

# USER MANUAL

DNS-323

VERSION 1.5



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# Product Overview

## Package Contents

- D-Link DNS-323 ShareCenter™ 2-Bay Network Storage
- CD-ROM with Manual and Software
- Quick Installation Guide
- Power Adapter (12V 3A, 5V 3A)
- Power Cable Clip
- CAT5 Ethernet Cable

**Note:** Using a power supply with a different voltage than the one included with the DNS-323 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 Vista®, or XP (with Service Pack 2)



# Introduction

The D-Link DNS-323 ShareCenter™ 2-Bay Network Storage shares your documents, photos, music, and videos across the network and on the Internet (via FTP server) so family members, friends, or employees can access them. This enclosure, which can hold two 3.5" SATA hard drives of any capacity<sup>1</sup>, creates a central network point for backing up valuable files. The built-in RAID 1<sup>2</sup> mirroring technology protects these files from drive failure. Other options such as Standard, JBOD, and RAID 0 are also available.

The DNS-323 shares files over the Internet via the built-in FTP server. 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-323 can be used to stream photos, music, and videos to UPnP AV compatible network media players<sup>3</sup>.

The included CD contains D-Link's Easy Search Utility. This utility allows you to locate the DNS-323 on the network and map drives to your computer. Backup software is also included on the CD. This software allows you to back up your files from a computer to the DNS-323 manually, by a schedule, as well as to recover your computer.

Combining ease of use with practical and high performance features, the DNS-323 is an organized solution for any network. Free up drive space on computers and centralize data on your network with the DNS-323 ShareCenter™!

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

<sup>2</sup> RAID 1 mirroring requires the use of 2 internal SATA drives.

<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-323 is designed for easy installation and allows remote access to important data via your local network or the Internet.

- Two 3.5" SATA Hard Drive Bays
- Tool-less Hard Drive Installation
- Multiple Hard Drive Configurations Including: RAID 0, RAID 1<sup>1</sup>, Standard, and JBOD
- High Performance with Gigabit Ethernet Connectivity<sup>2</sup>
- SharePort™ Technology for Sharing a USB Printer or Storage over your Network
- USB Port Supports SharePort™ Technology and UPS Monitoring
- Built-in Secure FTP Server for File Access Over the Internet
- UPnP® AV Server to Stream Music, Photos, and Video to Compatible Media Players<sup>3</sup> Including: PlayStation® 3 and Xbox® 360
- iTunes Server<sup>4</sup>
- Peer-to-Peer Download Engine Powered by BitTorrent™
- Users and Groups can be Assigned to Folders with Read or Read/Write Access
- Establish Storage Quotas For Users and Groups
- Full or Incremental Backups
- Recover Your Computer using the Bundled Backup Software
- Automatic E-Mail Notifications of Device Status
- Configure Language Setting for use with Web Interface
- Jumbo Frame Support of up to 9000 Bytes
- Yahoo! Widget Support
- NFS Server Support

<sup>1</sup> RAID 1 mirroring requires the use of 2 internal SATA drives.

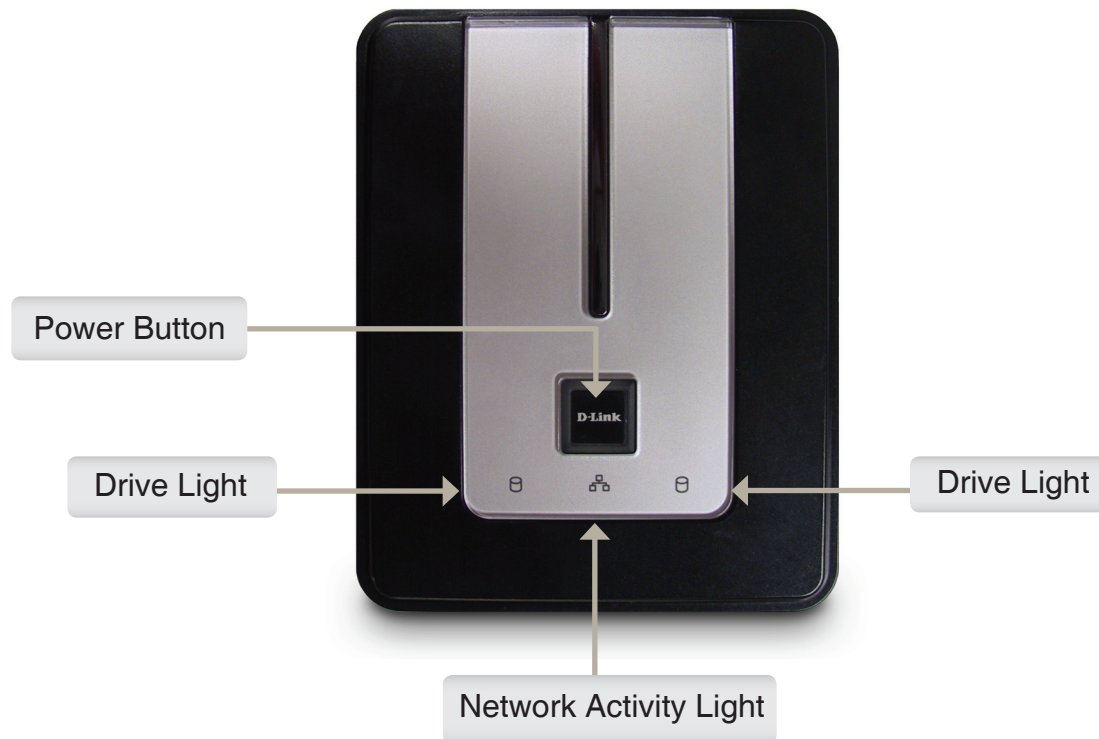
<sup>2</sup> Speed results will vary depending on the benchmark utility, hard drive configuration, and the network environment used for testing.

<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.

<sup>4</sup> D-Link makes no warranty as to the availability, reliability, functionality, and operation of the iTunes Server feature.

# Hardware Overview

## Front View

**Power Button:**

Press once to power on the DNS-323. Press and hold the button until it begins to blink to power down the DNS-323.

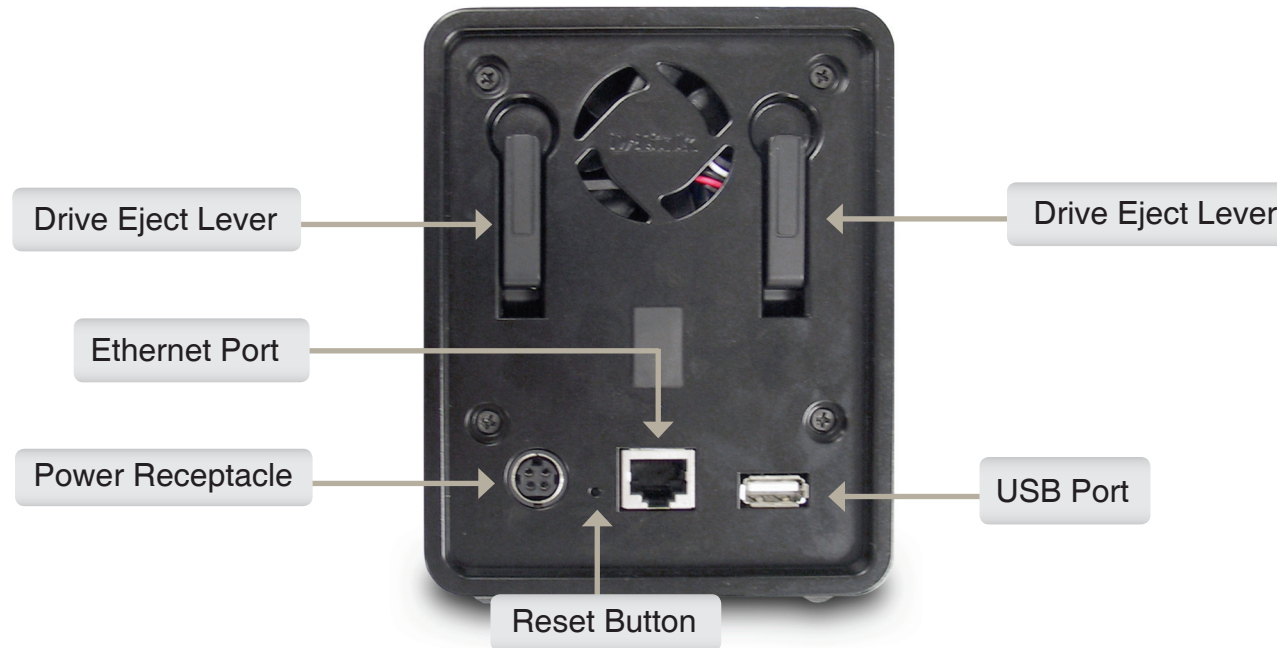
**Drive Lights:**

These lights will be solid BLUE when drives are connected but inactive. The lights will blink when the drives are being accessed, formatted or synchronized. They will illuminate AMBER if a drive has failed.

**Network Activity Light:**

The Activity Light will be solid BLUE when there is an Ethernet connection. It will blink to indicate LAN traffic.

## Rear Panel (Connections)



### **Power Receptacle:**

The 12V 3A / 5V 3A power supply connects here.

### **Ethernet Port:**

A Gigabit Ethernet port that connects the DNS-323 to a network.

### **USB Port:**

Connect a printer, or UPS to the port. This USB port also supports D-Link SharePort™ technology. Refer to the SharePort™ manual for more detail.

### **Drive Eject Lever:**

Use the levers to eject the hard drives. The front panel must be removed before ejecting the drives.

### **Reset Button:**

A pinhole button located beside the Ethernet socket is used to reset the DNS-323 to the factory default settings.

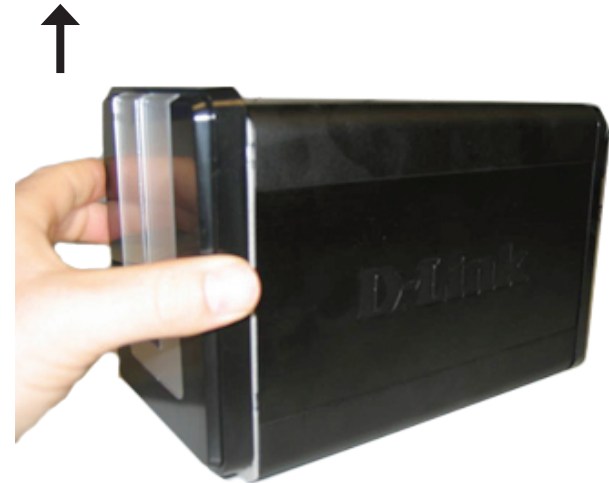
**Note:** After resetting the unit's configuration you will still have access to the data on your hard drive(s).

# Installation

## Hardware Setup

This section provides unpacking and installation information for the DNS-323. Open the shipping carton for the DNS-323 and carefully unpack its contents. To install the DNS-323 on your local network, refer to the steps below:

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-323. 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. If a drive is not properly seated, the light will not illuminate after powering on the device.



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





5. Connect an Ethernet cable to the available Ethernet port. This cable should connect the DNS-323 to your local network via a router or switch, or directly to a computer for configuration.



6. Connect the power adapter to the power receptacle.

7. Connect a USB printer or UPS. (Optional)



# Configuration

## Easy Search Utility

When first powered on, during the initial boot sequence, the DNS-323 will wait to be assigned an IP address via DHCP. If it does not receive an 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-323 for the first time. If you want to change the IP address before logging in or are unable to connect to the DNS-323 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 Device** The Easy Search Utility displays all available DNS-323 devices on the network here.

**Refresh** Refresh the device list.

**Configuration** Click **Configuration** to access the Web-based utility of the DNS-323.

**Language** Click **Language** if you wish to store non-English character files. Refer to page 96.

**LAN** Configure the LAN Settings for the DNS-323 here.

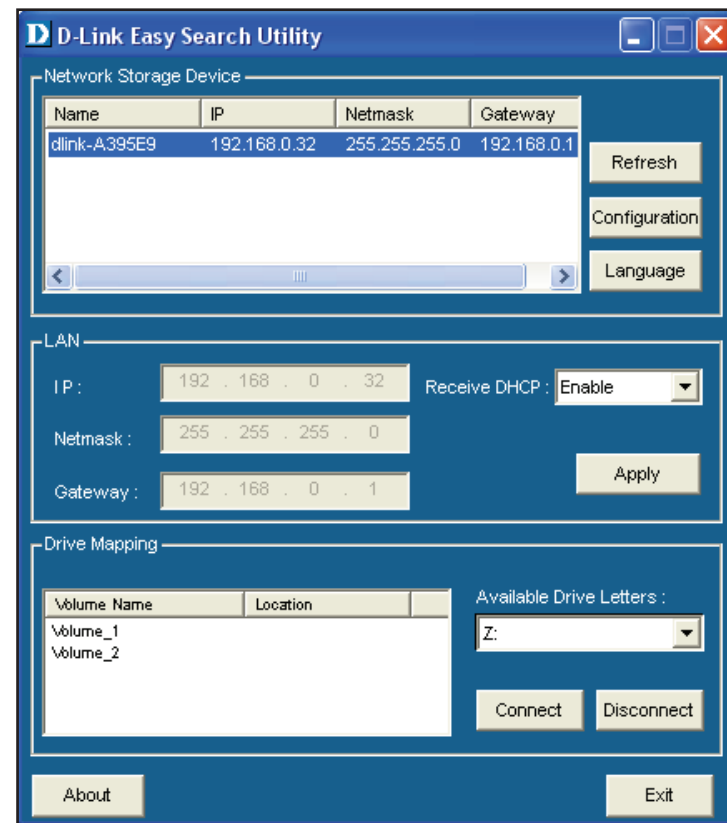
**Apply** Click **Apply** to save and activate the changes to the LAN Settings.

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

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

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

**About** Click to see the basic firmware and copyright information about D-Link Easy Search Utility.



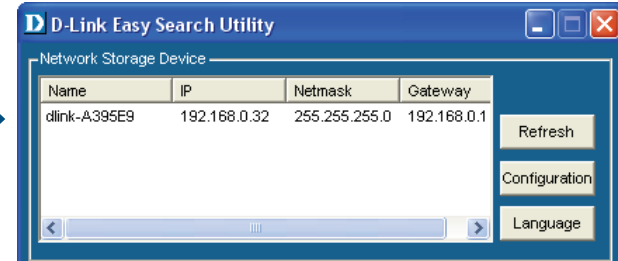
# Getting Started

To run the Easy Search Utility, insert the DNS-323 CD into your CD-ROM drive:

Click **Easy Search Utility**.



Highlight an available DNS-323 and click **Configuration** to access the web-based utility.

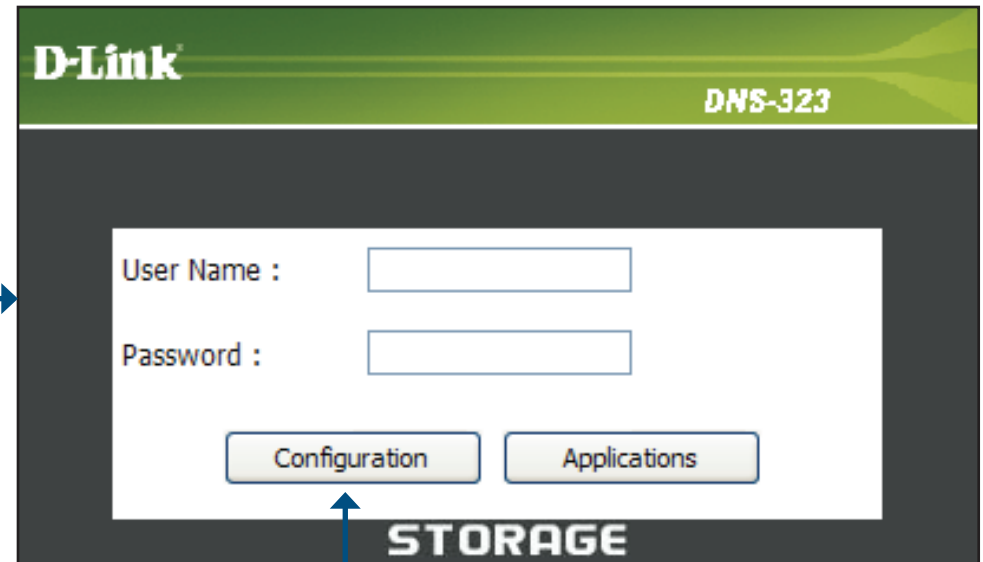


## Please Note:

The computer, used to access the DNS-323 web-based configuration manager must be on the same subnet as the DNS-323. If your network is using a DHCP server and the computer receives IP settings from DHCP, the DNS-323 will automatically be in the same subnet.

The Login screen will appear:

Type **admin** for the username and leave the password field blank.

The image shows the login interface of a D-Link DNS-323 device. At the top, there is a green header bar with the 'D-Link' logo on the left and 'DNS-323' on the right. Below this is a dark grey rectangular area containing a white login form. The form has two input fields: 'User Name :' and 'Password :'. Below the password field are two buttons: 'Configuration' and 'Applications'. At the bottom of the dark grey area, the word 'STORAGE' is written in large, bold, white capital letters. Two blue arrows point from the text instructions on the left to the 'Configuration' button and the 'User Name' field.

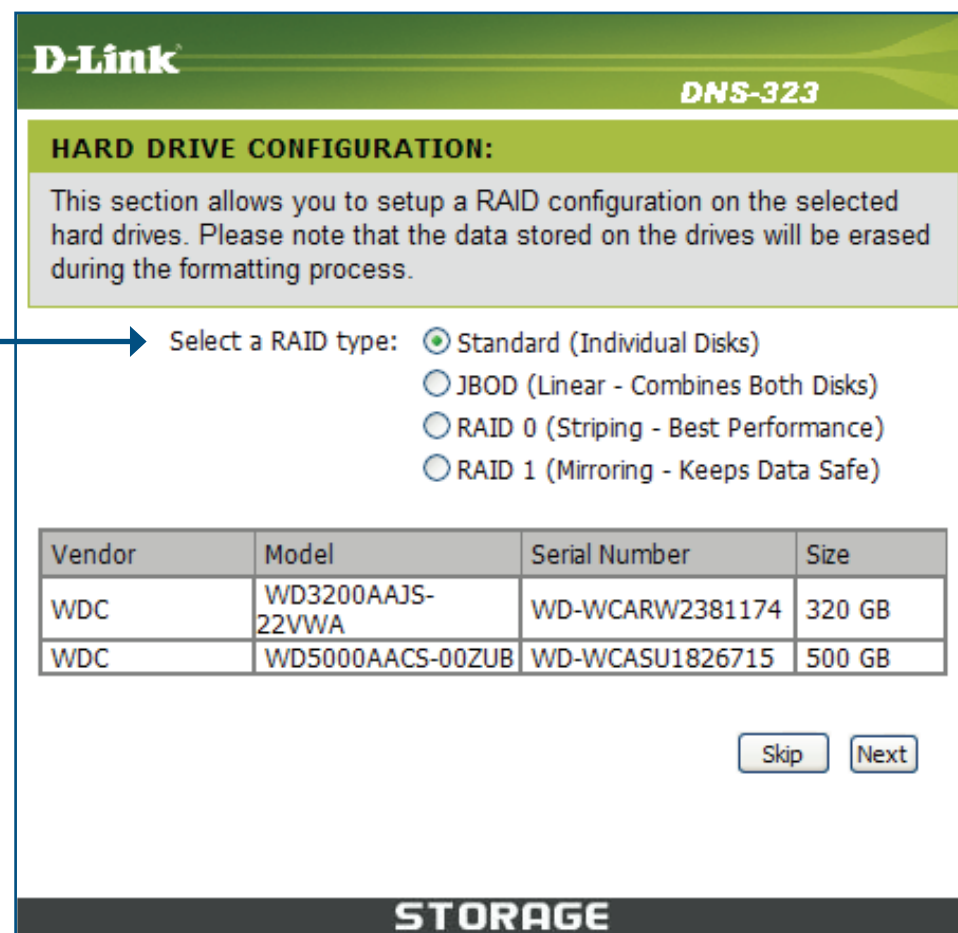
Click **Configuration**.

When logging into the DNS-323 for the first time, you will be asked to choose a drive configuration type and format the drives. There are four configuration options: **Standard**, **JBOD**, **RAID 0** and **RAID 1**. Standard configures each disk as a separate volume, while JBOD combines both disks into a single volume, as well as RAID 0 and RAID 1. See page 54 for more details on using the RAID configurations.

**Note:** All data will be erased during the format process.

When prompted to configure the Hard Drive Settings:

Select the configuration type of your hard drive, **Standard**, **JBOD**, **RAID 0** or **RAID 1**.



The screenshot shows the 'D-Link DNS-323' web interface for 'HARD DRIVE CONFIGURATION'. It includes a warning about data erasure, a RAID type selection menu with four options (Standard, JBOD, RAID 0, RAID 1), a table of detected hard drives, and 'Skip' and 'Next' buttons.

**D-Link** **DNS-323**

**HARD DRIVE CONFIGURATION:**

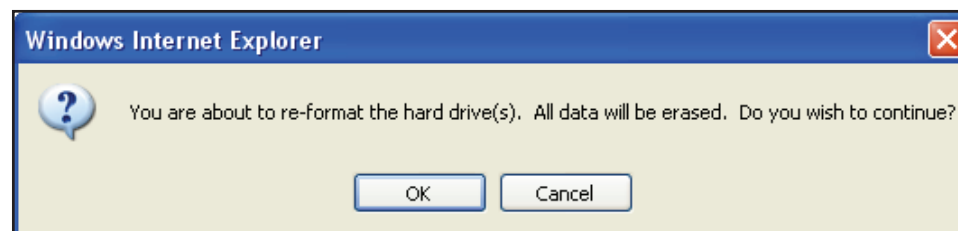
This section allows you to setup a RAID configuration on the selected hard drives. Please note that the data stored on the drives will be erased during the formatting process.

Select a RAID type: ☒ Standard (Individual Disks)  
☐ JBOD (Linear - Combines Both Disks)  
☐ RAID 0 (Striping - Best Performance)  
☐ RAID 1 (Mirroring - Keeps Data Safe)

Vendor	Model	Serial Number	Size
WDC	WD3200AAJS-22VWA	WD-WCARW2381174	320 GB
WDC	WD5000AACS-00ZUB	WD-WCASU1826715	500 GB

**STORAGE**

A warning message informing you that your drives will be formatted and all data will be erased. Click **OK** to continue.



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**HARD DRIVE CONFIGURATION:**

This section allows you to setup a RAID configuration on the selected hard drives. Please note that the data stored on the drives will be erased during the formatting process.

Select file system :

EXT 2 (Best Performance)  
EXT 3 (Most Stable)

Back Next

**STORAGE**

Select the EXT2 or EXT3 file system on DNS-323.



Select to enable or disable the auto-rebuild function of RAID 1.

**Note:** This window appears only when selecting RAID 1 as the configuration type.

**D-Link** **DNS-323**

**HARD DRIVE CONFIGURATION :**

This section allows you to setup a RAID configuration on the selected hard drives. Please note that the data stored on the drives will be erased during the formatting process.

☐ Enable Auto-Rebuild

☒ Disable Auto-Rebuild

Back Next

**STORAGE**

**D-Link** **DNS-323**

**HARD DRIVE CONFIGURATION:**

This section allows you to setup a RAID configuration on the selected hard drives. Please note that the data stored on the drives will be erased during the formatting process.

Available capacity of RAID 1 volume : 318 GB

Enter the desired capacity of RAID 1 volume :  GB

The remaining space will become a JBOD (Linear) volume.  
Remaining space : 816 GB

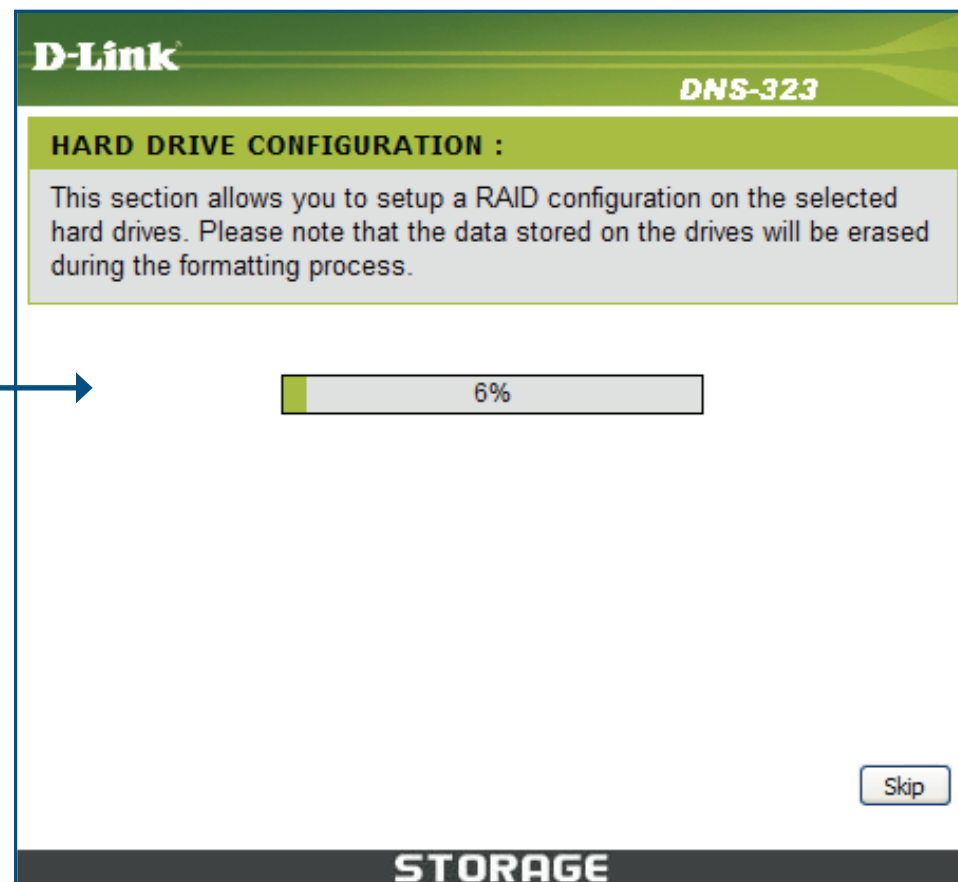
[Back](#) [Next](#)

**STORAGE**

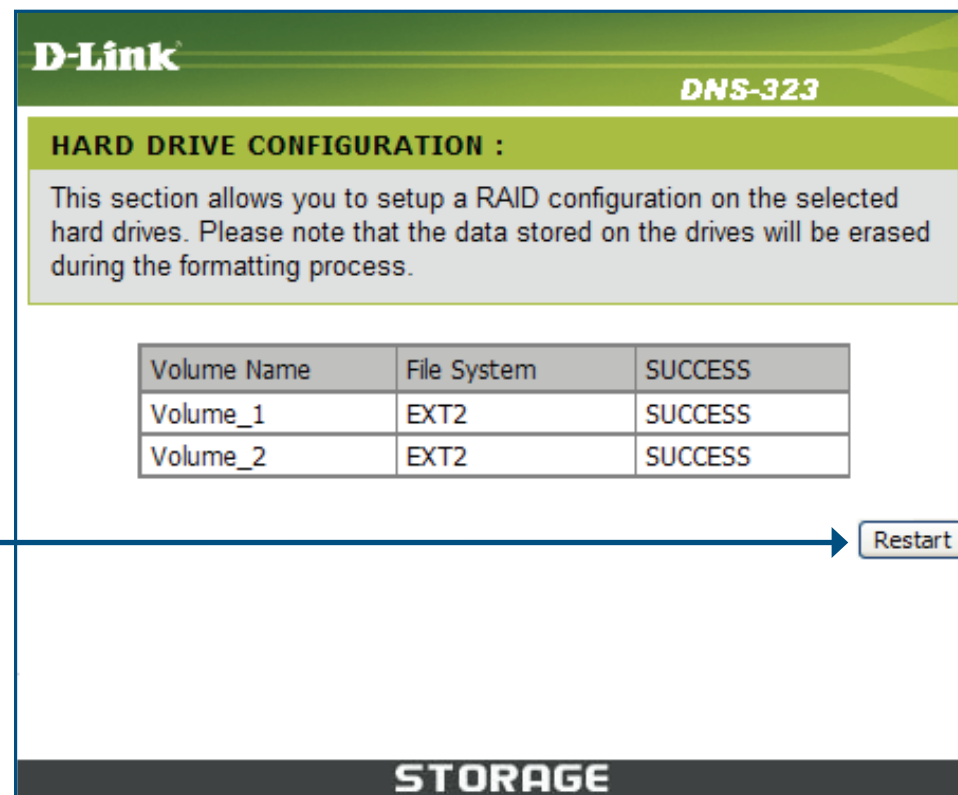
Enter the capacity of the hard drive that you want to reserve for RAID 0 or RAID 1.

**Note:** This window appears only when selecting RAID 0 or RAID 1 as the configuration type.

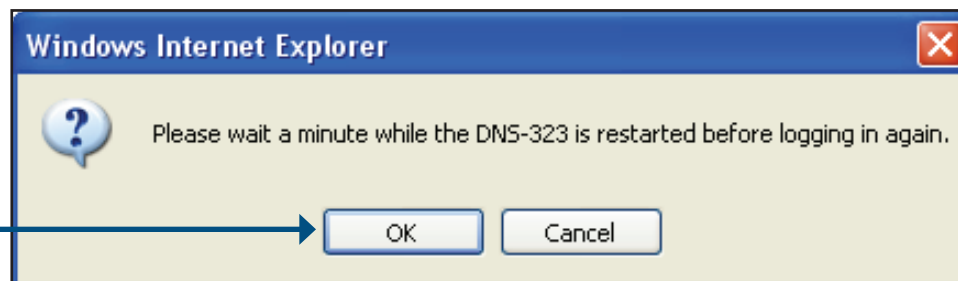
This window appears to indicate the progress of the disk formatting.



When formatting of the drive completes, the DNS-323 will prompt the user to restart.

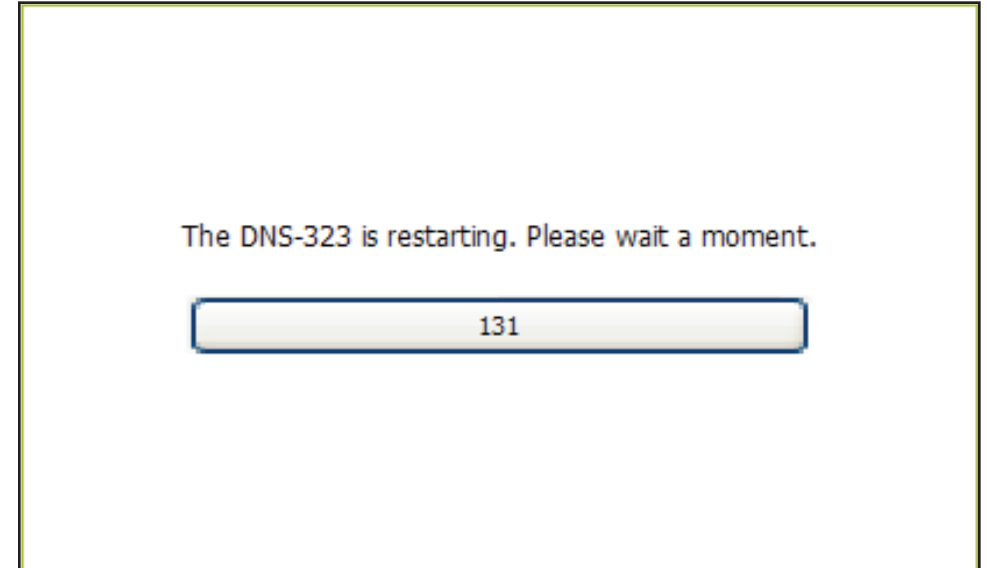


Click the **Restart** button to restart the DNS-323



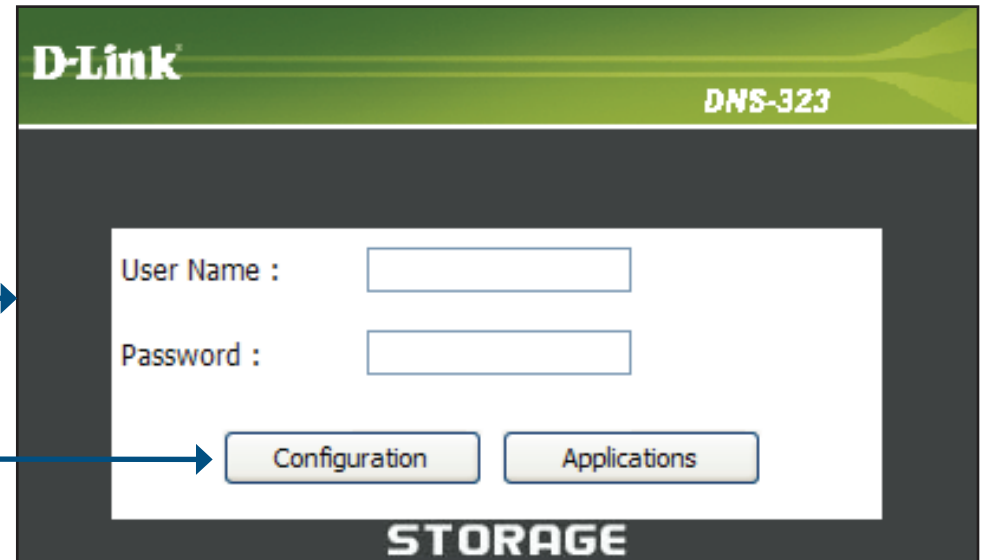
Click the **OK** button to restart the device.

A restart countdown screen will appear. When the restart is complete, a login screen will appear:



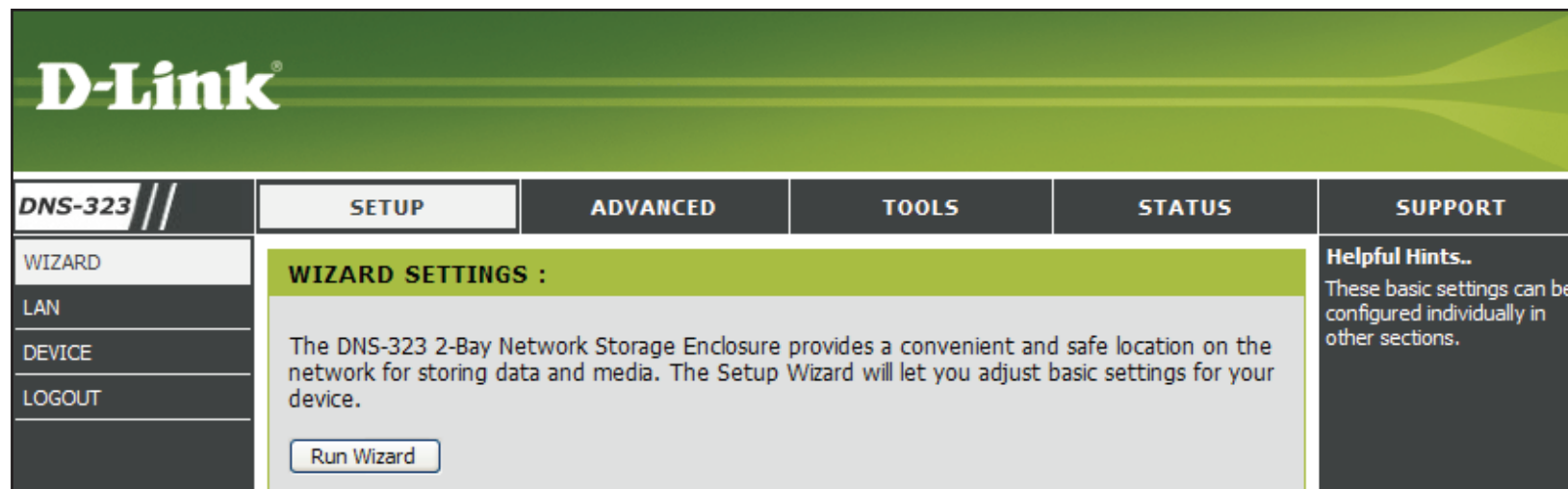
Type **admin** for the username and leave the password field blank.

Click **Configuration**.



**Note:** After logging in to the DNS-323 for the first time it is recommended to add a password to the admin account (see page 46 for details.)

After logging in, you will be redirected to the DNS-323 web UI:





# Web UI

The DNS-323 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:

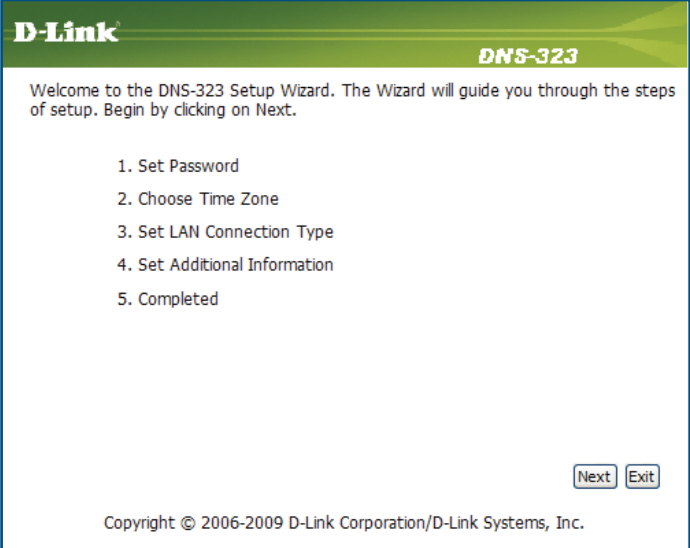
- **Setup** - Contains the DNS-323 setup wizard, as well as the LAN configuration settings, and device settings.
- **Advanced** - Allows the DNS-323 administrator to configure users, groups of users, and their storage quotas. The network access settings, FTP server, UPnP AV server, iTunes server, DHCP server, LLTD, and Add-ons settings are all contained here as well.
- **Tools** - Contains configuration options for the Admin password, time and system settings, firmware upgrades, e-mail alerts and disk scan. Settings for Power management, RAID configuration, and DDNS are also available from the Tools page.
- **Status** - Contains a summary of DNS-323 information and logs.
- **Support** - Contains the DNS-323 help files.
- **Logout** - Clicking this button will log out the admin and end the DNS-323 configuration session.

These pages and their configuration options will be discussed in detail in the following pages of this manual.

# Setup Wizard

The DNS-323 has a setup Wizard that allows you to quickly configure some of the basic device settings.

When running the DNS-323 setup wizard, the welcome screen details the five steps of the wizard. Click **Next** to continue.



**D-Link** **DNS-323**

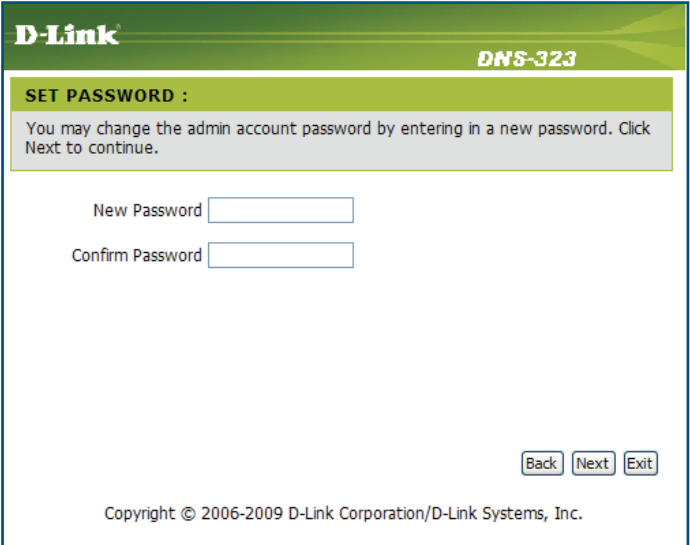
Welcome to the DNS-323 Setup Wizard. The Wizard will guide you through the steps of setup. Begin by clicking on Next.

1. Set Password
2. Choose Time Zone
3. Set LAN Connection Type
4. Set Additional Information
5. Completed

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

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



**D-Link** **DNS-323**

**SET PASSWORD :**

You may change the admin account password by entering in a new password. Click Next to continue.

New Password

Confirm Password

[Back](#) [Next](#) [Exit](#)

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Set the appropriate **Time Zone** for your location. Click **Next** to continue.

**D-Link** **DNS-323**

**CHOOSE TIME ZONE :**

Select the appropriate time zone for your location and click Next to continue.

Time Zone

(GMT-08:00) Pacific Time (US & Canada);Tijuana

Back Next Exit

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Edit or change the DNS-323 LAN information or keep the current settings. Click **Next** to continue.

**D-Link** **DNS-323**

**SELECT LAN CONNECTION TYPE :**

Select your connection type and enter the IP information if necessary. Click Next to continue.

☒ DHCP Client  
☐ Static IP

IP Address 192.168.0.32

Subnet Mask 255.255.255.0

Gateway 192.168.0.1

DNS1

DNS2

Back Next Exit

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Enter your workgroup, name and description for the DNS-323, or leave the default values and click **Next** to continue.

**D-Link** **DNS-323**

**SET ADDITIONAL INFORMATION :**

Enter your workgroup, name, and description for the DNS-323 if necessary. Otherwise you may accept the default values and click Next to continue.

Workgroup

Name

Description

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When the wizard completes, click **Back** to go back and make changes or click **Completed** to restart the DNS-323 and save the configuration.

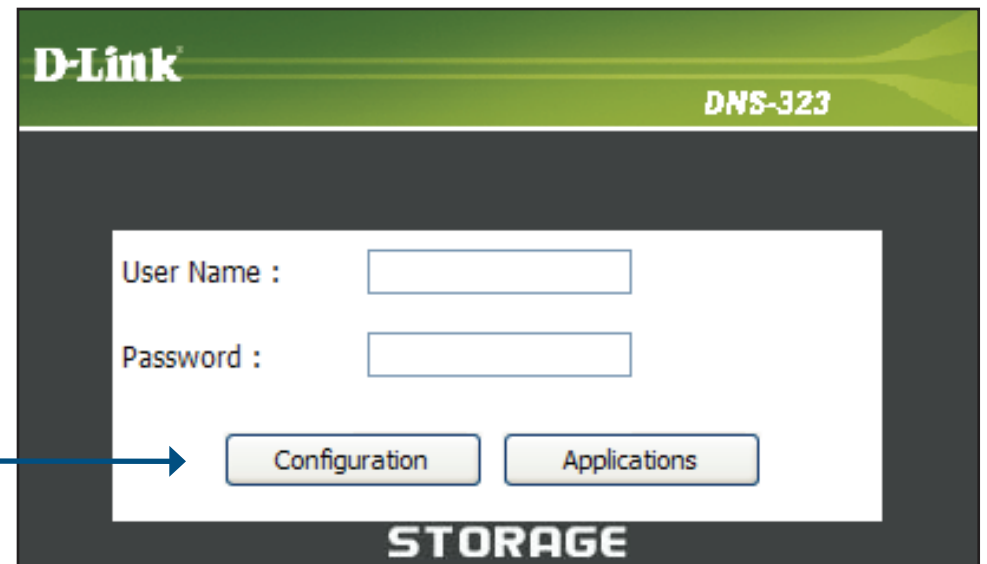
**D-Link** **DNS-323**

**SETUP COMPLETED :**

The Setup Wizard is complete. Click Back to review and make more changes. Click Completed to save the current settings.

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When the login prompt appears, log in using the new administrator password. Click **Configuration**.



The image shows the login interface for a D-Link DNS-323 STORAGE device. At the top, there is a green header bar with the "D-Link" logo on the left and "DNS-323" on the right. Below this is a dark grey rectangular area containing a white login box. Inside the white box, there are two labels: "User Name :" followed by a text input field, and "Password :" followed by another text input field. Below the password field, there are two buttons: "Configuration" and "Applications". The word "STORAGE" is printed in large, bold, white capital letters at the bottom of the dark grey area. A blue arrow originates from the text "Click **Configuration**." in the instruction box and points directly to the "Configuration" button.

# LAN

The Local Area Network settings for the DNS-323 are configured on the LAN page.

**Link Speed** The LAN Link Speed is set to **Auto** by default, but can be manually set to 100Mbps or 1000Mbps. Click the **Apply** button.

**DHCP Client** Selecting DHCP Client will cause the DNS-323 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-323 manually.

**Jumbo Frame Settings** Click the **Enable** radio button next to **Status** to enable jumbo frames.

**D-Link**

**DNS-323** // **SETUP** **ADVANCED** **TOOLS** **STATUS** **SUPPORT**

**WIZARD**  
**LAN**  
**DEVICE**  
**LOGOUT**

**LAN SETTINGS :**

The LAN Settings allows you to configure the Link Speed and to configure the IP address as a DHCP client or Static IP.

Enabling Jumbo Frames allows you to increase the Frame size from 3,000 to 9000 bytes which increase network throughput and performance. Standard Ethernet Frames are 1,500 bytes in size.

**LAN SETTINGS :**

Speed 100 Mbps

Link Speed ☒ Auto ☐ 100 ☐ 1000

☒ DHCP Client  
☐ Static IP

IP Address :

Subnet Mask :

Gateway :

DNS1 :

DNS2 :

**JUMBO FRAME SETTINGS :**

Status : ☐ Enable ☒ Disable

**Helpful Hints..**  
A Static IP is recommended if you will be using the FTP server.



## Device

The device settings page allows you to assign a workgroup, name and description to the DNS-323.

**Workgroup** Assigns a workgroup name to the DNS-323.

**Name** Assigns a unique name to the DNS-323. The name can be used to access the device from a web browser instead of using the IP address.

For example: *http://dlink-xxxxxx*

This is useful if there are more than one DNS-323 in the network. By default the device name is dlink-xxxxxx, where xxxxxx is the last six digits of the MAC address.

**Description** Assigns a device description to the DNS-323.

The screenshot shows the D-Link DNS-323 web interface. The top header is green with the D-Link logo. Below it is a navigation bar with tabs: DNS-323, SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar contains links: WIZARD, LAN, DEVICE (highlighted), and LOGOUT. The main content area is titled 'DEVICE SETTINGS :'. It contains a text input field for 'Enter a workgroup, name, and description.' with 'Save Settings' and 'Don't Save Settings' buttons below it. Below this is another section titled 'DEVICE SETTINGS :' with three input fields: 'Workgroup' (containing 'workgroup'), 'Name' (containing 'dlink-A395E9'), and 'Description' (containing 'DNS-323'). On the right side, there is a 'Helpful Hints..' section with text explaining how to access the device using the name in the web-browser, using the example 'dlink-A395E9' where 'A395E9' is the last six digits of the MAC address.

# Advanced Users and Groups

The DNS-323 supports up to 64 unique users. The users can be added to a group, or individually. The users and groups are created to allow access to specific folders on the DNS-323, via FTP or your local network.

## User and Group Creation

This section contains required attributes for a new user or group. Including User Name and Password or Group name.

If creating a new user, carry out the following steps:

- Click the **User** radio button.
- Type in a User Name, Password and Confirm Password in the relevant fields.
- Click the **Add** button to finish creating the user.

If creating a new group carry out the following steps:

- Click the **Group** radio button.
- Type in a Group name in the **Add New Group** text box.
- Click the **Add** button to finish creating the group.

## Select Group

Select a group that has been created for adding users.

## List of All Users

Displays the list of users that you may assign to the selected group.



- To add a new user to the selected group, click the user then click the **Add >>** button.
- To remove a user from the group, click the user and then click the **<< Remove** button.

The screenshot shows the D-Link DNS-323 web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists various configuration options: USERS / GROUPS, QUOTAS, NETWORK ACCESS, FTP SERVER, UPnP AV SERVER, iTunes SERVER, DHCP SERVER, LLTD, ADD-ONS, and LOGOUT. The main content area is titled 'USERS / GROUPS' and contains the following sections:

- USERS / GROUPS :** A descriptive text block stating that this section allows creating and managing user and group accounts, and that up to 64 users and 10 groups can be created.
- USER AND GROUP CREATION :** A section with two radio buttons: 'User' (selected) and 'Group'. Below them are input fields for 'User Name', 'Password', and 'Confirm Password', followed by an 'Add' button.
- GROUP SETTINGS :** A section with a 'Select Group' dropdown menu. Below it are two large empty boxes labeled 'List of all users' and 'Users in group'. Between these boxes are 'Add >>' and '<< Remove' buttons, and a checkbox for 'All accounts'.
- USER LIST :** A table with columns for 'NO.', 'User Name', and 'Group Name'. It includes icons for 'Change Password' and 'Delete'.
- GROUP LIST :** A table with columns for 'NO.', 'Group Name', and 'User Name'.

On the right side of the interface, there is a 'Helpful Hints..' section with the text: 'User passwords must be at least five characters long. A user name can not be the same as a group name.'

**Users in Group** Users that are assigned to the selected group will be listed here.

**User List** Displays all the users that have been created. To change a user's password, click the corresponding  icon. To remove a user from the list, click the corresponding  icon.

**Group List** Displays all the groups that have been created. To remove a group from the list, click the corresponding  icon.


# Quotas

The DNS-323 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.

## User Quota Settings

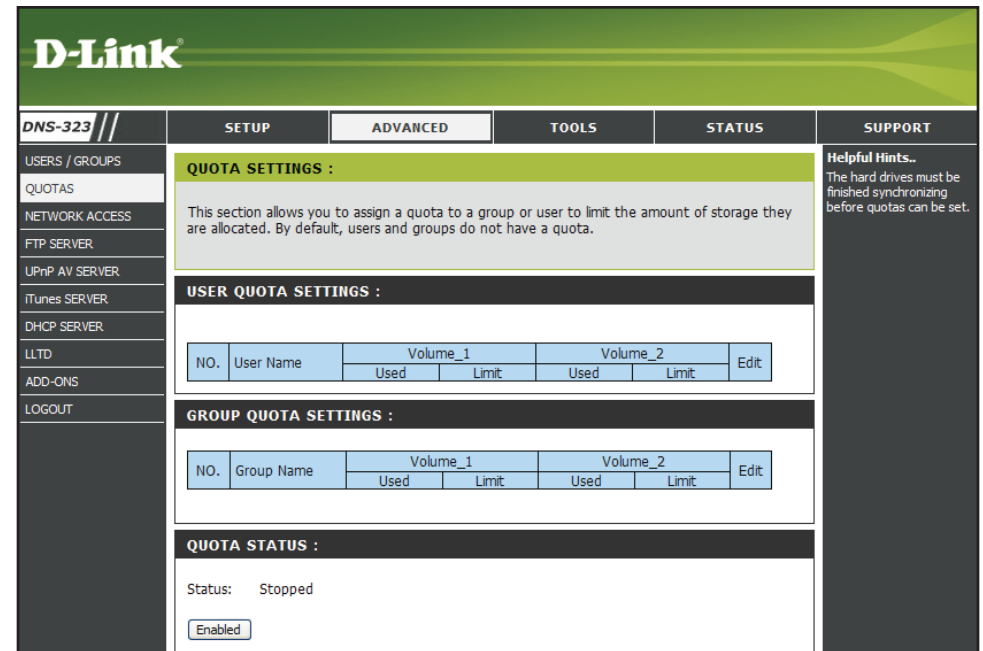
User quotas are displayed here. Quotas can be edited by clicking the  icon.

## Group Quota Settings

Group quotas are displayed here. Quotas can be edited by clicking the  icon.

## Quota Status

Displays the current status of the quota feature. The quota function can be started or stopped here by clicking the **Enabled/Disabled** button.



The screenshot shows the D-Link DNS-323 web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists various settings categories: USERS / GROUPS, QUOTAS, NETWORK ACCESS, FTP SERVER, UPnP AV SERVER, iTunes SERVER, DHCP SERVER, LLTD, ADD-ONS, and LOGOUT. The main content area is titled 'QUOTA SETTINGS' and contains the following sections:

- QUOTA SETTINGS :** A text box explaining that this section allows assigning a quota to a group or user to limit storage allocation. By default, users and groups do not have a quota.
- USER QUOTA SETTINGS :** A table with columns for NO., User Name, Volume\_1 (Used, Limit), Volume\_2 (Used, Limit), and Edit.
- GROUP QUOTA SETTINGS :** A table with columns for NO., Group Name, Volume\_1 (Used, Limit), Volume\_2 (Used, Limit), and Edit.
- QUOTA STATUS :** A section showing the current status as 'Stopped' and an 'Enabled' button.




On the right side of the interface, under the 'SUPPORT' tab, there is a 'Helpful Hints...' section with the text: 'The hard drives must be finished synchronizing before quotas can be set.'


## Configuring Quotas

By default, all users and groups are displayed in 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:

### USER QUOTA SETTINGS :

NO.	User Name	Volume_1		Volume_2		Edit
		Used	Limit	Used	Limit	
1	user1	unlimited		unlimited		
2	user2	unlimited		unlimited		
3	user3	unlimited		unlimited		

Click the  icon of the user you want to add a quota to.

### USER QUOTA SETTINGS :




User Name

Volume\_1 Quota Amount  MB

Volume\_2 Quota Amount  MB




Set a quota amount (MB) for the user and click **Apply**.

**Apply**



NO.	User Name	Volume_1		Volume_2		Edit
		Used	Limit	Used	Limit	
1	user1	unlimited		unlimited		
2	user2	unlimited		unlimited		
3	user3	unlimited		unlimited		

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

**USER QUOTA SETTINGS :**

NO.	User Name	Volume_1		Volume_2		Edit
		Used	Limit	Used	Limit	
1	user1	0 MB	20000 MB	0 MB	20000 MB	
2	user2	unlimited		unlimited		
3	user3	unlimited		unlimited		

**GROUP QUOTA SETTINGS :**

NO.	Group Name	Volume_1		Volume_2		Edit
		Used	Limit	Used	Limit	
1	group1	unlimited		unlimited		
2	group2	unlimited		unlimited		

**QUOTA STATUS :**

Status: Stopped

Click **Enabled** to turn quota monitoring on.

**QUOTA STATUS :**

Status: Started

Once enabled, the status will change to Started.

# Network Access

The Network Access settings allow you to assign 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.

<b>Network Access Settings</b>	Assign permissions for users and groups on the local network.
<b>Category</b>	Determines whether the access rule will apply to a group or individual user.
<b>User / Group</b>	Select the user or group for the access rule or you can select <b>All Accounts</b> .
<b>Folder</b>	Click the <b>Browse</b> button to open and select the folder or directory you are controlling access to.
<b>Permission</b>	Set the user or group permission to <b>Read Only</b> or to <b>R/W: Read/Write</b> .
<b>Oplock</b>	Opportunistic locks (oplocks) are a characteristic of the LAN Manager networking protocol implemented in the 32-Bit Windows family. Oplocks are guarantees made by a server for a shared logical volume to its clients. These guarantees inform the Client that a file's content will not be allowed to be changed by the server, or if some change is imminent, the client will be notified before the change is allowed to proceed.

Oplocks are designed to increase network performance when it comes to network file sharing however when using file-based database applications it is recommended to set the share oplocks to **No**.

By default, Windows Vista® has Oplocks enabled and can not be disabled. If you are having network performance issues with applications sharing files from the DNS-323 you may try to improve performance by setting Oplocks to **No (off)**.

**D-Link**

DNS-323 // SETUP ADVANCED TOOLS STATUS SUPPORT

**NETWORK ACCESS SETTINGS :**

This section allows you to assign access rights for users and groups to a specific folder 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 :**

Type: ☒ SMB

Category: ☒ User ☐ Group

User:  ☐ All accounts

Folder:

Permission:

Oplocks:

Map archive:

Comment:



**SMB LIST :**

☒ Read/Write ☐ Read Only ☐ Modify settings ☐ Delete

Share	Path	User/Group	Comment	Oplocks	Map archive	R/W
Volume_1	Volume_1	ALL		No	No	<input checked="" type="checkbox"/> <input type="checkbox"/>
Volume_2	Volume_2	ALL		No	No	<input checked="" type="checkbox"/> <input type="checkbox"/>

**Map Archive** When enabled, the file attribute "Archive" will be copied as the file is being stored on the DNS-323. 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. To modify an access rule, click the  icon. To remove an access rule, click the  icon.

The DNS-323 supports two types of Network Access Settings:

1) **User or Account Configuration** - This configuration will be triggered when one or more users are configured to connect to a folder. It will require the users to enter a username and a password when accessing the shared storage.

2) **Open Configuration** - This configuration is the default configuration of the DNS-323. It allows for open access to anyone who wants to access the shared storage without the need to enter a username and a password.

When configuring a user to connect to a specific folder, User or Account Configuration is triggered and a new button, **Reset Network Account List**, will be available. When clicking this button, the Network Access List will be removed and the device will be returned to Open Configuration.

The DNS-323 also supports Network File System (NFS) functions. For installing the application pack, refer to page 45 for more details.

A warning message will appear after clicking the **Reset Network Access List** button.

**NETWORK ACCESS SETTINGS :**

Type ☒ SMB

Category ☒ User ☐ Group

User  ☐ All accounts

Folder

Permission

Oplocks







Map archive

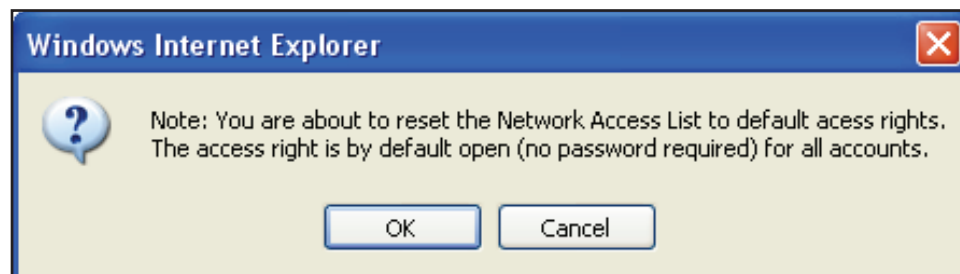
Comment

---

**SMB LIST :**

☒ :Read/Write ☐ : Read Only ☐ : Modify settings ☐ : Delete

Share	Path	User/Group	Comment	Oplocks	Map archive	R/W	
Volume_1	Volume_1	ALL		No	No	<input checked="" type="checkbox"/>	 
Volume_2	Volume_2	ALL		No	No	<input checked="" type="checkbox"/>	 
user2_folder	Volume_1/user2_folder	user2		No	No	<input checked="" type="checkbox"/>	 





# FTP Server

The DNS-323 is equipped with a built-in FTP Server, which is easy to configure. It 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-323 at a time. For improved security, the DNS-323 supports use of an FTPS client, such as SSL/TLS, to encrypt both the password and the data. The DNS-323 supports FireFTP, a cross-platform FTP client for Mozilla Firefox users. See the Using FireFTP section on page 89 for more information.

**FTP Account Settings** This section contains the user and group configuration settings for access to the FTP folder to the DNS-323.

**Category** Determines whether the FTP server rule will apply to an individual user or a group.

**User / Group** Select the user or group for the FTP account or you can select **All Accounts** under User.

**Folder** Browse to open and select the folder or directory you are granting FTP access to. Select **root** to grant access to all volumes.

**Permission** Set the user or group permission to **Read Only** or **RW: Read/Write**.

**FTP Server Settings** This section contains the configuration settings for the DNS-323 FTP Server.

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

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

**D-Link**

**DNS-323** // **SETUP** **ADVANCED** **TOOLS** **STATUS** **SUPPORT**

**USERS / GROUPS**  
**QUOTAS**  
**NETWORK ACCESS**  
**FTP SERVER**  
 UPnP AV SERVER  
 iTunes SERVER  
 DHCP SERVER  
 LLTD  
 ADD-ONS  
 LOGOUT

**FTP SERVER SETTINGS :**

This section contains the configuration settings for the built-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 :**

Category ☒ User ☐ Group

User  ☐ All accounts

Folder ☐ Root

Permission

**FTP SERVER SETTINGS :**

Max. User

Idle Time  (1~10 Minutes)

Port  (1025 to 3688, 3690 to 49999, 65501 to 65535, Default: 21)

Passive Mode ☒ Use the default port range (55536-55663)  
☐ Use the following port range:  ~   
☐ Report external IP in Passive mode  
 External IP :  .  .  .

Client Language

Flow Control ☒ Unlimited ☐  x 10 KBs

SSL/TLS ☐ Allow SSL/TLS connection only

**FTP ACCESS LIST :**

☒ R/W : Read/Write ☐ Read Only

Path	User/Group	R/W

**FTP SERVER STATUS :**

Status

**Helpful Hints.**  
 If your DNS-323 is connected to a router, you will need to forward port 21 (in the router configuration) to the IP address of the DNS-323. From the outside world, remember to access this FTP server by using the WAN address of your router. The default FTP port is 21. However, you can also use ports 1025 to 3688, 3690 to 49999, and 65501 to 65535.  
 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-323.



**Port** Sets the FTP port. Default is 21.

- Passive Mode** This allows the client to initiate the connection and the FTP server to randomly open ports for transferring data.
- **Use the default port range (55536-55663)** - Click the radio button to open this range of ports for FTP clients to connect.
  - **Use the following port range:** - Click the radio button and enter a range of ports for FTP clients to connect.
  - **Report external IP in Passive mode** - Select the check box and enter the IP address of the Router.

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

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

**SSL/TLS** Select the check box that only allows SSL/TLS connection.

**FTP Access List** The FTP access for users and groups that has been created in the FTP Account Settings section can be edited and deleted here. To modify a FTP rule, click the corresponding  icon. To delete a FTP rule, click the corresponding  icon.

**FTP Server Status** Displays the current status of the FTP Server. Click the **Start/Stop FTP server** to enable or disable the FTP 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-323.

FTP ACCESS LIST :

☒:R/W : Read/Write
 ☐:Read Only
 ☐:Modify settings
 ☐:Delete

Path	User/Group	R/W
------	------------	-----

FTP SERVER STATUS :

Status	Stopped
Port	21
Max. User	10
Flow Control	Unlimited
Idle Time	2
Client Language	Western European
SSL/TLS connection	Yes
Passive Mode	55536~55663

Start FTP Server

If you are behind a router, you will need to forward the FTP port from the router to the DNS-323. Additional filtering and firewall settings may need to be modified on your router to allow FTP Access to the DNS-323 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** Name the DNS-323 FTP server rule.
- IP Address** Enter the IP address of the DNS-323.
- 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.

Product Page: WBR-2310 Hardware Version: A1 Firmware Version: 1.01

**D-Link**

WBR-2310 // SETUP ADVANCED TOOLS STATUS SUPPORT

**VIRTUAL SERVER RULES :**

The Virtual Server option allows you to define a single public port on your router for redirection to an internal LAN IP Address and Private LAN port if required. This feature is useful for hosting online services such as FTP or Web Servers.

Save Settings Don't Save Settings

**20 - VIRTUAL SERVER RULES**

	Name	IP Address	Port	Traffic Type	Schedule
<input checked="" type="checkbox"/>	DNS-323_FTP	192.168.0.32	Public	TCP	Always
<input type="checkbox"/>			Private		

**Helpful Hints..**

- Check the **Application Name** drop down menu for a list of pre-defined applications that you can select from. If you select one of the pre-defined applications, click the arrow button next to the drop down menu to fill out the appropriate fields.
- You can select your computer from the list of DHCP clients in the **Computer Name** drop down menu, or enter the IP address manually of the computer you would like to open the specified port to.
- In order to apply a schedule to a Virtual Server Rule, you must first define a schedule on the **Tools>Schedules** page.

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.dns323.com:3000, where the FTP port is 3000).



**Please Note:**

In order to use FXP (File Exchange Protocol) for server-to-server data transfer, make sure to change the port from 21 to some other port as listed in the Port section of the web UI. Also, make sure to open the corresponding port on your router and forward that port from your router to the DNS-323.

## UPnP AV Server

The DNS-323 features a UPnP AV Server. This server provides the ability to stream photos, music and videos to UPnP AV compatible network media players. If the server is enabled, the DNS-323 will be automatically detected by UPnP AV compatible media players on your local network.

**UPnP AV Server** Select **Enable** or **Disable** to enable or disable the DNS-323 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.

**Refresh** Click the **Refresh** button after adding new files to be used by UPnP AV compatible devices.

The screenshot shows the D-Link DNS-323 web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists various configuration options: USERS / GROUPS, QUOTAS, NETWORK ACCESS, FTP SERVER, UPnP AV SERVER (selected), iTunes SERVER, DHCP SERVER, LLTD, ADD-ONS, and LOGOUT. The main content area is titled 'UPnP AV SERVER SETTINGS :'. It contains a descriptive paragraph about the UPnP AV server function and a note about automatic scanning. Below this are three buttons: 'Save Settings', 'Don't Save Settings', and 'Refresh'. A second section, also titled 'UPnP AV SERVER SETTINGS :', contains two settings: 'UPnP AV Server' with radio buttons for 'Enable' and 'Disable' (where 'Disable' is selected), and 'Folder' with a checked checkbox for 'Root' and a text field showing 'dlink-A395E9\_SHARE'. A 'Helpful Hints...' sidebar on the right provides additional instructions.

UPnP AV SERVER SETTINGS :
<p>This section allows you to configure the UPnP AV server function. You can enable or disable the UPnP AV server function, and specify the folder or directory that will be shared.</p> <p>The DNS-323 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.</p> <p> <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/> <input type="button" value="Refresh"/> </p>
UPnP AV SERVER SETTINGS :
<p>UPnP AV Server <input type="radio"/> Enable <input checked="" type="radio"/> Disable</p> <p>Folder <input checked="" type="checkbox"/> Root dlink-A395E9_SHARE</p>

**Helpful Hints..**  
After adding new media content to the DNS-323, click the refresh button.  
You can manually scan for the file updates by clicking the "Refresh" button.

# iTunes Server

The DNS-323 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-323 will be automatically detected by the iTunes program and the music and videos contained in the specified directory will be available for streaming over the network.

**iTunes Server** Select **Enable** or **Disable** to enable or disable the DNS-323 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.

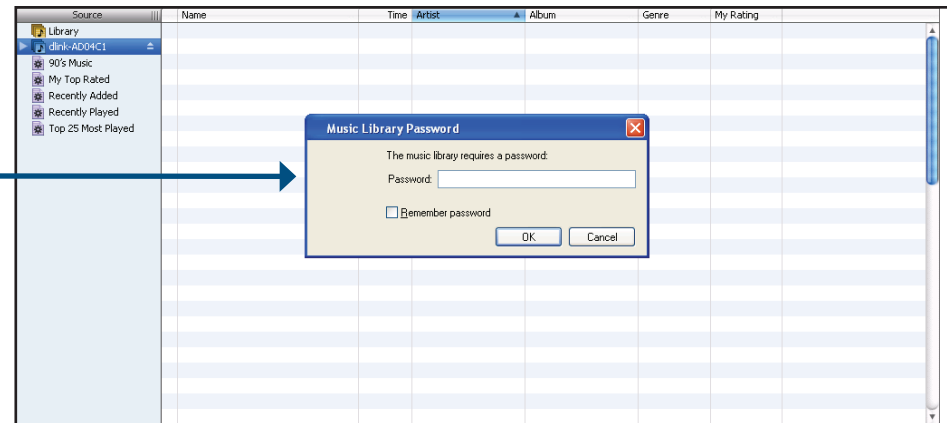
**Password** Sets password for the iTunes server. (Optional)

**Refresh** Click **Refresh** after adding new files to be used with iTunes.

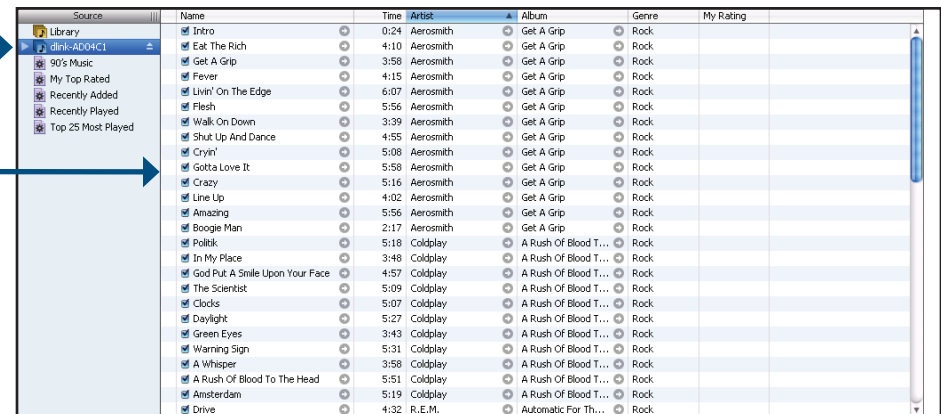
The screenshot shows the D-Link DNS-323 web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists various configuration options: DNS-323, USERS / GROUPS, QUOTAS, NETWORK ACCESS, FTP SERVER, UPnP AV SERVER, iTunes SERVER (selected), DHCP SERVER, LLTD, ADD-ONS, and LOGOUT. The main content area is titled 'iTunes SERVER SETTINGS :'. It contains a descriptive paragraph about the iTunes server function and a 'Refresh' button. Below this, there is a section for 'iTunes SERVER SETTINGS :' with the following options: iTunes Server (radio buttons for Enable and Disable, with Disable selected), Folder (checkbox for Root, which is checked, and a text field for dlink-A395E9\_SHARE), and Password (a text input field). On the right side of the interface, there is a 'Helpful Hints...' section with additional information about automatic detection and manual scanning.

After enabling the iTunes server on the DNS-323, launch iTunes. When iTunes detects the DNS-323, select it and you will be prompted to enter the iTunes server password if required.

Select the DNS-323. When prompted, enter the iTunes server password. Click **OK**.



Media stored on the DNS-323 will be available for use in iTunes.



# DHCP Server

The DNS-323 can be used as a DHCP Server. As a DHCP server, it can be used to serve IP addresses to other devices on your local network. However, this feature should not be enabled if you already have a DHCP server, such as a router on your local network.

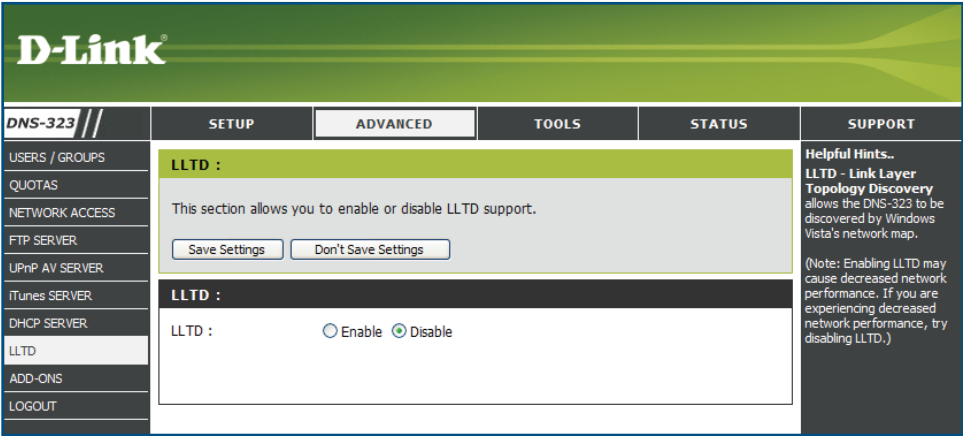
- DHCP Server** Click the **Enable** or **Disable** radio button to enable or disable the DNS-323 DHCP server.
- Starting IP Address** Enter the starting IP address for the range of addresses assigned by the DHCP server.
- Ending IP Address** Enter the ending IP address for the range of addresses assigned by the DHCP server.
- Lease Time** Sets the duration of time that an IP address will remain assigned to a device.
- DHCP Client List** Displays the Hostname, IP address, MAC address and Expired Time of the clients that have received a DHCP address from the DNS-323.

The screenshot shows the D-Link DNS-323 web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists various configuration options: USERS / GROUPS, QUOTAS, NETWORK ACCESS, FTP SERVER, UPnP AV SERVER, iTunes SERVER, DHCP SERVER (selected), LLTD, ADD-ONS, and LOGOUT. The main content area is titled 'DHCP SERVER SETTINGS' and contains a message: 'This section allows you to enable the built-in DHCP server to issue IP addresses to devices on your local network.' Below this message are three buttons: 'Save Settings', 'Don't Save Settings', and 'Refresh'. The 'DHCP SERVER' section shows the DHCP Server status as 'Disable' (selected), with 'Starting IP Address' set to '192.168.0.2' and 'Ending IP Address' set to '192.168.0.254'. The 'Lease Time' is set to '1 Week'. Below this is the 'DHCP CLIENT LIST' section, which has a table with columns: Host Name, IP Address, MAC Address, and Expired Time. On the right side of the interface, there is a 'Helpful Hints...' section with text: 'If you already have a router assigning DHCP to the network, do not enable this feature. The DHCP server should be used when no other DHCP server is available.'

# LLTD

The DNS-323 supports LLTD. LLTD stands for Link Layer Topology Discovery and is used by the Network Map application that is included in Windows Vista®.

**LLTD** Click the **Enable** or **Disable** radio button to enable or disable the DNS-323 LLTD service.





## Add-ons

In this section you will be able to install application and language packs to further enhance the functionality of your DNS-323. This powerful new feature on the DNS-323 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

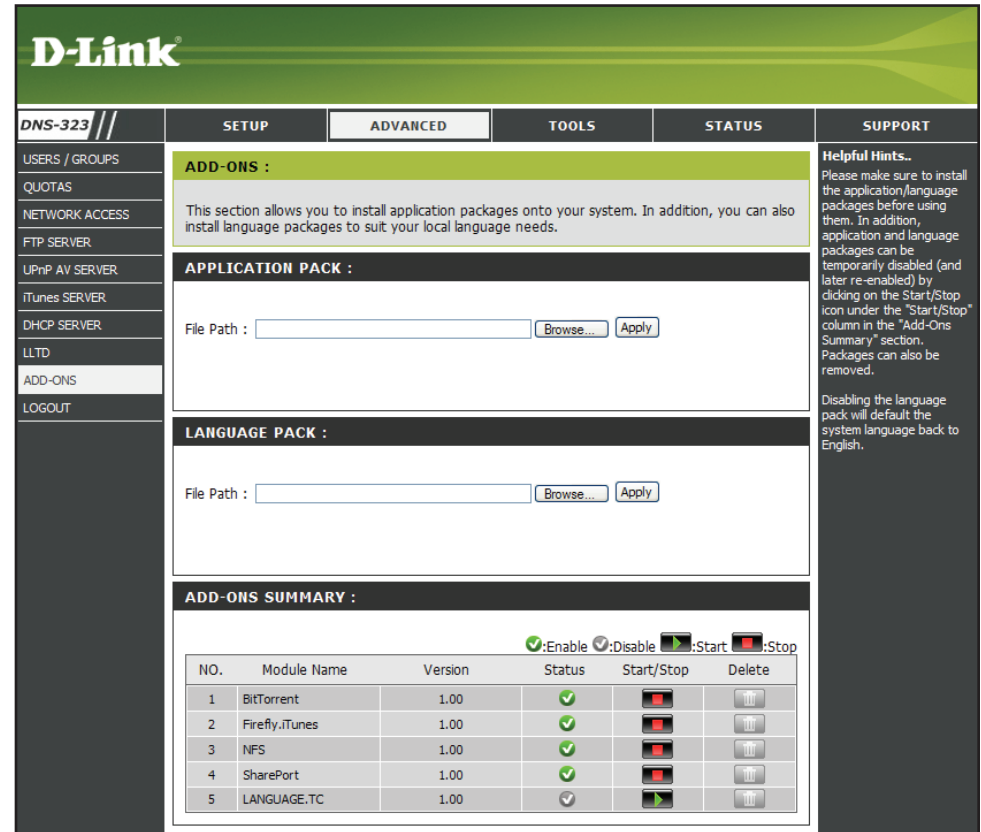
Click the **Browse** button to search for the specific application pack you want to install. After selecting the application pack, click the **Apply** button to install the application pack.

### Language Pack
















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

### Add-ons Summary

This section displays 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  icon to enable the specified pack. Click the  icon to disable the specified pack. Under the Delete column, click the  icon to uninstall the specified pack.



The screenshot shows the D-Link DNS-323 web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists various system settings like USERS / GROUPS, QUOTAS, NETWORK ACCESS, FTP SERVER, UPnP AV SERVER, iTunes SERVER, DHCP SERVER, LLTD, ADD-ONS, and LOGOUT. The main content area is titled 'ADD-ONS' and contains three sections: 'ADD-ONS' (introductory text), 'APPLICATION PACK' (with a 'File Path' input field and 'Browse...' and 'Apply' buttons), and 'LANGUAGE PACK' (with a 'File Path' input field and 'Browse...' and 'Apply' buttons). At the bottom is the 'ADD-ONS SUMMARY' table.

NO.	Module Name	Version	Status	Start/Stop	Delete
1	BitTorrent	1.00			
2	Firefly.iTunes	1.00			
3	NFS	1.00			
4	SharePort	1.00			
5	LANGUAGE.TC	1.00			



#### Please Note:

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

# Tools

## Admin Password

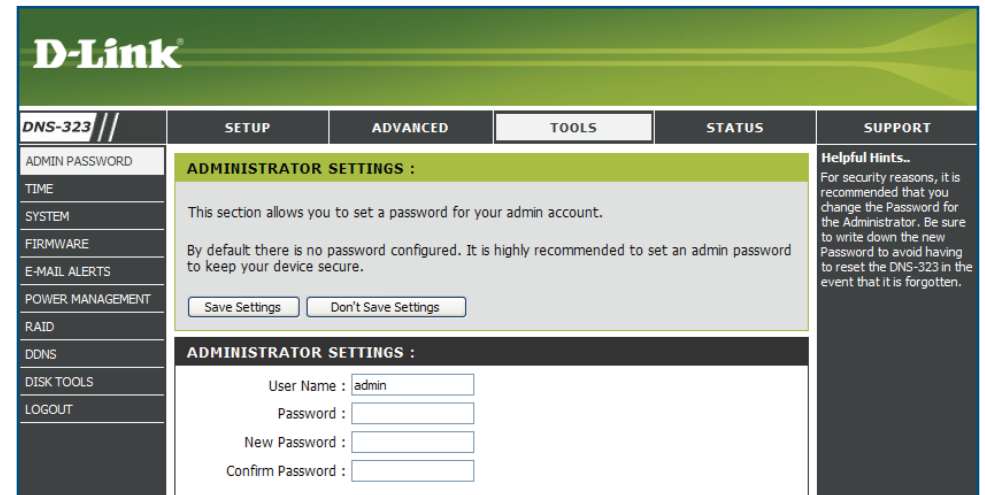
The Admin menu allows you to set a password for your admin account. It is recommended to set a password when first configuring the DNS-323.

**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.



The screenshot shows the D-Link DNS-323 web interface. The top navigation bar includes 'DNS-323', 'SETUP', 'ADVANCED', 'TOOLS' (selected), 'STATUS', and 'SUPPORT'. The left sidebar lists various settings: ADMIN PASSWORD, TIME, SYSTEM, FIRMWARE, E-MAIL ALERTS, POWER MANAGEMENT, RAID, DDNS, DISK TOOLS, and LOGOUT. The main content area is titled 'ADMINISTRATOR SETTINGS :'. It contains a message: '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.' Below this message are two buttons: 'Save Settings' and 'Don't Save Settings'. At the bottom, there are four input fields: 'User Name : admin', 'Password :', 'New Password :', and 'Confirm Password :'. On the right side, there is a 'Helpful Hints..' section with text: 'For security reasons, it is recommended that you change the Password for the Administrator. Be sure to write down the new Password to avoid having to reset the DNS-323 in the event that it is forgotten.'

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

# Time

The DNS-323 Time page contains several different options for setting the device's internal clock. It is important to set an accurate time so that backups and downloads can be accurately scheduled.

**Time Zone** Select your time zone from the drop-down menu.

**Daylight Saving Time** Select the **Enable Daylight Saving** check box. Enter the start and end date in the **DST Start** and **DST End** fields. The daylight saving will execute in the specified days.

**NTP Server** Select the **Enable NTP Server** check box to enable NTP. Network Time Protocol (NTP) synchronizes the DNS-323 with an Internet time server.

D-Link provides two time servers for your convenience. Choose the one closest to your location.

**Set The Date Time Manually** This option allows you to set the time and date manually. Deselect the **Enable NTP Server** check box and enter the appropriate time and date.

**From My Computer** Click the **Set Time From My Computer** button to synchronize the time with your computer.

**D-Link**

**DNS-323** // **SETUP** **ADVANCED** **TOOLS** **STATUS** **SUPPORT**

**ADMIN PASSWORD**  
**TIME**  
**SYSTEM**  
**FIRMWARE**  
**E-MAIL ALERTS**  
**POWER MANAGEMENT**  
**RAID**  
**DDNS**  
**DISK TOOLS**  
**LOGOUT**

**SYSTEM TIME SETTINGS :**

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.

Current Time : 22:04:22 09/13/09  
 Current Time Zone : (GMT-08:00) Pacific Time (US & Canada);Tijuana

**TIME CONFIGURATION :**

Time Zone : [(GMT-08:00) Pacific Time (US & Canada);Tijuana]

Enable Daylight Saving : ☐

Set DST Date :

DST Start : [ ] (mm/dd)  
 DST End : [ ] (mm/dd)

**NTP SERVER :**

Enable NTP Server : ☒

NTP Server : [ ] << [Select NTP Server]

**SET THE DATE AND TIME MANUALLY :**

Date and Time : Month [09] Day [13] Year [2009]  
 Hour [22] Minute [03] Second [43]

**Helpful Hints..**  
 Using the NTP option will guarantee the time to be accurate provided that the DNS-323 is connected to the Internet and your DNS values (in SETUP > LAN) are valid.

Click **Save Settings** to save the time configuration.

# System

The DNS-323 System menu provides options for system restarts, saving and loading configuration settings, and setting idle times.

**Restart** Click **Restart** to reboot the DNS-323.

**Restore Defaults** Click **Restore** to reset the DNS-323 to its factory default settings. This will erase all previous configuration changes.

**Shutdown** Click **Shutdown** to turn off the DNS-323.

**Configuration Settings** Click **Save** to save the current DNS-323 configuration 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-323 configuration settings or that users will be allowed to remain idle while accessing the download schedule settings.

Click **Apply** to save the settings.

**Power LED Control** Click **Disable** to turn off the LED on DNS-323. Click **Enable** to turn on the LED. Click the **Apply** button.

**HTTPS** Select the check box to use secure HTTPS, allowing you access to the web interface. Click the **Apply** button.

The screenshot shows the D-Link DNS-323 web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists menu items: ADMIN PASSWORD, TIME, SYSTEM, FIRMWARE, E-MAIL ALERTS, POWER MANAGEMENT, RAID, DDNS, DISK TOOLS, and LOGOUT. The main content area is titled 'SYSTEM SETTINGS' and contains several sections:

- SYSTEM SETTINGS :** A descriptive text block explaining the system settings section.
- RESTART :** A section with a 'System Restart.' label and a 'Restart' button.
- DEFAULTS :** A section with a 'Restore To Factory Default Settings.' label and a 'Restore' button.
- SHUTDOWN :** A section with a 'System shutdown.' label and a 'Shutdown' button.
- CONFIGURATION SETTINGS :** A section with 'Save Configuration Settings.' (with a 'Save' button) and 'Load Configuration Settings.' (with a 'Load' button and a 'Browse...' button).
- IDLE TIME :** A section with 'Config Inactivity Timer' (set to 10 minutes) and 'Download Schedule Inactivity Timer' (set to 10 minutes), both with 'Apply' and 'Cancel' buttons.
- POWER LED CONTROL :** A section with 'Power LED Control' (radio buttons for 'Enable' and 'Disable', with 'Enable' selected) and an 'Apply' button.
- HTTPS :** A section with a checkbox for 'Enable HTTPS access ONLY (HTTP via SSL encryption)' and an 'Apply' button.

A 'Helpful Hints..' sidebar on the right states: 'If you restore to factory defaults, all current settings will be erased.'

# Firmware

The DNS-323 Firmware menu makes it simple to check for new firmware releases and upload them to the device.

## 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 Info

This section provides information about the current DNS-323 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.

The screenshot shows the D-Link DNS-323 web interface. The top navigation bar includes links for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists various configuration options, with FIRMWARE highlighted. The main content area is titled 'FIRMWARE UPGRADE :'. It contains a message about checking for updates and a link to the D-Link Support Page. Below this, there is a section for 'CURRENT FIRMWARE INFO :'. This section displays the 'Current Firmware Version : 1.08' and 'Firmware Date : 08/27/2009'. There is a 'File Path' input field with a 'Browse...' button next to it. At the bottom of the main content area, there are 'Apply' and 'Cancel' buttons. On the right side of the interface, there is a 'Helpful Hints..' section with additional information about firmware updates.

# E-Mail Alerts

With the DNS-323 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.

## E-mail Alert Settings

This 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.

## Alert Types

This section contains the alert options and their configuration settings.

**D-Link**

**DNS-323** // **SETUP** **ADVANCED** **TOOLS** **STATUS** **SUPPORT**

**E-MAIL ALERTS :**

This section allows you to configure e-mail to be alerting you to certain operational conditions and drive status conditions. These alerts can prove helpful with the management and safeguarding of important data.

Save Settings Don't Save Settings Clear Saved Settings

**E-MAIL ALERT SETTINGS :**

Login Method ☒ Account ☐ Anonymous

User Name

Password

Port

SMTP Server

Sender E-mail

Receiver E-mail

☐ SMTP Authentication

Test E-Mail

**ALERT TYPES :**

☐ Space Status Interval:  (Hours)  (Minutes)

☐ One Of The Volumes Is Full

☐ One Of The Hard Drives Has Failed

☐ The Administrator Password Has Been Changed

☐ Firmware Has Been Upgraded

☐ Send Log File.

☐ One Torrent Download Finished.

☐ System Temperature Has Exceeded   °F

Enabling this feature will cause the DNS-323 to shut down after the selected temperature is exceeded and an e-mail is sent.

**Helpful Hints..**  
The SMTP server is your outgoing mail server. If you aren't sure what this is, contact the company that provides e-mail services for you.

## E-Mail Alert Settings

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

**Port** Enter the port of the SMTP server.

**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@dns323.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 that will receive the alerts. This address must correspond with the SMTP server configured above.

**SMTP Authentication:** Select this check box if your mail server requires authentication.

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

**E-MAIL ALERT SETTINGS :**

Login Method ☒ Account ☐ Anonymous

User Name

Password

Port

SMTP Server

Sender E-mail

Receiver E-mail

☐ SMTP Authentication

**E-MAIL ALERT SETTINGS :**

Login Method ☐ Account ☒ Anonymous

Port

SMTP Server

Sender E-mail

Receiver E-mail

## E-Mail Alert Types

**Space Status** Select an interval in hours and minutes to have a status of space remaining on the drives e-mailed.

**A Volume Is Full** An alert will be sent when the hard drive is full.

**A Hard Drive Has Failed** An alert will be sent if a critical error occurs on one of the drives.

**Administrator Password Change** An alert will be sent if the admin password is changed.

**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 Exceeded** An alert will be sent if the DNS-323 device temperature exceeds the set threshold. After the alert has been sent, the DNS-323 will power off for safety.

**ALERT TYPES :**

☐ Space Status Interval:  (Hours)  (Minutes)

☐ One Of The Volumes Is Full

☐ One Of The Hard Drives Has Failed

☐ The Administrator Password Has Been Changed

☐ Firmware Has Been Upgraded

☐ Send Log File.

☐ One Torrent Download Finished.

☐ System Temperature Has Exceeded   °F

Enabling this feature will cause the DNS-323 to shut down after the selected temperature is exceeded and an e-mail is sent.



# Power Management

The DNS-323 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

Enable or Disable Power Management on the DNS-323 by clicking the appropriate radio button.

## Turn off Hard Drives

Set the amount of time before idle drives will shut down.

Click **Save Settings** to save the settings or **Don't Save Settings** to discard the changes.

## Fan Control

Set the fan to **Auto (Off/Low/High)**, **Auto (Low/High)** or **Manual (Always On High)**.

The screenshot shows the D-Link DNS-323 web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists various configuration options: ADMIN PASSWORD, TIME, SYSTEM, FIRMWARE, E-MAIL ALERTS, POWER MANAGEMENT (selected), RAID, DDNS, DISK TOOLS, and LOGOUT. The main content area is titled 'POWER MANAGEMENT' and contains the following sections:

- POWER MANAGEMENT :** A message states, 'This section allows you to enable or disable the hard drive hibernation.' Below this are two buttons: 'Save Settings' and 'Don't Save Settings'.
- HARD DRIVE HIBERNATION SETTINGS :** This section includes:
  - HDD Hibernation : ☒ Enable ☐ Disable
  - Turn Off Hard Drives : A dropdown menu set to 'After 5 minutes'.
- FAN CONTROL :** This section includes:
  - Type : A dropdown menu set to 'Auto ( Off / Low / High )'.

On the right side of the interface, there is a 'Helpful Hints..' section with text: 'Save on electricity costs and extend the life of your hard drives by using power management. You can also control the fan speed based on your environment.'

# RAID

The DNS-323 supports four different disk configuration types: **Standard**, where each drive is a unique volume, **JBOD**, which combines both drives in a linear fashion to create one volume, as well as **RAID 0** and **RAID 1**.

When **RAID 1** is used, the DNS-323 supports both Auto Rebuild and Manual Rebuild. Auto Rebuild allows a degraded RAID 1 array to be automatically rebuilt when a failed hard drive is replaced by restoring data from the existing hard drive to the newly inserted hard drive. Manual Rebuild requires the user to login to the Web UI of the DNS-323 and initiate the Raid 1 Rebuild by clicking the **Manual Rebuild Now** button.

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

The DNS-323 allows you to change the drive configuration from Standard to RAID 1, without losing any data



## Please Note:

Rebuilding will erase all data on the newly inserted drive.

A pop-up window will appear with the drive configuration options.

Choose the RAID option you want to implement, by clicking the appropriate radio button and press **Next** button.

The steps for configuring RAID are identical to the steps carried out earlier from the **Getting Started** section of the manual.

**RAID CONFIGURATION :**

Vendor	Model	Serial Number	Size
WDC	WD3200AAJS-22VWA	WD-WCARW2381174	320 GB
WDC	WD5000AACS-00ZUB	WD-WCASU1826715	500 GB

Select a RAID type:

☒ Standard (Individual Disks)

☐ JBOD (Linear - Combines Both Disks)

☐ RAID 0 (Striping - Best Performance)

☐ RAID 1 (Mirroring - Keeps Data Safe)

Back

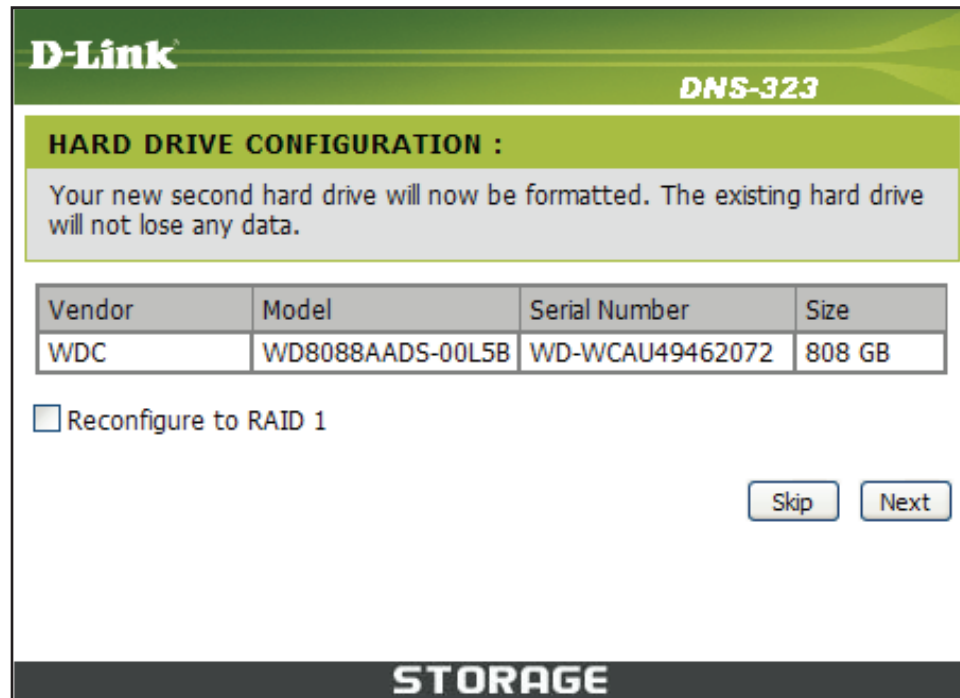
Next

## Configure a new Hard Drive to RAID 1

When inserting a new hard drive into the DNS-323, you can configure it to RAID 1, which will mirror the existing hard drive. By doing this, the new hard drive must have at least the same storage space as the existing hard drive.

To add a new hard drive and configure it to RAID 1 carry out the following steps:

1. Turn off the power and insert a new hard drive into an available drive bay. For more information on Hardware Setup, refer to page 9.
2. Turn on the power and log in the web interface.
3. The page appears in order to configure the new hard drive.
4. Select the **Reconfigure to RAID 1** check box.
5. Click **Next** to proceed.



**D-Link** **DNS-323**

**HARD DRIVE CONFIGURATION :**

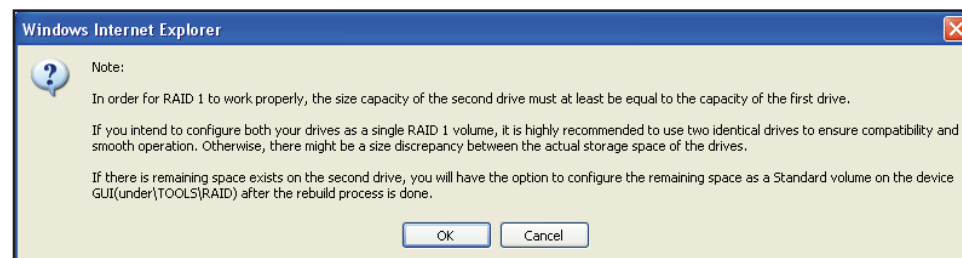
Your new second hard drive will now be formatted. The existing hard drive will not lose any data.

Vendor	Model	Serial Number	Size
WDC	WD8088AADS-00L5B	WD-WCAU49462072	808 GB

☐ Reconfigure to RAID 1

**STORAGE**

6. A warning message appears. Click **OK** to proceed.



7. Select to enable or disable the auto-rebuild function of RAID 1.

The screenshot shows the 'HARD DRIVE CONFIGURATION' section of the D-Link DNS-323 web interface. The interface has a green header with the D-Link logo and the model number 'DNS-323'. Below the header, the title 'HARD DRIVE CONFIGURATION :' is displayed in a green box. A grey box contains a warning: 'This section allows you to setup a RAID configuration on the selected hard drives. Please note that the data stored on the drives will be erased during the formatting process.' Below this, there are two radio button options: 'Enable Auto-Rebuild' and 'Disable Auto-Rebuild'. The 'Disable Auto-Rebuild' option is selected, indicated by a green dot. At the bottom right of the configuration area, there are 'Back' and 'Next' buttons. A dark grey footer bar at the very bottom contains the word 'STORAGE' in white capital letters.

**D-Link** **DNS-323**

**HARD DRIVE CONFIGURATION :**

This section allows you to setup a RAID configuration on the selected hard drives. Please note that the data stored on the drives will be erased during the formatting process.

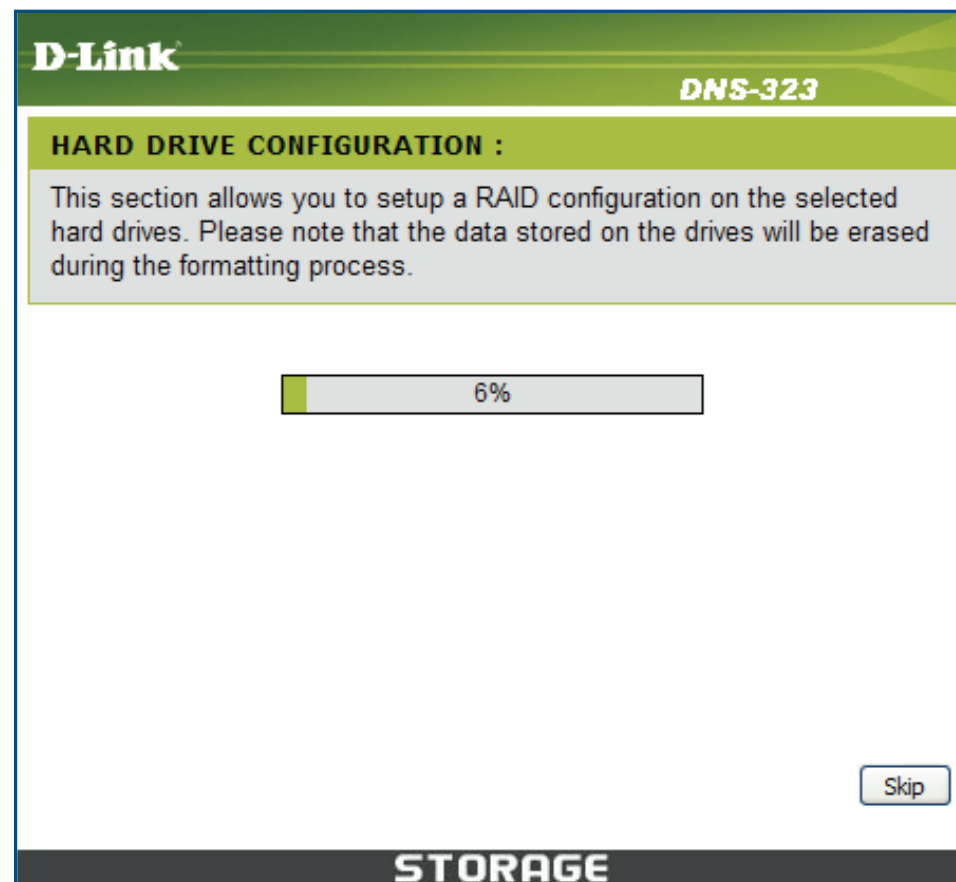
☐ Enable Auto-Rebuild

☒ Disable Auto-Rebuild

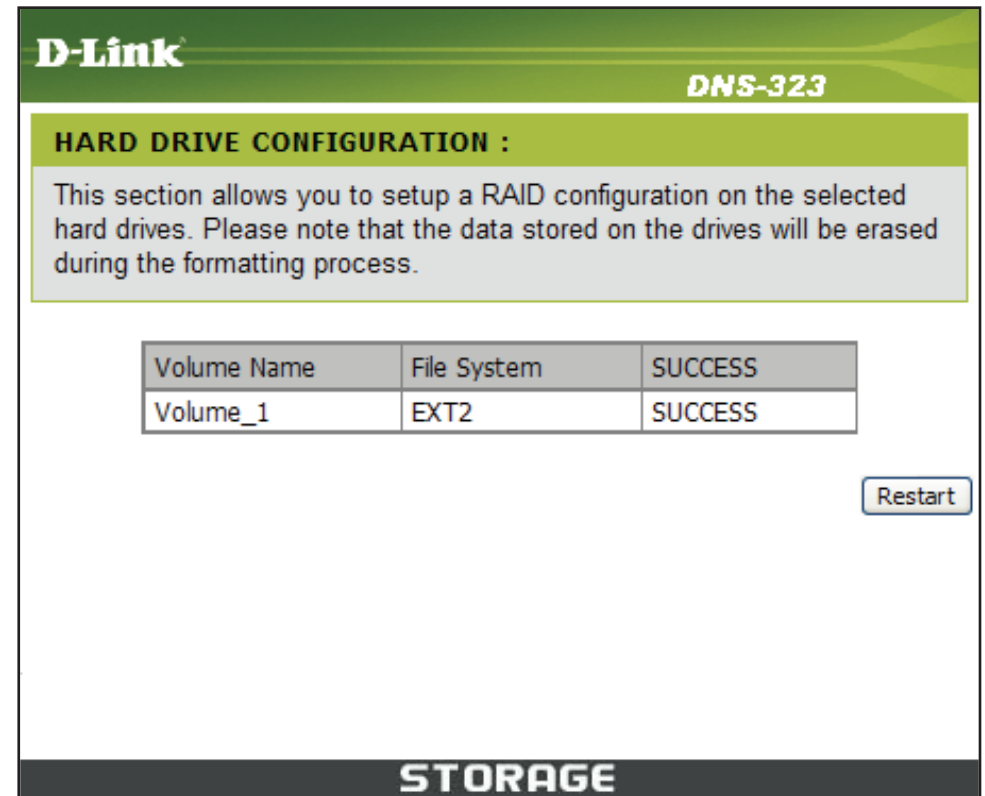
Back Next

**STORAGE**

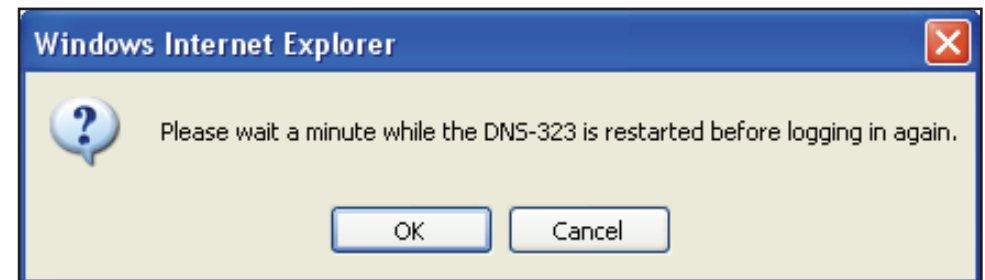
8. Click **Next** to proceed.
9. This window appears to indicate the progress of the disk formatting.



10. When formatting of the drive completes, the DNS-323 will prompt the user to restart. Click the **Restart** button to restart the DNS-323.



11. Click the **OK** button to restart the device.



If clicking the **Skip** button when the first step of Hard Drive Configuration prompts, you can go to RAID (**Tools > RAID**) window to configure the new hard drive.

1. Click the **Format the new drive as Standard type** button.
2. The steps for configuring the new drive are identical to the steps carried out earlier in this Configure a New Hard Drive to RAID 1 section.

**HARD DRIVE CONFIGURATION :**

This section allows you to setup a RAID configuration on the selected hard drives. Please note that the data stored on the drives will be erased during the formatting process.

**AUTO-REBUILD CONFIGURATION** allows you to enable or disable the Auto-Rebuild feature. You can also manually rebuild by clicking the Rebuild button in the RAID CONFIGURATION section. Please note that rebuilding your volume will erase all data on the newly inserted drive.

**RAID CONFIGURATION :**

Current RAID Type :

Volume\_1 : Standard

Set RAID Type and Re-Format

**CONFIGURE THE NEW 2ND DRIVE :**

Format the new drive as Standard type

**AUTO-REBUILD CONFIGURATION :**

☐ Enable Auto-Rebuild  
☒ Disable Auto-Rebuild

Manually Rebuild Now



When the new drive is configured to RAID 1 and the storage space is larger than the existing hard drive, the **Create A New Volume From The Remaining Available Storage Space** button appears to create a new volume for the remaining space.

1. Click the **Create A New Volume From The Remaining Available Storage Space** button to proceed.

**HARD DRIVE CONFIGURATION :**

This section allows you to setup a RAID configuration on the selected hard drives. Please note that the data stored on the drives will be erased during the formatting process.

**AUTO-REBUILD CONFIGURATION** allows you to enable or disable the Auto-Rebuild feature. You can also manually rebuild by clicking the Rebuild button in the RAID CONFIGURATION section. Please note that rebuilding your volume will erase all data on the newly inserted drive.

**RAID CONFIGURATION :**

Current RAID Type :  
Volume\_1 : RAID 1 (Degraded)

Set RAID Type and Re-Format

**REMAINING SIZE :**

Create A New Volume From The Remaining Available Storage Space

**AUTO-REBUILD CONFIGURATION :**

Vendor	Model	Serial Number	Size
WDC	WD8088AADS-00L5B	WD-WCAU49462072	808 GB

☐ Enable Auto-Rebuild  
☒ Disable Auto-Rebuild

Manually Rebuild Now

Apply Cancel

2. Choose the Standard (Individual Disks) and click the **Next** button to proceed.

**HARD DRIVE CONFIGURATION:**

This section will allow you to setup a RAID configuration from the remaining available storage space on the selected hard drives. Please note that the data stored on the drives will be erased during the formatting process.

**REMAINING SIZE :**

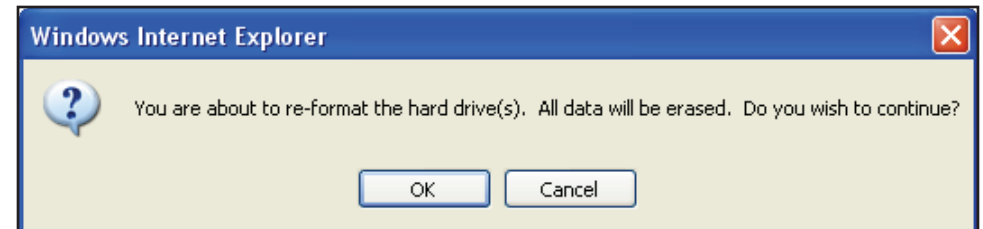
Vendor	Model	Serial Number	Remaining Size
WDC	WD8088AADS-00L5B	WD-WCAU49462072	308 GB

Select a RAID type:

☒ Standard (Individual Disks)  
☐ JBOD (Linear - Combines Both Disks)  
☐ RAID 0 (Striping - Best Performance)  
☐ RAID 1 (Mirroring - Keeps Data Safe)

Next

3. Click **OK** to proceed.

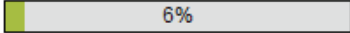


4. This window appears to indicate the progress of the remaining storage space formatting.

**HARD DRIVE CONFIGURATION :**

This section will allow you to setup a RAID configuration from the remaining available storage space on the selected hard drives. Please note that the data stored on the drives will be erased during the formatting process.

**RAID CONFIGURATION :**



6%

5. When formatting of the drive completes, the DNS-323 will prompt the user to restart. Click the **Restart** button to restart the DNS-323.

**HARD DRIVE CONFIGURATION :**

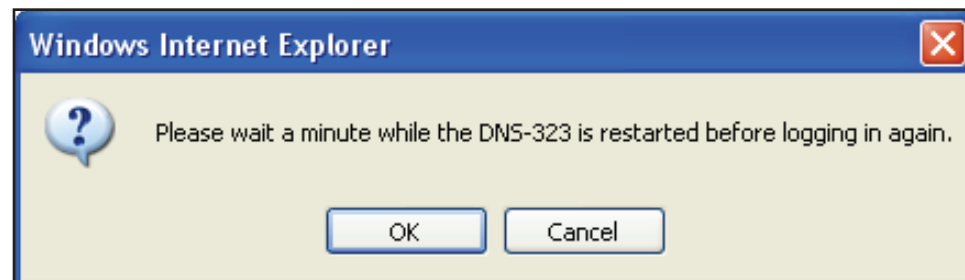
This section allows you to setup a RAID configuration on the selected hard drives. Please note that the data stored on the drives will be erased during the formatting process.

**RAID CONFIGURATION :**

Volume Name	File System	SUCCESS
Volume_2	EXT2	SUCCESS

6. Click the **OK** button to restart the device.

After the new drive has been configured, the RAID window displays the following information.



**HARD DRIVE CONFIGURATION :**

This section allows you to setup a RAID configuration on the selected hard drives. Please note that the data stored on the drives will be erased during the formatting process.

**AUTO-REBUILD CONFIGURATION** allows you to enable or disable the Auto-Rebuild feature. You can also manually rebuild by clicking the Rebuild button in the RAID CONFIGURATION section. Please note that rebuilding your volume will erase all data on the newly inserted drive.

---

**RAID CONFIGURATION :**

Current RAID Type :  
Volume\_1 : RAID 1 (Degraded)  
Volume\_2 : Standard

Set RAID Type and Re-Format

---

**AUTO-REBUILD CONFIGURATION :**

Vendor	Model	Serial Number	Size
WDC	WD8088AADS-00L5B	WD-WCAU49462072	808 GB

☐ Enable Auto-Rebuild  
☒ Disable Auto-Rebuild

Manually Rebuild Now

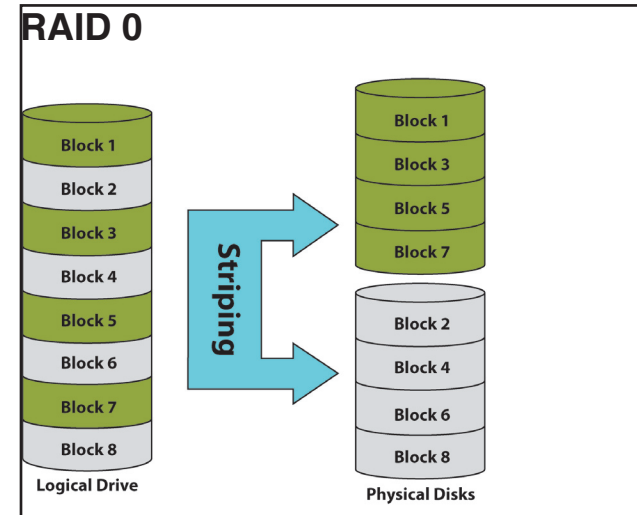
Apply Cancel

## 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 providing a different method of sharing or distributing data amongst the drives. The DNS-323 supports RAID levels 0 and 1.

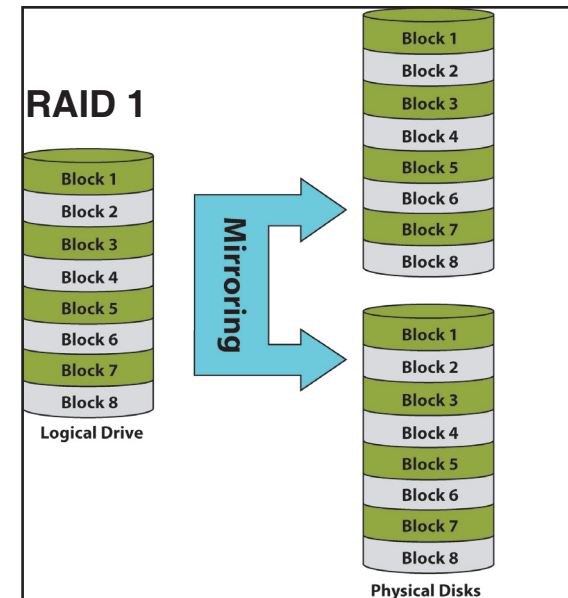
**RAID 0** **RAID 0** provides *data striping*, which spreads out blocks of data over both drives, but does not provide data redundancy.

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 both 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 both disks, **RAID 1** provides fault tolerance and protection, in addition to performance advantages.



# DDNS

The DDNS 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 domain name to connect to your server (IP address does not matter).

- DDNS

Select **Enable** or **Disable**.
- Server Address

Select a DDNS Server from the combo box on the right hand-side, or alternatively type in the server address manually.
- Host Name

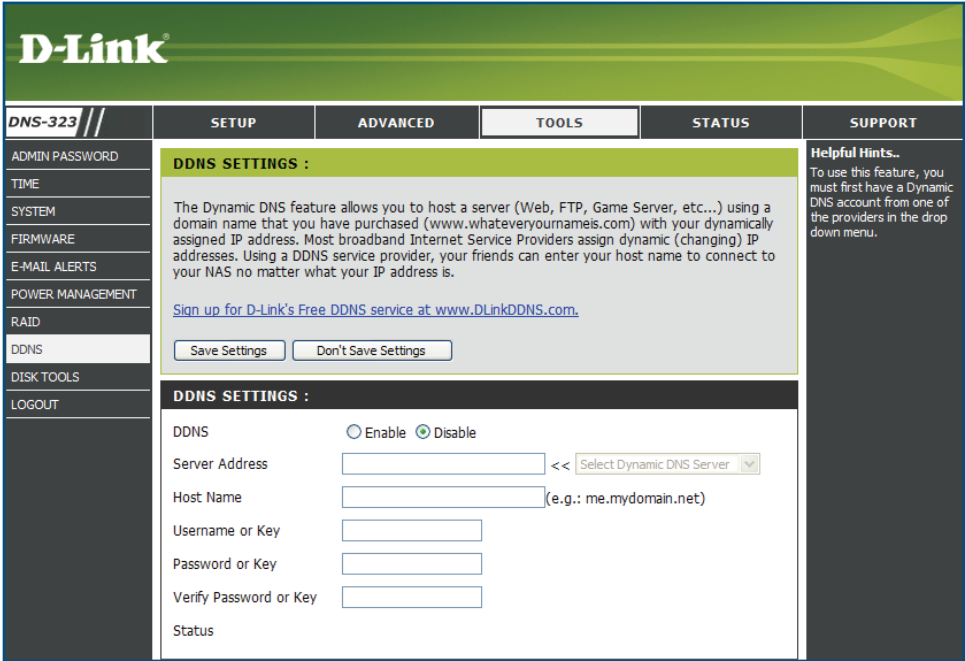
Enter your fully qualified Host Name in this field.
- Username or Key

Enter the username or key provided by your service provider. If the Dynamic DNS provider supplies only a key, enter that key in three fields.
- Password or Key

Enter your DDNS password or key.
- Verify Password or Key

Re-type the password or key provided by your service provider. If the Dynamic DNS provider supplies only a key, enter that key in the three fields.
- Status

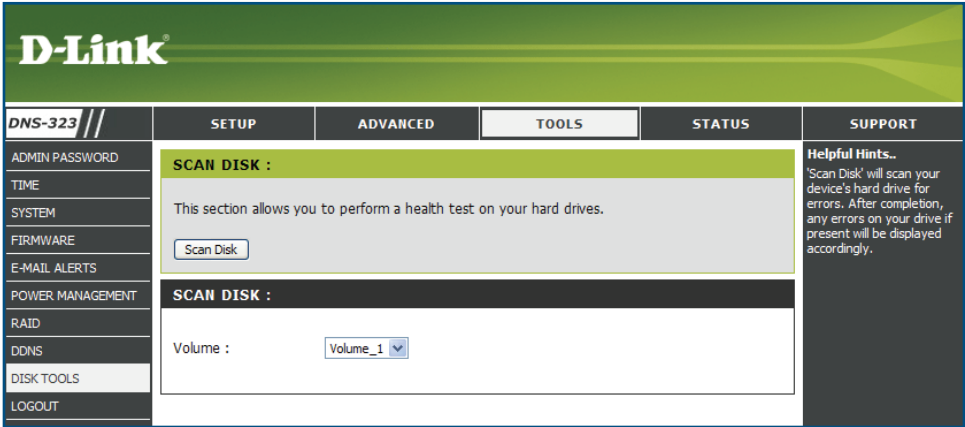
Displays your DDNS status.



# Disk Tools

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.

**Scan Disk**    Select a volume from the drop-down menu and click the **Scan Disk** button.



# Status

## Device Information

**LAN Info** Displays the local network settings of the DNS-323.

**Device Info** Displays the workgroup, name, description and current temperature of the DNS-323.

**Printer Info** Displays information for a USB printer, UPS, or SharePort™ connected device.

**Hard Drive Info** If your computer is having problems printing to the DNS-323, you can click the **Clear Print Queue(s)** button to remove any print jobs that may be causing your computer to be unable to print.

**Physical Disk Info:** Displays the hard drive information, including the disk mode, total size, used and remaining drive space.

Displays the hard drive information, including the disk mode, total size, used and remaining drive space.

The screenshot shows the D-Link DNS-323 web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS (selected), and SUPPORT. The left sidebar shows links for DEVICE INFO, LOGS, and LOGOUT. The main content area displays the following information:

**DEVICE INFORMATION :**  
View a summary of device information here.

**LAN INFO :**  
IP Address: 192.168.0.32  
Subnet Mask: 255.255.255.0  
Gateway IP Address: 192.168.0.1  
Mac Address: 00:1E:58:A3:95:E9  
DNS1:  
DNS2:

**DEVICE INFO :**  
Workgroup: workgroup  
Name: dlink-A395E9  
Description: DNS-323  
System Temperature: 113°F / 45°C  
Current Rx/Tx: 47795/47928  
System Up Time: 0 day 2 hours 16 minutes

**PRINTER INFO :**  
Manufacturer: None  
Product: None

**HARD DRIVE INFO :**  
Total Drive(s): 2

Volume Name	Volume Type	Sync Time Remaining	Total Hard Drive Capacity	Used Space	Unused Space
Volume_1	RAID 1	Completed	79267 MB	64 MB	79203 MB
Volume_2	JBOD		646660 MB	72 MB	646588 MB

**PHYSICAL DISK INFO :**

Slot	Vendor	Model	Serial Number	Size
Right	WDC	WD3200AAJS-22VWA	WD-WCARW2381174	320 G
Left	WDC	WD5000AACS-00ZUB	WD-WCASU1826715	500 G



# Logs

Use the Log window to view a summary of the System and FTP Log Events on the DNS-323.

Choose 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.

**D-Link**

**DNS-323** // **SETUP** **ADVANCED** **TOOLS** **STATUS** **SUPPORT**

**DEVICE INFO**  
**LOGS**  
**LOGOUT**

**LOGS :**

Use this option to view the NAS system logs and the FTP logs.

**LOGS :**

LOGS : System Log

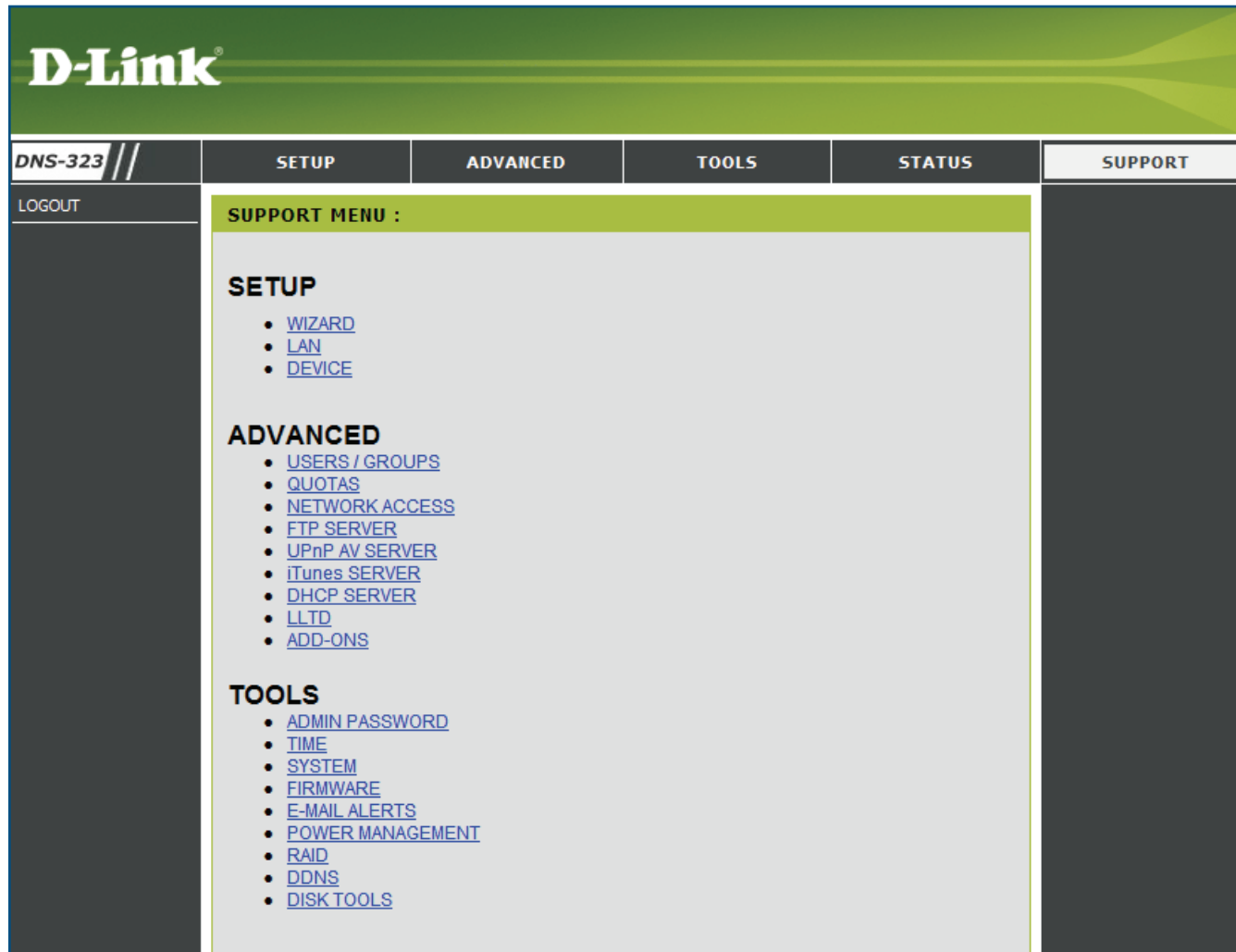
Date	Time	Info
2009/09/13	17:08:33	System restore to factory default settings.
2009/09/13	17:10:12	System up.
2009/09/13	17:12:08	admin login.
2009/09/13	17:12:37	Created a "user01" account.
2009/09/13	17:12:51	Created a "user02" account.
2009/09/13	17:16:22	Created a "user03" account.
2009/09/13	17:16:37	Created a "group01" group.
2009/09/13	17:16:49	Created a "group02" group.
2009/09/13	17:17:30	Created a "user1" account.
2009/09/13	17:17:45	Created a "user2" account.

Page: 1 ⏪ ⏩ ⏴ ⏵ Page:1/3, Total Records:29

**Helpful Hints..**  
 We recommend that you frequently check the logs for system/hard drive errors and/or unauthorized NAS usage.

# Support

The DNS-323 Support page provides a menu of Support topics explaining the features of the device.



# Mapping a Drive

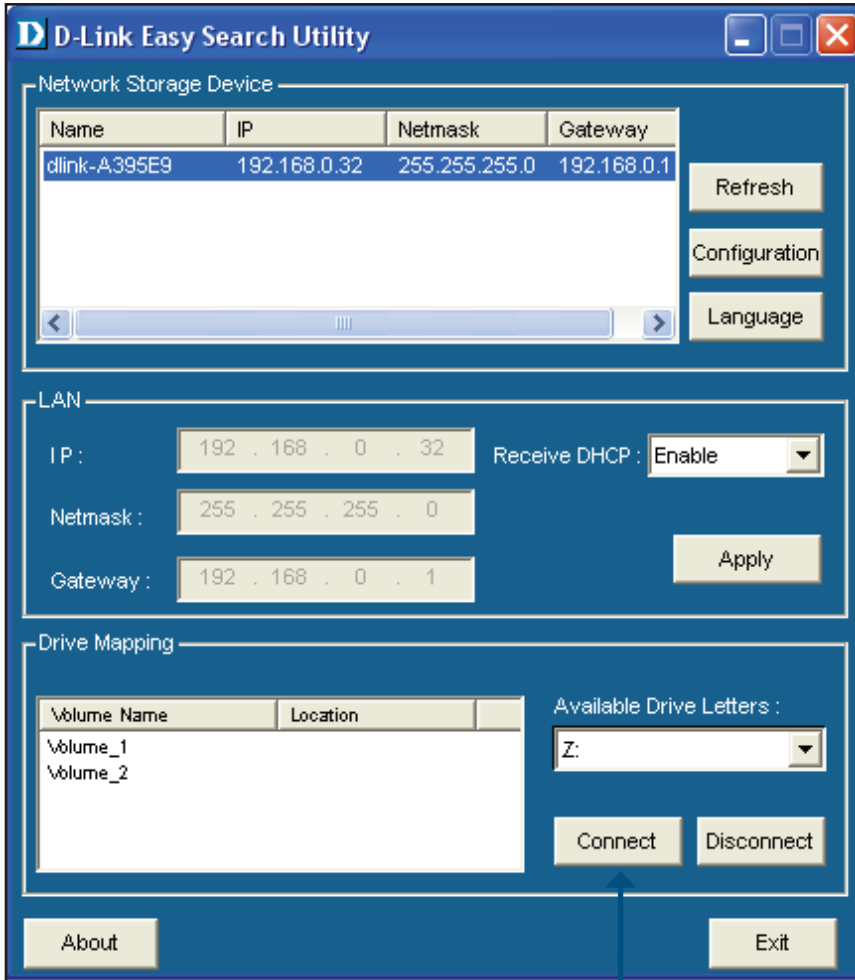
You can use the D-Link Easy Search Utility to map drives to your computer. Insert the DNS-323 CD into your CD-ROM drive.

Click **Easy Search Utility**.



The Easy Search Utility will load and detect any DNS-323 devices that are on the local network.

If the DNS-323 you are working with does not show up in the device list, click **Refresh**.



The screenshot shows the 'D-Link Easy Search Utility' window. It has three main sections: 'Network Storage Device', 'LAN', and 'Drive Mapping'. The 'Network Storage Device' section contains a table with columns 'Name', 'IP', 'Netmask', and 'Gateway'. The first row is highlighted in blue and contains the text 'dlink-A395E9', '192.168.0.32', '255.255.255.0', and '192.168.0.1'. To the right of this table are three buttons: 'Refresh', 'Configuration', and 'Language'. The 'LAN' section contains four input fields for 'IP', 'Netmask', and 'Gateway', each with a dropdown arrow on the right. The 'IP' field is set to '192 . 168 . 0 . 32', 'Netmask' to '255 . 255 . 255 . 0', and 'Gateway' to '192 . 168 . 0 . 1'. There is also a 'Receive DHCP' dropdown set to 'Enable' and an 'Apply' button. The 'Drive Mapping' section contains a table with columns 'Volume Name' and 'Location'. The first row is highlighted in blue and contains the text 'Volume\_1' and 'Volume\_2'. To the right of this table is an 'Available Drive Letters' dropdown set to 'Z:'. Below this are 'Connect' and 'Disconnect' buttons. At the bottom of the window are 'About' and 'Exit' buttons.

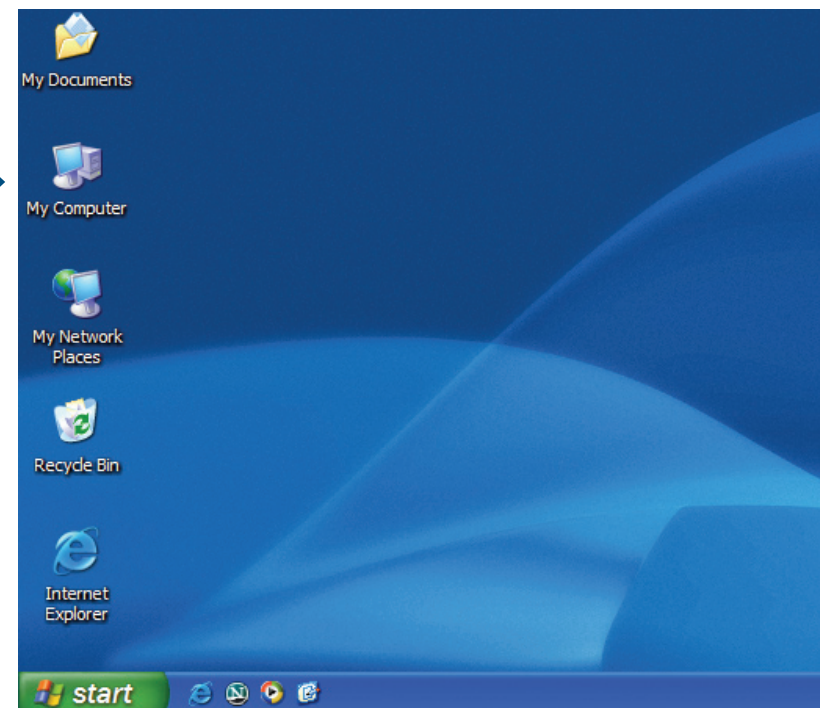
Highlight an available DNS-323.

All available volumes will be displayed under **Drive Mapping**. Highlight the volume you want to map to your computer.

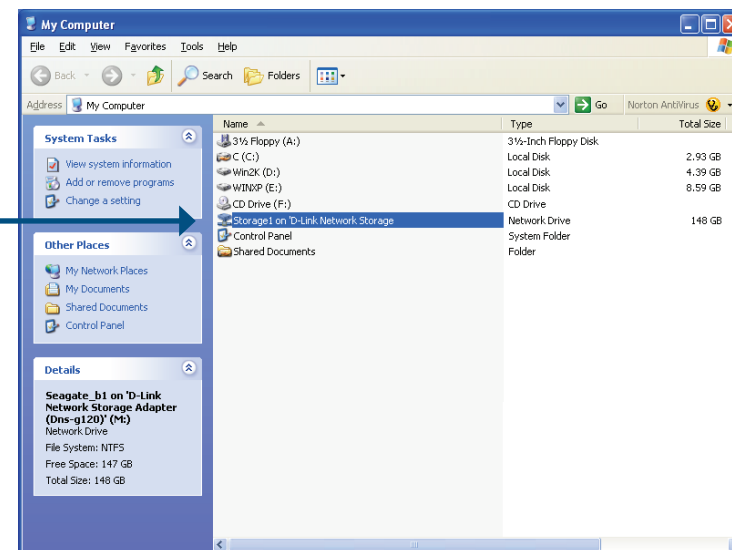
Select an available drive letter from the drop-down menu and click **Connect**.

Once connected, your mapped drive(s) will appear in **My Computer**.

Double-click the **My Computer** icon on your desktop.



Double-click on the mapped drive to access the files and folders.



# Download Scheduling

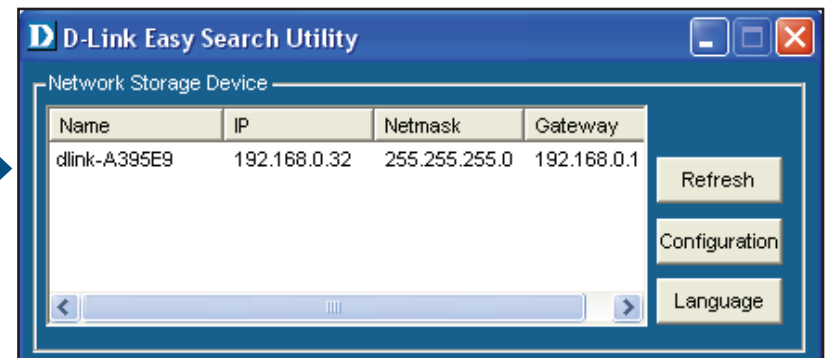
The DNS-323 Download Scheduling feature allows you to schedule folder or file downloads and backup sessions.

Begin by accessing the web-based configuration utility of your DNS-323:

Click **Easy Search Utility**.



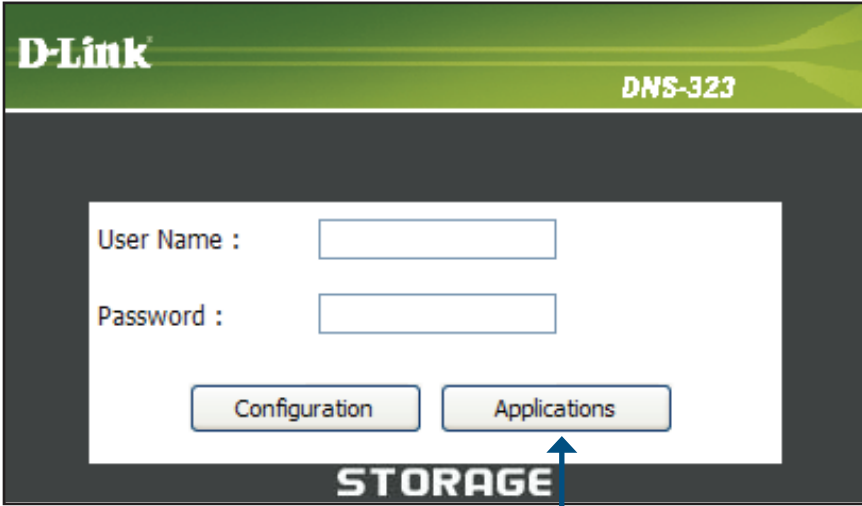
Highlight an available DNS-323 and click **Configuration** to access the web-based utility.



The DNS-323 login screen will appear:

Type **admin** for the username and leave the password field blank by default or your new password.

Click **Applications**.



The screenshot shows the D-Link DNS-323 login interface. At the top, there is a green banner with the 'D-Link' logo on the left and 'DNS-323' on the right. Below this banner is a dark grey rectangular area. Inside this area is a white rectangular box containing the login form. The form consists of two text input fields: 'User Name' and 'Password'. Below these fields are two buttons: 'Configuration' and 'Applications'. At the bottom of the dark grey area, the word 'STORAGE' is written in a large, bold, white font. Two blue arrows originate from grey text boxes on the left. The first arrow points from the text 'Type **admin** for the username and leave the password field blank by default or your new password.' to the 'User Name' input field. The second arrow points from the text 'Click **Applications**.' to the 'Applications' button.

The DNS-323's **Download Scheduling** configuration page will appear.

# Schedule Download Scheduling Settings

**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  
ftp://123.456.789/test.txt  
http://www.test.com/test.txt

**Test** Click **Test** to test if the URL is valid and the user name and password are correct.

**Local** Click **Test** to test if the URL is valid and the user name and password are correct.

**Save To** Enter a valid destination drive on the DNS-323, or click **Browse** to select 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. Checking **Incremental Backup** will have the DNS-323 compare identical file names at the source and destination. Files will only be overwritten if the source file is more recent edited.

**D-Link**

**DNS-323** // SCHEDULE DOWNLOAD BITTORRENT

**SCHEDULING**  
STATUS  
SUPPORT  
LOGOUT

**SCHEDULING SETTINGS :**

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

Save Settings Don't Save Settings

**SCHEDULING SETTINGS :**

Login Method ☐ Account ☒ Anonymous

User Name \*\*\*\*\*

Password \*\*\*\*\*

Type

URL  Test Local

Save To  Browse

When Date : 09 / 16 / 2009  
Time : 01 : 52

Recurring Backup  00 : 00

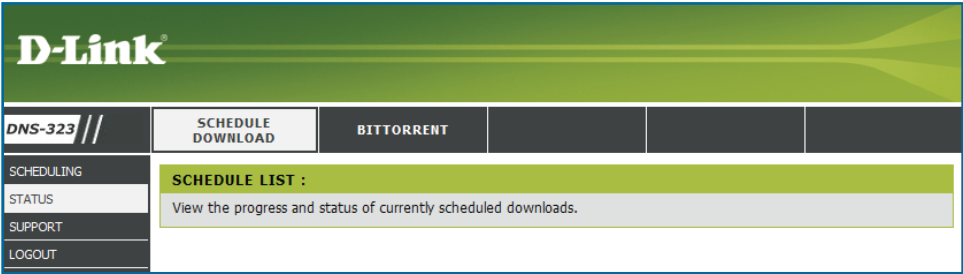
☐ Incremental Backup (Only for local backup)

**Helpful Hints..**  
Always test the URL before applying changes. This will help to ensure a successful download.



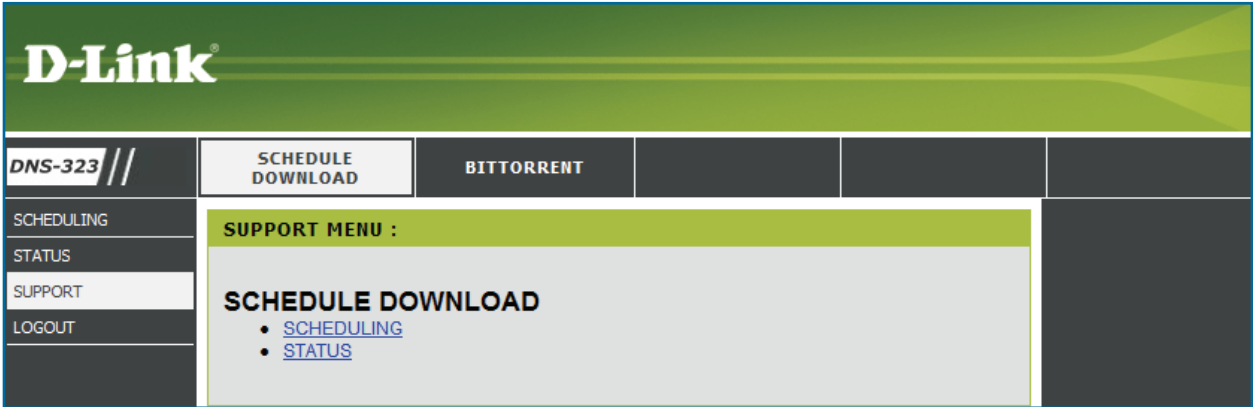
# Schedule Status

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



# Support

The Support page provides a menu of Support topics explaining the features of the Schedule Download.



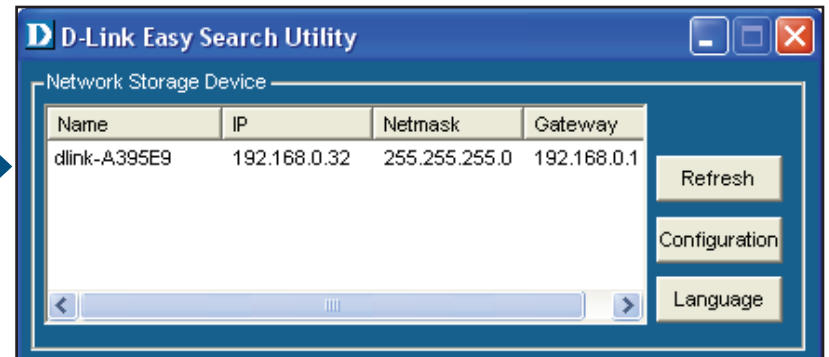
# BitTorrent

BitTorrent is a peer-to-peer file sharing protocol used for distributing large amounts of data. Go to **Advanced** -> **Add-ons** to add and enable the BitTorrent application pack in order to see the BitTorrent window. For installing the application pack, refer to page 45 for more detail.

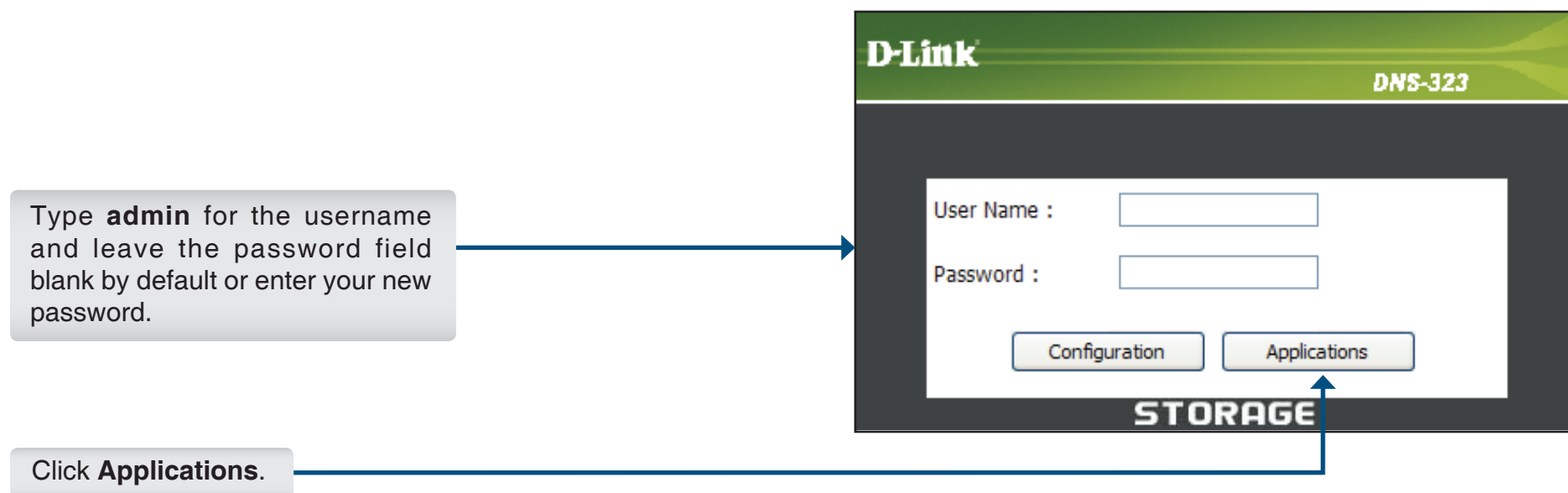
Click **Easy Search Utility**.



Highlight an available DNS-323 and click **Configuration** to access the web-based utility.

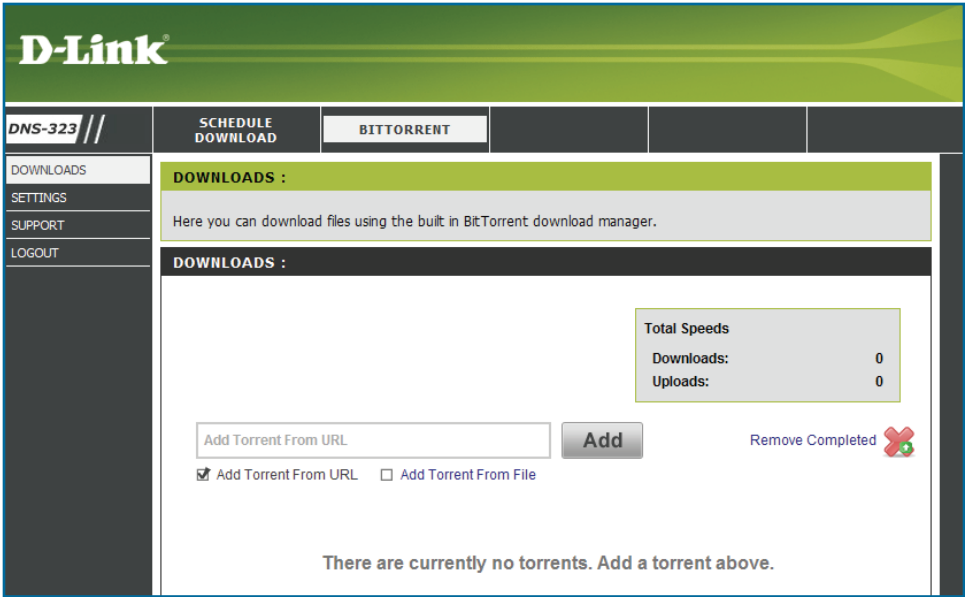


The DNS-323 login screen will appear.



On the following screen, click the **BitTorrent** option to access the BitTorrent settings:

You can add Torrents from either a URL or from a file on your PC.

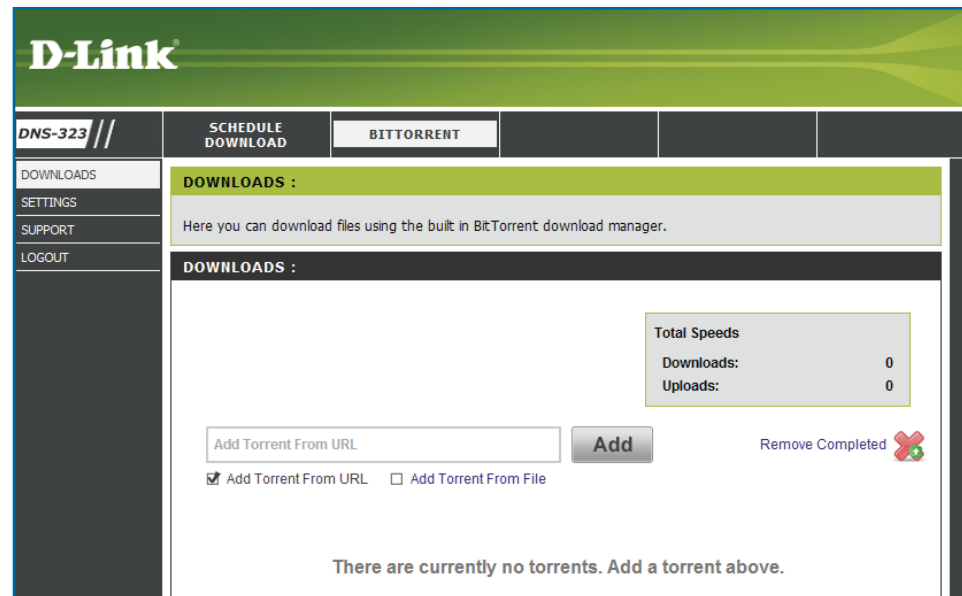


## Adding a Torrent From URL

To add a Torrent from a URL

- Click the **Add Torrent From URL** checkbox.
- Type in the URL of the website where you will download the Torrent from and click the **Add** button.

The Torrent will now appear in the Downloads list.

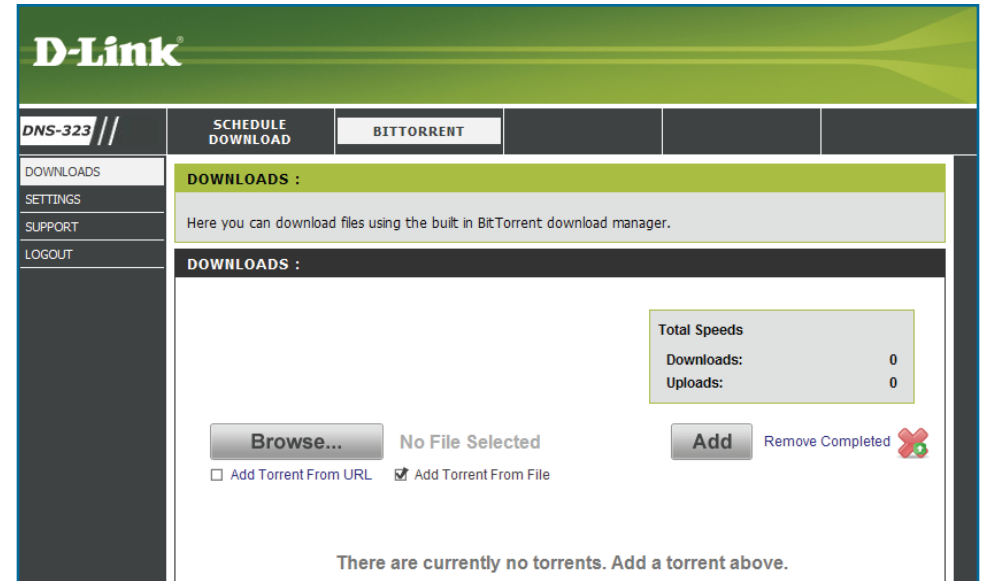


## Adding a Torrent From File

To add a Torrent from a File

- Click the **Add Torrent From File** checkbox.
- Click the **Browse** button.
- Navigate to the folder where the Torrents are located on your PC and click the **Add** button.

The Torrent will now appear in the Downloads list.



# Torrent Settings

Click the **Settings** link in the **BitTorrent** menu to change the Bit Torrent settings.

You can use the radio buttons on this screen to customize the Bit Torrent Settings of the DNS-323.

**Port Settings** 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.

**Bandwidth Management** To manually set the Bandwidth Management click the **Manual** radio button and type in the Maximum download rate, Maximum upload rate and Maximum upload rate when seeding in the appropriate text boxes.

**Seeding** Select the appropriate seeding option from the radio buttons.

**Path** Select the path for saving Torrents.

When you have finished click the **Save** button.

**D-Link**

**DNS-323** // SCHEDULE DOWNLOAD BITTORRENT

**DOWNLOADS**  
**SETTINGS**  
 SUPPORT  
 LOGOUT

**SETTINGS :**

Here you can configure your BitTorrent download manager settings.

**SETTINGS :**

**Port Settings:**

☒ Default (6881)  
☐ Custom  
 Incoming connections port:

**Bandwidth Management:**

☒ Automatic  
☐ 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:**

☒ Seed until removed  
☐ Stop seeding when ratio reaches  %  
☐ Stop seeding after  (Minutes)

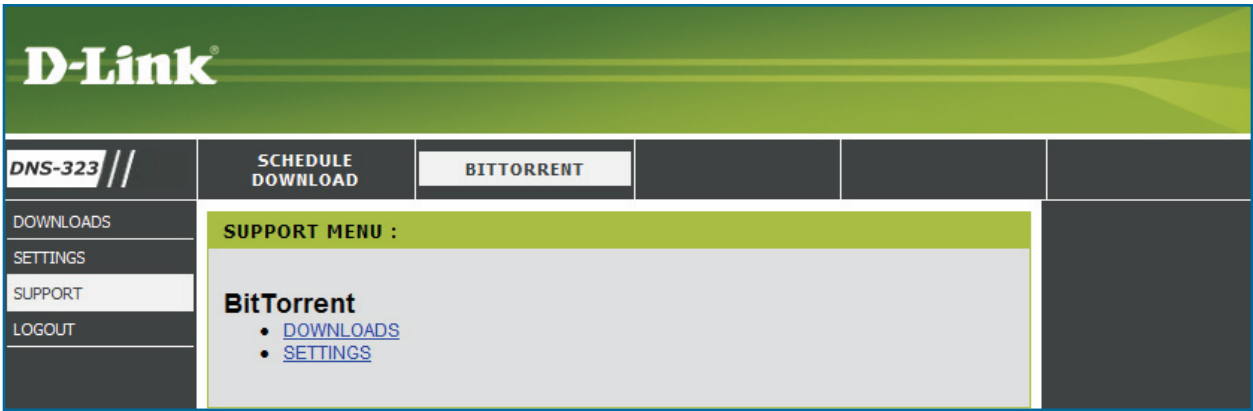
**Path:**

Torrent save path:

**Save** **Cancel**

# Downloads Support

The Support page provides a menu of Support topics explaining the features of the BitTorrent.



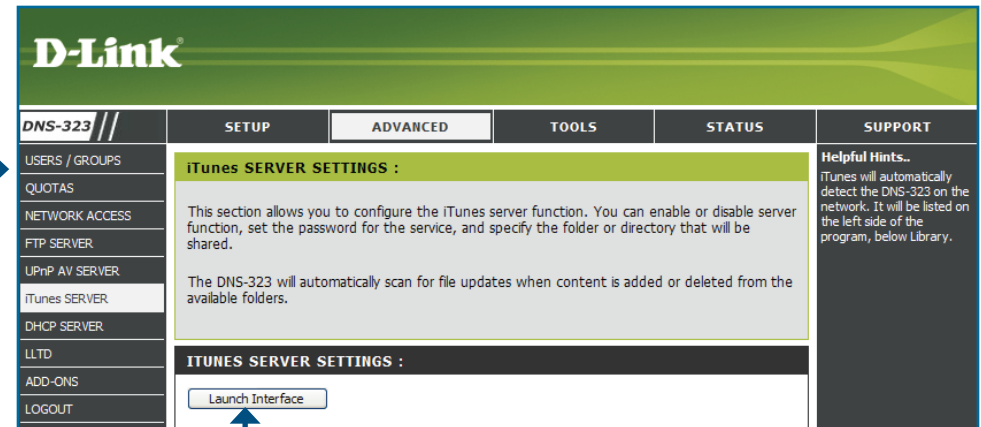


# Firefly iTunes

Firefly is a media server for digital music. Go to **Advanced** -> **Add-ons** to add and enable the Firefly application pack in order to see the window below. For installing the application pack, refer to page 45 for more detail.

Go to **Advanced** -> **iTunes Server** window.

Click **Launch Interface** to connect to Firefly.



The Firefly page appears. For more information about how to use Firefly, refer to Firefly website (<http://www.fireflymediaserver.org/index.php>).

**firefly**

The best open-source media server for the [Roku SoundBridge](#) and iTunes



Server status

Smart playlists

Configuration

About firefly

Help

Thanks

Version svn-1696

### Server Status

Service	Status	Control
Firefly Media Server	Running	
File scanner	Idle	<div>Start Scan</div> <div>Start Full Scan</div>

Plugin	Version
Uptime	11 minutes, 6 seconds
Songs	0
Songs Served	0
DB Version	2

Client IP	Action
-----------	--------

# NFS

Network File System (NFS) is a protocol for network share folders. Go to **Advanced** -> **Add-ons** to add and enable the NFS application pack in order to see the window below. For installing the application pack, refer to page 45 for more detail.



Go to **Advanced** -> **Network Access** to see NFS appear under Type in the Network Access Settings section. Click **NFS** and enter the information below.

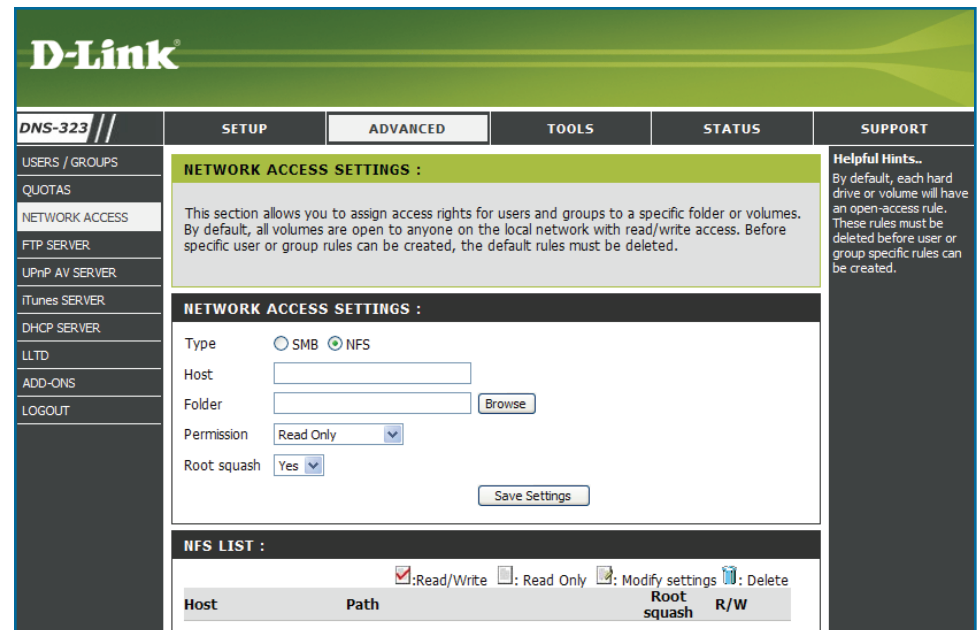
**Host** Select the appropriate login method to access the files for download. If the site requires login credentials, select **Account** and enter a valid username and password.

**Folder** Click the **Browse** button to open and select the folder or directory you are controlling access to.

**Permission** Set the user or group permission to **Read Only** or to **R/W: Read/Write**.

**Root Squash** Select Yes to map the root users when accessing NFS.

**NFS List** Lists all defined access rules. To modify an access rule, click the  icon. To remove an access rule, click the  icon.



**D-Link**

DNS-323 //

SETUP ADVANCED TOOLS STATUS SUPPORT

USERS / GROUPS  
QUOTAS  
NETWORK ACCESS  
FTP SERVER  
UPnP AV SERVER  
iTunes SERVER  
DHCP SERVER  
LLTD  
ADD-ONS  
LOGOUT

**NETWORK ACCESS SETTINGS :**

This section allows you to assign access rights for users and groups to a specific folder 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 :**

Type ☐ SMB ☒ NFS

Host

Folder

Permission

Root squash

**NFS LIST :**

Host	Path	<input checked="" type="checkbox"/> : Read/Write	<input type="checkbox"/> : Read Only	<input type="button" value="Modify settings"/>	<input type="button" value="Delete"/>
				Root squash	R/W

**Helpful Hints..**  
By default, each hard drive or volume will have an open-access rule. These rules must be deleted before user or group specific rules can be created.

**Note:** To allow NFS access to anyone on the network, enter the IP Address 192.168.0.0/24 where 192.168.0.0 is the IP Subnet of your network.

# UPS Monitoring

The DNS-323 supports a battery backup, or uninterruptible power supply (UPS). Connect a UPS to the USB port on the back of the DNS-323. You will see the UPS listed on the Device Information window (**Status > Device Info**) under UPS Info.

To add an uninterruptible power supply, carry out the following steps:

1. Turn off the DNS-323 if it is not already powered down.
2. Connect the UPS to the USB port on the back of the DNS-323.
3. Connect the power of the DNS-323 to the UPS.
4. Turn on the UPS.
5. Turn on the DNS-323.
6. Verify if the UPS is properly connected and powered on by going to the Device Information window (pictured on the right) and confirming if the UPS is listed in the UPS Info section.

The screenshot shows the 'DEVICE INFO' window of the DNS-323. The window has a sidebar on the left with 'DEVICE INFO' and 'LOGOUT' options. The main content area is titled 'DEVICE INFORMATION : View a summary of device information here.' and contains several sections:

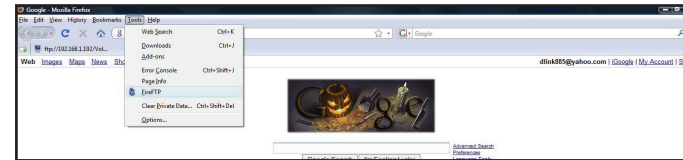
- LAN INFO :**
  - IP Address: 192.168.1.192
  - Subnet Mask: 255.255.255.0
  - Gateway IP Address: 192.168.1.1
  - Mac Address: 00:19:5B:3D:04:D1
  - DNS1: 192.168.1.1
  - DNS2:
- DEVICE INFO :**
  - Workgroup: workgroup
  - Name: DNS-323
  - Description: DNS-323
  - System Temperature: 114°F / 46°C
- PRINTER INFO :**
  - Manufacturer: None
  - Product: None
  - Clear print queue(s)
- HARD DRIVE INFO :**
  - Total Drive(s): 1
  - Volume Name: Volume\_1
  - Total Hard Drive Capacity: 983454 MB
  - Used Space: 5538 MB
  - Unused Space: 977915 MB
- PHYSICAL DISK INFO :**

Slot	Vendor	Model	Serial Number	Size
1	Seagate	ST31000340AS	9QJ04LQ8	1000 G
2	-	-	-	-

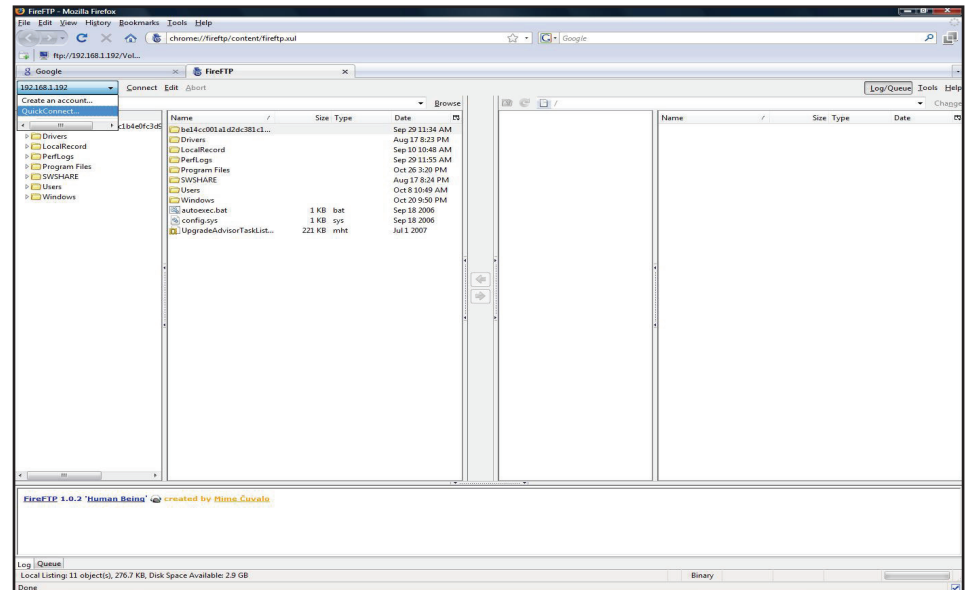
# Using FireFTP

The DNS-323 supports FireFTP, an open source, cross-platform FTP client for Mozilla Firefox users that want to use FTP or FTPS. To use FireFTP, follow the directions below.

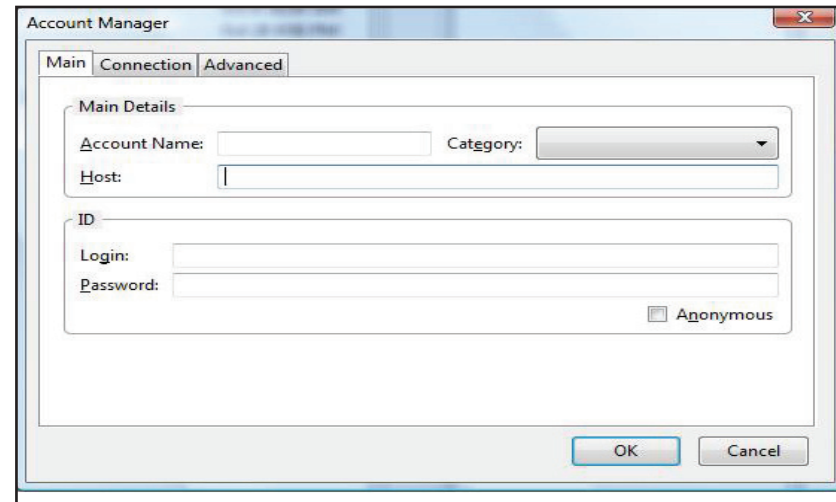
From the Tools menu, click **FireFTP** to start the FireFTP FTP client.



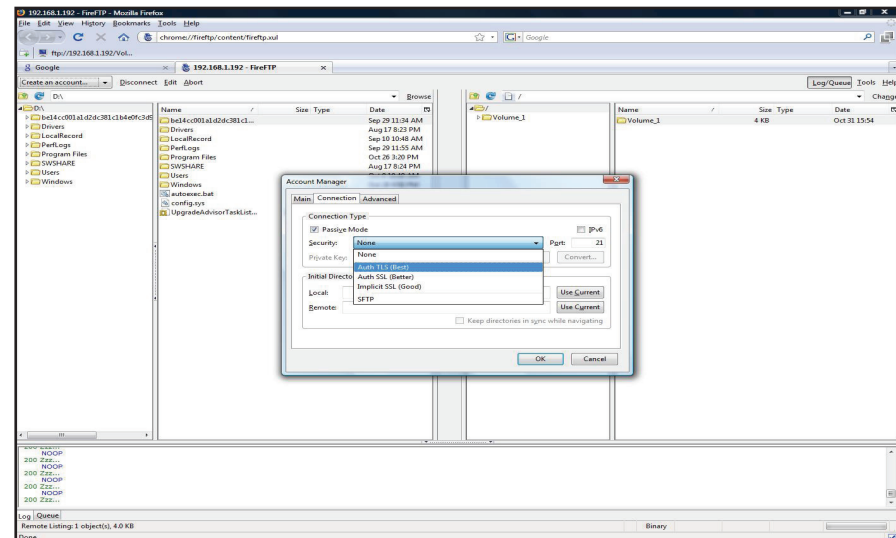
Create a new connection.



Set the IP address and user account on the Main tab of the Account Manager window to login to the DNS-323 FTP server. Click **OK**.



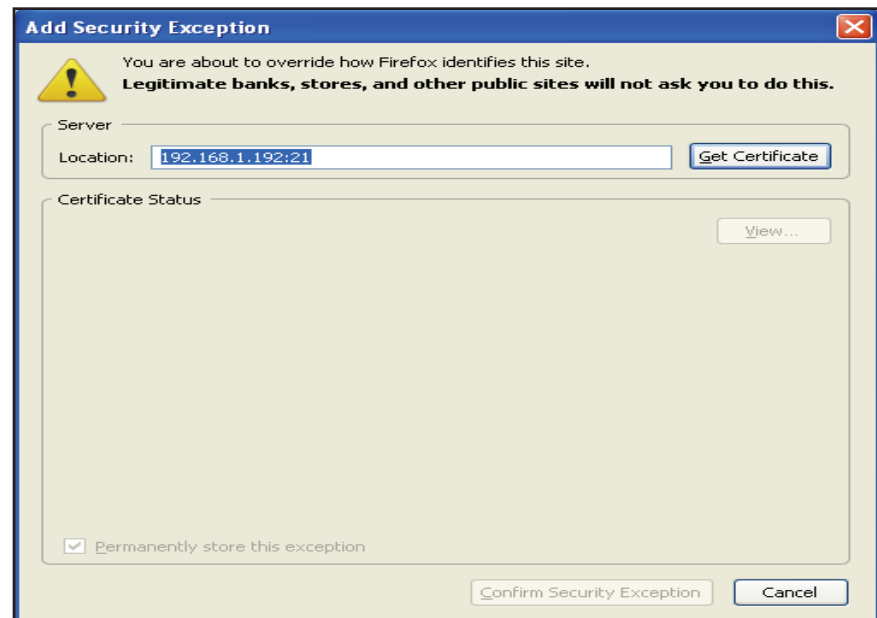
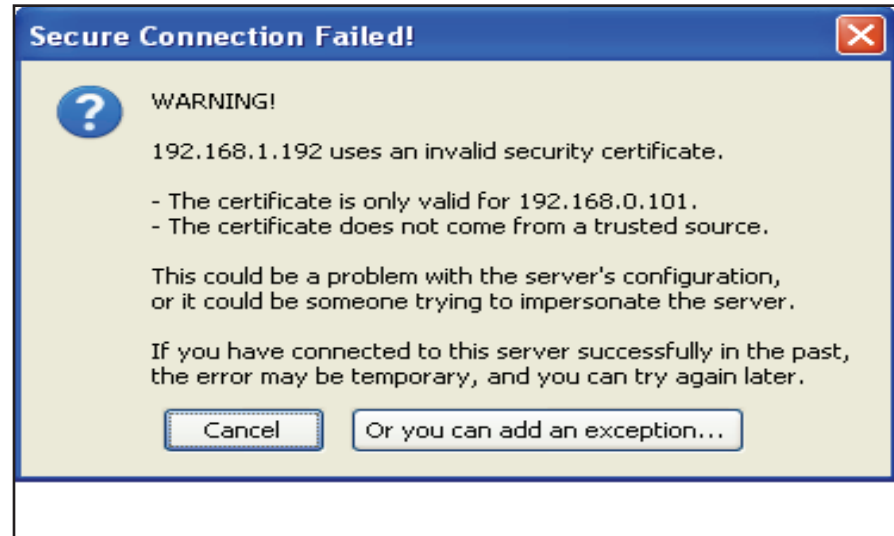
Go to the Connection tab of the Account Manager window and set the security function to “Auth TLS (Best)” mode. Press **OK** to finish the setting.



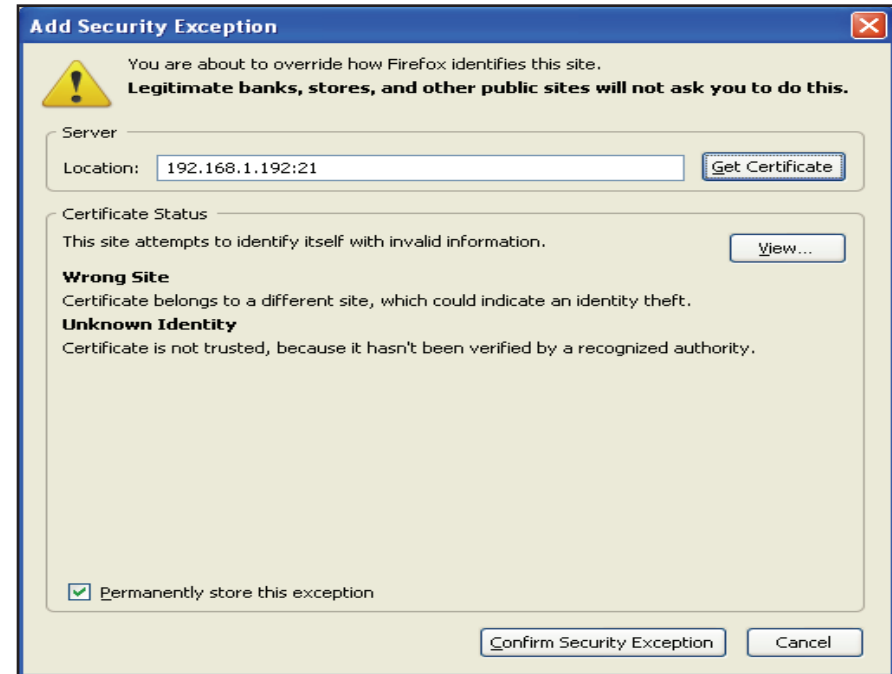
You will now see a series of pop-up warning messages that look similar to the ones depicted on the right. Click the buttons which are marked with a red frame to continue. Click the **Or you can add an exception...** button.

Click the **Add exception...** button

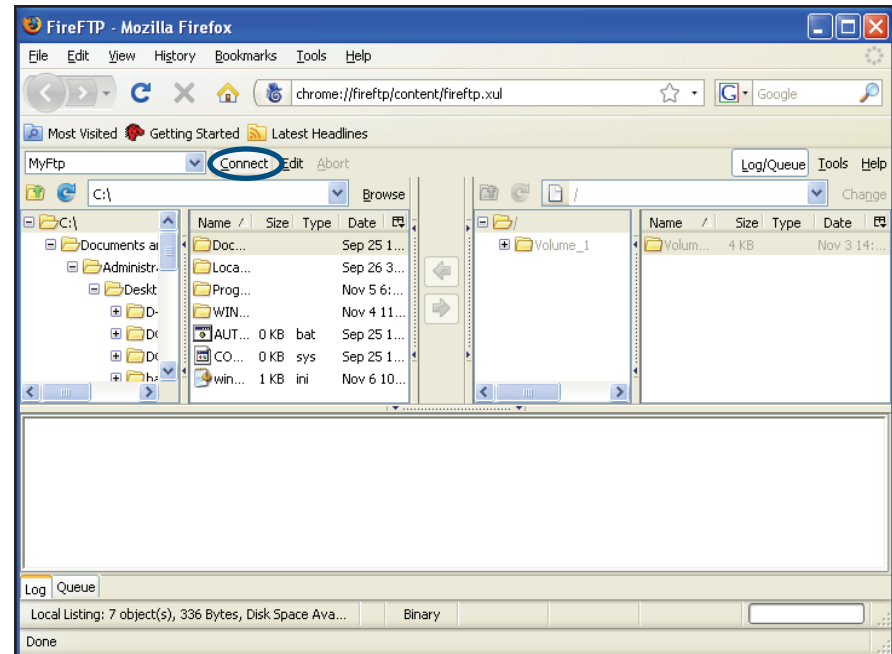
Click the **Get Certificate** button.



Click the **Confirm Security Exception** button.

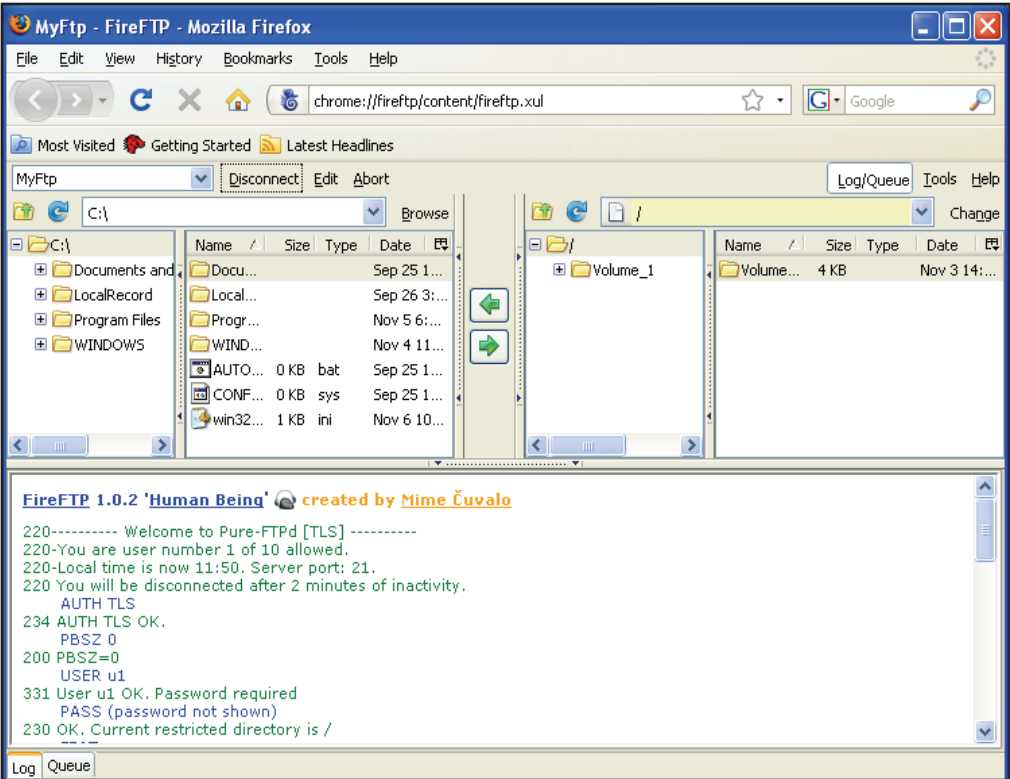


Press the **Connect** button to connect to the DNS-323 FTP server.





This window indicates you have made a successful connection.



# Yahoo! Widget Configuration

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

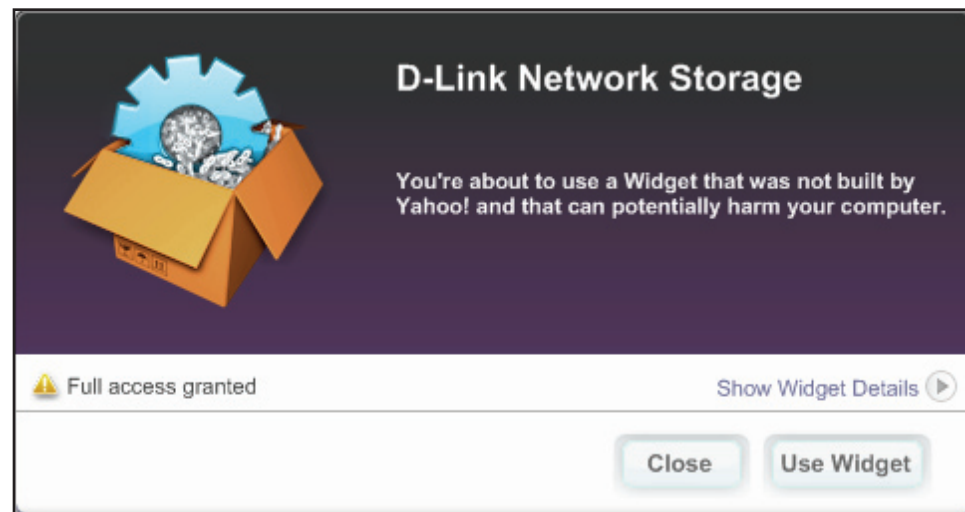
What is a Yahoo! Widget?

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. Once you hover with your mouse over the D-Link Widget you'll be able to click the **configuration** button.

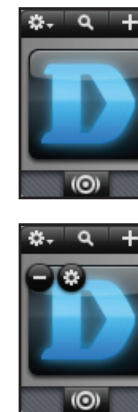
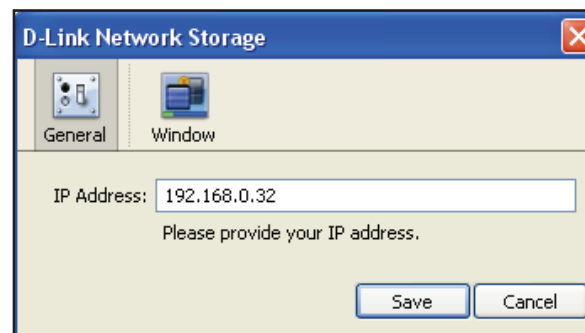
**Note:** The software can be found in the CD-ROM or downloaded from D-Link's support site.



- Step 2.** Click the **configuration** button to configure the Widget.

Enter the IP Address of your DNS-323 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:** In the System window, information about your Computer, ShareCenter™, IP Address, Firmware Version and Current Operational Temperature are displayed.

**Hard Drive:** In the Hard Drive window, information about the storage space of your ShareCenter™ is displayed.

**Server:** In the Server window, information about the USB Device, UPnP Server, iTunes and FTP Server configured on your ShareCenter™ is displayed.

**Download:** In this window, the user can view the download status of files being downloaded using the Bit Torrent Client Add-on. Please note that the Bit Torrent Add-on must be installed on the device for this window to display information.



# Storing non-English Character Files

If you are using firmware 1.04 or higher, then by default the DNS-323 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. However, if you were using an earlier version (firmware 1.03 or earlier) and have just upgraded to 1.04 or higher, Unicode will not be supported until you have reformatted the hard drives in your DNS-323. If you wish to store non-English character files, but do not want to reformat your hard drives, you will need to change the Language setting of the device to ensure compatibility with those files.

Follow the Easy Search Utility steps below to change the language of your device if you have chosen to not reformat your hard drives.

Insert the DNS-323 CD into your CD-ROM drive.

Click **Easy Search Utility**



# Replacing or Adding a New Hard Drive

It is recommended that you back up your important files before replacing or adding a new hard drive to the DNS-323.

## 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-323 and then connect to the Web UI. The DNS-323 will prompt you to format the new drive (Standard, RAID 1 mode) or both drives (JBOD, RAID 0 mode).

## Adding a New Hard Drive:

The DNS-323 is able to work with one single hard drive under Standard mode. Please make sure the power is off before installing a second hard drive.

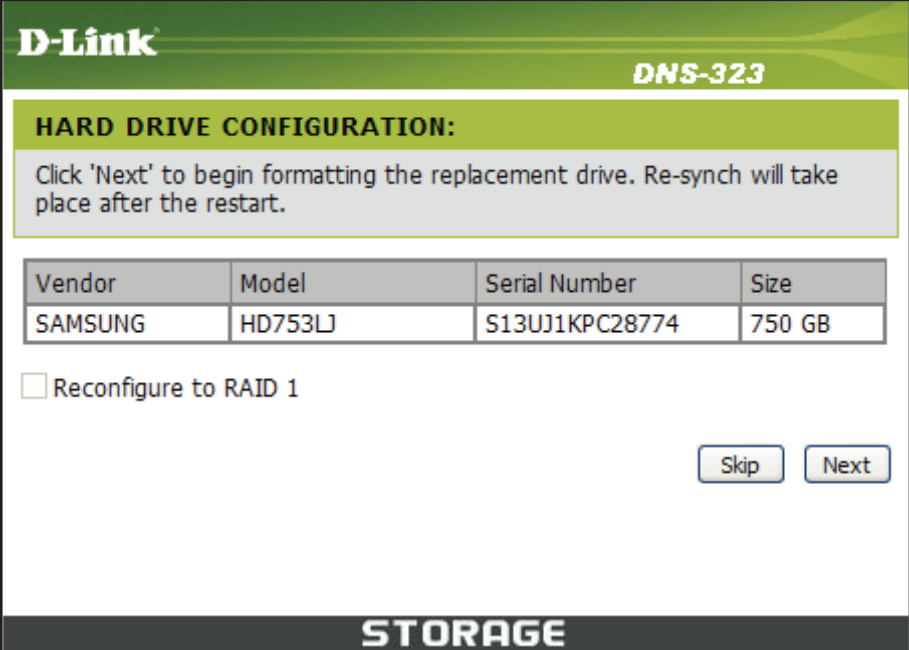
After you install the new drive, turn on the DNS-323 and then connect to the Web UI. The DNS-323 will prompt you to format the new drive.

**Note:** *Formatting a hard drive will erase the data stored on the hard drive. Please back up important data before formatting a hard drive.*

After you install the new drive, turn on the DNS-323 and then connect to the Web UI. The DNS-323 will prompt you to format the new drive.

You will now have two choices for your disk configuration:

- If you want to configure the new disk as a separate volume, press the **Next** button.
- If you want to configure the new disk in the DNS-323 to use RAID 1, select the **Reconfigure to RAID 1** check box and click the **Next** button.



**D-Link** **DNS-323**

**HARD DRIVE CONFIGURATION:**

Click 'Next' to begin formatting the replacement drive. Re-synch will take place after the restart.

Vendor	Model	Serial Number	Size
SAMSUNG	HD753LJ	S13UJ1KPC28774	750 GB

☐ Reconfigure to RAID 1

[Skip](#) [Next](#)

**STORAGE**

**Note:** Formatting a hard drive will erase the data stored on the hard drive. Please back up important data before formatting a hard drive.

The following message will display when the formatting has completed:

Press the **Restart** button to continue.

