User Manual

LinkStation Live
Shared Network Storage

Congratulations on your new LinkStation Live. This user manual is intended to assist you in configuring it.

Because we're constantly updating our product, the images and text in this manual may vary slightly from the images and text displayed by your LinkStation. These changes are minor and should not affect the ease of setup adversely. As time passes, future user interfaces, updated software, and later versions of this manual may be freely available for download at our web site: *http://www.buffalotech.com*.

If you run into difficulties or need additional help, feel free to contact our technical support. Contact information for Buffalo Technology and our technical support is available on pages 73 and 74.

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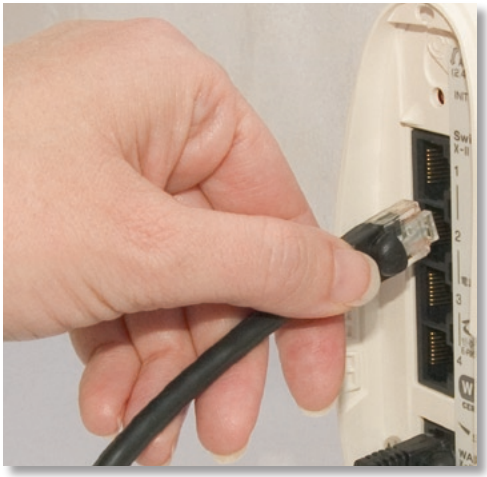
Begin by plugging your *power cable* and *Ethernet cable* into the back of the LinkStation as shown.

Plug the power cord into a wall socket or surge protecter. Plug type and socket will differ according to country of use.



Plug the other end of the Ethernet cable into a hub, router, or switch in your network.

Press the *power button* on the front panel. LEDs will blink as your LinkStation boots up.

After your LinkStation has completed booting up, check the *LINK/ACT LED* on the front of the LinkStation. If it's lit, then your LinkStation is connected properly, and you can go on to page 8. If it's not lit, turn to page 7 for troubleshooting.

The LinkStation's Ethernet port will automatically adjust to use either a crossover or catch cable, so you may connect the LinkStation to your network with either type of Ethernet cable.

Verify that the *LINK/ACT LED* on the front of LinkStation is lit (see page 6's picture). If it's lit, go to page 8 to continue setting up LinkStation. If the *LINK/ACT LED* is still not lit, try the suggestions below to verify that you're not suffering from common setup problems.

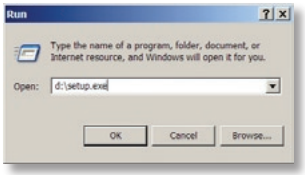
Having problems? Make sure that:

- the LinkStation and the router, hub or switch are both powered on,
- the Ethernet cable is securely plugged in at both ends, and
- the Ethernet cable is not damaged. Verify this by trying a different Ethernet cable.

If problems persist, you may contact Buffalo Technology's technical support. See pages 73 and 74 for technical support contact information.

Insert the LinkNavigator CD into your computer's CD-ROM drive.

On a PC, setup should automatically launch. If it does not, manually launch setup.exe by pressing *Start* and selecting the *Run...* option. When the *Run* dialog opens, type **d:\setup.exe** (where d is the drive letter of your CD-ROM drive). Press *OK* to continue.



If you are installing the software on a Mac, open the CD and click *LinkNavigator* to begin installation.

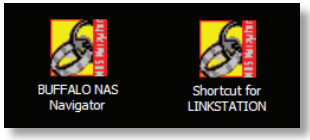
Press the *Begin Installation* button to begin.

If you're installing on a PC, click on *Connect this PC to LinkStation* (the green, lower button). Mac users can skip this step.

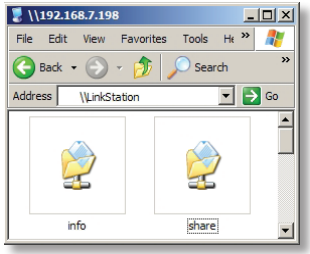
Click *Next* to step through the installation.

Continue pressing *Next* to step through the installation.

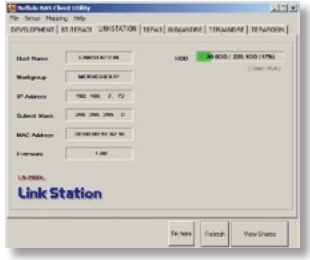
When installation is complete, you may close the installation window.



Two new icons will be on your desktop: *Shortcut for LinkStation* and *Buffalo NAS Navigator*.



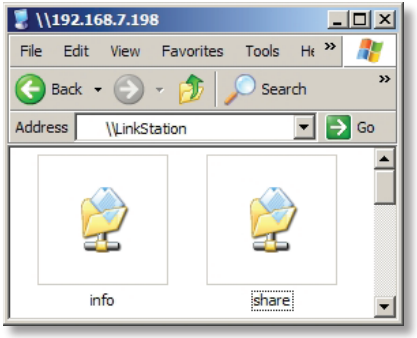
Clicking *Shortcut for LinkStation* takes you directly to the folders on your LinkStation. *Share* is the main folder that you can put files and folders in. *Info* contains a copy of your user manual.

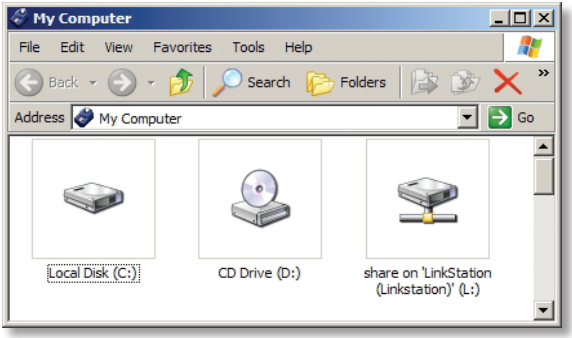


The *Buffalo NAS Navigator* icon opens the LinkStation's client utility. Turn to page 64 for more on using the NAS Navigator client utility.

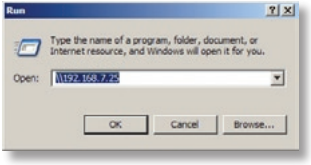
To Access LinkStation Data from a PC:

Your LinkStation uses “shares” (folders) to hold data. A share called “share” is already configured on your LinkStation, and you can create additional shares on page 32. To start using your LinkStation, you can either click on the *Shortcut for LinkStation* on your desktop, or you may just use *drive L* in My Computer, which setup has mapped to the default share in your LinkStation.

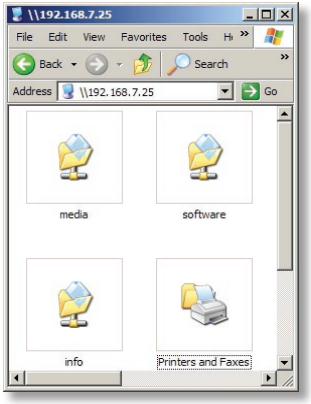




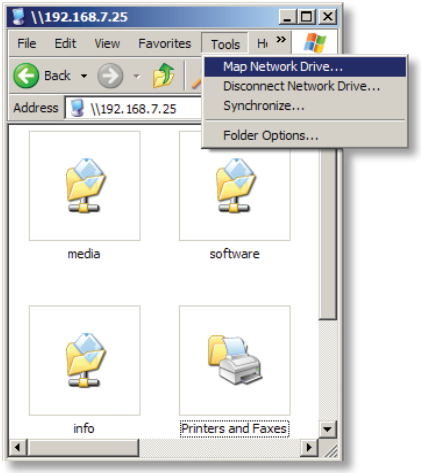
You can map additional driveletters to shares on your LinkStation. From the *Start* menu, select *Run....* Enter your LinkStation's hostname (see page 25, or you can get it from the NASnavigator utility) or IP address. Press *OK*.

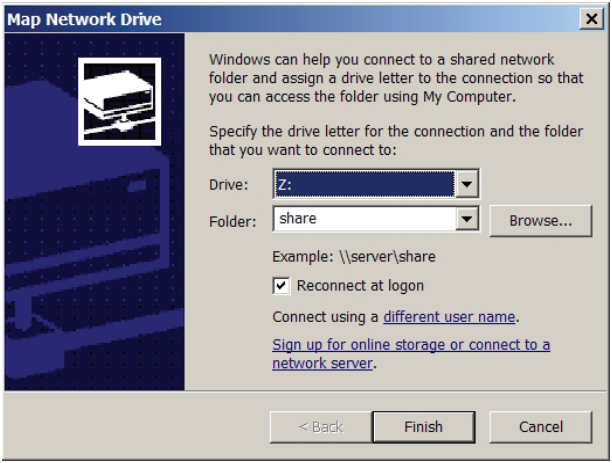


Your LinkStation should open. "Share" is a data folder in your LinkStation by default. "Info" contains your user manuals. If you have created other folders, they will be visible here too. You can map drive letters to any of these folders.



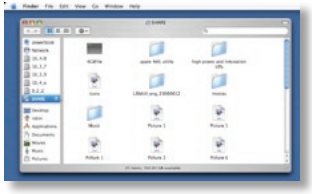
From the *Tools* pull-down menu, select *Map Network Drive*. Choose a drive letter from the *Drive:* pull down menu. To specify the folder to map, either find it with *Browse* or enter **\\LinkStation_Name\share_name** in the *Folder:* field, where *LinkStation_Name* is your LinkStation's hostname (page 25) and *share_name* is the name of a folder on your LinkStation. Check the *Reconnect at logon* checkbox to have Windows connect to this mapped drive everytime it starts. When finished, press the *Finish* button. Your share is now mapped to a drive letter.





After installing the LinkNavigator software, your Mac will have two new icons on the desktop.

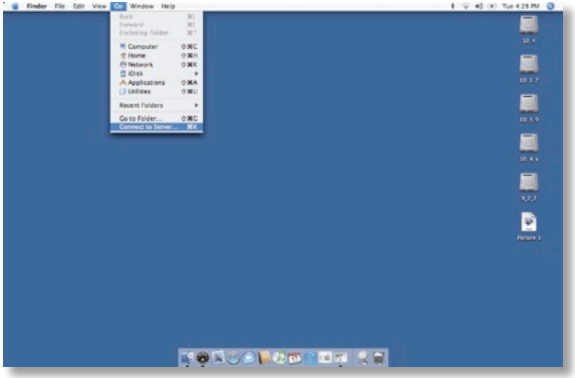
The *Share* folder is the main folder that you can put files and folders in. *NAS Navigator* is the LinkStation's client utility.

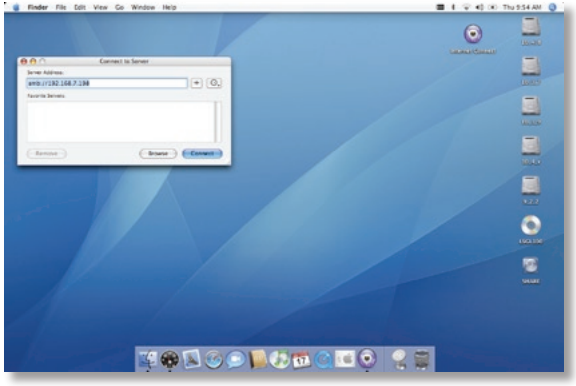


Clicking *Share* opens the main folder on your LinkStation. You can put files and folders in *Share* as though it were any other hard drive connected to your computer. You may add additional shares to your LinkStation on page 32.

The *NAS Navigator* icon opens the LinkStation's client utility. See pages 23 and 64 for more on using the NAS Navigator client utility.

You can manually add LinkStation Shares (folders) to your desktop by adding them to the Mac's server list. Begin by clicking *Go*, and then choose *Connect to Server*.

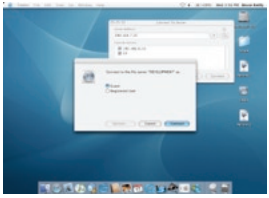




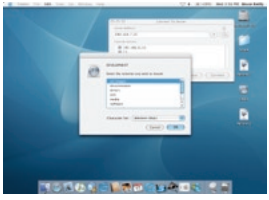
In the *Server Address* field, enter your LinkStation's IP address in the form *smb:// ipaddress* (where "ipaddress" is your LinkStation's IP address), and click *Connect*.

If you don't know your LinkStation's IP address, see page 18.

Select *Guest* and click on *Connect*. Note: If you have configured share permissions on your LinkStation, select *Registered User* and enter your login credentials.



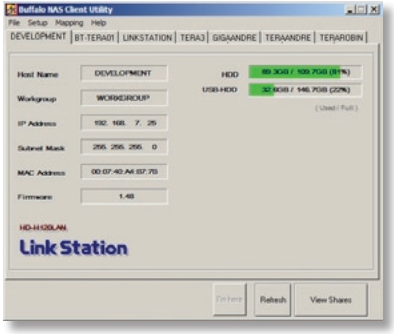
Select the volume that you want to mount, such as *share* or *share-mac*, from the list of folders on the LinkStation.



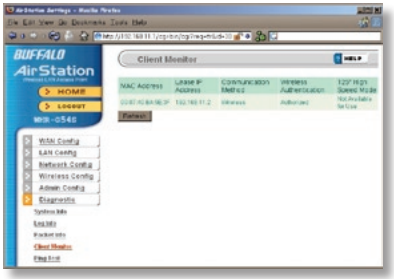
The share will open. A link to the shared folder will appear on your desktop.

If you don't know your LinkStation's IP address, there are several ways to get it.

One simple method is to use the NAS Navigator client utility (included on your CD) to find your LinkStation(s). Just click on the tab for your LinkStation and you'll be able to read its IP address. See page 64 for more on NAS Navigator.



You can always get the LinkStation's IP address from your router's configuration utility. Many Buffalo routers list this information on the *Client Monitor* page, as shown to the right. Consult your router's documentation for instructions on identifying the LinkStation's IP address.



LinkStation Live has two USB 2.0 ports on the rear. These ports can be used for adding external USB Hard Drives or a USB Printer. LinkStation will share connected USB storage devices, allowing everyone on the network to use them. Up to two external USB hard drives may be added to LinkStation Live. To connect a USB hard drive or printer to your LinkStation, simply plug it into one of the USB ports.

Once your USB hard drive is connected, see page 29 for configuring your LinkStation to use it. Page 31 will show you how to reformat the USB Hard Drive if necessary. Page 41 and 42 show you how to set up LinkStation to back up to a USB Hard Drive.

See page 66 to set up Windows PCs to print to a USB Printer on your LinkStation.

Power Button – Press and release the Power Button to turn the LinkStation on. Hold it down for three seconds to turn the LinkStation off.

Link/Act LED – The Link/Act LED glows green when the LinkStation is connectied to a network. It blinks when the LinkStation is sending or receiving data.

Info LED – The Info LED blinks when you have a message waiting for you in the client utility.

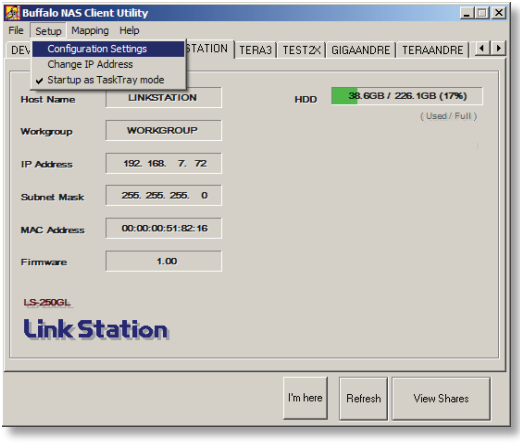
Error LED – This LED blinks to signal abnormal operation. See page 71 for a list of LED error codes.

Init button – The red Init button allows you to return your LinkStation to factory defaults.

10/100/1000 Mbps Ethernet Port – Use this port to connect your LinkStation to a switch, a router, or another computer. The port is autosensing, so either a conventional Ethernet cable or a crossover Ethernet cable may be used.

USB Ports – LinkStation offers two USB 2.0/1.1 ports for adding external drives or a USB printer. See page 19 for more on using the LinkStation's USB ports.

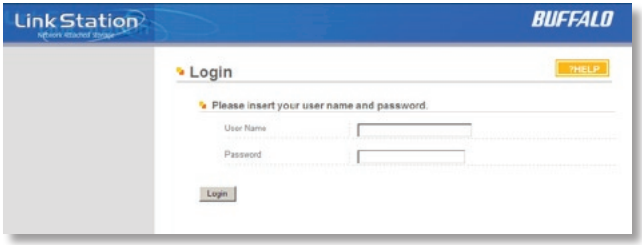
The Configuration GUI



The Configuration GUI may be accessed at any time by typing the IP address of your LinkStation into the URL bar of a browser running on a computer connected to the same network as the LinkStation. This works perfectly with OS X, Linux, and other non-Windows PCs.

You may also open the Configuration GUI from NAS Navigator by clicking on *Setup* and choosing *Configuration Settings*.

This login prompt will appear. Enter **admin** for the user name. Until you change it, the password for the admin account will be **password**. Press the *OK* button when finished.



User name: *admin*
Password: *password*

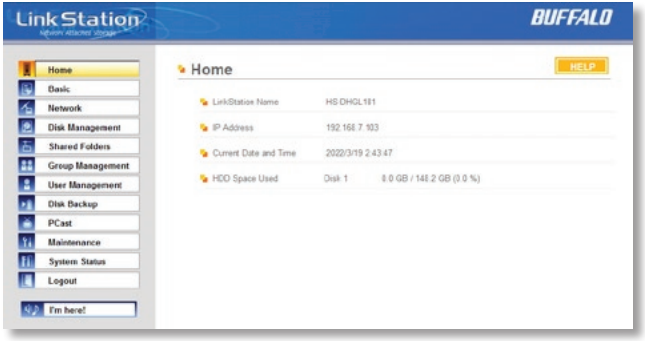
See page 38 to change your password.

If this login prompt does not appear, your DHCP server may not be functioning correctly. If DHCP is disabled, you may re-enable it, or verify that the LinkStation's IP Address is in the same range as that of your PC.

NOTE: Page 26 shows how to enable or disable DHCP, or configure the LinkStation with a Static IP Address.

Welcome to *Advanced Settings*, the configuration GUI for the LinkStation! Bookmark this page in your browser so it can be easily accessed for future configuration changes. If the LinkStation's IP Address changes, you will need to recreate the link. You can also get here by typing *http://LinkStation_Name* into a Web browser, where LinkStation_Name is the name of your LinkStation (page 25).

You are now at *Home*. Notice that the *Home* button is lit up in yellow. You can navigate this menu by clicking on the buttons at the left of the screen. Here at "Home", you can see basic information about your LinkStation's current configuration. You may close this screen by clicking *Logout* at the bottom left, or just by closing the browser window. If you have lost your LinkStation, clicking *I'm here!* at the bottom left will cause it to beep, making it easier to find.



Basic

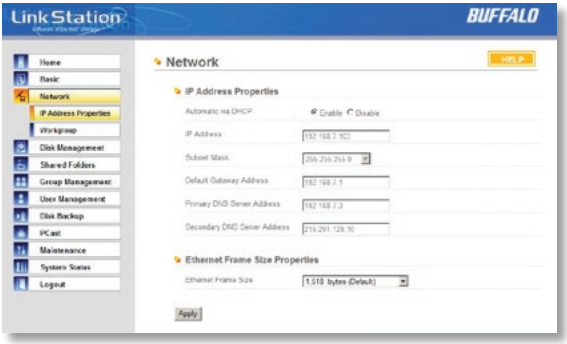
You may modify your LinkStation's hostname and description under *Hostname Setup*. A friendly, easy-to-remember name (e.g. "LinkStation") is recommended.

Make sure that the date and time are correct in *Date and Time Setup*. To synchronize time settings with those in your computer, press *Use Local Time*. To have your system time automatically set by an NTP server, enable *NTP Server* and enter an IP Address for the NTP server (e.g. 192.43.244.18) or use the supplied default NTP server.

Ensure that both the *Display Language* and the *Windows Client Language* are set to languages that you're comfortable with.

Once desired fields have been completed, press the *Apply* button.

Network (IP Address Properties)

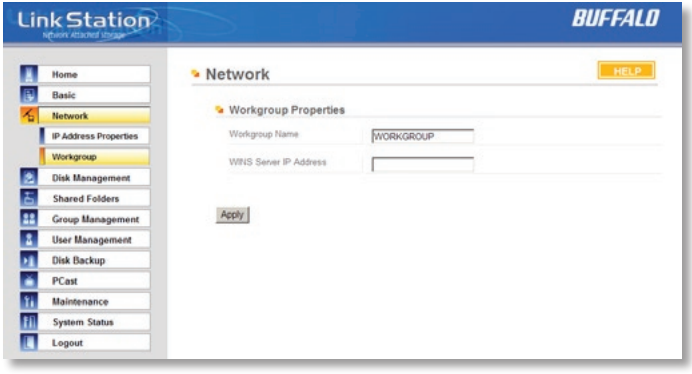


In most networks, LinkStation will get its IP Address automatically from a DHCP server. You may disable DHCP here. If DHCP is disabled and an IP Address is not set manually, it will default to *192.168.xxx.xxx* with subnet mask 255.255.0.0. The LinkStation's *IP Address*, *Subnet Mask*, *Default Gateway Address*, and *DNS Server address* may all be entered manually under *IP Address Properties*.

Ethernet Frame Size may also be set manually on this page. Only use JumboFrame settings when operating in a Gigabit environment where all other clients support the same JumboFrame setting.

Click *Apply* after making any changes.

Network (Workgroup/Domain)



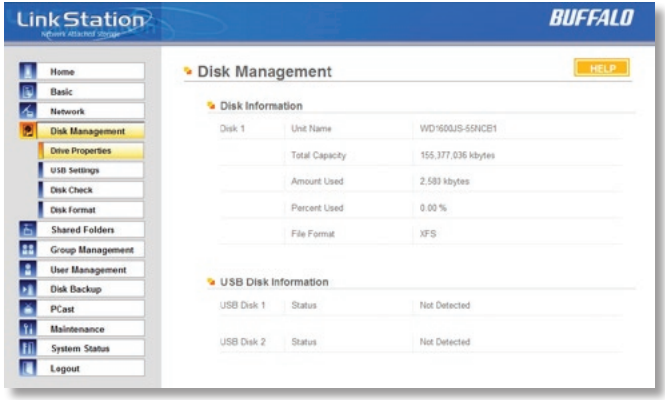
If you are unfamiliar with networking, then leave the *Workgroup Name* set to *Workgroup*.

To make your LinkStation a member of a workgroup, enter the appropriate information into the fields on this page and click *Apply*.

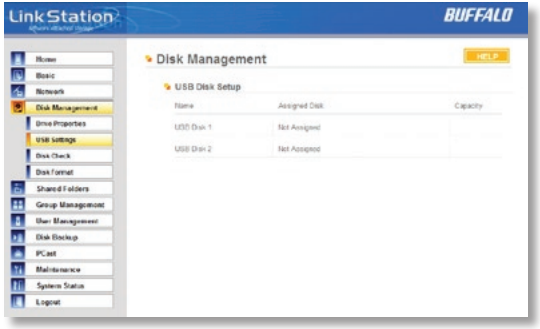
Use of a WINS Server with your LinkStation is strictly optional.

Disk Management (Drive Properties)

This page shows the properties for the main drive in your LinkStation Live. If you have any USB hard drives plugged into the linkstation, their properties will appear here as well.

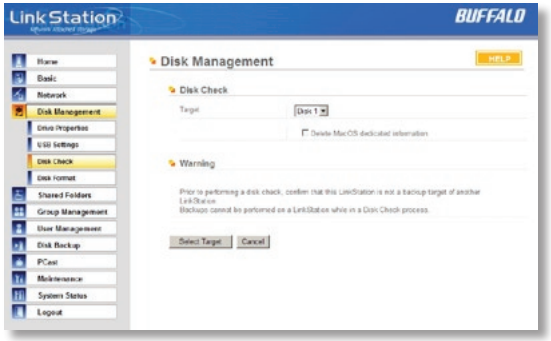


Disk Management (USB hard drives)



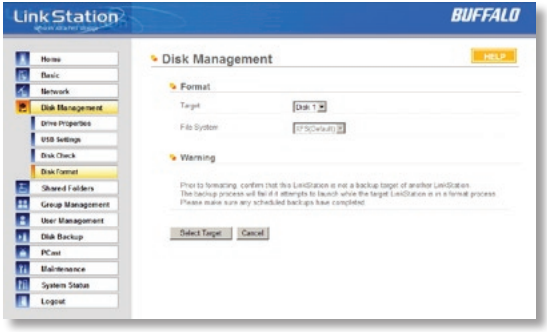
From here you can see your USB hard drives' setup information. If the hard drives' information isn't displayed properly, try restarting your USB hard drives and then restarting your LinkStation. Some USB hard drives must be reformatted from within LinkStation before they can be assigned shares. Select *Disk Format* from the left-side menu to format your USB hard disk(s). Page 31 has more on disk formatting.

Disk Management (Disk Check)



Disk check checks any of your hard drives for errors. To use disk check, select the disk that you want to check from the target pulldown and click *Select Target*. Then click on *Start Disk Check*.

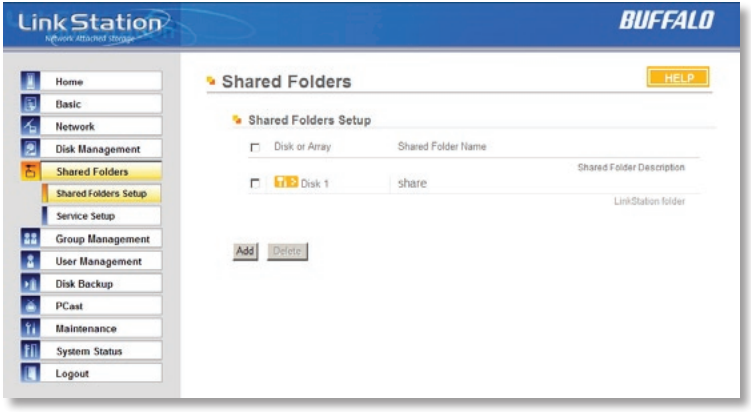
Disk Management (Disk Format)



To format a hard drive or array, select it from the *Target Disk* drop box. Choose the file system desired from the *File System* dropbox (internal drives can only be formatted with XFS). Note that FAT32 has a 4 gigabyte filesize limit for individual files. If you choose FAT32 for your file system, you will not be able to store single files larger than 4 gigabytes on the drive. Use of the *XFS* or *EXT3* file systems is recommended. Press *Select Target Disk* when done, and then *Start format.*

Depending on the size of the target hard disk or array, a Disk Format may take several hours to complete. Performance will be slow during the disk format.

Shared Folders



To add new shares on your LinkStation, select *Shared Folders* from the left side menu, and then click the *Add* button under *Shared Folders Setup*.

To delete a share or shares, check the checkbox next to the shares you'd like to delete, and press the *Delete* button. Deleting shares will remove the share and erase all of the files and folders inside that share.

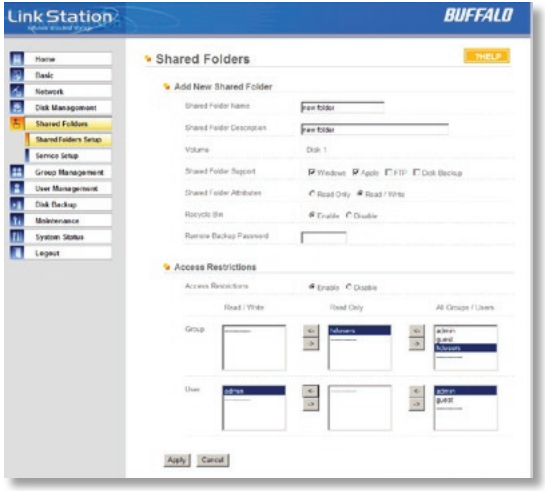
Adding a new Shared Folder

To add a new shared folder, enter a name for it in the *Shared Folder Name* box and choose which *Disk Space* it will reside in. You may also choose which operating systems and features the share will support by putting the appropriate checks next to *Shared Folder Support*, and whether the share supports the Recycle Bin by putting a selecting *Enable* or *Disable*. Enter a *Shared Folder Description* and a *Remote Backup Password* if desired. Click *Apply* to build the new shared folder.

Appletalk support is available for use with legacy Macs. Checking "Apple" by *Shared Folder Support* turns on AppleTalk, letting you use your LinkStation with older Macs. Note that Appletalk files are limited to 2GB maximum filesize and 32 characters for filenames. If a folder with AppleTalk on is accessed from a modern OS through smb, these limitations will not apply.

Remote Backup Password will set a password on this share for other LinkStations who want to use it as a remote backup target. This password will not affect users attempting to access the share; it only pertains to remote LinkStations trying to access this share for backup tasks.

Shared Folders (Access restrictions)



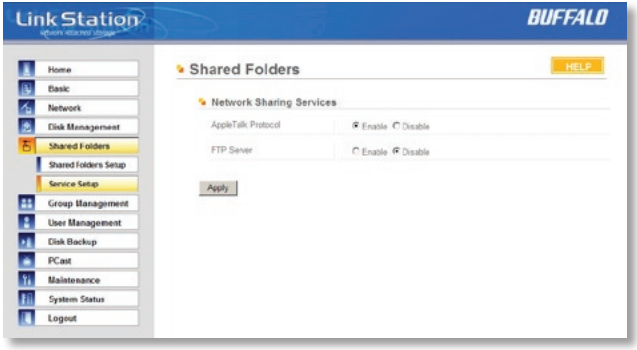
To use *Access Restrictions* for a share, select *Enable*.

Highlight groups or users in the *All Groups/ Users* column and use the left-pointing arrow buttons (located just to the left of each box) to move individual groups or users from the *All Groups/Users* column to the *Read Only* box (if you want to give them read access only) or all the way to the *Writable* box, if you want to give them full access to the share. Right-pointing arrows will move highlighted users or groups back to the right.

Click *Apply* when you have your groups and users in the appropriate boxes.

To set up new groups and users, see pages 36 and 37.

Shared Folders (Service Setup)

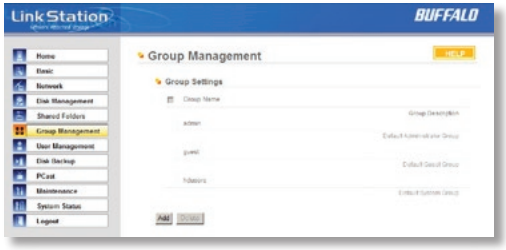


To allow FTP Access to LinkStation, choose *Enable* for *FTP Server*. To enable legacy AppleTalk support, choose *Enable* for *AppleTalk Protocol*.

FTP Server Info: Enabling the FTP Server will allow users to connect to shares via FTP protocol. Their username and password is used for their login credentials, and they will only have access to shares that have read-only or writeable access to on the LinkStation. The network administrator of your network may need to enable traffic on port 21 to the LinkStation for FTP to work over the Internet.

Click the *Apply* button to set up these services.

Group Management



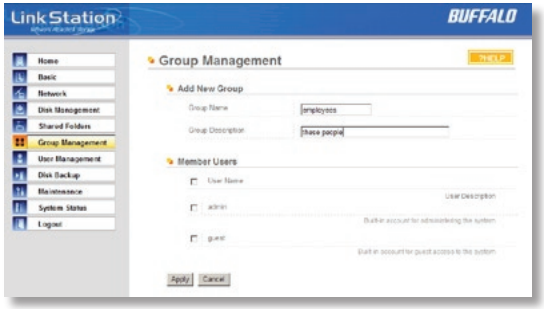
Groups allow for easier management of permissions in some networks, specifically networks with a lot of users in different departments.

To *Delete* a group, put a check next to its name and click *Delete*. To add a group to your LinkStation, click *Add*.

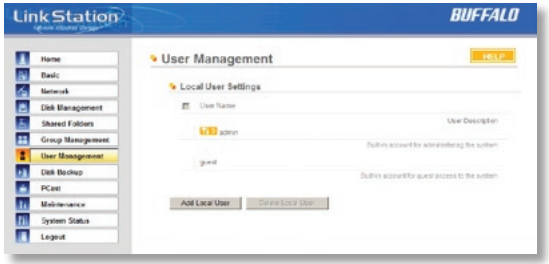
Add a name and a description to the *Add New Group* fields. Put checks next to each *Member User* that you want to be part of the group. Click *Apply* when your group is set up the way you want it.

Active Directory and Domain Groups are not shown here but are available under Share Management.

Members can be added or removed from a group at any time by editing the group. This is done by clicking on the Group name on the main Group Settings page.

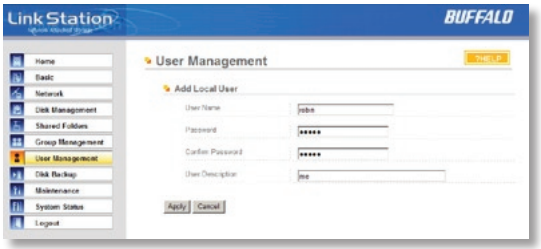


User Management

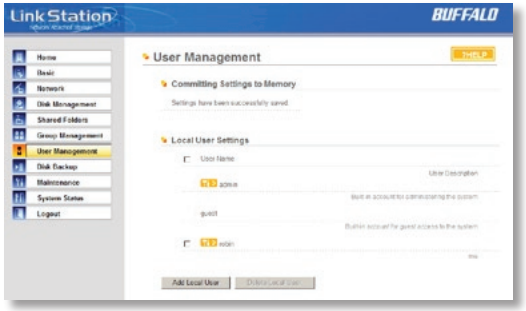


LinkStation is preconfigured with two users, *admin* and *guest*, out of the box. The *admin* and *guest* user accounts cannot be deleted. To delete any other user, put a check next to their name and click *Delete*. To add a new user, click *Add*.

The *Add New User* dialog will appear. Enter a *User Name*, *Password*, and *User Description* for the new user and click the *Apply* button. If a user will be accessing the LinkStation from a Windows 95/98 computer, their password should be 15 characters or less. Mac OS 8 and OS 9 users's passwords should be 9 characters or less. Users of other OSs may have passwords of up to 20 characters.

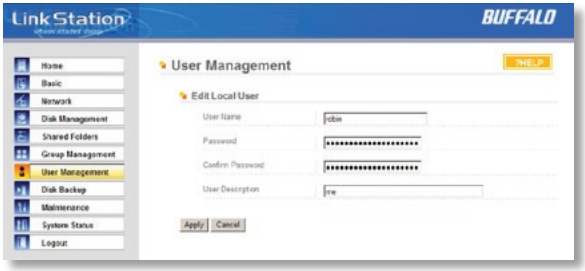


User Management (changing passwords)

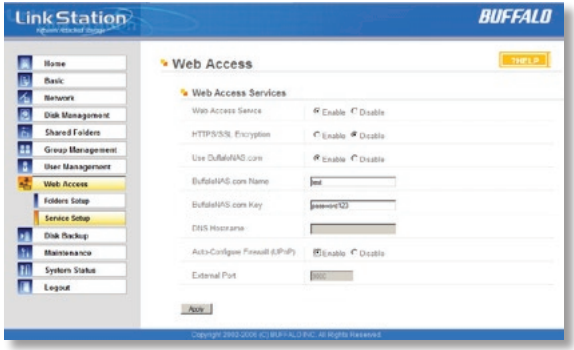


To change an account's password, click on the name of the account under *User Settings*. Note: if a user name and password are used to log into a user's windows computer or domain, the same user name and password should be used when creating the user's account on the LinkStation, or problems accessing shared folders may occur.

Enter the desired new password in both boxes and click *Apply*.



With Buffalo's WebAccess, you can access your LinkStation from anywhere in the world with an Internet connection. It's easy to access your files, or share them with other people, wherever they may be.



WebAccess is set up from within the Configuration GUI. First, select 'Web Access', and then 'Service Setup' from the menu on the left.

To use Webaccess, set 'Web Access Service' to *Enable*.

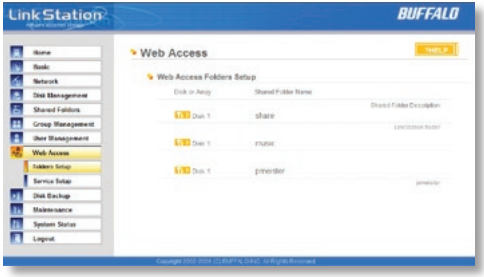
You may enable SSL Encryption if desired.

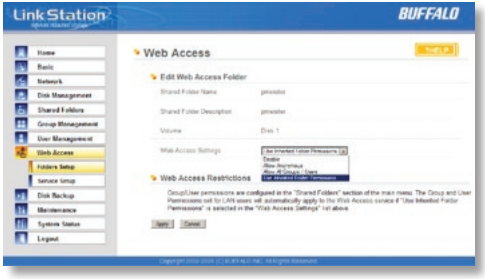
Using 'BuffaloNAS.com' is recommended. Otherwise, you'll have to manage your own DNS settings.

'Auto-Configure Firewall' is also recommended if your router supports UPnP (most do since 2001). If you choose not to enable this, you must manually configure your router and firewall to forward internal port 9000 to the Internet.

Choose a name for your BuffaloNAS account and a password ("key"). This name is the name that will be used to access your LinkStation and to share with your friends. The password for this protects other people from using it, so picking a strong password is recommended.

Click *Help* in the top right of the window for detailed information on each setting.





Select 'Folders Setup' in the left-side menu. Any shares on your LinkStation will appear on the list to the right. Click on the icon beside it to select a share for web access.

Choose your desired level of Web Access from the 'Web Access Settings' dropbox:

'Disable' will prevent remote access to this share through WebAccess. This is the default setting.

'Allow Anonymous' will allow *anyone* to access the share. Don't use this setting unless you want your LinkStation share to be available publicly to everyone in the world!

'Allow All Groups/Users' will allow only people who have an account on the LinkStation to access this share remotely.

'Use Inherited Folder Permissions' will allow people with an account on the LinkStation to access the share remotely only if they have read permissions on the specific share that they're accessing.

Consult your user manual for more information on setting up groups, users, and permissions on the LinkStation.

Click the *Apply* button to save your changes.

To access your LinkStation remotely, open a browser window on any computer connected to the Internet and go to *buffalonas.com*.

In the dialog box, type the BuffaloNAS name that you set on page 39.

Alternately, you can go directly to your share by typing *BuffaloNAS.com/your_BuffaloNAS_name* in the URL window.

The folders from your LinkStation's share will appear. Files from anonymous shares will appear to the right. To see files from shares that are not set to anonymous, you will need to *log in*. The 'login' link is on the top left corner of the page.

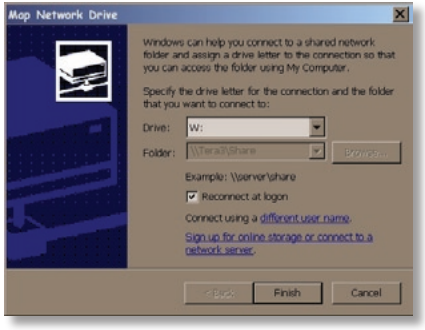
To access individual folders on the right, click on their *open* links.

Clicking on individual files will give you other options, depending on the filetype. Clicking on the *Audio* link at the bottom left corner of the page will give you options for playing music files, including the opportunity to launch a Flash-based music player that will stream your audio files directly through the Web interface.

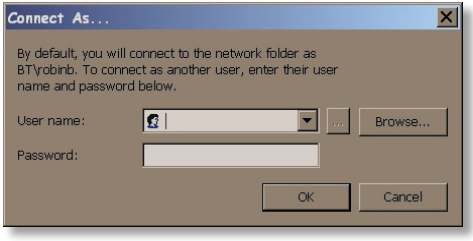
When accessing multiple shares to a Windows PC, you may see this error message.

This is caused by having multiple shares to the same resource using different login credentials. The error occurs when connecting to at least one secure, restricted share. Due to a constraint in Microsoft Windows, only one set of login credentials can access or map drive letters for a network resource such as the LinkStation. As such, only one username and password can be used while mapping drives to a PC. If unsecure, unrestricted shares are mapped and then an attempt to map a secure, restricted share is made from the same PC, this error will occur. To prevent this, you must create all mapped shares using the same login and password information. Please follow the steps on the next page to remedy this problem.

Mapping Multiple Shares

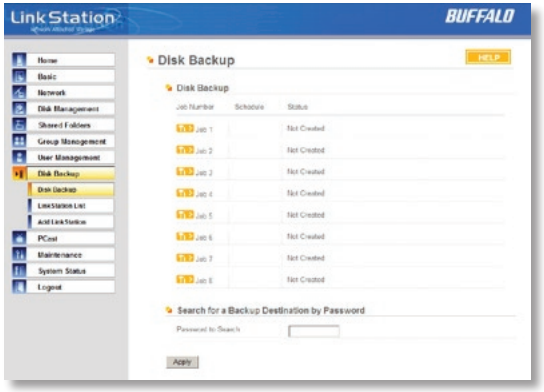


When mapping any share, select the *Connect using a different user name* option. A login and password prompt will appear. Use the username and password required by any secure, restricted shares for *all* shares. All mapped shares on a single PC must use the same username and password!



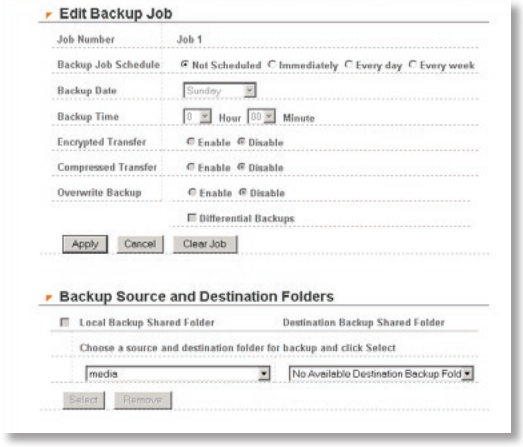
If only unrestricted shares are being mapped, then it's not necessary to set a username and password for shares. Multiple mapped drives to unrestricted shares can exist without a username or password as long as no restricted, secure shares are mapped. If an unrestricted share and a restricted share are both being mapped or accessed, use the restricted username and password for the unrestricted share login by using the *Connect using a different user name* option. This will allow a Windows PC to access both shares without any problems.

Disk Backup



To create a backup job, click on a *Job Number*. The *Edit Backup Job* dialog will appear.

Disk Backup (Edit Backup Job)

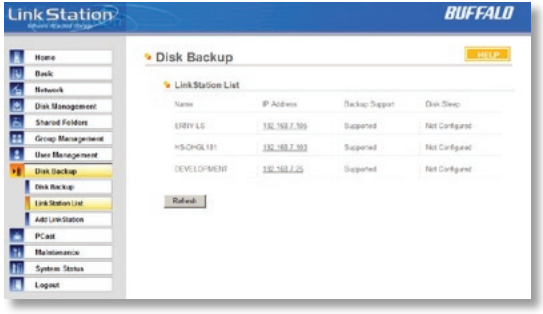


A *Backup Job* can run regularly on a daily or weekly schedule, or immediately by appropriate choices in the *Backup Job Schedule* field. *Date* and *Time* for the backup may be entered, and *Encryption* and *Compression* enabled or disabled. Enable *Overwrite Backup* to have each scheduled backup write over the previous backup, or *Differential Backups* to backup only files changed since the previous backup.

Select the folder to be backed up from the *Local Backup Shared Folder* dropbox, and the destination for the backup files from the *Destination Backup Shared Folder* dropbox. The destination folder may be on a USB drive attached to the LinkStation, or another LinkStation on the network. Click on *Select* to approve the backup targets.

Click the *Apply* button when your backup job is set up the way you want it, or *Clear Job* to stop a job from running again.

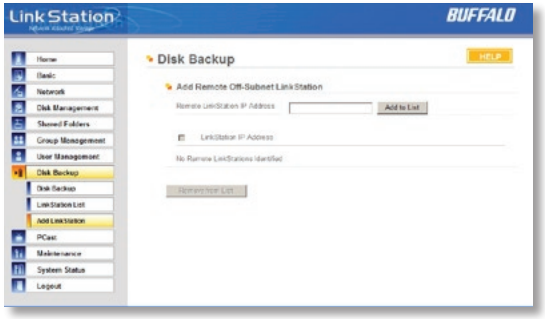
Disk Backup (LinkStation List)



The LinkStation list shows other LinkStations in your network that you can configure network backups to.

Press *Refresh* to get a list of LinkStations on your network.

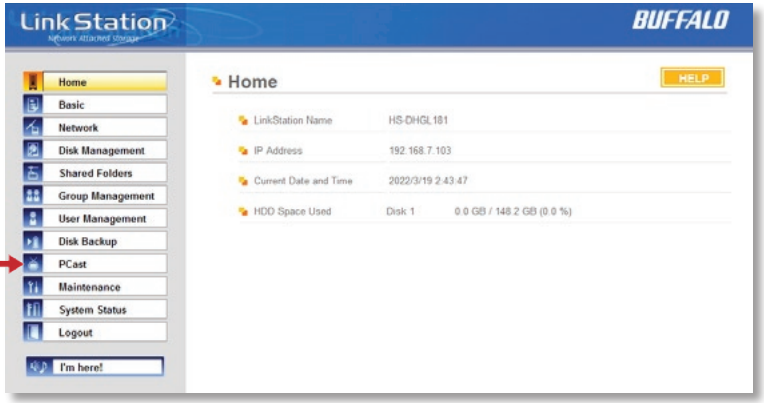
Disk Backup (Add LinkStation)



To add a remote LinkStation to your network, enter its numerical IP Address in the *Remote LinkStation IP Address* field and click the *Add to List* button. For remote LinkStation backups, make sure both firewalls are configured to allow traffic in and out of their networks.

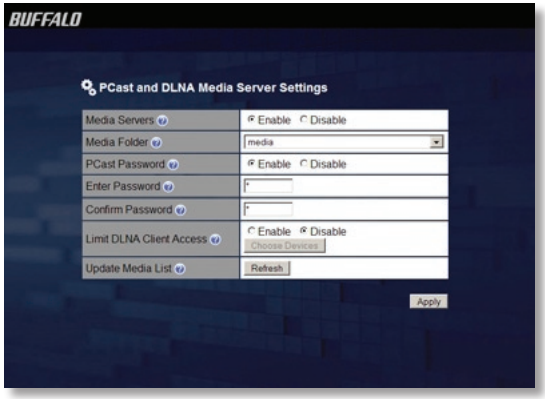
Note: Disk Backups between two LinkStations use port 8873 for encrypted backups and port 873 for backups with no encryption.

PCast and DLNA are special services that can run within LinkStation, allowing it to be a media server for LinkTheater or other digital multimedia players. The LinkTheater product is a media server that connects to your television and streams multimedia content. The PCast service allows you to stream any multimedia content directly from LinkStation to the LinkTheater. DLNA is an industry standard supported by many digital multimedia players.



If you do not own a multimedia player, PCast and DLNA settings may be ignored.

For more information on LinkTheater, please visit Buffalo Technology's web site at **www.buffalotech.com** and look under Multimedia Products.



Media Server Function: The *Media Server Function* will need to be enabled for this function to work. If you do not own a LinkTheater than disabling this feature is recommended.

Media Folder: The *Media Folder* specifies which shared folder to share with LinkTheater. All of the multimedia files inside this shared folder will be available to LinkTheater. **NOTE:** At this time, only one shared folder can be accessed with LinkTheater. Please make sure that all of the multimedia files you wish to share with LinkTheater are in this shared folder.

PCast Password: Restrict access to your media server by specifying an access password.

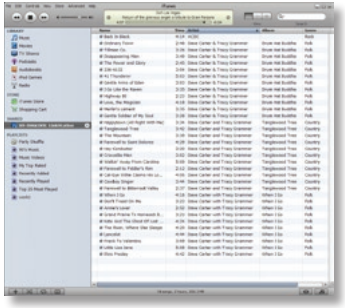
Limit DLNA Client Access: Choose what devices can access your media server. See next page for more information on configuration.

Update Media List: This updates the list of multimedia folders and files displayed by your media player. Some changes may not be shown until the list is refreshed or the media player rebooted.

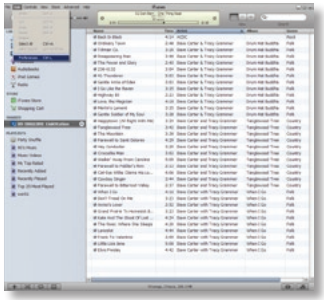
Get to this page by clicking *Choose Devices* on the previous page.

Search for DLNA Client: This will show a list of all clients that could connect to the media server. For any that you want to have access, put a checkmark next to their MAC address and click *Allow Access*. You can deny access to any DLNA client by checking it and clicking *Deny Access*.

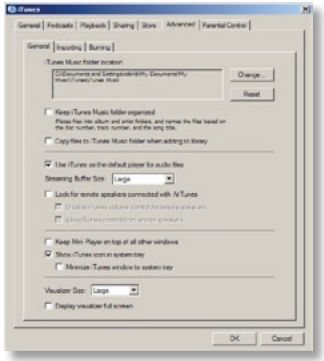
Your LinkStation may be used as a music server for computers running iTunes. As long as PCast's *Media Servers* function is enabled, the *Media Folder* ("Share" by default) will appear in iTunes on computers on the same subnet.



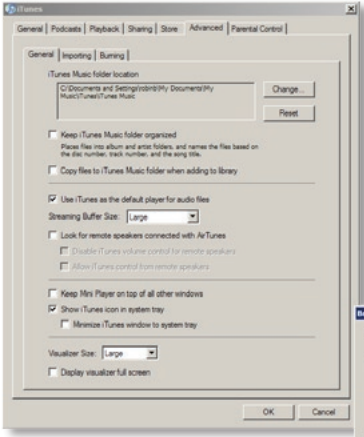
All music files in the *Media Folder* will be visible from within iTunes 7 or later. Music files stored in this folder will be playable from up to 5 computers on the network.

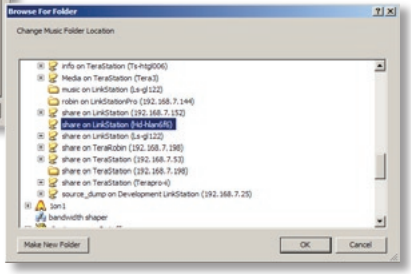


You can configure iTunes to store all of your music on the LinkStation if desired. To do so, select *Edit* and then *Preferences*.



On the *Advanced* tab, to change the iTunes Music folder, click *Change*.

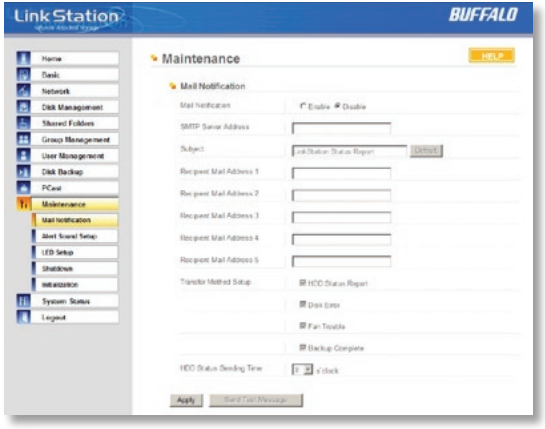




Browse to the media folder on your LinkStation (by default, the media folder is "//LinkStationName/share"). Click *OK*, and then *OK* again.

ITunes will now save all music to the media folder on the LinkStation.

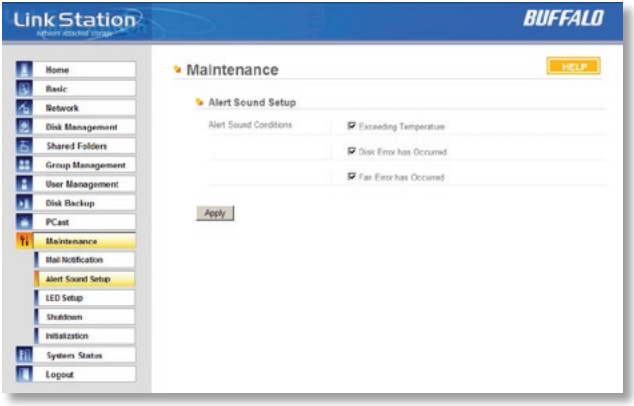
Maintenance (Notification)



If your LinkStation is remotely managed, you may choose to receive nightly status reports and be notified of any disk events by email. To set this up, enable *Mail Notification* and enter the IP Address of your SMTP server* in the *SMTP Server Address* field. Select a *Subject* line for the emails (i.e. "LinkStation Status Report") and enter the email address of each person you want to receive notification emails into a *Recipient Mail Address* field.

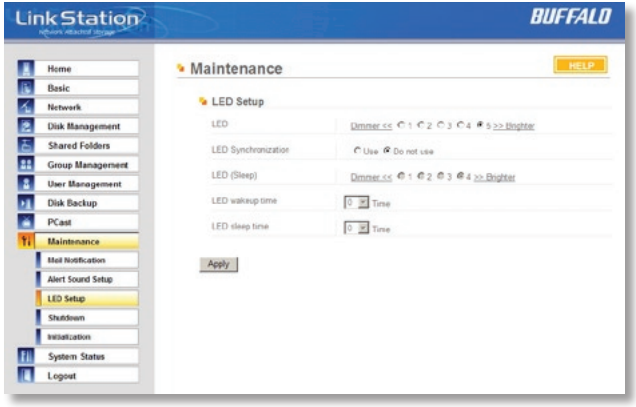
* SMTP server must be an *open* type server. Currently, there's no provision for entering a username or password.

Maintenance (Alert Settings)



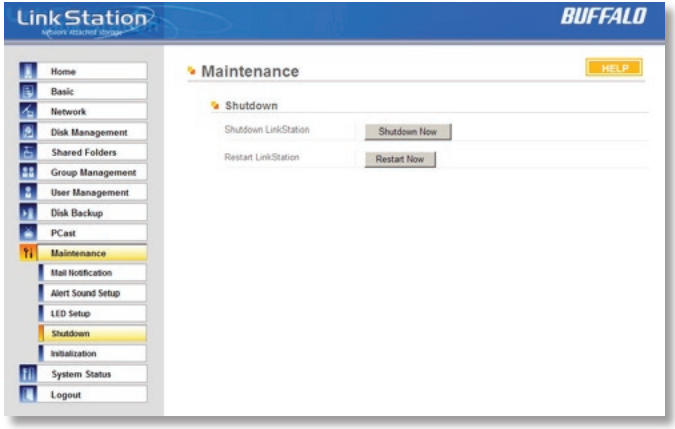
Alerts can be configured on the LinkStation to make audible noises when a problem is detected. Along with the audible noise, alert emails will be sent out if *Mail Notification* was properly configured. Please select the features you would like to receive an audible sound alert from and then press the *Apply* button.

Maintenance (Status LED Settings)



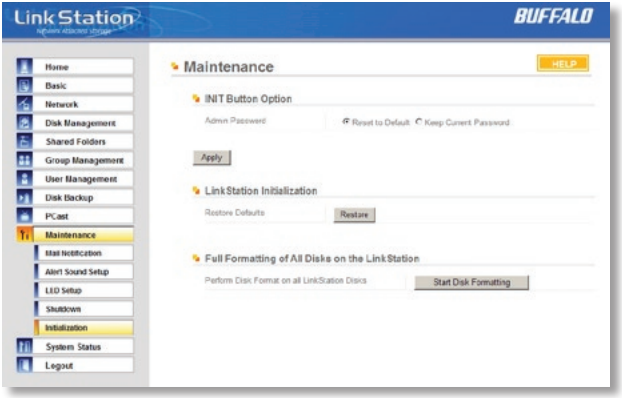
Adjust the brightness of the LEDs on your LinkStation's front panel here. Press *Apply* to update the settings.

Maintenance (Shutdown)



From the *Shutdown* page, press *Apply* to shutdown LinkStation. This has the same function as holding down the power button on the front of LinkStation, but may be done remotely. Turning on the LinkStation after a shutdown requires a physical button push on the front of LinkStation. The *Restart Now* button simply reboots the LinkStation, bringing it back to functionality after about 120 seconds.

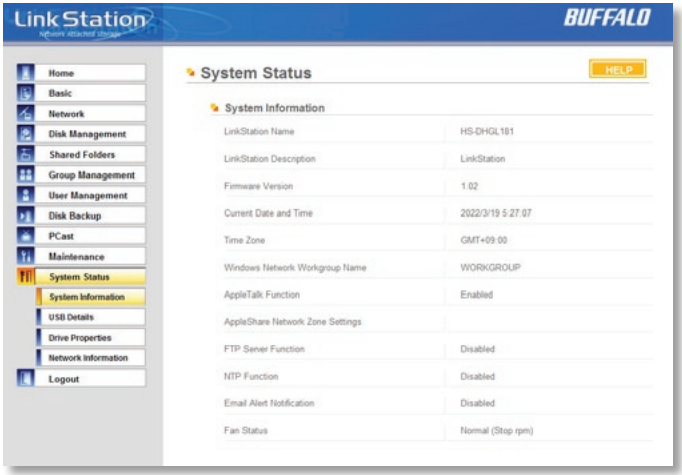
Maintenance (Initialization)



Initialization is a reset procedure that restores all settings back to the default, out of box, configuration. All configuration, users, groups, and backup jobs are lost, but actual data and shares on the hard are NOT lost. If you want all data to be erased, reformat the drive.

Specify whether the LinkStation shall keep its administrator password after a initialization or whether the password should be reset to the default password (default password is *password*). Press the *Apply* button once you make the selection.

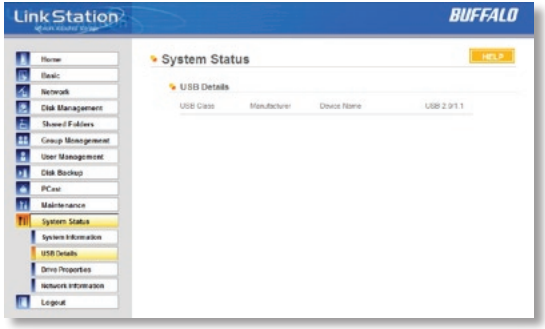
Press the *Restore* button to begin the initialization process; this will restore all settings to factory defaults but will NOT erase the data on the hard drives. *Start Disk Formatting* begins a complete disk format that will erase all information on the LinkStation's internal hard drives. This cannot be undone.



This page shows you the System Information for your LinkStation.

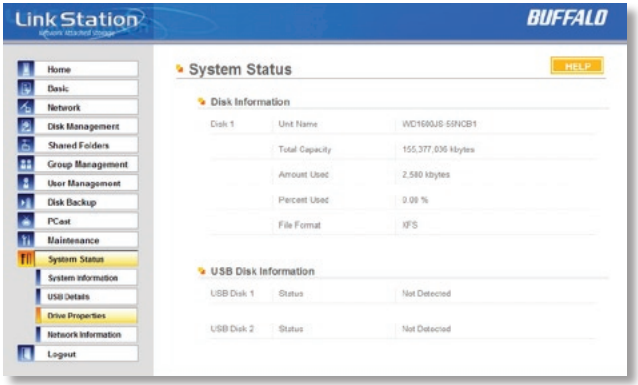
Firmware updates are occasionally available from *www.buffalotech.com* for the LinkStation Live. These must be executed from a Windows PC on the same network. Your router, switch, or hub should pass through ports 8873 and 22939 for this to work (most do).

System Status (USB Details)



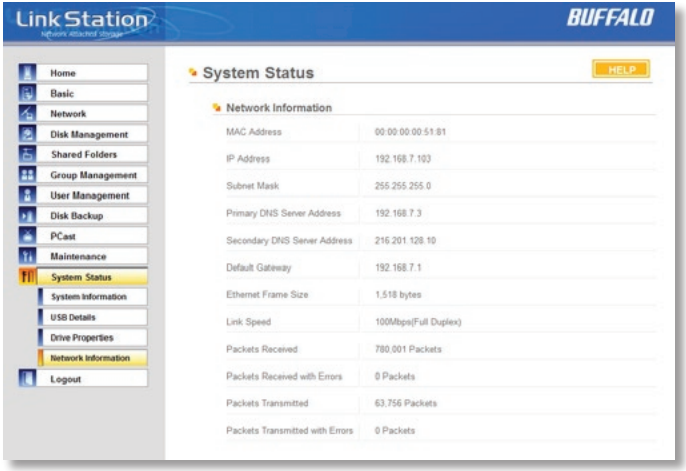
This page shows you details on USB hard drives and UPSs plugged into your LinkStation. In this example, no USB hard drives are plugged in to the LinkStation.

System Status (Drive Properties)

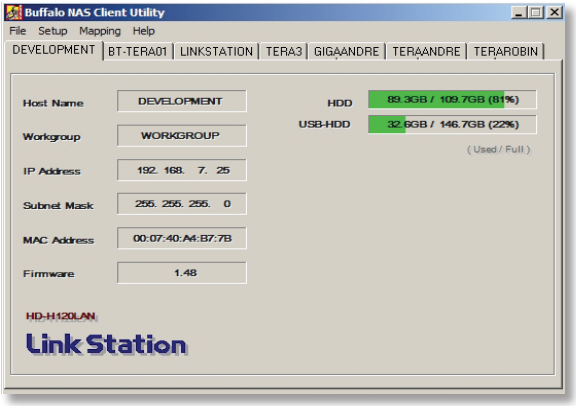


This page shows you the properties of all hard drives in and attached to your LinkStation.

System Status (Network Information)



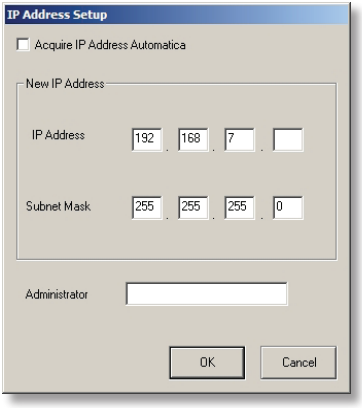
This page shows you the System Information for your network connection.



This is the *Buffalo NAS Client Utility*. Installed on your PC, it allows you to access each of the LinkStations (and TeraStations) on your network. Click *Refresh List* to get tabs for each of your LinkStations. Each tab shows the Host Name, Workgroup, IP Address, and Subnet Mask of the associated LinkStation, as well as the version of firmware it's running.

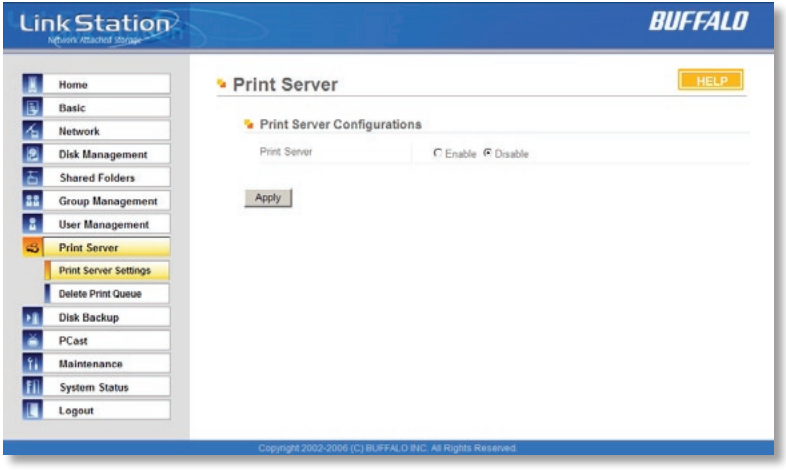
With a LinkStation's tab selected, you can click on the *View Shares* button to go directly to its root share. Clicking the *Setup* pulldown menu and selecting *Browser Management* takes you to the browser management tool that we began exploring on page 22. And clicking *Setup* and choosing *Modify IP Address* takes you to the following screen . . .

IP Address Setup



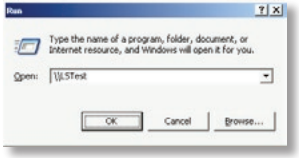
Here, you may enter your *IP Address* and *Subnet Mask* manually, or enable your LinkStation to acquire them automatically from a DHCP server. You'll need the administrator password to use this screen. Press *OK* when you're done.

If a USB printer is plugged into your LinkStation, you can easily add the printer to any Windows PC on your network. Follow these steps for each PC that you want to be able to access the printer.

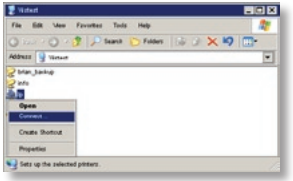


• To begin, enable the print server in the configuration GUI for your LinkStation.

- Access the LinkStation by pressing *Start*, selecting the *Run...* option, and entering *LinkStation_Name* (where LinkStation_Name is the name you set on page 25). Press the *OK* button when finished.



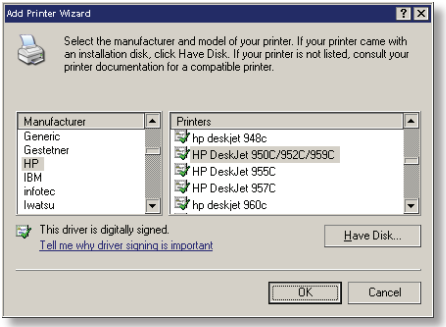
- Right click on the *lp* icon and select *Connect*.



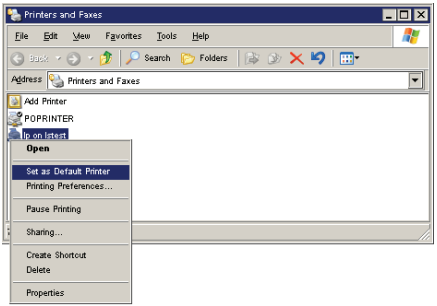
- You may receive a warning about installing from a trustworthy source. If you receive this message, press *Yes* to continue.

- You will receive a warning that the server does not have the proper drivers. Press *OK* to continue.

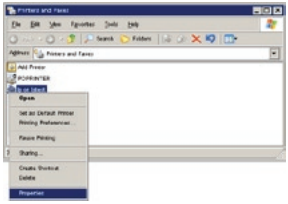
- The *Add Printer Wizard* will launch. Select the proper driver for your printer. If the specific printer is not in the list, you will be required to insert the CD that came with your printer into your PC's CD-ROM drive and press the *Have Disk* button. Refer to your printer documentation for further information on installing your printer if necessary. Press *OK* to finish.

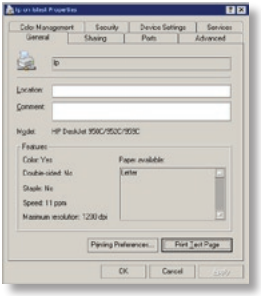


- If *lp* is the only printer installed on the PC, then it will automatically be set as the default printer. If it's not the only printer, you may make it the default printer by clicking *Printers and Faxes* in Control Panel, right clicking on the *lp* printer icon and selecting the *Set as Default Printer* option from the *File* drop-down menu.

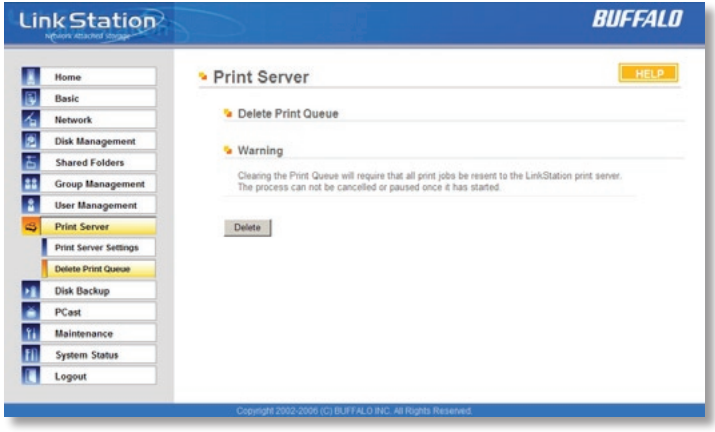


- To print a test page or configure additional printer settings, right click on the *lp* printer icon and select *Properties*. This will open the printer's driver properties page.
- Press the *Print Test Page* button to print a test page. You can also browse through the available settings for the printer. Please refer to the printer's documentation for more information on changing the printer's settings.





NOTE: The printer installation process can be done on any machine on your network. Multiple machines may print to the printer at the same time. Repeat this process on all computers that require access to the printer.



If a corrupt print job is sent to a printer, printing may suddenly fail. If your print jobs seem to be locked up, clearing the print queue may resolve the issue.

To delete the print queue, press the *Delete* button. This will clear all current print jobs. Users will have to re-send any incomplete print jobs to the printer.

If there are still problems printing to the printer, then check the printer manufacturer's documentation for troubleshooting information. Also, verify that the USB cable is securely fastened to both the printer and the TeraStation. Finally, you may try turning the TeraStation off, turning the printer off, turning the printer back on, and then turning the TeraStation back on again.

Disk Errors

If LinkStation encounters a disk error, it will be reported in the LinkStation status on the top of any of the Web-Based configuration screens. Run a *Disk Scan* in the event of this error. If that doesn't work, try a reformat. Reformatting the drive will delete all of the data on it so try to backup any data you can before beginning. Finally, if none of the above solutions help, then please contact Technical Support for further assistance.

LED Flash Codes:

3 flashes - Partition problem with hard drive. Reformat the hard drive.
4 flashes - Fan problem.
5 flashes - ROM problem.
6 flashes - Hard Drive can not be recognized.
7 flashes - Problem with motherboard (RAM, LAN, or Hard Drive controller).

LAN Standards:	IEEE 802.3u; IEEE 802.3ab; IEEE 802.3
Transmission Types:	1000BASE-T: 8B1Q4, PAM5; 100BASE-TX: 4B5B MLT-3; 10BASE-T Manchester Coding
Access Media:	CSMA/CD
Media Interface:	RJ-45
USB Standard:	USB 2.0 Hi-Speed (HS) Full-Speed (FS) Low-Speed (LS)
USB Connector:	USB A Connector (2)
Data Transmission Speed:	Max: 480 Mbps (HS Mode) Max: 12 Mbps (FS Mode)
Electric Current:	120V A/C
Power Consumption:	~21W (Varies slightly with drive size)
Dimensions:	2.4” x 6.3” x 8.5” (60 x 160 x 216 mm.)
Weight:	~3.5 lbs (1.6 kg.) (Varies with drive size)
Operating Environment:	41°-95° F, 5°-35° C; 20-80% non-condensing

Buffalo Technology USA Inc.
4030 West Braker Lane, Suite 120
Austin, TX 78759-5319

GENERAL INQUIRIES

Monday through Friday
8:30am-5:30pm CST
Direct: 512-794-8533 | **Toll-free:** 800-456-9799 | **Fax:** 512-794-8520 | **Email:** *sales@buffalotech.com*

TECHNICAL SUPPORT

North American Technical Support by phone is available 24 hours a day, 7 days a week. (USA and Canada).
Toll-free: (866) 752-6210 | **Email:** *info@buffalotech.com*

Buffalo Technology UK Ltd.
176 Buckingham Avenue,
Slough, Berkshire, SL1 4RD
United Kingdom

GENERAL INQUIRIES

Email: *sales@buffalo-technology.com*

TECHNICAL SUPPORT

Phone (UK only): 08712 50 12 60*
Phone: +353 61 70 80 50
Email: *helpdesk@buffalo-technology.ie*
*Calls cost 8.5p per minute

Technical Support Operating Hours
Monday - Friday (GMT)
9:00 AM - 6:00 PM Monday-Thursday
9:00 AM - 4:30 PM Friday

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