taking place on your ShareCenter.

**System:** Information about your Computer, ShareCenter,

IP Address, Firmware Version and Current Operational Temperature are displayed in the

System window.

Hard Drive: Information about the storage space of your

ShareCenter is displayed In the Hard Drive

window.

Server: Information about the USB Device, UPnP

Server, ITunes and FTP Server configured on your ShareCenter is displayed in the

Server window.

Download: The user can view the download status of

files being downloaded using the BitTorrent Client Add-on. Please note that the BitTorrent Add-on must be installed on the device for

this window to display information.



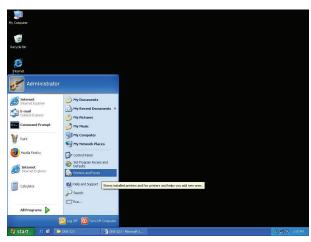






### **USB Print Server**

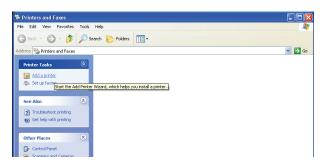
The DNS-343 features a built-in USB print server, giving users the ability to share a printer on their local network. Connect a USB printer to the USB port on the back of the DNS-343. It is important to ensure that the manufacturer's printer drivers are already installed on the computer you want to print from.



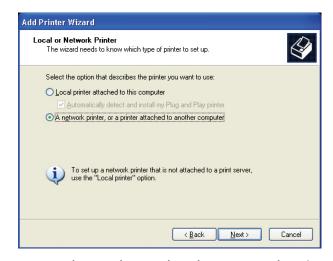
To add a printer:
 Click Start and select Printers and Faxes.



3. The Windows® Add Printer Wizard will launch: Click **Next** to continue.



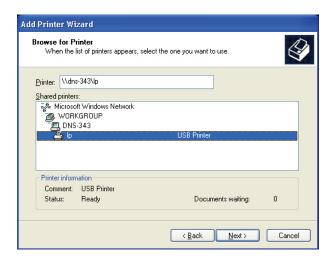
2. Click Add a printer.



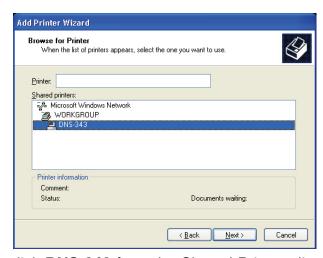
4. When prompted to select a local or network printer, click A network printer, or a printer attached to another computer. Click Next to continue.



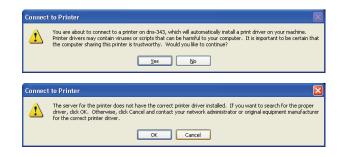
5. Select **Browse for a printer** and click **Next** to continue.



7. Select the available USB printer, and click **Next** to continue.



Double-click **DNS-343** from the Shared Printers list to expand the tree.



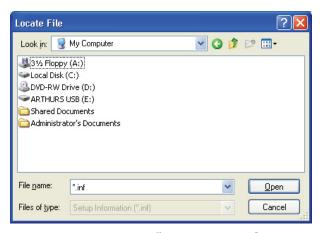
8. The following printer driver messages will appear: Click **Yes** to continue. Click **OK** to continue and select a printer driver.



 Select the appropriate printer driver from the list and click **OK** to complete the wizard. If the driver is not in the list, click the **Have Disk** button.



10. Insert the print driver CD or browse to the appropriate directory.



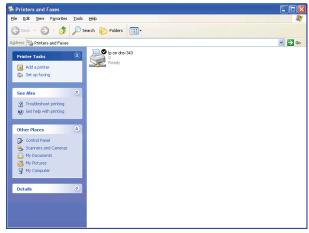
11. Select the appropriate driver file, and click **Open** to continue.



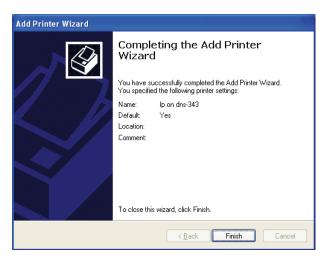
12. Click **OK** to continue.



13. Verify the driver is correct, and click **OK** to continue.



15. The printer should now appear as an available printer.



14. The wizard will install the printer drivers, and return a completion screen. Click **Finish**.

# **Storing non-English Character Files**

By default the DNS-343 will support Unicode, which is an industry standard allowing computers to consistently represent and manipulate text expressed in most of the world's writing formats.

## Replacing or Adding a New Hard Drive

It is recommended that you backup your important files before replacing or adding a new hard drive to the DNS-343.

#### Replacing a Hard Drive:

Please make sure the power is off before replacing a hard drive. After you install the new drive, turn on the DNS-343 and then connect to the Web UI. The DNS-343 will prompt you to format the new drive. Refer to page 12.

### **Adding a New Hard Drive:**

The DNS-343 is able to work with one, two, three or four hard drives. Please make sure the power is off before installing a new hard drive. After you install the new drive(s), turn on the DNS-343 and then connect to the Web UI. The DNS-343 will prompt you to format the new drive(s). Refer to page 12.



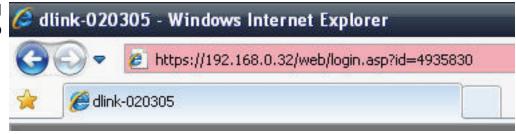
#### Please Note:

Formatting a hard drive will erase the data stored on the hard drive. Please backup important data before formatting a hard drive!

## **Secure HTTP Login**

Apart from logging into the web user interface using the normal http://192.168.69.32/, the user can also login to the web configuration using secure https.

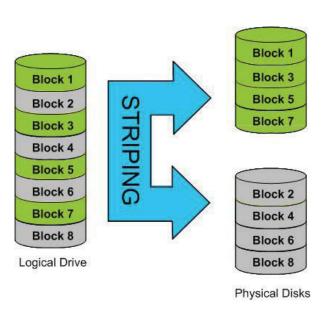
- 1) Open Internet Explorer and type https://192.168.0.32
- 2) Login to the DNS-343 as per normal.



### What is RAID?

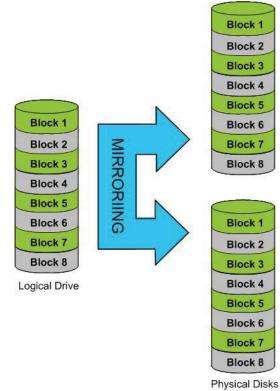
RAID, short for Redundant Array of Independent Disks, is a combination of two or more disks with the aim of providing fault tolerance and improving performance. There are several different levels of RAID, with each one providing a different method of sharing or distributing data among the drives.

RAID 0: RAID 0 provides data striping, which spreads out blocks of data over all 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.



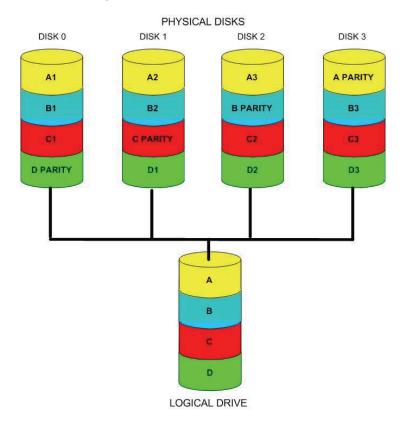
RAID 1: RAID 1 provides mirroring over multiple disks, with the same read/write speed of a single disk. A RAID 1 array can only be as large as it's smallest member disk.

> Because the data is stored on multiple disks, RAID 1 provides fault tolerance and protection, in addition to performance advantages.



RAID 5: RAID 5 provides data striping with distributed parity, which stores information that can be used to reconstruct data. A RAID 5 array will be the size of all the combined disks capacity less the capacity of one disk, e.g. If there are 4x 80GB disks in the array, the arrays capacity will be 240GB (3x80GB).

Implementing RAID 5 on the DNS-343 allows it to continue operating even if one of the disks fails. The diagram below indicates the operation of RAID 5:



# RAID 1 Recovery - Setting up RAID 1

**RAID CONFIGURATION:** 

Message from webpage

RAID 1 configuration creates an exact copy (or mirror) of a set of data on two or more disks.

Step 1: Go to ADVANCED > RAID and select Basic Configuration.

Also select **RAID 1** (Mirroring - Keeps Data Safe). Click the **Next** button.

Disk Vendor Serial Number Size 1 Seagate ST3500630AS 5QG1TEHT 500 GB 2 Seagate ST3500630AS 5QG1TENA 500 GB Basic Configuration : Select a RAID type: O Standard (Individual Disks) O JBOD (Linear - Combines All Disks) RAID 1 (Mirroring - Keeps Data Safe) RAID 5 (Striping with Rotating Parity) O Custom Configuration: Back Next

A message will pop-up. Click OK.

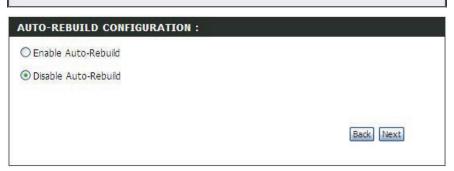
- Step 2: Auto-Rebuild is a feature that will allow the DNS-343 to initiate the Rebuilding phase automatically. The Rebuilding phase will occur when one or more hard drives fail and is replaced by a new one.
- Step 3: WARNING This feature will automatically format the newly added drive.

  If this feature is NOT required, click **Disable**. Click

If this feature is NOT required, click **Disable**. Click **Next** to continue.

Choose the desired file system and click **Next**.

RAID 1 configuration creates an exact copy (or mirror) of a set of data on two or more disks.



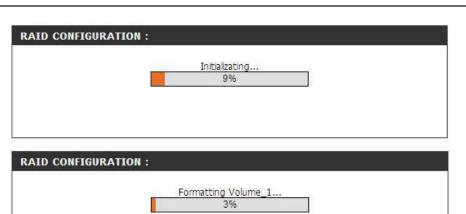
Create a Raid based on the minimum space of the existing drives, the remaining space will become JBOD(Linear) Volume.

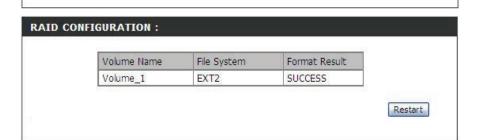
Cancel



**Step 4:** RAID configuration will initiate, and formatting of the hard drives will commence.

After the RAID 1 configuration, you'll be prompted to click the **Restart** button. RAID 1 configuration is complete.



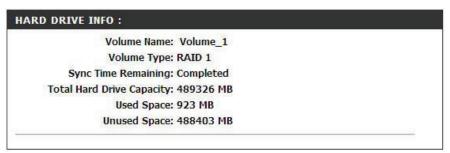


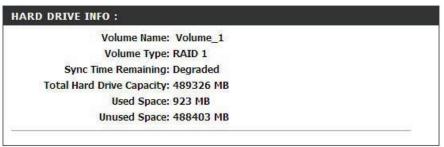
# RAID 1 Recovery - Auto Rebuilding

When a hard drive fails or becomes corrupted, RAID 1 provides the feature to enable the Auto Rebuild configuration. This configuration will take the information from one of the existing hard drives and rebuild the new hard drive with the same information to complete the RAID 1 configuration.

Information: To view the hard drive status you can got to STATUS > SYSTEM INFO and monitor the Sync Time Remaining field. If it displays *Completed*, the RAID 1 configuration is functioning normal.

**Degraded:** If it displays *Degraded*, then one of the hard drives have either failed or is starting to fail. This mean that the problematic hard drive needs to be replaced.

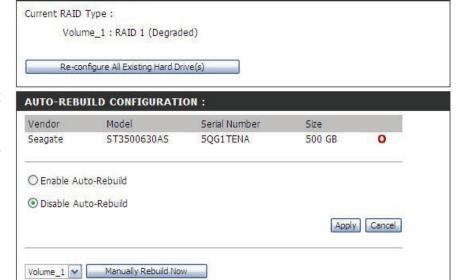




**RAID CONFIGURATION:** 

**Step 1:** After the new hard drive is inserted into the DNS-343. go to **ADVANCED > RAID.** You now have the option to start the Auto Rebuilding process, if Auto Rebuild was disabled from the beginning. If Auto Rebuild was enabled from the beginning, the DNS-343 will start this Rebuilding process automatically.

> You can now click the Manually Rebuild Now button to initiate the Auto Rebuilding process.

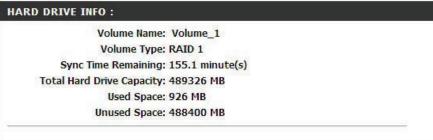


Step 2: After clicking the **Manually Rebuild Now** button, the Synchronizing will start and take some time to finish.



Monitoring: To monitor the progress of the Auto Rebuilding process, you can go to STATUS > SYSTEM INFO and monitor the Sync Time Remaining (progress of the Rebuilding process).

Alternatively you can also use your Yahoo! Widget to monitor the progress of the Rebuilding process.





# **Quotas - Configuration**

By default, all users and groups are displayed on the Quota Settings page. Users and groups are automatically listed on this page, and cannot be deleted. The default quota setting is *Unlimited*.

#### To add a quota for a user:

**Step 1:** Click the **Notepad** icon of the user you want to add a quota to.



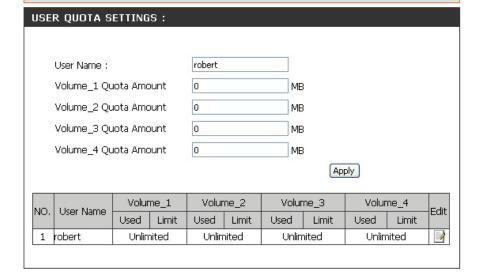
This section allows you to assign a quota to a group or user to limit the amount of storage they are allocated. By default, users and groups do not have a quota.

#### USER QUOTA SETTINGS: Volume\_1 Volume\_2 Volume\_3 Volume\_4 NO. User Name Edit Used | Limit Used Limit Used Limit Used Limit 1 robert Unlimited Unlimited Unlimited Unlimited

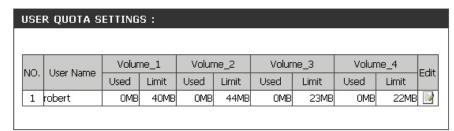
**Step 2:** Type the quota amount (MB) that the user will have for each volume and click **Apply**.

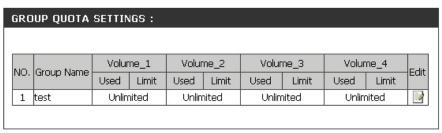
#### **OUOTA SETTINGS:**

This section allows you to assign a quota to a group or user to limit the amount of storage they are allocated. By default, users and groups do not have a quota.



The user and their amount of storage used, and their storage limit are displayed.





Step 3: Click Enabled to turn quota monitoring on.



Once enabled, the status will change to Started.

QUOTA STATUS :	
Status: Started	
Disabled	

### To add a quota for a group:

**Step 1:** Click the **Notepad** icon of the group you want to add a quota to.

#### QUOTA SETTINGS:

This section allows you to assign a quota to a group or user to limit the amount of storage they are allocated. By default, users and groups do not have a quota.

#### USER QUOTA SETTINGS:

NO.	User Name	Volume_1		Volume_2		Volume_3		Volume_4		Edit	
	NO.	. Oser Name	Used	Limit	Used	Limit	Used	Limit	Used	Limit	cuit
	1	robert	OMB	40MB	OMB	44MB	OMB	23MB	OMB	22MB	1

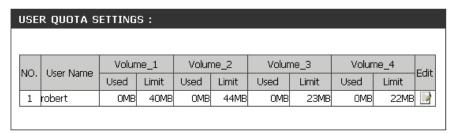
#### GROUP QUOTA SETTINGS:

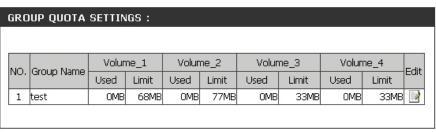
NO	NO	Croup Name	Volume_1		Volume_2		Volur	me_3	Volume_4		— Edit
NO.	агоир магне	Used	Limit	Used	Limit	Used	Limit	Used	Limit	TEUIL	
1	test	Unlin	nited	Unlimited		Unlimited		Unlimited		100	
		NO. Group Name	NO. Group Name Used	NO. Group Name Used Limit	NO. Group Name Used Limit Used	NO. Group Name Used Limit Used Limit	NO. Group Name Used Limit Used Limit Used	NO. Group Name Used Limit Used Limit Used Limit	NO. Group Name Used Limit Used Limit Used Limit Used	NO. Group Name Used Limit Used Limit Used Limit Used Limit Used Limit	

**Step 2:** Type the quota amount (MB) that the group will have for each volume and click **Apply**.

GRO	OUP QUOTA	SETTIN	IGS :								
	Group Name	:		test							
	Volume_1 Qu	ount	0			MB					
Volume_2 Quota Amount				0		ME	мв				
	Volume_3 Quota Amount				0 MB						
	Volume_4 Quota Amount					ME	MB				
	Apply										
				1.1-h	0	14-1	0		4		
NO.	Group Name	roun Name Volum	ne_1	volur	ne_2	Volur	ne_3	Volur	ne_4	Edit	
140.		Used	Limit	Used	Limit	Used	Limit	Used	Limit	Lone	
1	test	Unlin	nited	Unlin	nited	Unlin	nited	Unlin	nited	1	

The group, the amount of storage used and the storage limit are displayed.





Step 3: Click Enabled to turn quota monitoring on.



Once enabled, the status will change to Started.

QUOTA STATUS :
Status: Started
Disabled

# **Technical Specifications**

#### **Standards**

- IEEE 802.3
- IEEE 802.3u
- CIFS/SMB
- DHCP Server/Client
- NTP
- Jumbo Frame
- LLTD
- UPnP AV
- FTP

- IEEE 802.3ab
- TCP/IP
- NFS
- DDNS
- HTTP/HTTPS
- USB 2.0
- Rsync
- PnP-X
- FTP over explicit SSL/TLS, FXP

#### **Supported Hard Drive Type**

- SATA I/II Any Capacity; Supports hard drive capacity of up to 2TB
- 3.5" Internal

#### **Ports**

- 1 10/100/1000 Gigabit Ethernet Port
- 1 USB Port
- Power

#### **Display**

• 256 x 64 OLED Display Screen

### **Disk Management**

- Multiple Hard Drive Configurations: RAID 0, RAID 1, RAID 5, JBoD, Standard
- Hard Drive Format: EXT2/EXT3
- Scandisk
- S.M.A.R.T.
- RAID Roaming

#### **Account Management**

- Windows Active Directory service support
- User account management
- Group account management
- User/Group Quota management
- Network Access management

#### **Device Management**

- Internet Explorer v6 and later or Firefox
- E-Mail Alerts
- Syslog
- Easy Search Utility
- Yahoo! Widget

#### **Power Management**

- Power Saving mode
- UPS Monitoring
- Auto Power Recovery
- Smart Fan control

#### File Sharing

- Max. User Accounts: 64 users (Samba) / 4000 (ADS)
- Max. Groups: 10 groups (Samba) / 1700(ADS)
- Max. Shared Folders: 45 (without/BT) / 10(with/BT)
- Max. Concurrent Connections: 64 (Samba) / 10 (FTP)

#### **Power Supply**

- External Power Supply
- DC 19V/7.89A Switching

### **Power Consumption**

Normal mode: 45.71W\*Sleep mode: 17.81W\*

### **Temperature**

Operating: 0° - 40° C (32° - 104° F)
Storage: -20° - 50° C ( -4° - 122° F)

### **Operating Humidity**

• 5% ~ 90% (Non-condensing)

#### **Dimensions**

• Item (W x D x H): 128 x 200 x 178 mm (5" x 7.9" x 7")

• Packaging (W x D x H): 270 x 320 x 260 mm (10.6" x 12.6" x 10.2")

### Weight

• Item: 2.7kg (6.0 lbs)

• Packaging: 4.5kg (10.0 lbs)

### **Multilingual Support**

• Samba: Unicode

• FTP Client: Unicode, Croatian, Cyrillic (Kyrgyz Republic), Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Romanian, Russian, Simplified Chinese, Slovenian, Spanish, Swedish, Traditional Chinese, Turkish