User Manual LS-WSGL LinkStation Mini



Introduction

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

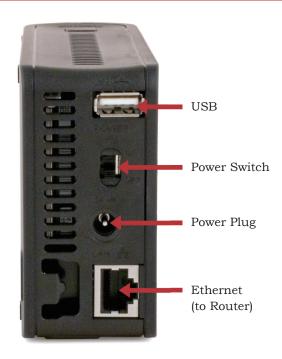
Because we're constantly updating our products, the images and text in this manual may vary slightly from the images and text displayed by your LinkStation. These changes are minor and should not affect the ease of setup adversely. As time passes, future user interfaces, updated software, and later versions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

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 67 and 68.

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Back Panel Layout



Installation

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:\LSnavi.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.



LinkNavigator Setup



Press the Begin Installation button to begin.

If you're installing on a PC, click on *Easy Setup* (the pink, upper button). Mac users can skip this step.

Click *Next* to step through the installation.



LinkNavigator Setup

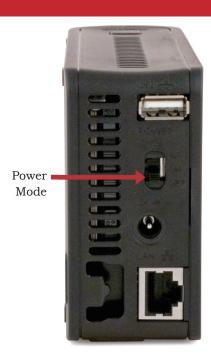


The wizard will step you through installation. Follow the directions on each screen and continue pressing *Next* to step through the installation.

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



Power Mode



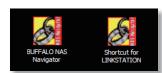
The "Power Mode" switch on the back of the unit has three positions: "Auto", "On", and "Off". The "Auto" position automatically powers the unit on or off based with your PC. If your PC is turned on the LinkStation will power up; if the PC is turned off the LinkStation will power down.

You must have installed the NAS Navigator software on your PC for this feature to work. Otherwise, if you move the switch to "auto", your unit will power down by itself and you will have to manually turn it back on.

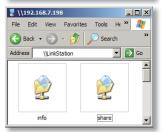
Also note that the unit needs to be powered on if you want to use the Web Access feature. When using Web Access, it is best to leave the Power Mode switch set to "On".

Move the switch to the "Off" position to turn the LinkStation off. It will take about 35 seconds to shut down. Do not unplug or interrupt power to the unit until shutdown is complete and all LEDs are off.

Using your LinkStation with a Windows PC



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.



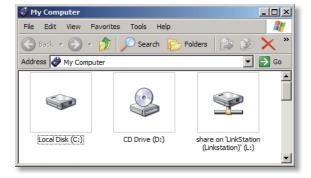
The *Buffalo NAS Navigator* icon opens the LinkStation's client utility. Turn to page 63 for more on using the NAS Navigator client utility.

Accessing LinkStation Data from your PC

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 in *Shared Folders*. 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.





Accessing LinkStation Data from your PC

You can map additional driveletters to shares on your LinkStation. From the *Start* menu, select *Run....* Enter your LinkStation's hostname (if you don't know it, 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.





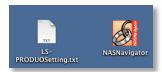
Accessing LinkStation Data from your PC

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 21) 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.



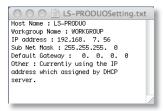


Using your LinkStation with a Mac



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

The LS-ProDuoSettings.txt file contains the IP address of your LinkStation. NAS Navigator is the LinkStation's client utility.



With the information in the *LS-ProDuoSettings.txt* file, you can easily connect to the LinkStation from any of your computers on your local network.



The NAS Navigator icon opens the LinkStation's client utility. See page 63 for more on using the NAS Navigator client utility.

Accessing LinkStation Data from a Mac

You can add a link to your LinkStation's share folder to your desktop by adding it 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*.

You can get your LinkStation's IP address from the *LS-ProDuoSettings.txt file* on your desktop, or see page 16.

Accessing LinkStation Data from a Mac

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 it



will appear on your desktop.



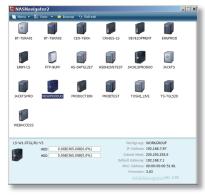
Accessing LinkStation Data from a Mac

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 icon for your LinkStation and you'll be able to read its IP address.

The *LS-ProDuoSettings.txt* file on your desktop contains the IP address of the linkstation at the time that the setup program was run.

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.



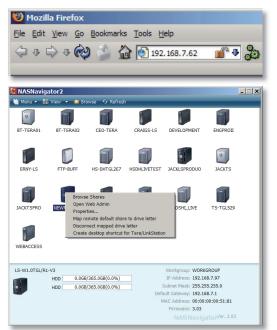


LinkStation Expansion

LinkStation Mini has two USB 2.0 ports on the rear. This port can be used for adding an external USB Hard Drive or a USB Printer. LinkStation will share connected USB devices, allowing everyone on the network to use them. To connect a USB hard drive to your LinkStation, simply plug it into the USB port.

Once your USB hard drive is connected, see page 26 for configuring your LinkStation to use it. To configure a USB printer, see page 42.

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.

You may also open the Configuration GUI from NAS Navigator by right-clicking on your LinkStation and choosing *Open Web Admin*.

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 36 to change your password.

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

Advanced Settings - Home

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 (hostname) of your LinkStation.

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 by just closing the browser window.



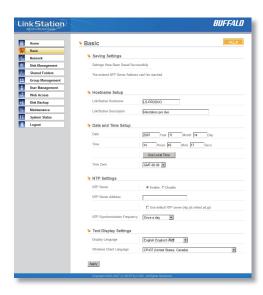
Basic

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 an 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)

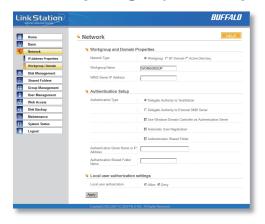


In most networks, LinkStation will get its IP Address automatically from a DHCP server. You may disable DHCP here. If DHCP is disabled and an IP Address is not set manually, it will default to 192.168.xxx.xxx with subnet mask 255.255.0.0. The LinkStation's IP Address, Subnet Mask, Default Gateway Address, 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 Domain/Active Directory networking, then please leave the *Network Type* selected as *Workgroup* and *Workgroup Name* set to *Workgroup*.

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

If using *NT Domain* or *Active Directory*, LinkStation must be added as a member computer in the Domain Server.

Setting *NT Domain* or *Active Directory* for network type integrates the LinkStation with a server. The LinkStation Pro participates as a member device in the Domain and Active Directory networks, allowing the LinkStation to use Users and Groups that reside on the Domain or Active Directory System. If Active Directory is used, then the LinkStation will automatically receive update information

from the domain controller(s). To configure the LinkStation Pro on an Active Directory network, you must have the Domain Administrator login credentials. Enter the Domain Name and Domain Controller into the appropriate fields. In an Active Directory environment, check the Active Directory Domain checkbox and fill in the remaining fields. The Authentication Setup fields will be automatically filled out, so no input is needed there. Once you have finished, press *Apply*.

Disk Management (Drive Properties)

This page shows the properties for the drives in your LinkStation Mini. If you have a USB hard drive plugged into the linkstation, its properties will appear here as well.

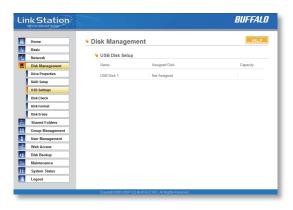


Disk Management (RAID Setup)



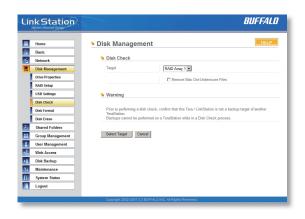
Configure your RAID settings here. To change the type of RAID array used, click on "RAID Array 1" under RAID Setup.

Disk Management (USB hard drives)



From here you can see your USB hard drive's system 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).

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 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*.

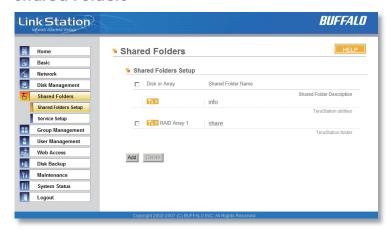
Depending on the size of the target hard disk or array, a Disk Format may take several hours to complete. Shares on the LinkStation will not be accessible during the disk format.

Disk Erase



To remove all data from a Disk, use *Disk Erase*. Once erased, this data cannot be restored.

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



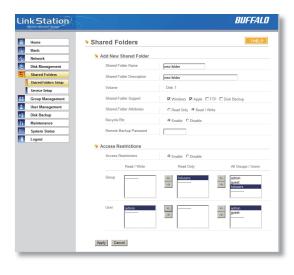
To add a new shared folder, enter a name for it in the *Shared Folder Name* box and choose which *Disk Space* it will reside in. You may also choose which operating systems and features the share will support by putting the appropriate checks next to *Shared Folder Support*, and whether the share supports 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)

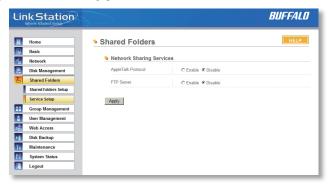


To use *Access Restrictions* for a share, select *Enable*.

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.

Shared Folders (Service Setup)



To allow FTP Access to your 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



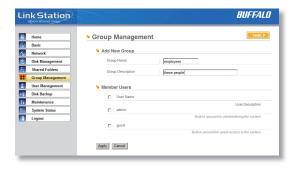
Groups allow for easier management of permissions in some networks, specifically networks with a lot of users in different departments.

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

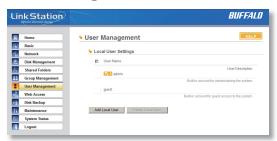
Add a name and a description to the *Add New Group* fields. Put checks next to each *Member User* that you want to be part of the group. Click *Apply* when your group is set up the way you want it.

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

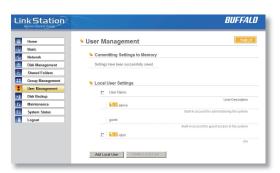


LinkStation is preconfigured with two users, *admin* and *guest*, out of the box. The *admin* and *guest* user accounts cannot be deleted. To delete any other user, put a check next to their name and click *Delete*. To add a new user, click *Add*

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.

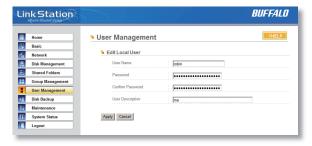


User Management (changing passwords)



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.

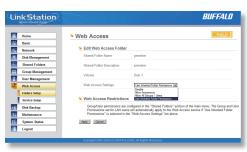
'Auto-Configure Firewall' is also recommended if your router supports UPnP (most do since 2001). If you choose not to enable this, you must manually configure your router and firewall to forward internal port 9000 to the Internet.

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.

Configuring WebAccess





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.

Click the *Apply* button to save your changes.

Using WebAccess

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 37.

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.



Using WebAccess

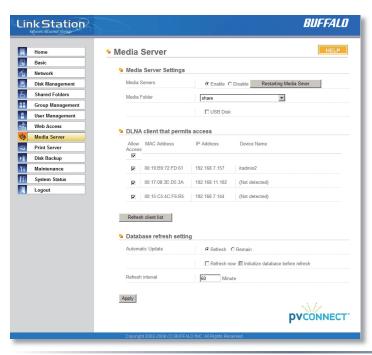


To access individual folders on the right, click on their *open* links.

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.



Configuring DLNA Media Server



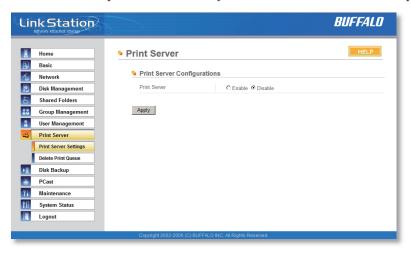
If you have a LinkTheater or other DLNA compatible media player, this page is where you configure your LinkStation to work with it.

Choose *Enable* for *Media Servers* and select the folder where your media files are stored. This may be located on a USB hard drive connected to the LinkStation if the *USB Disk* box is checked.

Check the *Allow Access* box for each media player that you want to be able to access your media files.

You may choose the interval at which the list of multimedia files on the LinkStation is updated. An interval of 60 minutes is recommended.

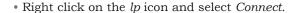
If a USB printer is plugged into your LinkStation, you can easily add the printer to any Windows PC on your network. Follow these steps for each PC that you want to be able to access the printer.

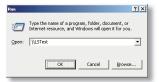


• To begin, enable the print server in the configuration GUI for your LinkStation.

Printer Installation

Access the LinkStation by pressing Start, selecting the Run...
 option, and entering \LinkStation_Name (where LinkStation_
 Name is the DNS name of your LinkStation). Press the OK
 button when finished.







- 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.

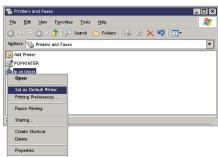


Printer Installation

• 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.





Printer Installation

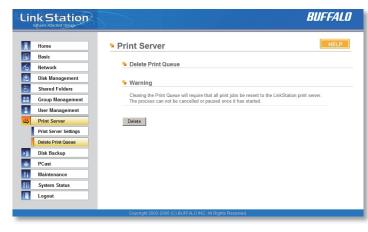
- To print a test page or configure additional printer settings, right click on the *lp* printer icon and select *Properties*. This will open the printer's driver properties page.
- Press the *Print Test Page* button to print a test page. You
 can also browse through the available settings for the
 printer.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





Print Server (Delete Print Queue)



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

LinkStation. Finally, you may try turning the LinkStation off, turning the printer off, turning the printer back on, and then turning the LinkStation back on again.

Accessing Multiple Shares from a single PC



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

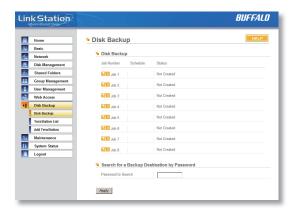


When mapping any share, select the *Connect using a different user name* option. A login and password prompt will appear. Use the username and password required by any secure, restricted shares for *all* shares. All mapped shares on a single PC must use the same username and password!



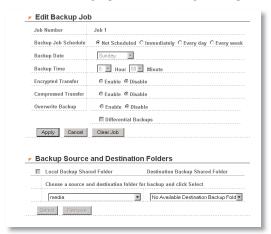
If only unrestricted shares are being mapped, then it's not necessary to set a username and password for shares. Multiple mapped drives to unrestricted shares can exist without a username or password as long as no restricted, secure shares are mapped. If an unrestricted share and a restricted share are 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)

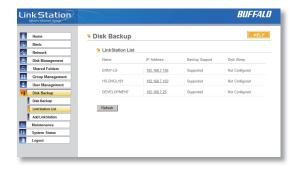


A *Backup Job* can run regularly on a daily or weekly schedule, or immediately by appropriate choices in the *Backup Job Schedule* field. *Date* and *Time* for the backup may be entered, and *Encryption* and *Compression* enabled or disabled. Enable *Overwrite Backup* to have each scheduled backup write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

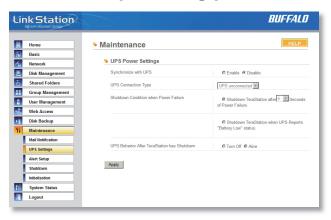
Maintenance (Notification)



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.

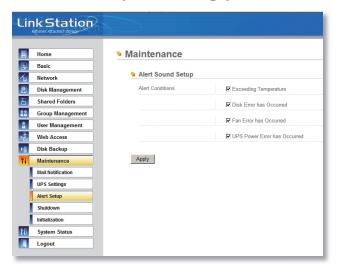
^{*} SMTP server must be an *open* type server. Currently, there's no provision for entering a username or password.

Maintenance (UPS Settings)



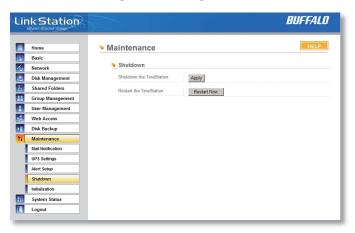
If using an Uninterruptible Power Supply, configure the LinkStation's UPS settings here.

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 (Shutdown)

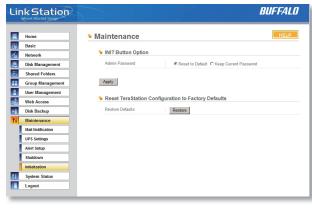


From the *Shutdown* page, press *Apply* to shutdown LinkStation. This has the same function as holding down the power button on the front of LinkStation, but may be done remotely. Turning on the LinkStation after a shutdown requires a physical button push on the front of LinkStation. The *Restart Now*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

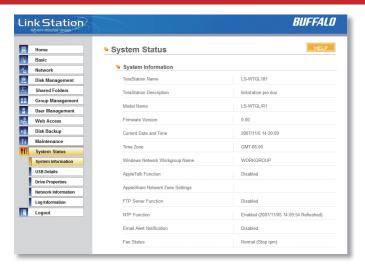
Specify whether the LinkStation shall keep its administrator password after a initialization or whether the password should be reset to the default password



(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.

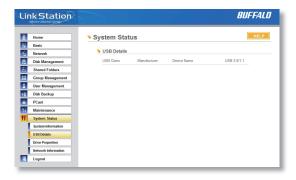
System Status (System Information)



This page shows you the System Information for your LinkStation.

Firmware updates are occasionally available from *www.buffalotech.com* for the LinkStation Mini. 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)



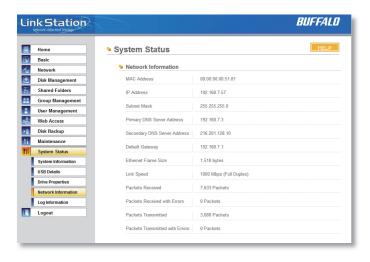
This page shows you details on USB hard drives and UPSs plugged into your LinkStation. In this example, no USB hard drives are plugged in to the LinkStation.

System Status (Drive Properties)



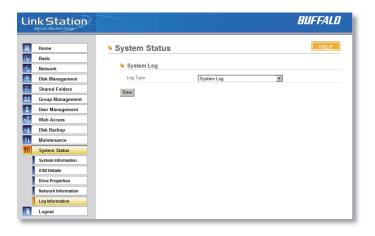
This page shows you the properties of all hard drives in and attached to your LinkStation.

System Status (Network Information)



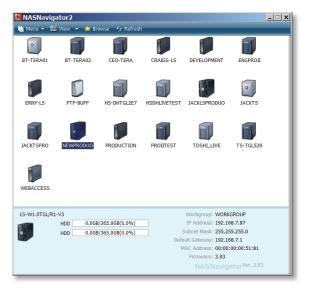
This page shows you the System Information for your network connection.

System Status (Logs)



Choose a Log from the dropdown menu and click View to see it.

LinkStation Client Utility



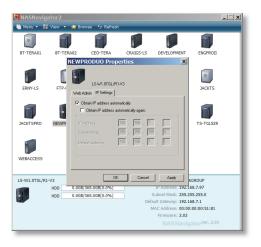
This is the *Buffalo NAS Client Utility*. Installed on your PC, it allows you to access each of the LinkStations (and TeraStations) on your network. Click *View* to get icons for each of your LinkStations. Highlight each tab to show the Host Name, Workgroup, IP Address, and Subnet Mask, Gateway, and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

Right-click on a LinkStation for more options. You can open the Web Admin GUI, map a share to a drive letter, or create a shortcut on your desktop.

To change a LinkStation's IP Address, click *Menu* and choose *Properties*.

LinkStation Client Utility

IP Address Setup



From the *IP Settings* tab, you may enter your *IP Address* and *Subnet Mask* manually, or enable your LinkStation to acquire them automatically from a DHCP server. Press *OK* when you're done.

Troubleshooting

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).

Technical Specifications

Data Transfer Rates:	10/100/1000 Mbps
Hard Drives:	(2) SATA
Main Connector Type:	RJ-45 (Ethernet)
USB Interface:	USB 2.0/1.1
Protocol Support:	TCP/IP SMB, FTP (File Sharing) HTTP (Management) NTP (Time Synchronization)
Power Supply:	100-240V 50/60Hz
Client OS Support:	Windows _® Vista™, XP, 2000,
	Mac OS _® 10.3.9 or later
Power Consumption:	~15W (with no USB devices connected)
Dimensions:	1.6" x 3.2" x 5.3" (40 x 82 x 135 mm)
Weight:	~17.6 ounces (.5 kg)
Operating Environment:	41°-95° F, 5°-35° C; 20-80% non-condensing

Contact Information (North America)

Buffalo Technology USA Inc. 11100 Metric Blvd., Suite 750 Austin, TX 78758

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

Contact Information (Europe)

Buffalo Technology UK Ltd. 2 Bracknell Beeches, Old Bracknell Lane Bracknell, Berkshire, RG12 7BW United Kingdom

GENERAL INQUIRIES

Email: sales@buffalo-technology.com

TECHNICAL SUPPORT

Buffalo Technology provides technical support in English, German, French, Italian and Spanish. For opening hours and relevant telephone numbers, please go to:

www.buffalo-technology.com/contact

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For each individual product and revision, please send one individually packaged self addressed padded CD shipping envelope, containing a blank CD-R to the following address:

Buffalo Technology USA Inc. 11100 Metric Blvd., Suite 750 Austin, TX 78758 Attn. GPL Department

Within the envelope containing the self addressed padded CD shipping envelope, please include a bank draft or money order for \$20 (USD) (made out to Buffalo Technology) to cover our handling fee, postage and CD preparation. The CD-R should have the name of the product and revision number clearly written on the actual CD-R (not on the insert).

We do not send GPL source in bulk on a DVD. And order confirmation is not required by the GNU General Public License.

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Sincerely, Buffalo Technology GPL Department

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Within the envelope containing the self addressed padded CD shipping envelope, please include a bank draft or money order for €20 (Euro) (made out to Buffalo Technology) to cover our handling fee, postage and CD preparation. The CD-R should have the name of the product and revision number clearly written on the actual CD-R (not on the insert).

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