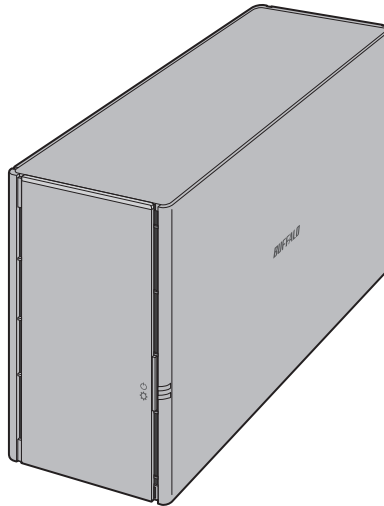


LinkStation 500

User Manual



www.buffalo-technology.com

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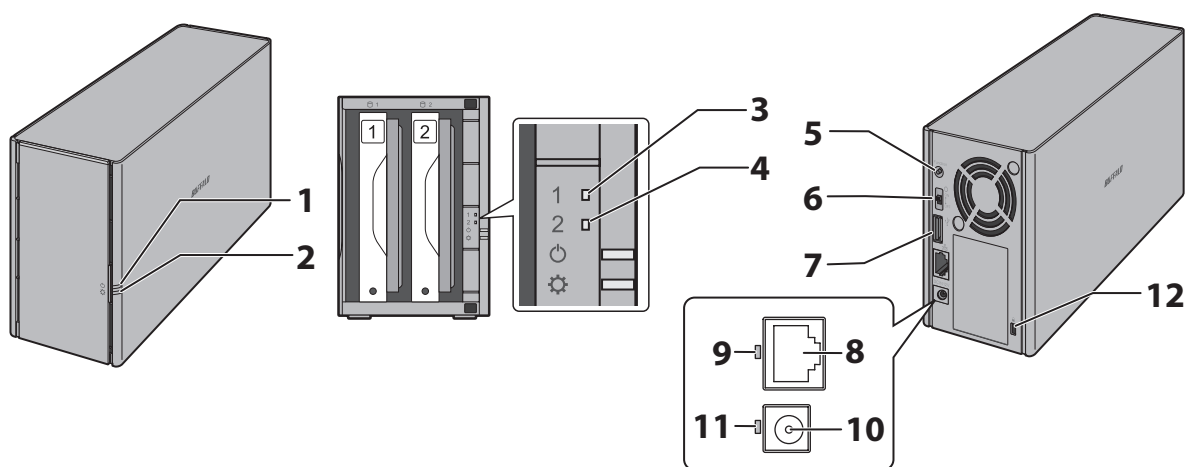
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Chapter 1 Getting Started

Diagrams


LS520D

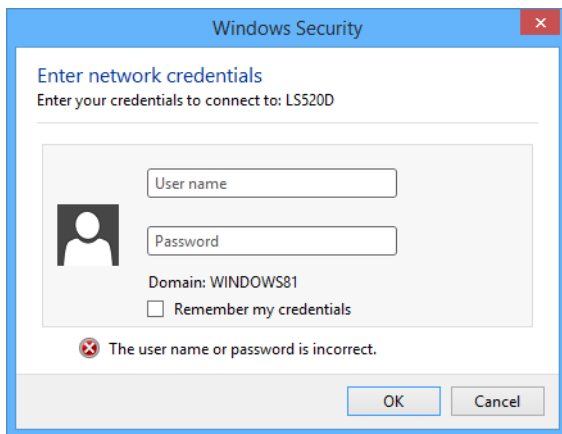


- 1** Power LED
The white power LED will light up while the LinkStation is on.
The white power LED blinks while booting or shutting down.
The red power LED blinks when an error occurs.
If there is a status message, the power LED blinks amber.
If there is new firmware available, the power LED glows amber.
- 2** Function LED
This LED glows white while the USB device is connected, and blinks white dismounting USB devices and during Direct Copy.
- 3** Drive 1 Error LED
If there is an error on drive 1, this LED will light.
- 4** Drive 2 Error LED
If there is an error on drive 2, this LED will light.
- 5** Function Button
Use this button for Direct Copy and initializing settings.
- 6** Power Switch
Move the switch up and down to power on and off.
- 7** USB 3.0 Port
Compatible Buffalo USB 3.0 hard drives and USB flash drives can be connected. USB hubs are not supported.

- 8** LAN Port
Connect to a router, hub, or switch on your Ethernet network with the included Ethernet cable.
- 9** Link and Activity LED
This LED shows network activity. It blinks green when the LinkStation is accessed over the network.
- 10** Power Connector
Use the included power cable to connect to a surge protector or outlet.
- 11** Power Status LED
The LED glows green when the power cable is connected.
- 12** Anti-Theft Security Slot
Use this slot to secure your LinkStation with a cable lock (not included).

Accessing Shared Folders

- 1** Double-click the  icon to start NAS Navigator2.
- 2** In NAS Navigator2, double-click your LinkStation's icon.
- 3** When the following screen is displayed, enter the username and password.



- 4** The Explorer will open with a list of shared folders. For Mac OS, the LinkStation is mounted as a drive icon on the desktop or it is displayed in the sidebar of the Finder.

Note: 15 GB in each RAID array or partition have been reserved for the system area in the LinkStation, so they cannot be used when accessing via SMB connection.

Turning the LinkStation On and Off


Move the power switch on the back of the LinkStation to the "on" position to turn it on. To turn it off, move the switch to the "off" position and wait for the unit to fully shut down before unplugging it. Never unplug the AC adapter without properly shutting down the LinkStation first.

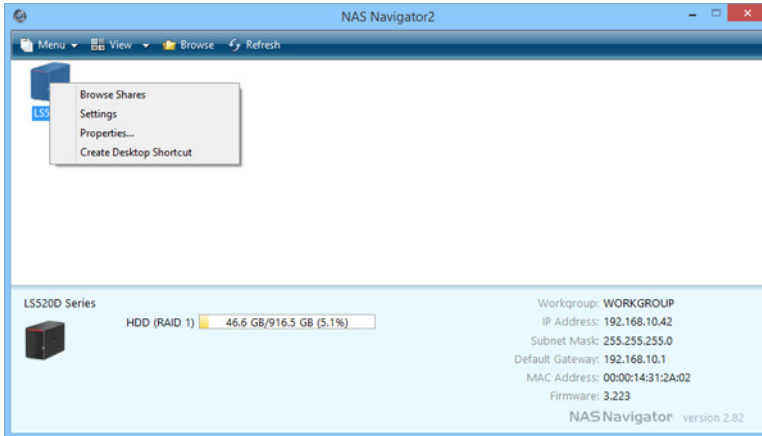
When all the LEDs on the front of the LinkStation turn off, the shutdown process is complete.




Restarting from Settings

You can also restart the LinkStation remotely from Settings. To restarting from Settings, follow the procedure below.

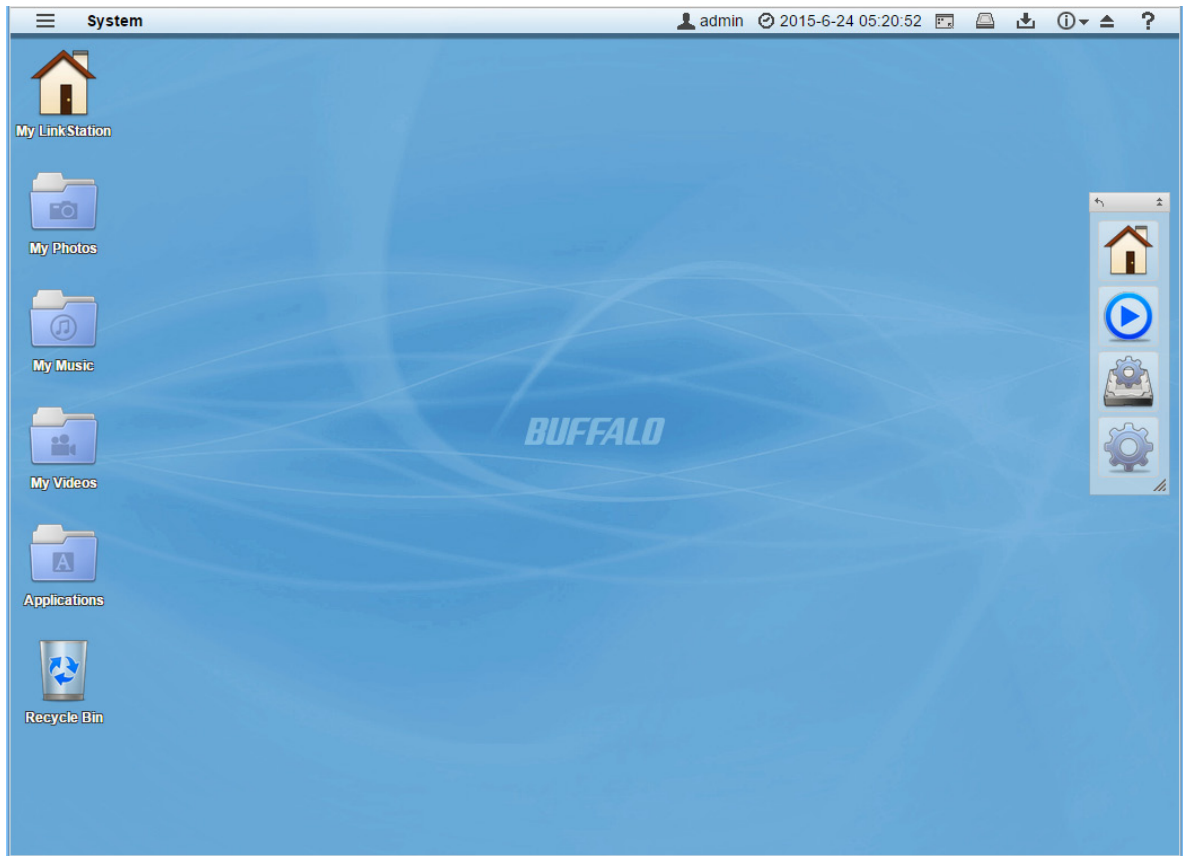
- 1 Double-click the  icon to start NAS Navigator2.
- 2 Right-click on your LinkStation's icon and choose *Settings*. For Mac OS, click your LinkStation's icon while holding down the control key, then select *Settings*.




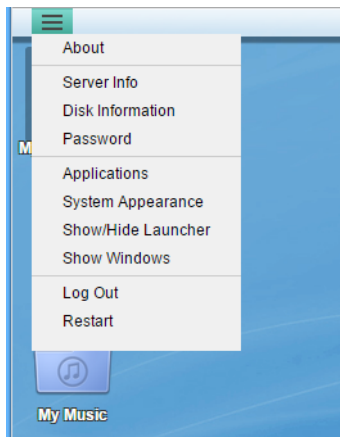
- 3 Enter a username and password, then press the Enter key or click the  icon to log in.



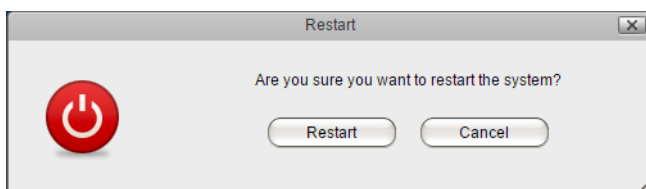
4 Settings will open.



5 Click  at the top-left of Settings and choose *Restart*.



6 Click *Restart* again.




Chapter 2 Configuration

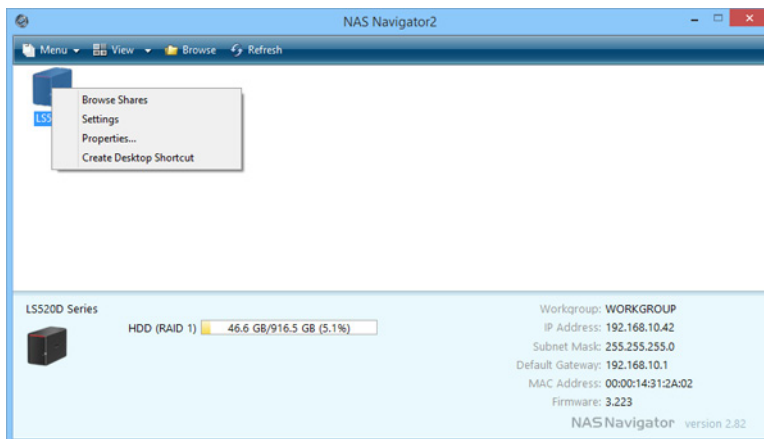
Configure and manage your LinkStation using the Settings interface, accessible from a browser window. Open the interface using the procedure below or type the LinkStation's IP address in the URL field of your browser.

Opening Settings

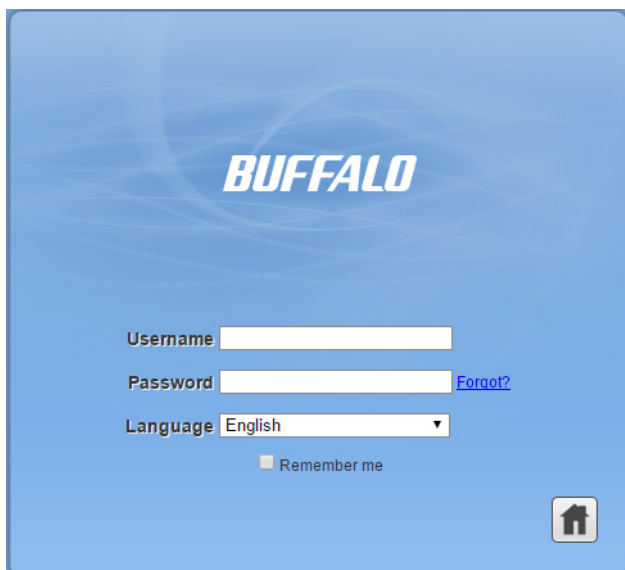
Note: Internet Explorer 9, Firefox 18, Google Chrome 24, Safari 8, and later are supported. If you have difficulty viewing Settings, check the following:


- If you have a proxy server enabled in the browser settings, disable the proxy server.

- 1 Double-click the  icon to start NAS Navigator2.
- 2 Right-click on your LinkStation's icon and choose *Settings*. For Mac OS, click your LinkStation's icon while holding down the control key, then select *Settings*.



- 3 The Settings login screen will open.



- 4 Enter a username and password, then press the Enter key or click the  icon to log in.
The default username and password are "admin" and "password".

Note: To log out from Settings, close the browser.

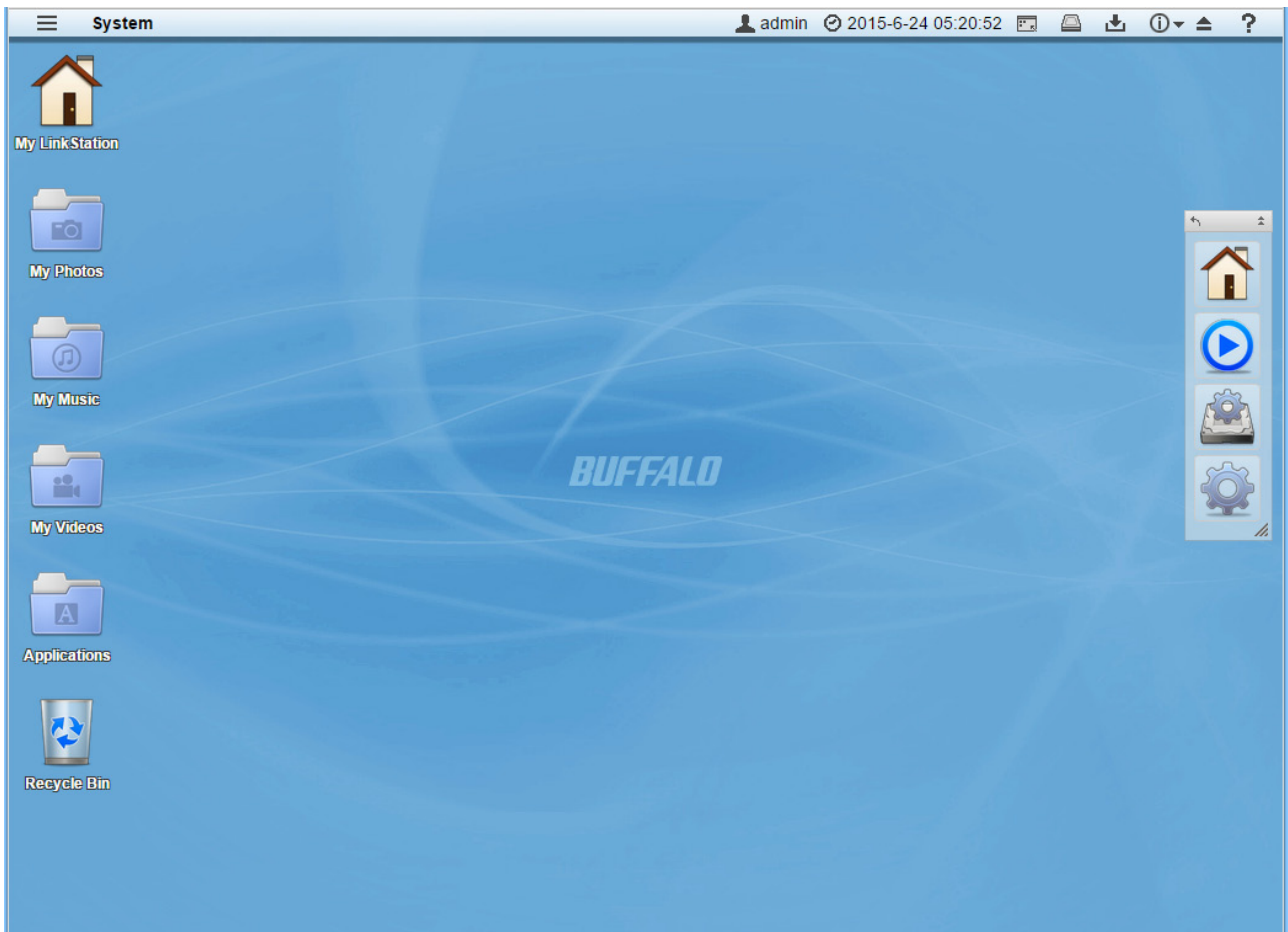
Restoring Administrator Password to the Factory Default

If you forget the admin password and cannot log in to Settings, you can initialize it with the function button. Follow the procedure below to initialize the password.

- 1 Turn off the LinkStation.
- 2 Turn the LinkStation on while holding down the function button until the power LED flashes amber.
- 3 Initialization will start. Do not power down the LinkStation while the power LED is blinking.
- 4 When the power LED glows a steady white, initialization is finished.

Navigating the Main Menu

When you log in to Settings, you will see the following screen first.



The Home Screen





The home screen acts like a typical computer desktop. Default shortcuts are listed below:

Item	Description
My LinkStation	Accesses all stored files and folders and all LinkStation functions, including creating new shared folders.
My Photos	Shortcuts of folders that are in My LinkStation.
My Music	
My Videos	
Applications	Contains programs built in to the LinkStation, as well as default shortcuts to system settings.
Recycle Bin	Stores deleted files. If a file is accidentally deleted, you can restore it from this folder. To empty the recycle bin, right-click the recycle bin icon, then select <i>Clear</i> . Note: The recycle bin will only store files deleted from Settings.

Launcher

The launcher provides instant access to applications and settings of your choice. Even with other windows open in the LinkStation, the launcher will always stay on top for easy access. You can adjust the launcher size, screen position, orientation, or even hide it completely, depending on what is convenient for you.

Default launcher shortcuts are listed below:

Item	Description
 My LinkStation	The same as My LinkStation.
 Media Player	Plays audio or video files stored in the LinkStation.
 Disk Manager	Manages internal and external drives connected to the LinkStation.
 Preferences	Configures optional advanced settings.

Customizing the Home Screen

You can customize the home screen desktop to your specifications.

Adding New Shortcuts

To add a new desktop shortcut for an application, drag the application from the "Applications" folder to the desktop. To add a desktop shortcut for a file or folder, drag the file or folder from its location to the desktop.

Deleting Shortcuts

To delete a shortcut, you can either right-click on the shortcut and select *Delete*. Alternatively, you can drag and drop the shortcut into the recycle bin, then click *OK* from the dialog window.

Restoring Shortcuts

To restore desktop shortcuts to the default ones, right-click anywhere on the desktop and select *Restore Desktop Icons*.

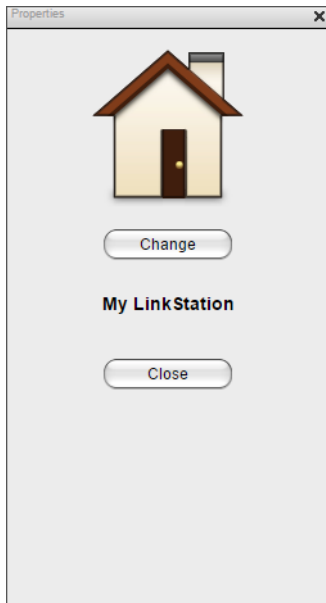
Arranging and Sorting Icons

To re-arrange the icons, simply drag them to your preferred location on the desktop. To sort desktop shortcuts, right-click anywhere on the desktop and select *Sort Desktop Icons*. All the shortcuts will be re-arranged starting from the top left corner.

Changing Icons

You can change replace an icon image with an image file on your LinkStation.

- 1 Right-click on a shortcut icon and select *Change Icon*.
- 2 Click *Change* and select the image you want.



- 3 Click *Close*.

Launcher Options

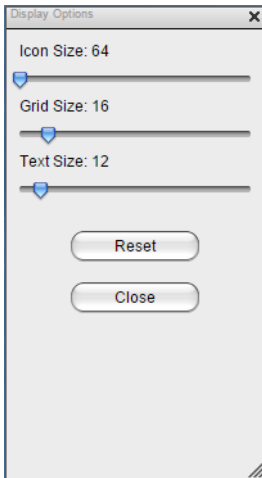
You can remove or restore launcher shortcuts just as you would with desktop shortcuts.

In addition to removing applications, you can also change the location and size of the launcher.

- Click and drag on the gray handle to re-position the launcher.
- Click on the double arrows in the gray handle to minimize the launcher.
- Click on the single arrow in the gray handle to flip the orientation from vertical to horizontal or vice versa.
- Click and drag the triangle in the corner of the launcher to resize it.

Display Options

Right-click anywhere on the desktop and select *Display Options*. You can adjust the sliders to change the item display sizes. To revert back to the factory default setting, click *Reset*.



- Icon Size: Toggle between icon display sizes.
- Grid Size: Toggle between icon grid display sizes.
- Text Size: Toggle between text display sizes.

Wallpaper Options

You can replace the default wallpaper to match your own personal preferences. You can set any image stored on the LinkStation as the wallpaper. You can also enable the slideshow function to cycle through your images and display a new image at a preset interval.

- 1 Right-click on the background and select *System Appearance*.
- 2 Click the *Wallpaper* tab, then *Open*. Select the folder where your images are stored, or click *View system wallpapers* to view stock images included on your LinkStation. Click on the image you want to set as your wallpaper.



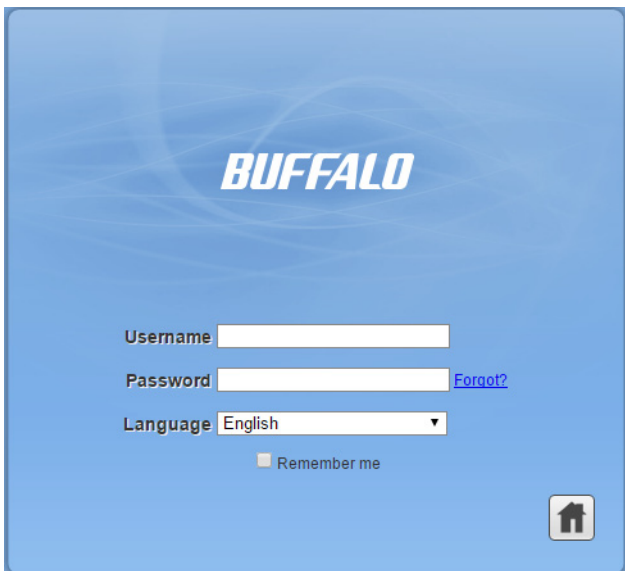
- 3** From the "Position" drop-down, select how the image will be displayed.
 - Stretch: Stretch the wallpaper to desktop size.
 - Center: Places the wallpaper in the center of the desktop.
 - Tile: Displays the wallpaper in a tile-like pattern.
 - Fill: Make the wallpaper fill the desktop and cut any overflow.
 - Fit: Make the wallpaper fit the desktop without overflow.
- 4** If you enable "Slideshow", you can set an interval in seconds to cycle through images in the selected folder as the background.
- 5** If you don't want to use an image as the wallpaper, you can set the background as a solid color and enable the "No Image" option.

Changing System Languages

You can change the system language before or after you log in to Settings.

Changing from Login Page

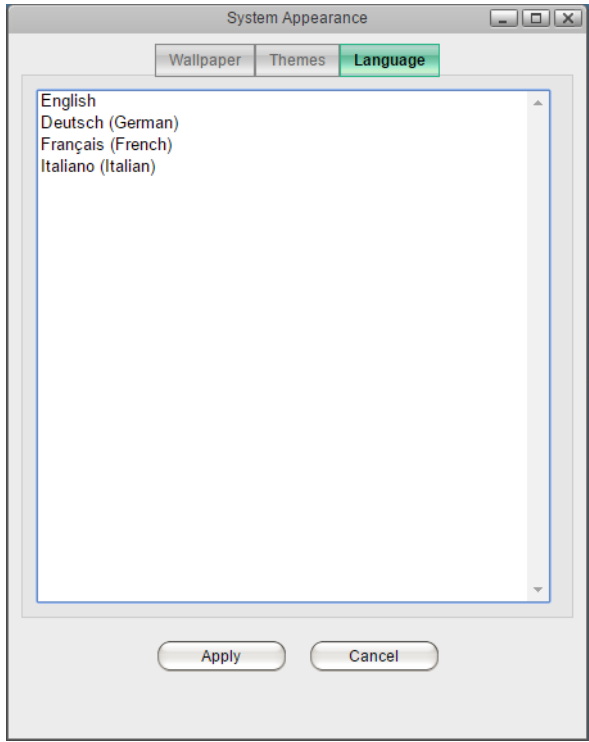
Open Settings and select the language from the drop-down menu. The system language will be changed after you log in.



Changing from Desktop

- 1** Right-click anywhere on the desktop and select *System Appearance*.

2 Click the *Language* tab and select the desired display language from the list.

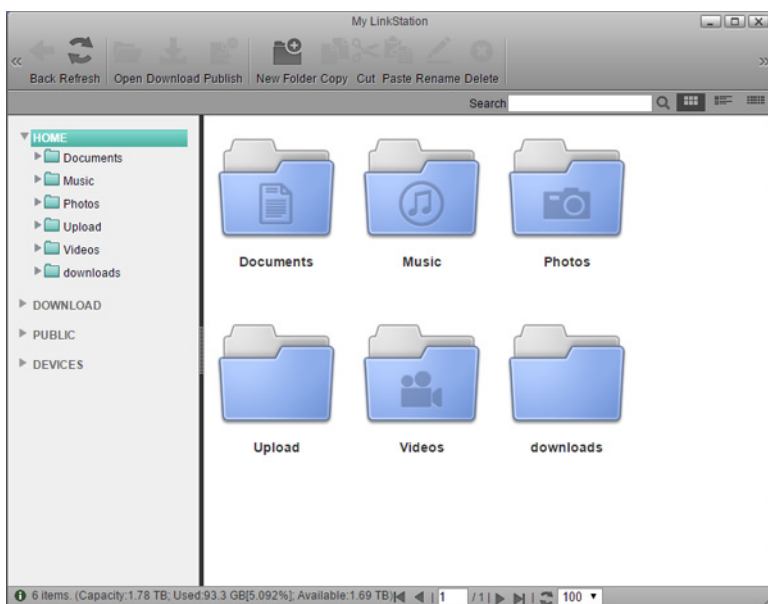


3 Click *Apply*.

Chapter 3 My LinkStation

My LinkStation is an application that manages files and folders stored on the LinkStation. To open My LinkStation,










double-click the  icon from the home screen.





In the My LinkStation window, the following tabs will be displayed on the left as a directory:

- Home: This shows subfolders in the user area that will be automatically created when creating a user. If you log in to Settings as the administrator, this will display all folders in the "admin" folder.
- Download: This is a folder that stores downloaded files.
- Public: This is a folder that any user can access.
- Devices: All shared and subfolders that are created in the LinkStation will be displayed.

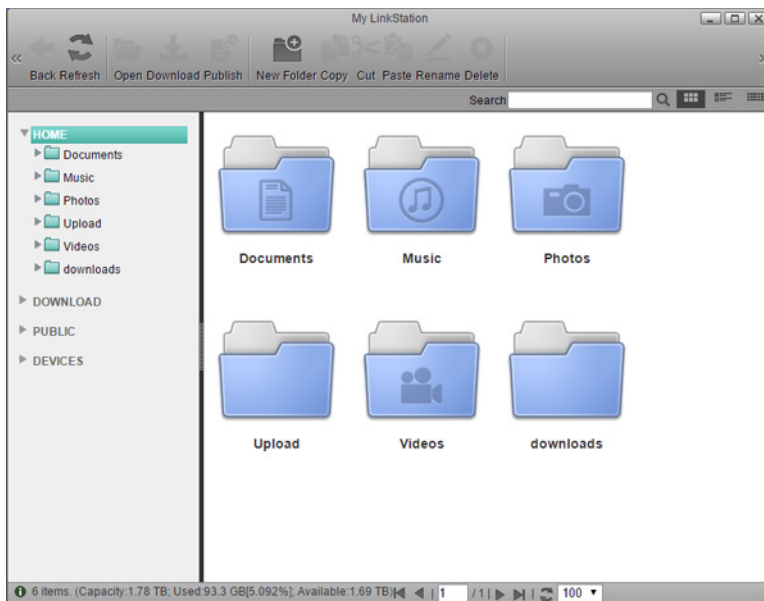
Note: "Download" and "Devices" folders can only be accessed by the administrator user.

Icons	Name	Descriptions
	Back	Return to the previous screen.
	Refresh	Refresh the screen.
	Open	Open a file or folder.
	Download	Download a selected file to your local computer.
	Publish	Share the selected folders or files with a link.
	New Folder	Create a new folder.
	Copy	Create a copy of the selected file or folder, either on the current directory or another that is available to the user.
	Cut	Cut the selected file or folder.
	Paste	Paste the selected file or folder to the new location.

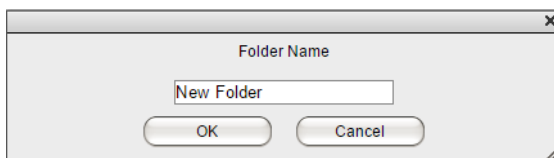
Icons	Name	Descriptions
	Rename	Change the name of a file or folder.
	Delete	Delete the selected file or folder.

Adding Folders

- 1 Select a shared folder to add a subfolder from the directory list at the left.
- 2 Click *New Folder*.



- 3 Enter a desired folder name and click *OK*.

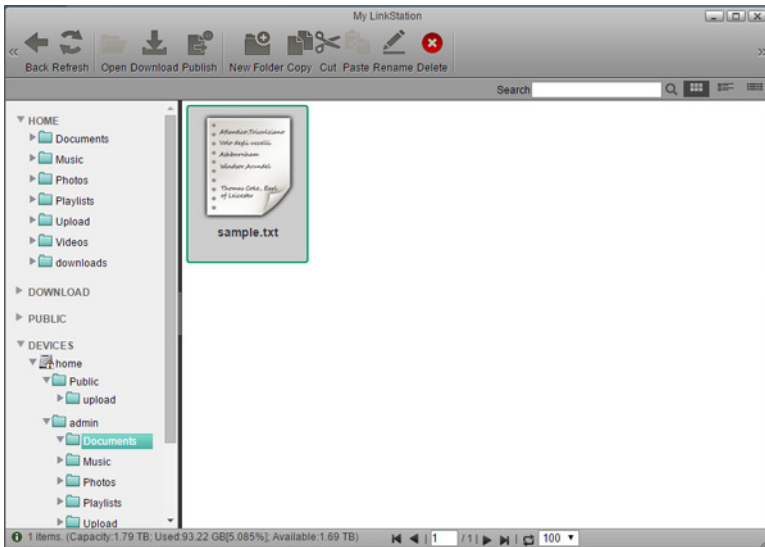


The folder will be created in the selected shared folder.

Note: If you want to add a new shared folder, see the "SHARED" section in chapter 7.

Downloading Files

Select a file to download to your computer and click *Download*. The selected file will be downloaded to your computer.

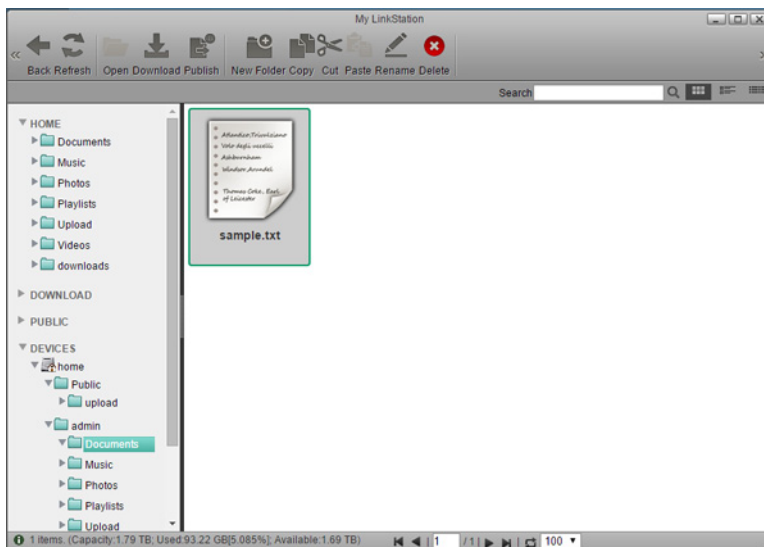


Sharing Files and Folders with Local Users

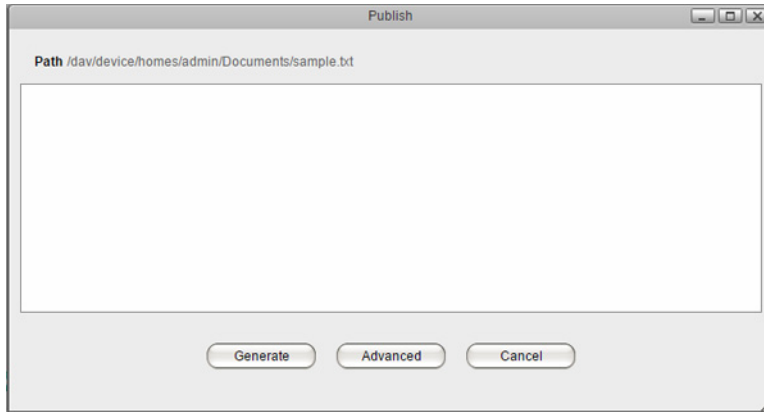
You can create a temporary shared link to share files or folders with other users on the same local network.

Note: The shared file or folder cannot be accessed via the Internet.

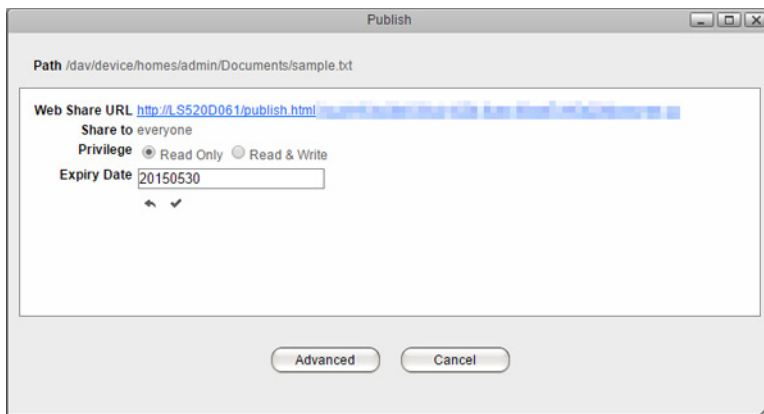
- 1 Select a folder or file from the main window and click *Publish*.



- 2** Click *Generate*. The temporary shared link will be generated.



- 3** By default, the privilege will be set to "Read Only" and the expiration date will be one month from the day the shared link is created. To change these settings, click the ✎ icon in the window. When you finish editing, click the ✓ icon to apply changes.



- 4** You can send the link by copying and pasting it into an email or messaging application.

Notes:














- No other folder or file on the LinkStation can be accessed from the shared link.
- Shared files can only be viewed or downloaded if the privilege is not changed from the default setting, "Read Only".
When the privilege is changed to "Read & Write", shared files can then be copied, edited, or deleted.
- Expired links cannot be accessed.
- If you delete a shared file or folder via the shared link, it will be removed completely, not placed into the recycle bin.

Chapter 4 Media Player

Media Player is an application that can play media files on the LinkStation and create original playlists with the

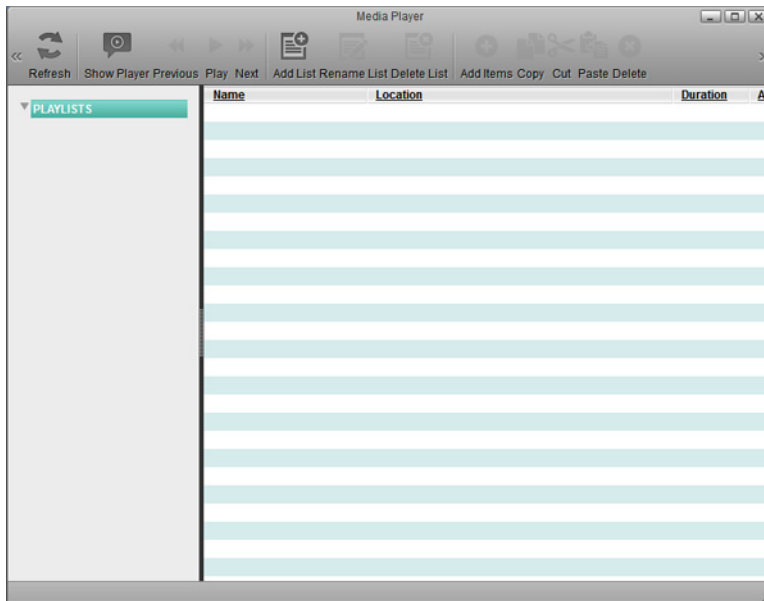


media files. To open Media Player, click the icon from the home screen.

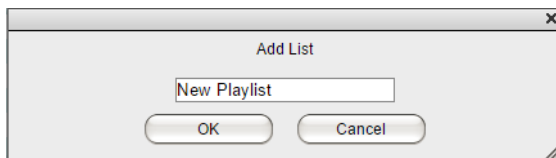
Icons	Name	Descriptions
	Refresh	Refresh the screen.
	Show Player	Displays the media player.
	Previous	Return to the previous media file.
	Play	Opens the media player and play media files in the playlist.
	Next	Skip to the next media file.
	Add List	Add a new playlist.
	Rename List	Change the name of a playlist.
	Delete List	Delete a selected playlist.
	Add Items	Add a media file to the playlist.
	Copy	Create a copy of the selected media file, either on the current directory or another that is available to the user.
	Cut	Cut the selected media file.
	Paste	Paste the selected media file to the new location.
	Delete	Delete the selected media file.

Creating Playlists

- 1 Select "PLAYLISTS" at the left of the window and click *Add List*.



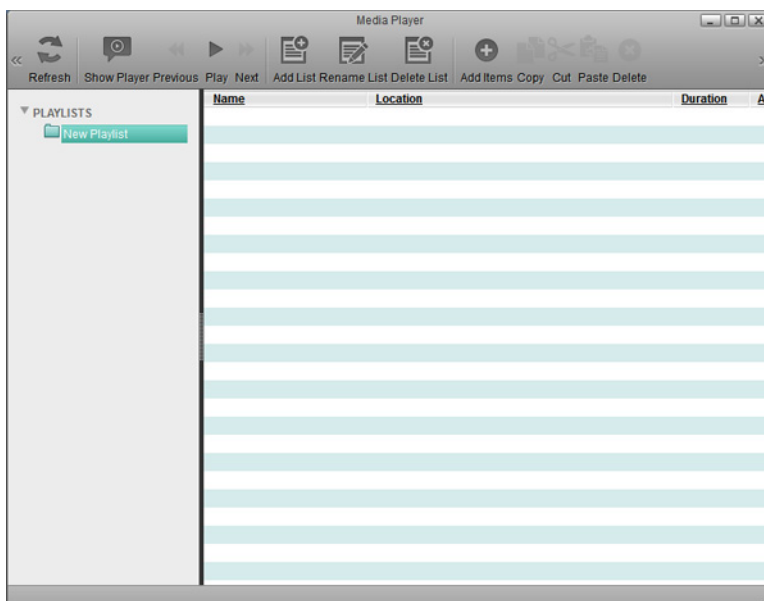
- 2 Enter a desired playlist name and click *OK*.



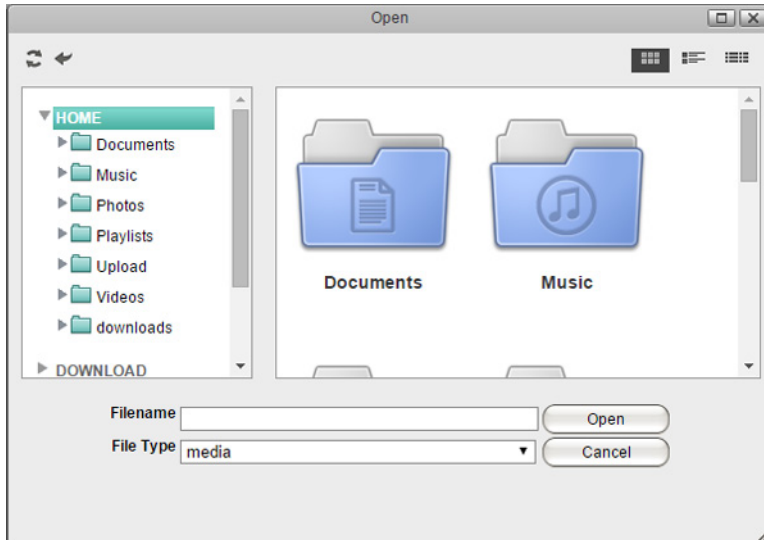
New playlist will be created.

Adding Media Files

- 1 Select the playlist at the left of the window and click *Add Items*.



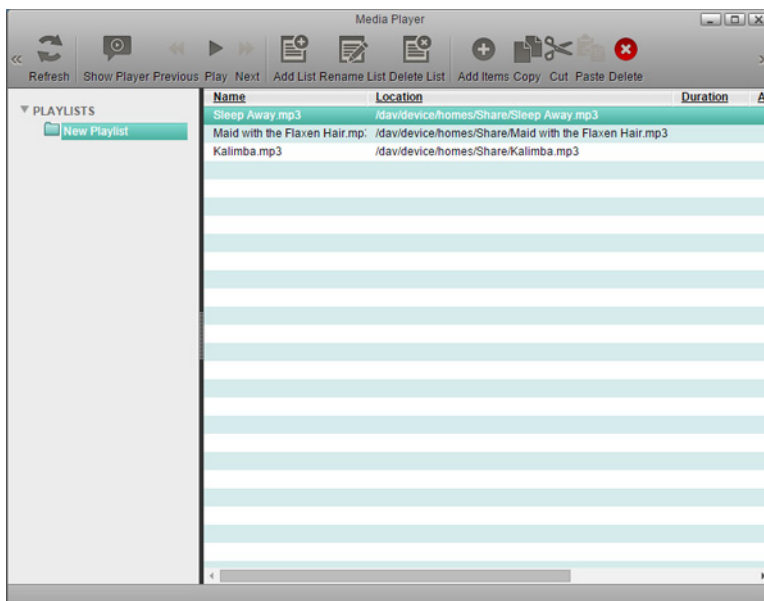
- 2 The dialog box will open. Select a media file to add and click *Open*.



The media file is now added to the playlist.

Playing Files

- 1 Select the playlist at the left of the window and click *Play*.



- 2 Media Player will open and start playing media files. To return to the playlist, click *Show Player*.

Media Player supports the following file extensions to play from the browser. To play files from the browser, certain plug-ins may be required.

Plug-In Name	File Extensions
QuickTime®	aif, aiff, aac, au, bmp, gsm, mov, mid, midi, mpg, mpeg, mp4, m4a, psd
Flash®	flv, mp3, swf
Windows Media Player®	avi, asx, asf, wma, wmv
RealPlayer®	ra, ram, rm, rpm, rv, smi, smil

If a file type is not listed above, that file will be downloaded instead.

Chapter 5 Disk Manager

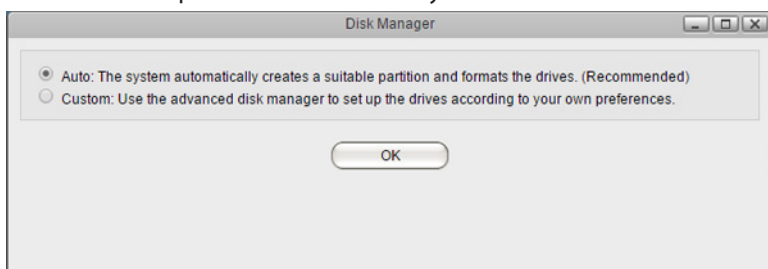
Disk Manager is an application that manages RAID arrays and partitions of internal or external drives. To open Disk



Manager, click the icon from the home screen.

Automatic Drive Management

If you are not familiar with drives or partitions, use "Auto" settings. This will help you configure drive settings easily and mount the partitions automatically.

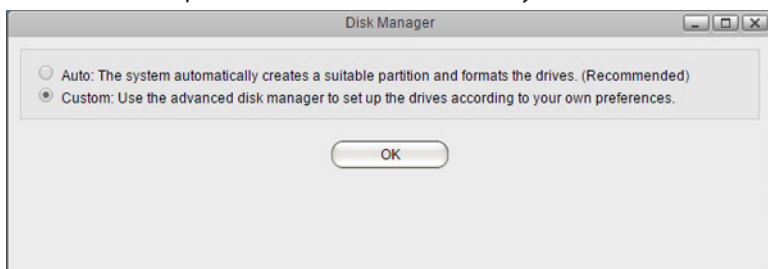


If you choose "Auto" settings, the wizard will create a RAID 1 array with 2 drives.







Customizing Drive Settings

If you select "Custom" in the Disk Manager window, you can customize the drive settings however you want. When you click *OK* in the following screen, the Disk Manager window will open.

Note: This option is for advanced users only.



Icons	Name	Descriptions
	Info	Display the drive information.
	Erase Device	Delete all drive partitions on the LinkStation. Note: Erasing the device will delete all data on the LinkStation. Backing up the data before erasing device is recommended.
	S.M.A.R.T. Info	S.M.A.R.T. (Self-Monitoring, Analysis, and Reporting Technology) monitors hard drives to detect and report various indicators of stability, in hopes of anticipating failures. When S.M.A.R.T. anticipates a drive failure, the user may choose to replace the drive to avoid outages and data loss.

Icons	Name	Descriptions
	Mount Partition	Mount the formatted partition to the LinkStation.
	Unmount Partition	Unmount the partition from the LinkStation.
	Delete Partition	Delete the selected partition if it's not in use.
	Format Partition	Format partition to change to the different file systems. Note: Formatting the partition will delete all data on the partition. Backing up the data before formatting is recommended.
	Refresh	Refresh the screen.
	Back	Return to the previous screen.

Working with RAID Arrays

The default RAID mode for this product is RAID 1.

RAID 1

Combines 2 or more partitions from hard drives into a mirrored RAID array. The available space in the array is the capacity of a single partition. Identical data is written to each partition. If a drive is damaged, data can be recovered by replacing the damaged drive. As long as one drive in the array remains undamaged, all data in the array can be recovered.

RAID 0

Combines 2 or more partitions from hard drives into a single RAID array. The available space is the total space of all partitions used. This simple RAID mode offers faster performance than RAID modes that include parity. If a single drive in the array fails, then all data in the array is lost.

Linear

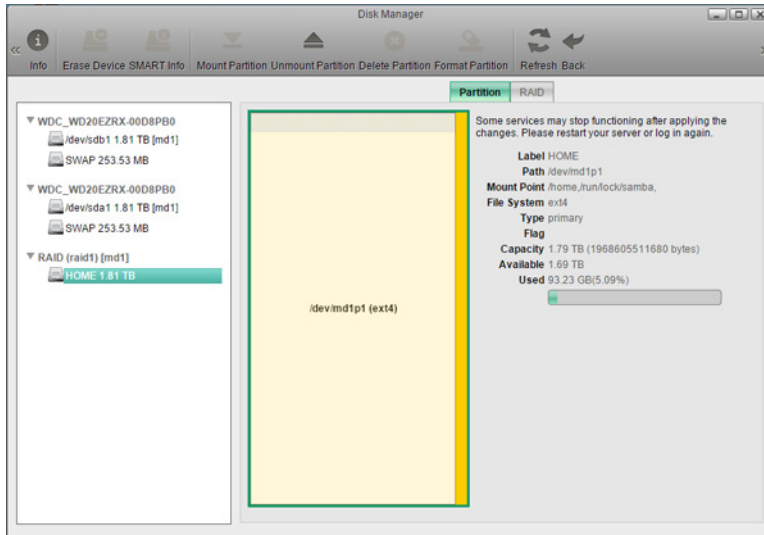
Combines all partitions from hard drives into a single virtual drive. For this virtual drive, data will be written onto the first partition, then to the next partition when the first partition becomes full, and so on. The available space is the total capacity of all partitions. Linear mode offers no redundancy. If any drive is damaged, data on the drive will be lost.

Changing the RAID Mode

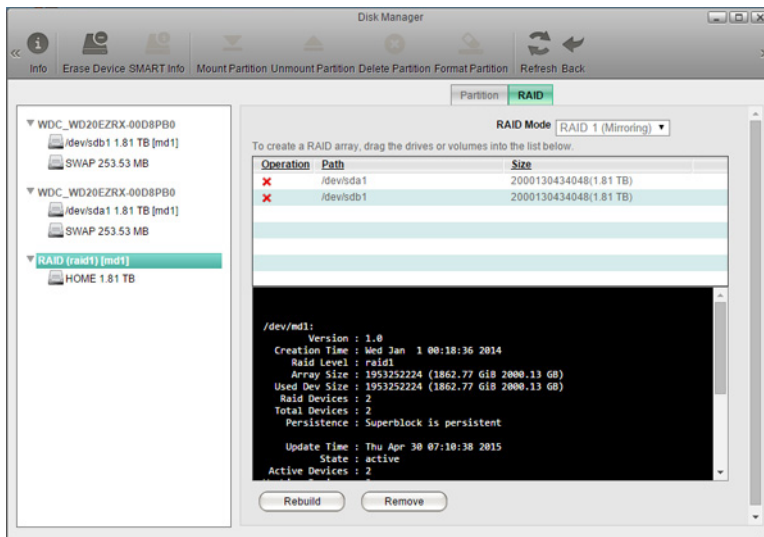
To change the RAID mode, follow the procedure below.

- 1 In Disk Manager, select "Custom" and click *OK*.

- 2 Select the partition under the RAID array and click *Unmount Partition*.

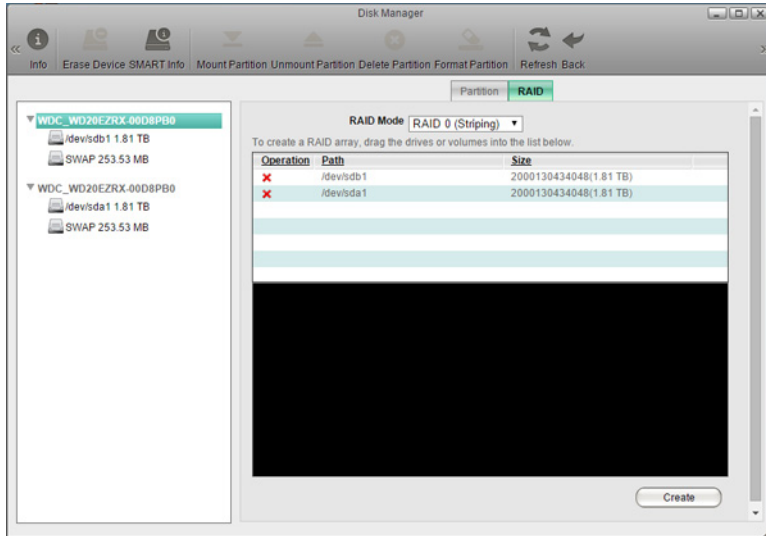


- 3 Select the RAID array, click the *RAID* tab, and click *Remove*.



- 4 Two different warnings will be displayed. Read them carefully and click Yes twice. The RAID array will be deleted.

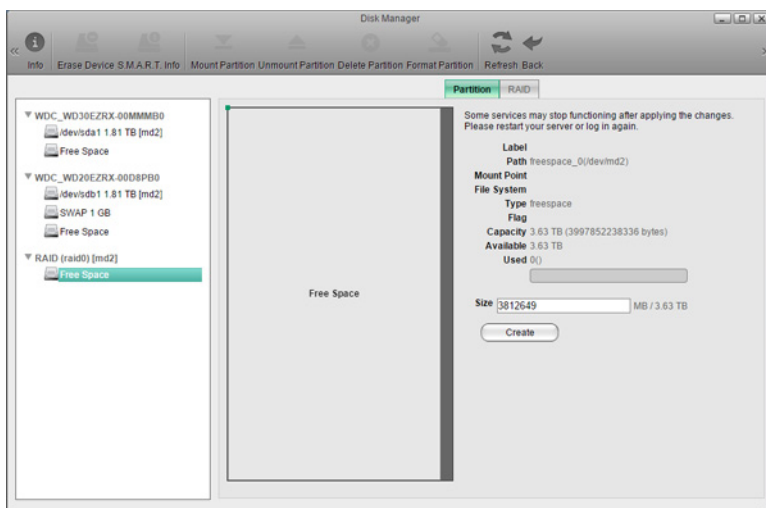
- 5 In the *RAID* tab, select the RAID mode from the drop-down list and drag and drop the partitions to be used for the RAID array.



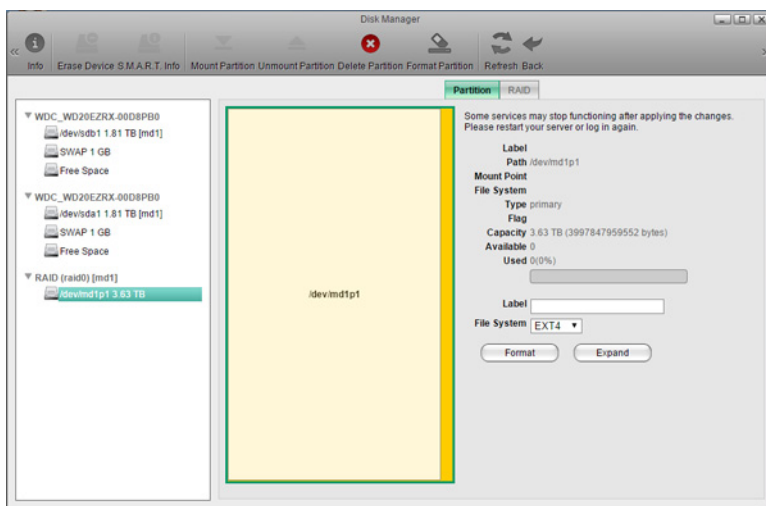
- 6 Click *Create*. Two different warnings will be displayed. Read them carefully and click *Yes* twice.

- 7 The RAID array is created. Click "Free Space".

- 8 Click the *Partition* tab, specify the partition size, and click *Create*.

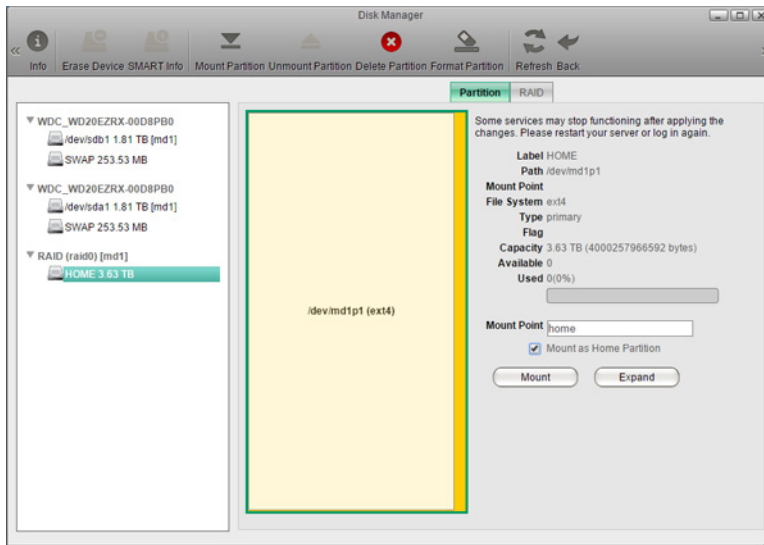


- 9 Select the partition, enter a desired label name (optional), and select "EXT4". Click *Format*.



10 Two different warnings will be displayed. Read them carefully and click *Yes* twice.

11 In the "Partition" tab, select the RAID array partition to be mounted and check "Mount as Home Partition", then click *Mount*. If you have mounted at least one home partition already, you can enter the desired mount point.



Once the RAID array is configured, create shared folders on the array to use them. Refer to the "SHARED" section in chapter 7 for the instructions.

Adding an External Hard Drive

The LinkStation 3 includes a USB port and you can connect an external drive or USB storage device to this port. For external drives, Buffalo USB drives are recommended.

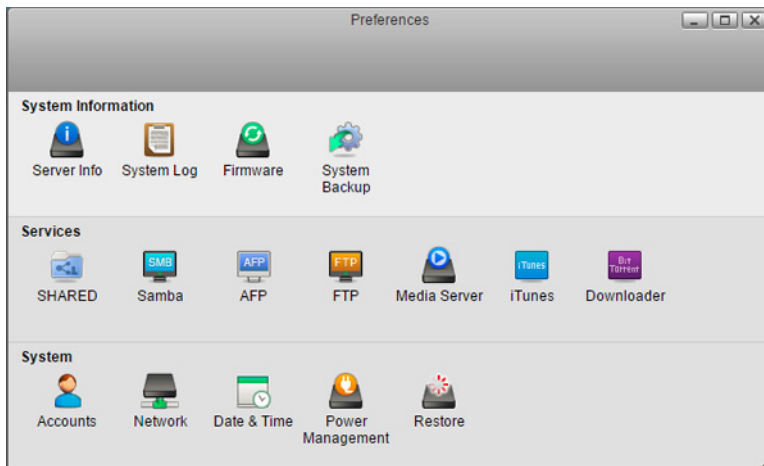
Connect only one device to a USB port. Some external drives with automatic power-on doesn't turn on automatically when connected to the LinkStation. Use their manual switch to turn them on. Be sure to connect only one bus-powered drive at a time. If there is insufficient bus power for your USB drive, connect its AC adapter.

Enabling External Drive Access

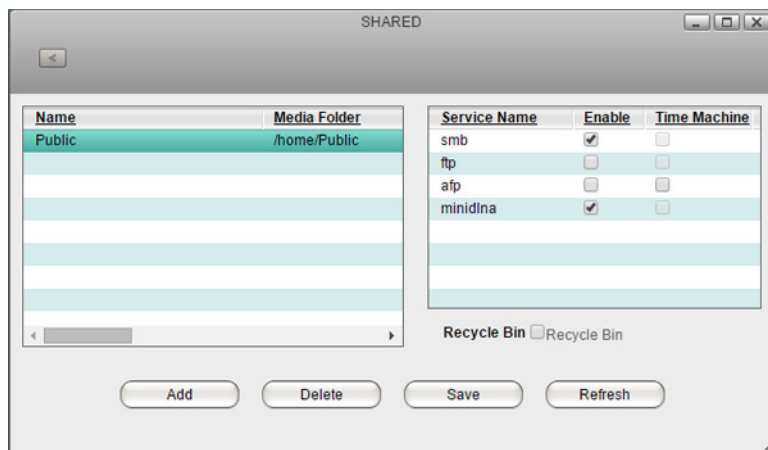
After connecting the USB drive to the LinkStation, enable access to the drive. Follow the procedure below.

1 In Settings, click *Preferences*.

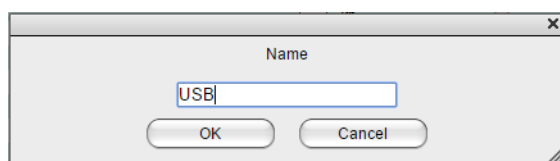
2 Click *SHARED*.



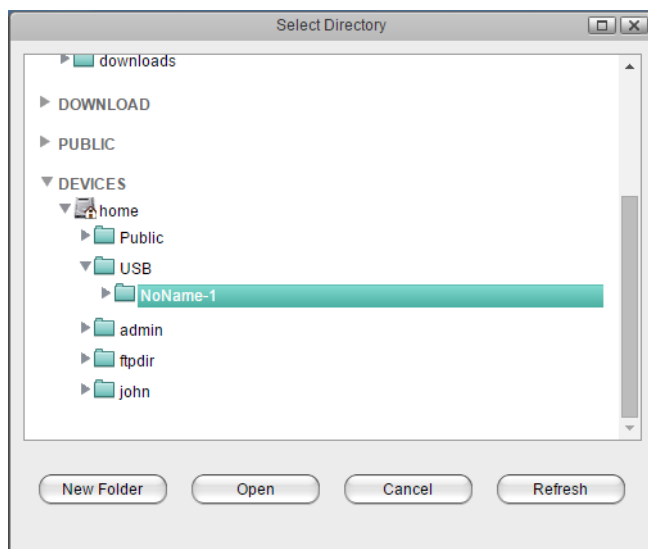
3 Click *Add*.



4 Enter a folder name and click *OK*.

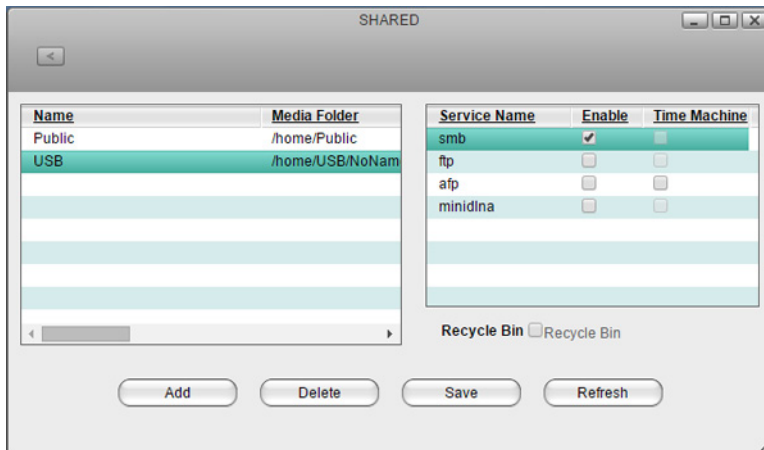


5 Navigate to *DEVICES - home - USB* and select your external drive.




6 Click *Open*.

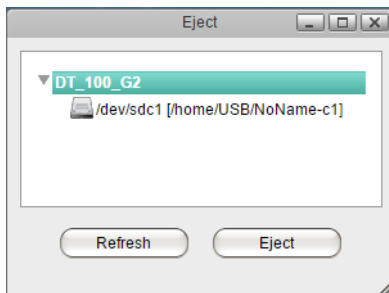
- 7 The connected USB drive is assigned as a shared folder. Enable "SMB" and other services, then click *Save*.



Dismounting an External Drive

If the LinkStation is powered on, dismount an external drive before unplugging it. You may dismount the external drive from Settings. If the LinkStation is off, then the external drive is already dismounted and may be unplugged safely.

- 1 Click the  icon at the upper right corner of the home screen toolbar.
- 2 Select the device to dismount and click *Eject*.

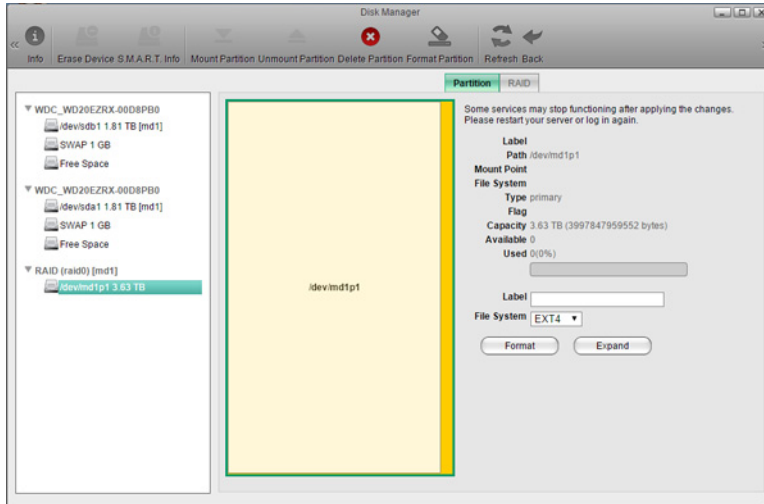


- 3 The external drive will be dismounted.
- Once the drive is dismounted, unplug it from the LinkStation.

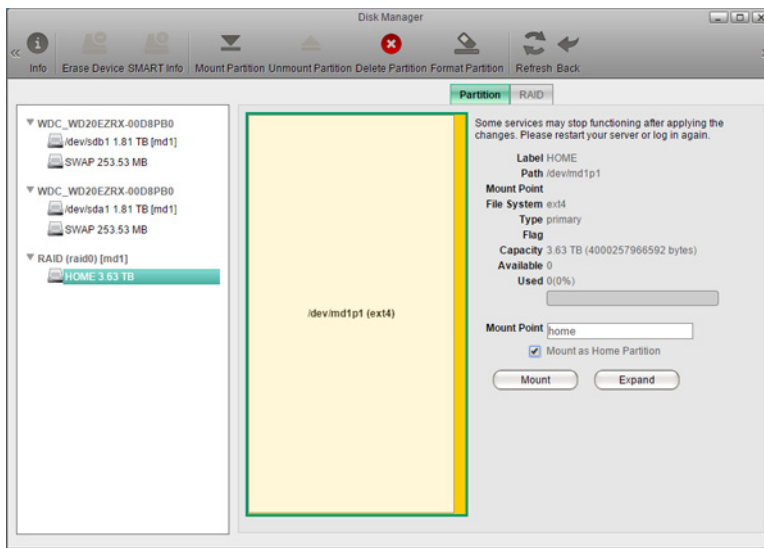
Formatting Partitions

- 1 In Disk Manager, select "Custom" and click *OK*.
- 2 Select the partition or RAID array from the device list.
- 3 Click *Unmount Partition* in the toolbar.
- 4 Click *Format Partition*.

- 5** In the "Partition" tab, enter a desired label name (optional) and select the file system from the drop-down list. Click *Format*.



- 6** Two different warnings will be displayed. Read them carefully and click *Yes* twice.
- 7** When the format finishes, click *OK*, then *Close*.
- 8** The partition is formatted. Check "Mount as Home Partition" and click *Mount*. If you have mounted at least one home partition already, you can enter the desired mount point.



Notes:

- Do not turn off the LinkStation or disconnect a hard drive while formatting.
- The following file systems can be formatted from Settings.

Internal Hard Drive	ext4
External Hard Drive	ext3, ext4, exFAT

Hard Drive Replacement

If a drive fails, NAS Navigator2 and Settings will show an error message. The hard drive will need to be replaced for the unit to function properly. After the drive is replaced, you will need to rebuild the RAID array.

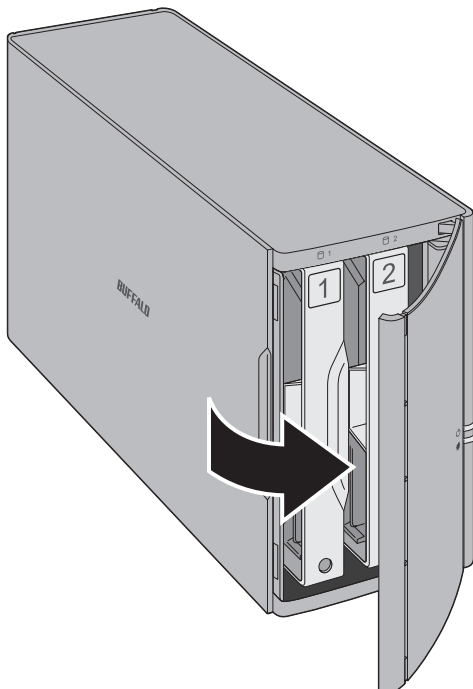
Notes:

- While the LinkStation is powered on, never unplug or remove drives without dismounting them first, and never replace a running drive. Power down the LinkStation before changing the drive.

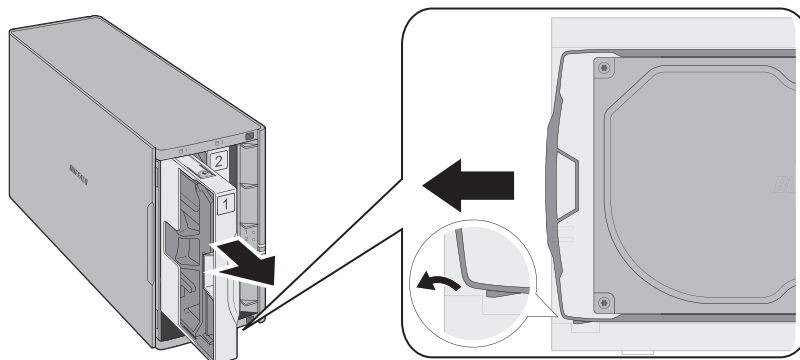
- For the replacement drive, use a Buffalo OP-HDBST series drive. The new drive should be the same size or larger as the replaced drive. If a larger drive is used, the extra space will not be usable in a RAID array.
- If there is existing data on the replacement drive, back it up as all data on the drive will be lost during the replacement process.
- If sending a defective drive to Buffalo for replacement, please keep the cartridge as Buffalo will only replace the hard drive and not the cartridge.
- To avoid damaging the LinkStation with static electricity, ground yourself by touching something made of metal before handling any sensitive electronic parts.
- Do not change the order of the hard drives in the LinkStation. For example, pulling out drive 1 and replacing it with drive 2 may cause data to be corrupted or lost.

Step 1 - Replacing a Hard Drive

- 1** Turn the LinkStation off and remove all cables.
- 2** Squeeze the left side of the front panel and swing it open.



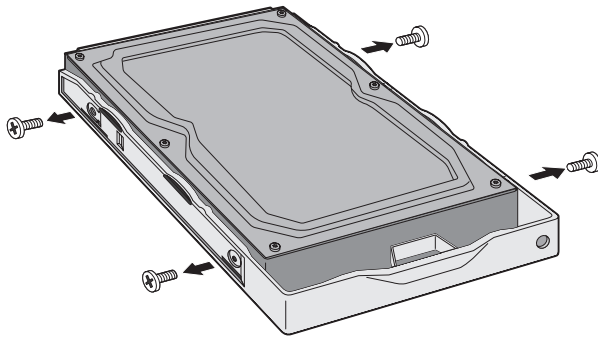
- 3** Push the failed drive's cartridge up and remove it from the LinkStation.



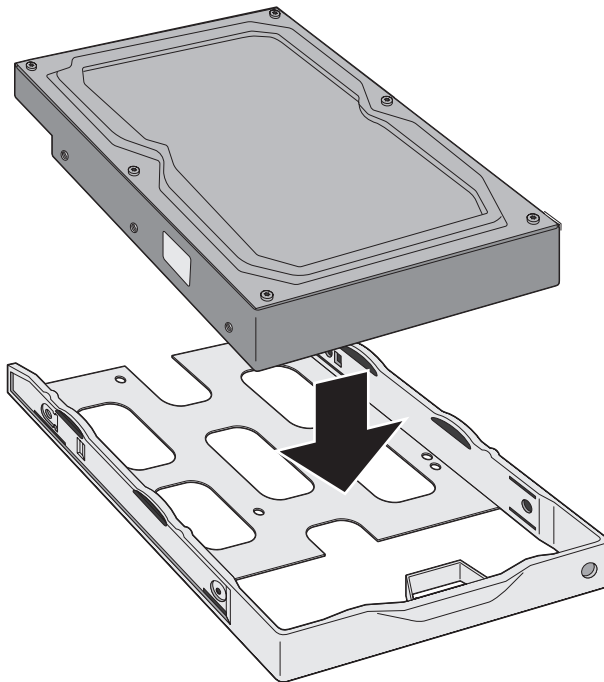
Notes:

- Do not press hard on the top of the LinkStation.
- Pull the drive straight out the front of the chassis.

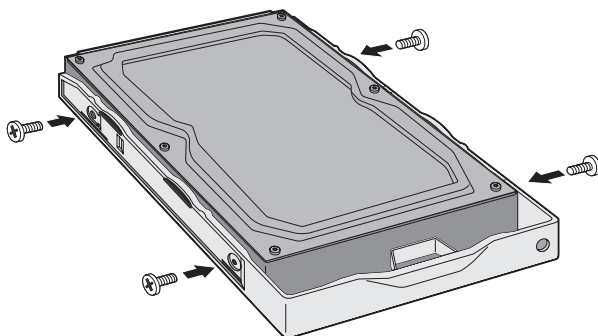
4 Remove the drive from the cartridge.



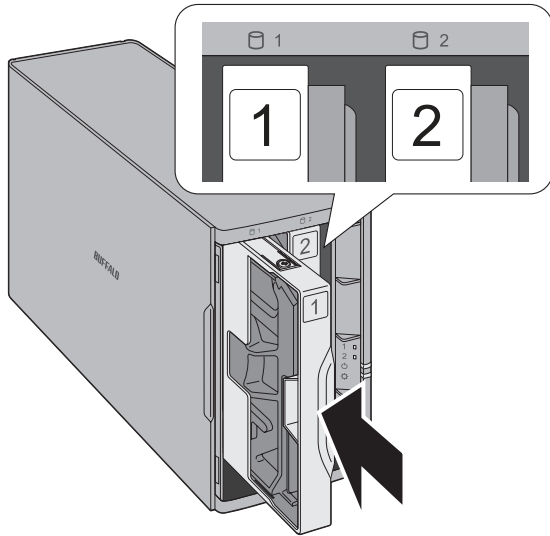
5 Install a new Buffalo OP-HDBST series drive in the cartridge.



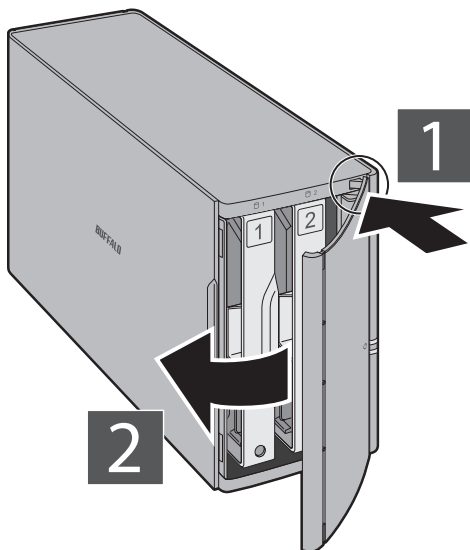
6 Replace the four screws.



- 7** Insert the new drive into the empty slot.



- 8** Close the front panel.



- 9** Connect all cables, then turn on the LinkStation.

Step 2 - Rebuilding the RAID Array

Depending on your RAID mode, the rebuilding procedure will be different. Follow the corresponding procedure below that matches your RAID mode.

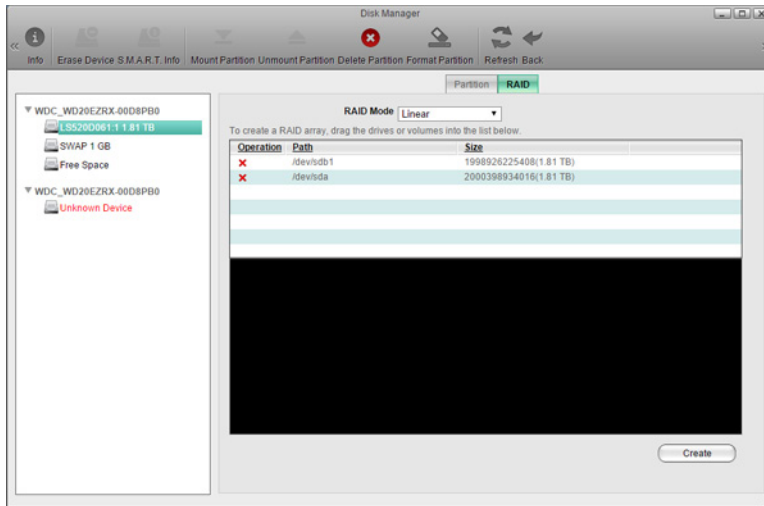
Using RAID 1

- 1** Follow the replacement drive procedure described above and replace a failed drive with a new drive.
- 2** Hold down the function button on the back of the LinkStation for 3 seconds.

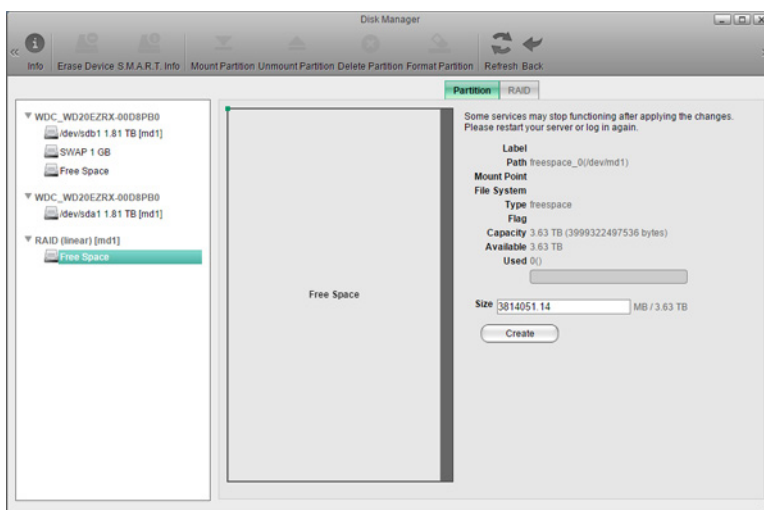
- 3 The LinkStation will start rebuilding the RAID array. After a few minutes, the I18 message will be displayed in NAS Navigator2. Wait until the drive finishes rebuilding; the I18 message will be extinguished.

Using RAID 0 or Linear

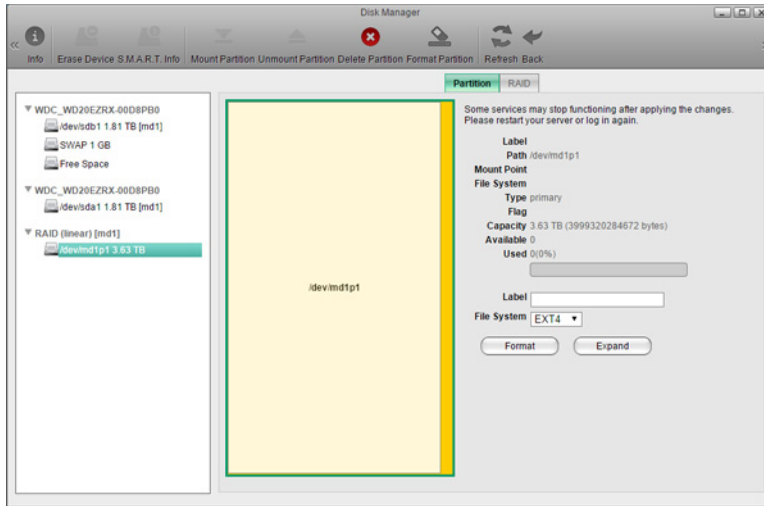
- 1 Follow the drive replacement procedure described above and replace a failed drive with a new drive.
- 2 Navigate to *Disk Manager - Custom* in Settings.
- 3 Click the *RAID* tab and select the RAID array.



- 4 The RAID array has already been removed. Drag and drop both the partition and the new drive into the list, then click *Create*.
- 5 Two different warnings will be displayed. Read them carefully and click *Yes* twice.
- 6 The RAID array is created. Click "Free Space".
- 7 Click the *Partition* tab, specify the partition size, and click *Create*.

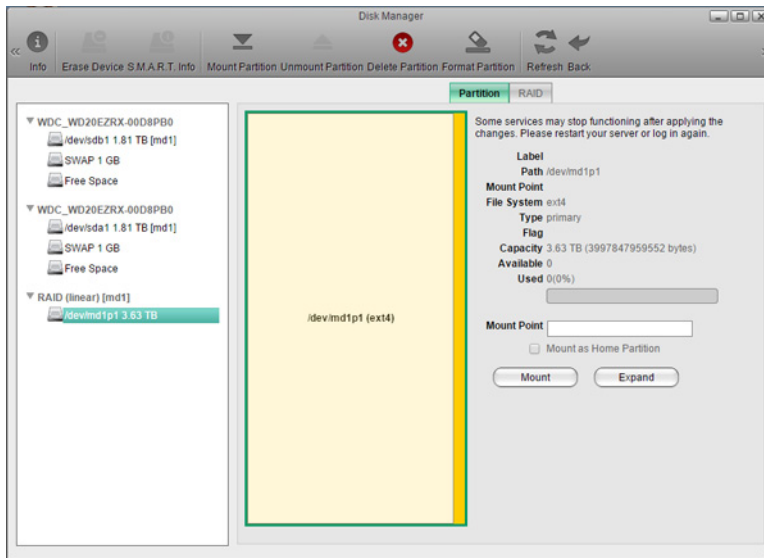


8 Select the partition, enter a desired label name (optional), and select "EXT4". Click *Format*.



9 Two different warnings will be displayed. Read them carefully and click *Yes* twice.

10 In the "Partition" tab, select the RAID array partition to be mounted and check "Mount as Home Partition", then click *Mount*. If you have mounted at least one home partition already, you can enter the desired mount point.



Once the RAID array is configured, create shared folders on the array to use them. Refer to the "SHARED" section in chapter 7 for the instructions.

Chapter 6 System Information

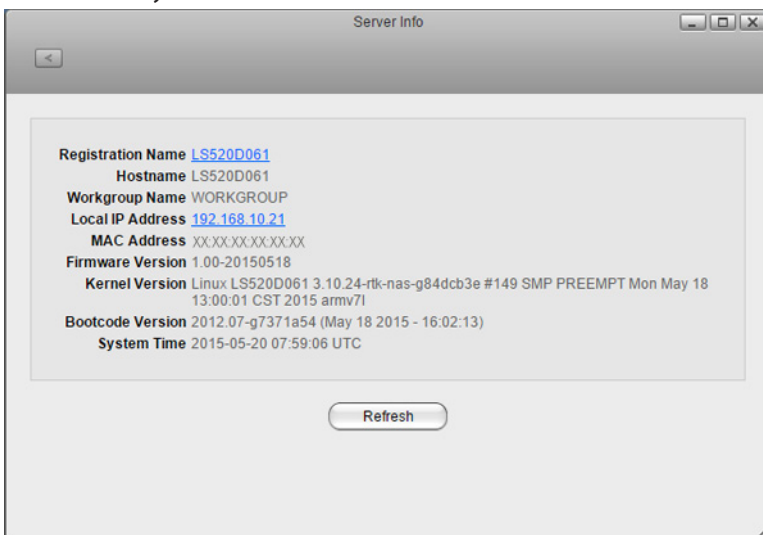


Click the  icon in the main menu to open "Preferences".



Server Info

Displays the registered name, hostname, workgroup name, IP address, MAC address, firmware version, time, and other minor system information.

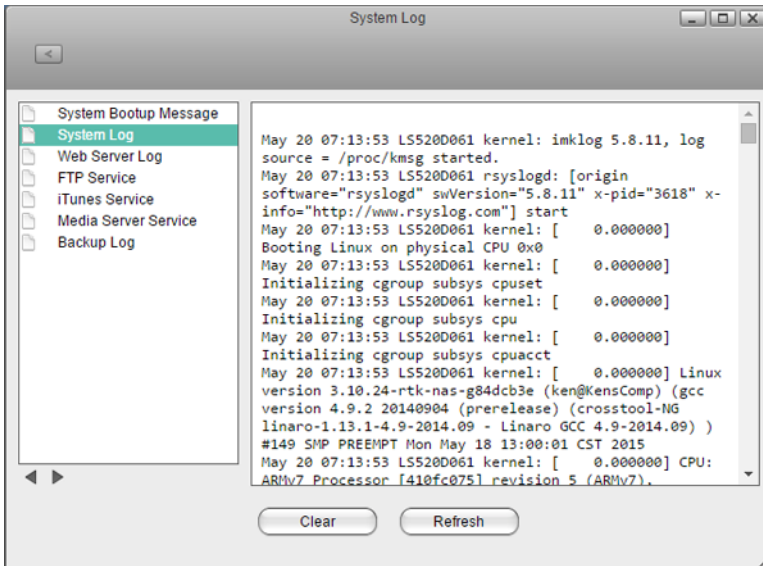


To open the Server Info window, click *Server Info* in Preferences.

System Log

Displays multiple logs of the LinkStation.

To open the System Log window, click *System Log* in Preferences.



Note: Up to 10 latest logs will be kept in the LinkStation.

Firmware

Verify the firmware version or update the LinkStation's firmware. There are two ways to update the firmware.

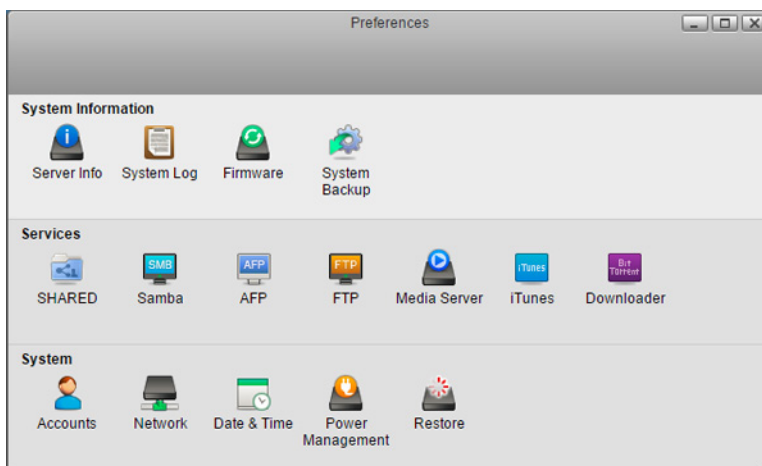
Online Update

If a new firmware is available, a message and button are displayed in Settings.

Manual Update

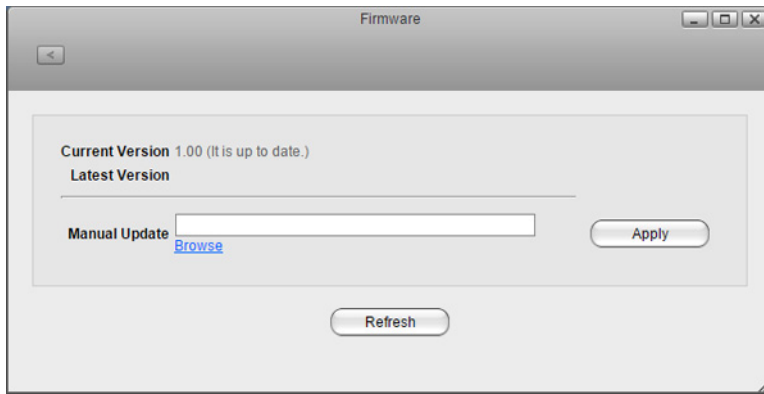
You can update the LinkStation's firmware manually.

- 1 Download the latest firmware image file from the Buffalo website and save the firmware image file to the LinkStation's shared folder.
- 2 In Settings, click *Preferences*.

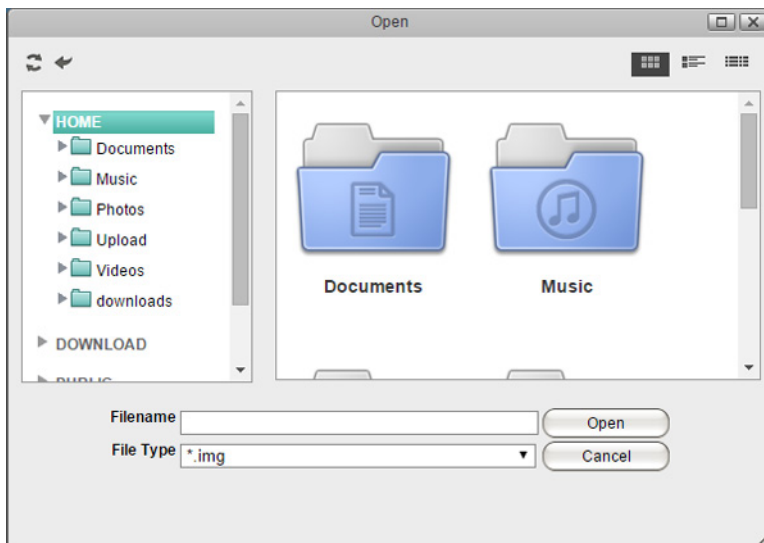


- 3 Click *Firmware*.

4 Click *Browse*.



5 Specify the firmware image file that was saved in the LinkStation's shared folder and click *Open*.

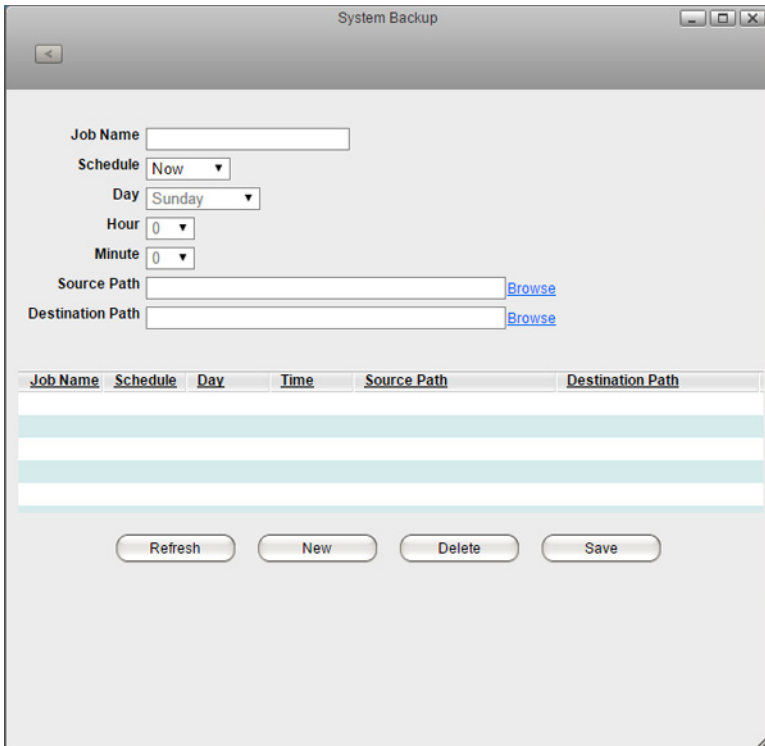


6 Click *Apply*.

7 While the firmware updates, the power LED blinks amber. Wait until the update is complete and the LED returns to white.

System Backup

Backs up the data in the LinkStation to another location to avoid unexpected data failure.



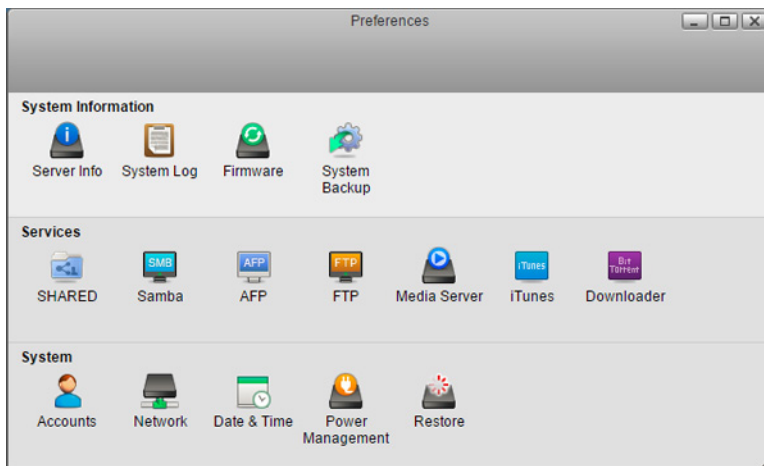
Backing Up from LinkStation

You can back up a LinkStation folder to:

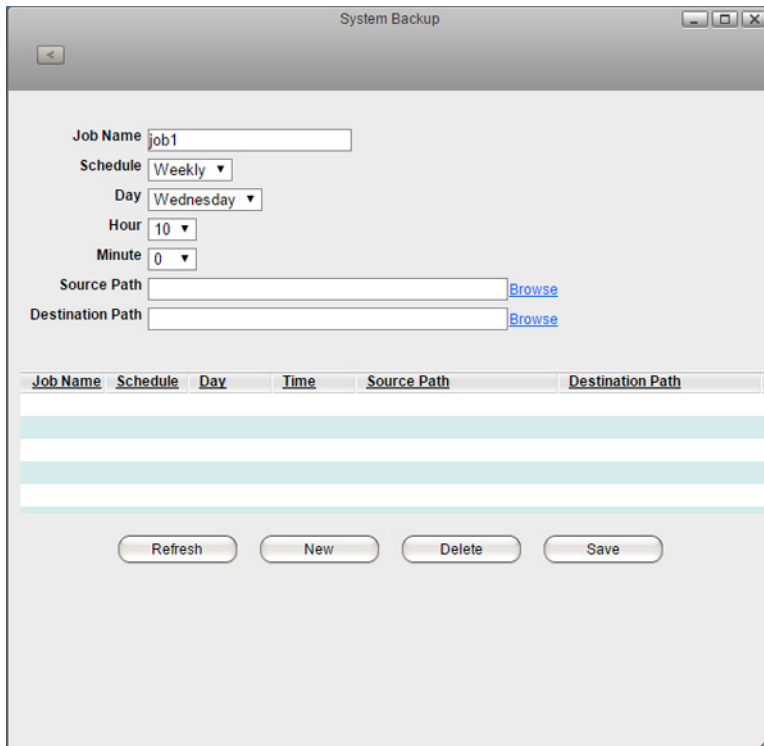
- A different folder on the LinkStation
- A USB device connected to the LinkStation

To create a backup job, follow the procedure below.

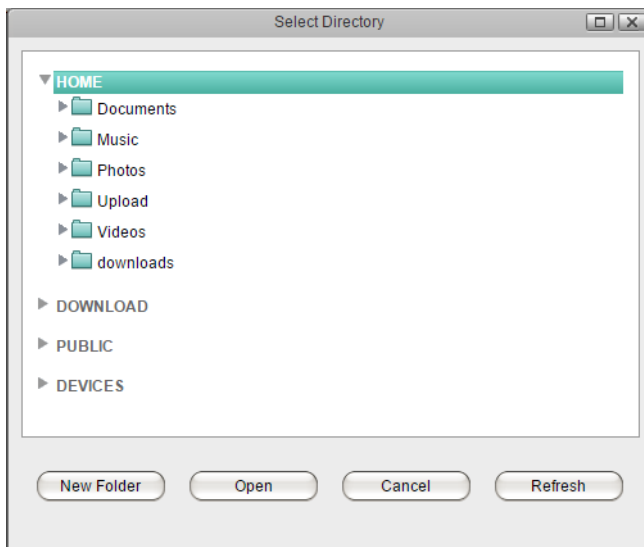
- 1 In Preferences, click *System Backup*.



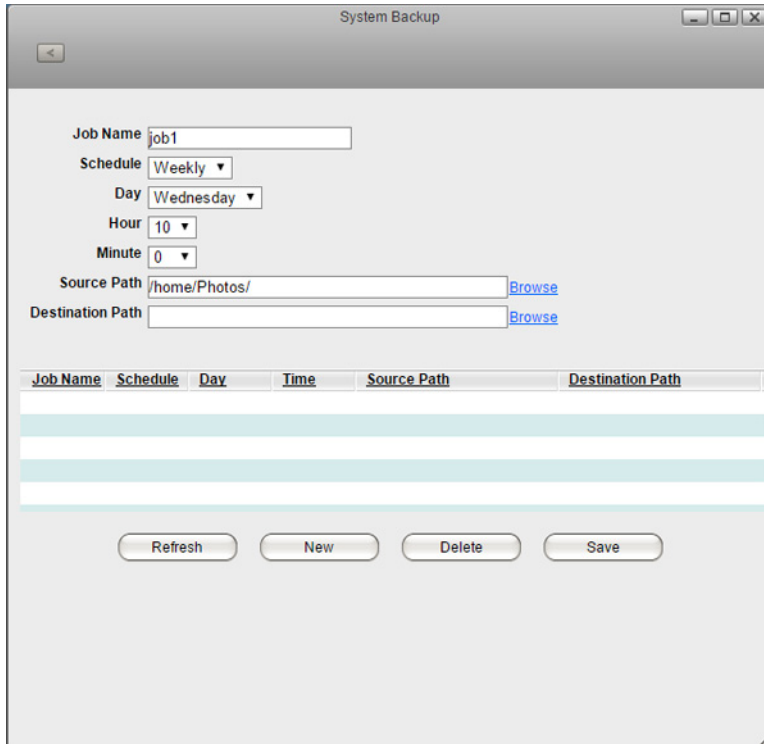
- 2** Enter a job name and configure backup settings such as date and time to run.



- 3** Click *Browse* to the right of "Source Path".
- 4** Select the folder that will be the backup source, then click *Open*.

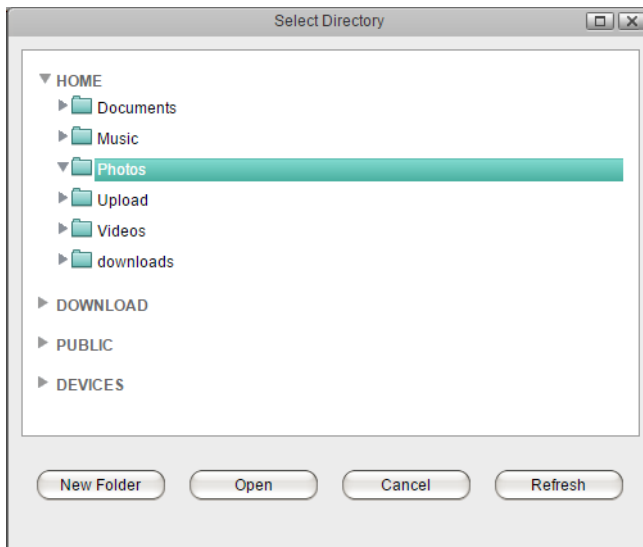


5 Click *Browse* to the right of "Destination Path".

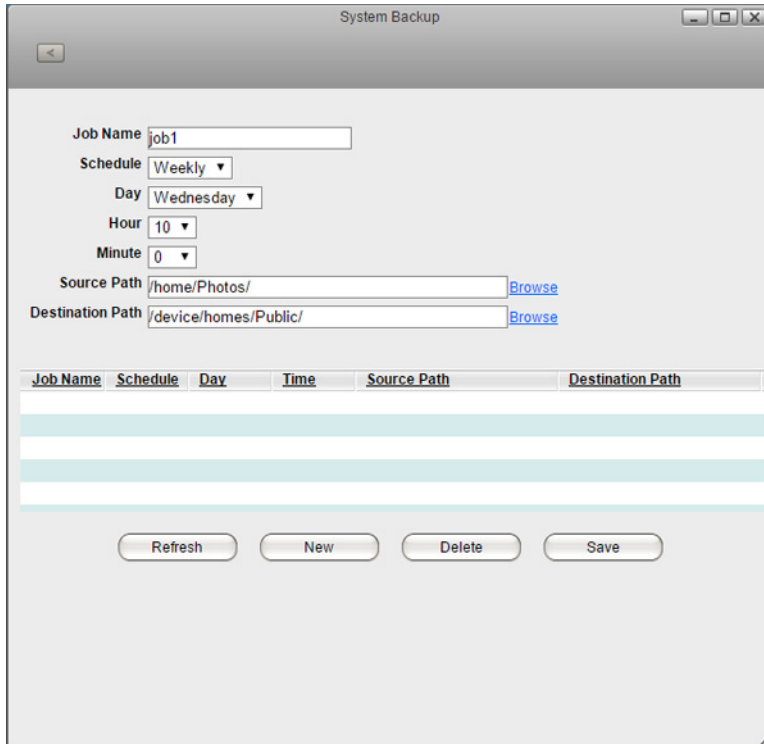


6 Select the backup target and click *Open*.

If you want to select the USB device as the backup target, select the USB device hostname under the "USB" folder. The "USB" folder is not in the USB device.



7 Click Save.



The backup job is added to the list.

Notes:

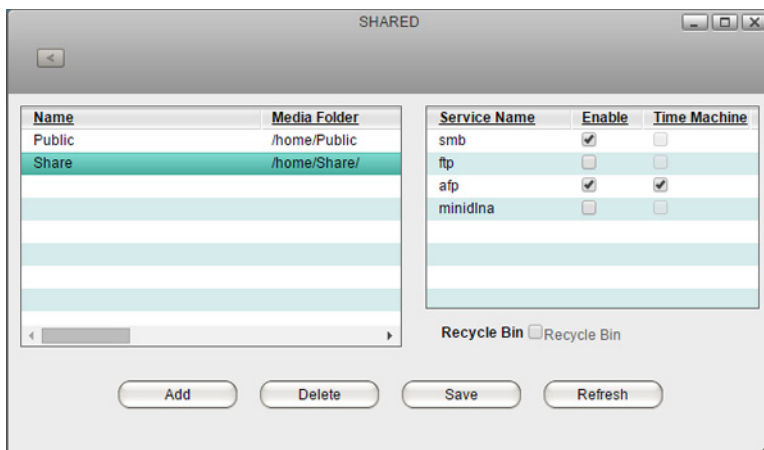
- Up to 8 backup jobs can be configured.
- When a backup job starts, a folder that contains the backup date in its folder name will be created in the backup target automatically and all data will be backed up to that folder.
- If a backup job is scheduled to run while Direct Copy is running, the job will be canceled. The prior process will work.

Backing Up Your Mac with Time Machine

Time Machine is a backup program included with OS X. To use your LinkStation as a backup destination for Time Machine, configure it as described below.

1 In Preferences, click *SHARED* and select a shared folder as your backup destination for Time Machine.

2 Check both checkboxes under "Enable" and "Time Machine" next to "afp", then click *Save*.

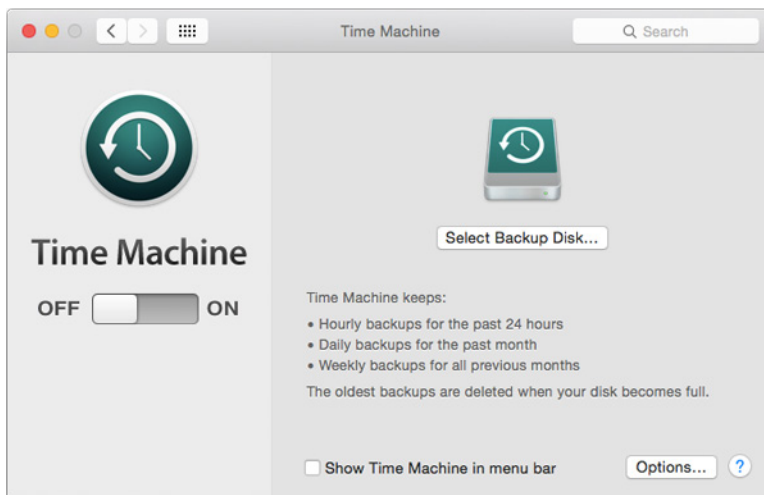


3 On the Mac, open *System Preferences*.

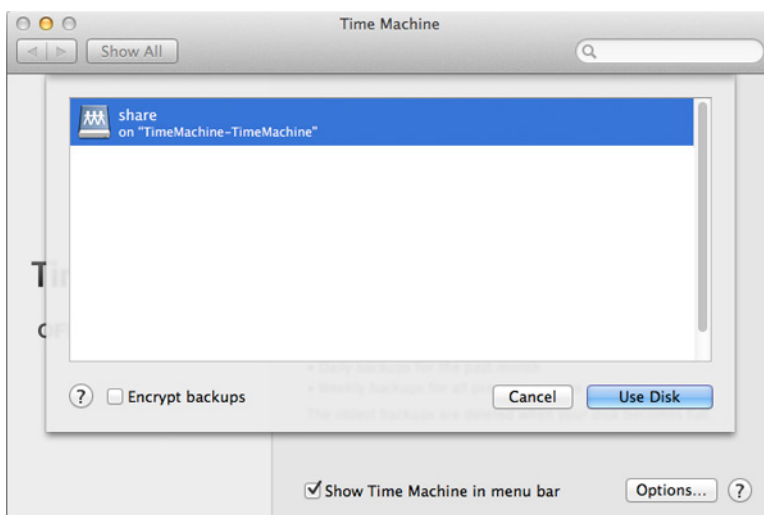
4 Click *Time Machine*.



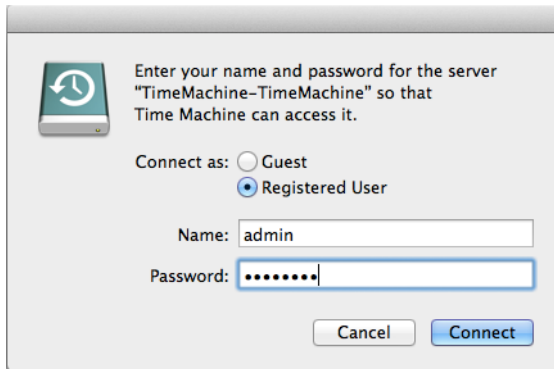
5 Click *Select Backup Disk*.



6 Select the LinkStation, then click *Use Disk*.



- 7** Enter a username and password with the rights to access the shared folder on the LinkStation, then click *Connect*.



- 8** Time Machine will count down from 120 seconds and backup will start.



Copying from a USB Device

Use Direct Copy to copy from a USB device directly to the LinkStation.

Following device is supported:

- USB mass storage devices

To copy using Direct Copy, follow the procedure below.

Note: Direct Copy will not work while the backup is running. The prior process will work.

- 1** Connect the USB device. When it mounts, the function LED will light up.
- 2** You now have 60 seconds to press the function button once. If you do, the function LED will flash as all the files on the USB device are copied to the Direct Copy folder ("usb_backup" under "Public" folder) of the LinkStation.

Note: While the function LED is flashing, hold the function button down for 3 seconds to cancel Direct Copy.

- 3** When the copy operation is finished, the access LED of the USB device will stop flashing and the function LED on the LinkStation will be extinguished. Dismount the USB device from the LinkStation referring to the "Dismounting an External Drive" section in chapter 5.

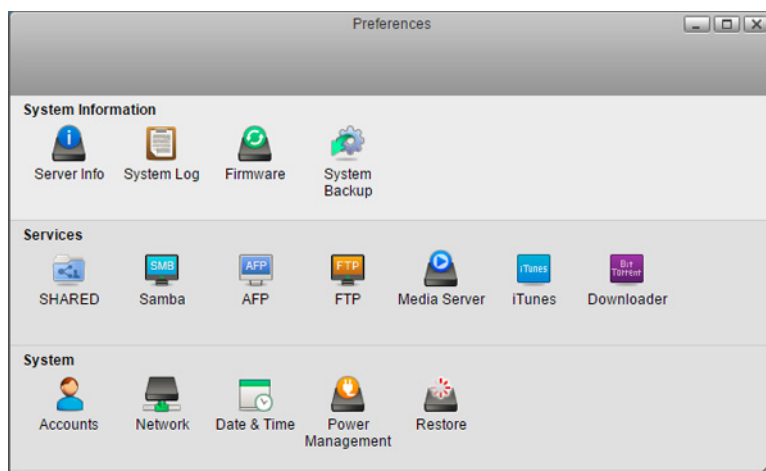
Chapter 7 Services

SHARED

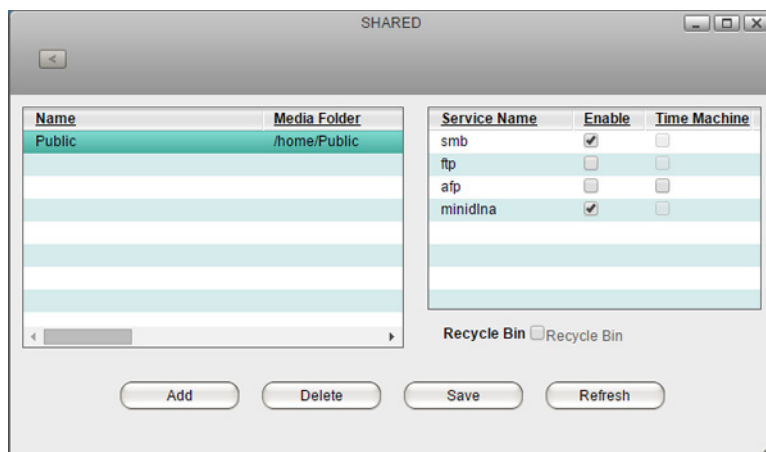
Create or delete shared folders in the LinkStation and enable or disable protocol services.

Adding Shared Folders

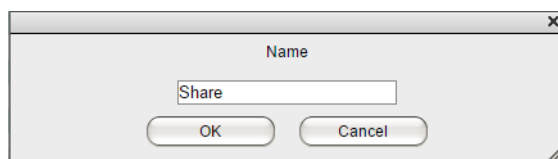
- 1 In Preferences, click *SHARED*.



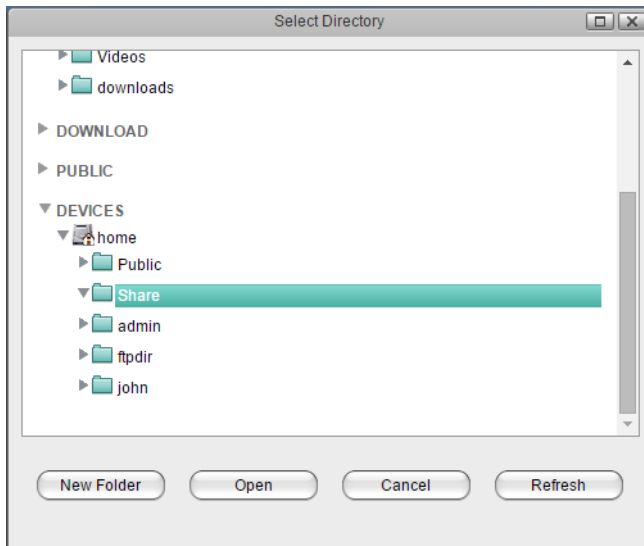
- 2 Click *Add*.



- 3 Enter a folder name and click *OK*.



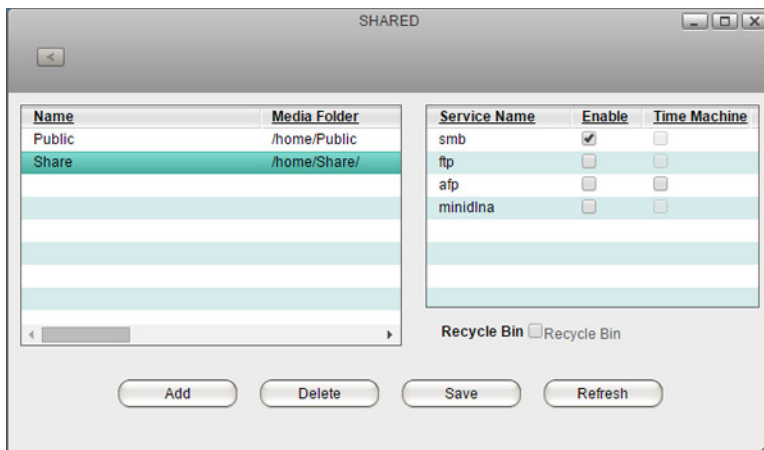
4 Navigate to *DEVICES - home* and select the shared folder.



If you want to add a new folder to the list, click *New Folder*, enter a desired folder name, and click *OK*.

5 Click *Open*.

6 The shared folder is added to the list. From this screen, you can enable or disable services such as SMB, FTP, AFP, and DLNA protocols. Check in the checkbox under "Enable".



The shared folder is now created. To access the folder via SMB, FTP, or AFP, make sure if the service is enabled. The procedure to enable each service is describing below.

Notes:

- If creating a shared folder fails, verify at least one partition or array is mounted as the home partition.
- Even if you delete the folder name from the list, the folder that exists in the home partition will not be deleted. Remove it from My LinkStation if it's not necessary.

Recycle Bin

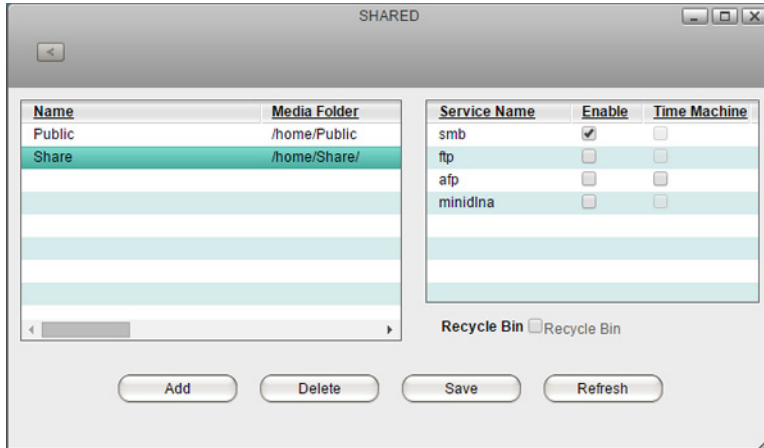
To protect your data from accidental deletion, using the recycle bin is recommended. The recycle bin will only work with SMB connections.

Samba

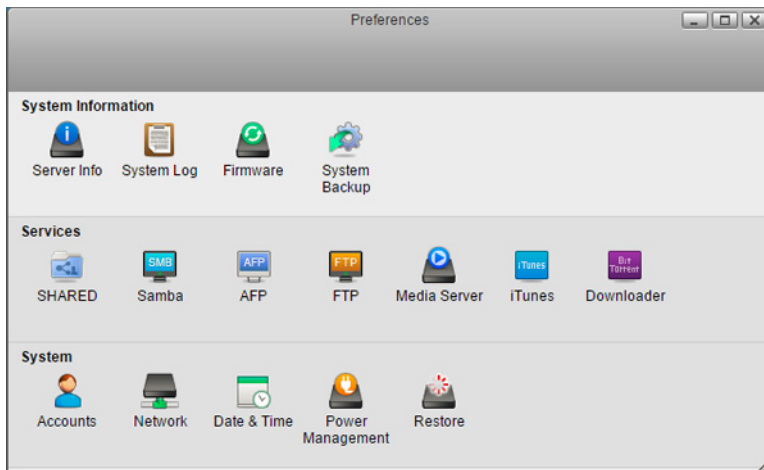
Enable or disable SMB connections for the LinkStation. It is enabled by default.

1 In Preferences, click *SHARED* and select a shared folder for connecting via SMB.

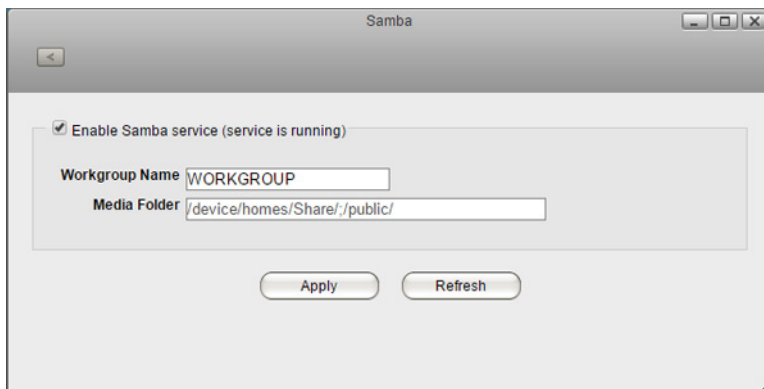
- 2 Make sure that "smb" is enabled for the folder. If not, check the checkbox under "Enable" next to "smb", then click *Save*.



- 3 Click *Samba*.



- 4 Check "Enable Samba service" to enable SMB connection and click *Apply*.

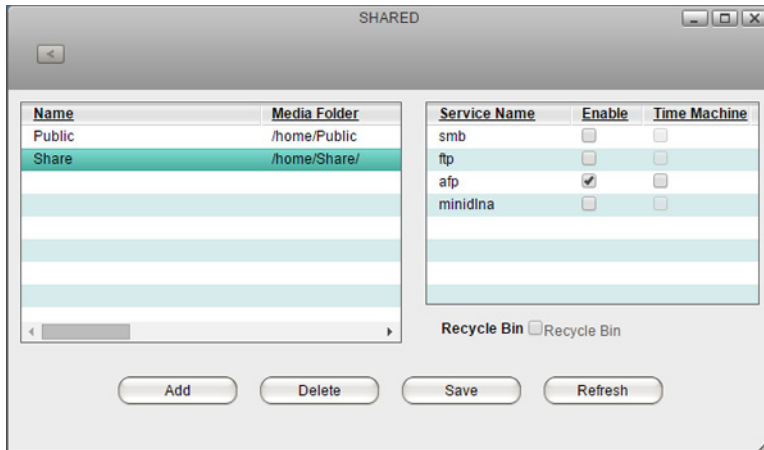


AFP

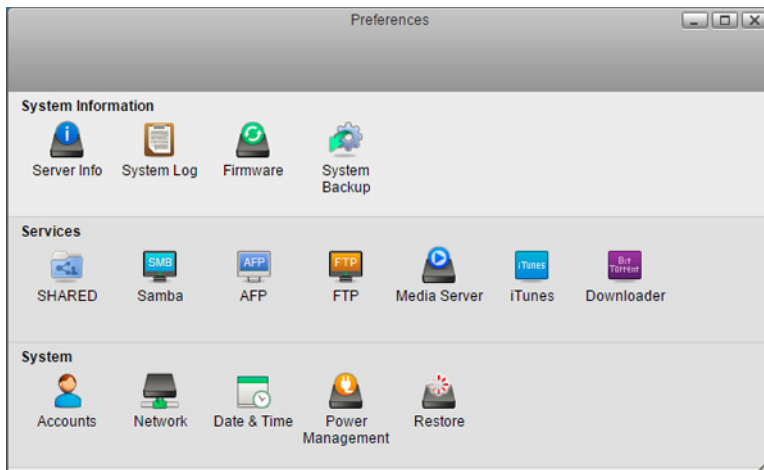
Enable or disable AFP connections for the LinkStation. It is disabled by default.

- 1 In Preferences, click *SHARED* and select a shared folder for connecting via AFP.

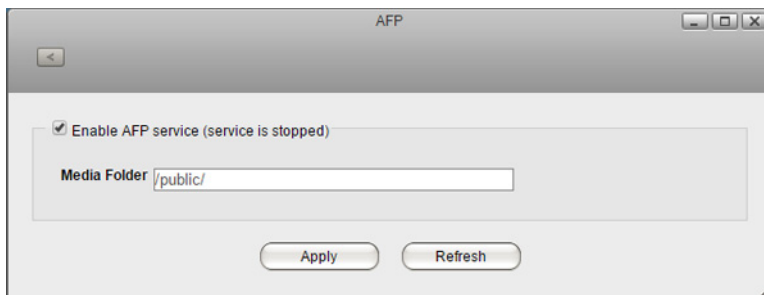
- 2 Make sure that "afp" is enabled for the folder. If not, check the checkbox under "Enable" next to "afp", then click *Save*.



- 3 Click *AFP*.



- 4 Check "Enable AFP service (service is stopped)" to enable AFP connection and click *Apply*.

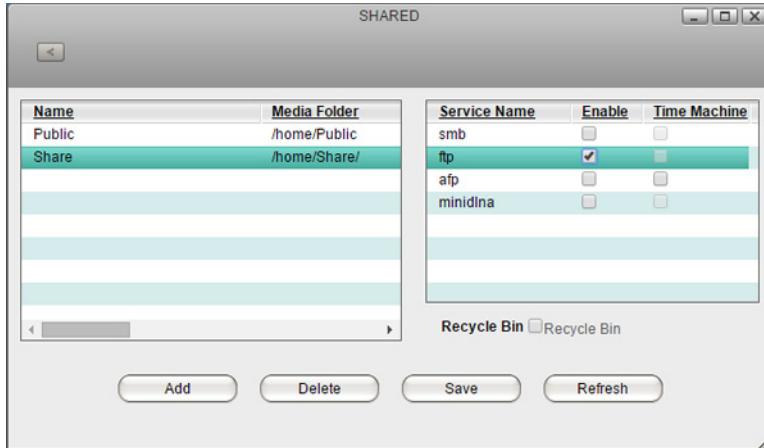


FTP

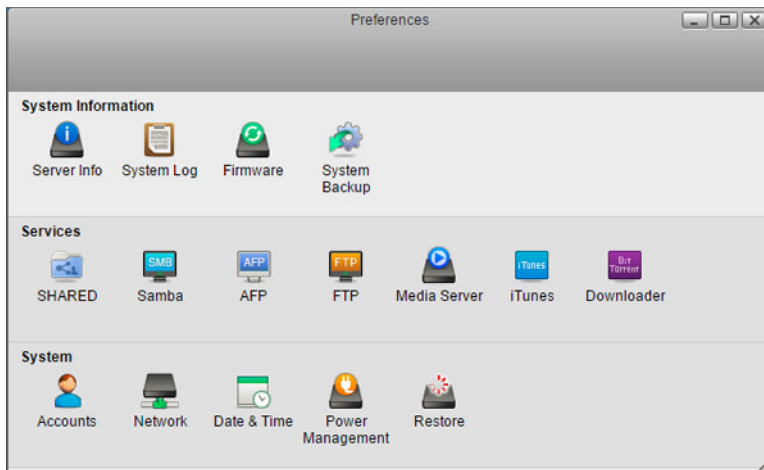
Enable or disable FTP connection of the LinkStation. It is disabled by default.

- 1 In Preferences, click *SHARED* and select a shared folder for connecting via FTP.

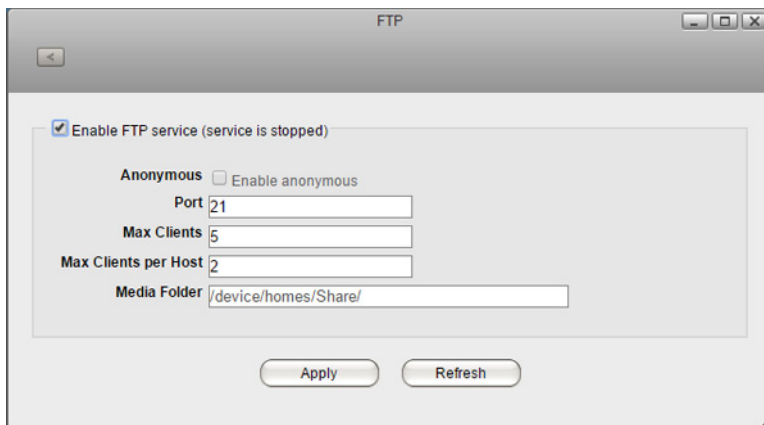
- 2 Make sure that "ftp" is enabled for the folder. If not, check the checkbox under "Enable" next to "ftp", then click *Save*.



- 3 Click *FTP*.



- 4 Check "Enable FTP service" to enable FTP connection.



- 5 Enter a desired port number and other settings. If you want to allow anonymous access, check "Enable anonymous".

- 6 Click *Apply*.

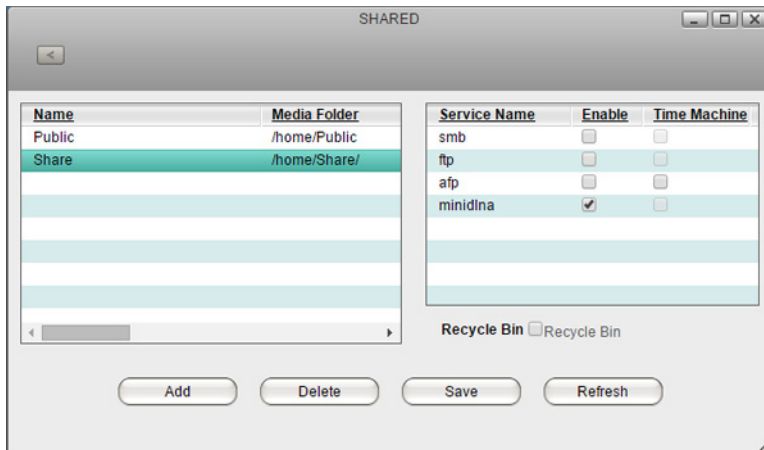
Note: If you access the LinkStation as an anonymous user via FTP, it will be read-only access.

Media Server

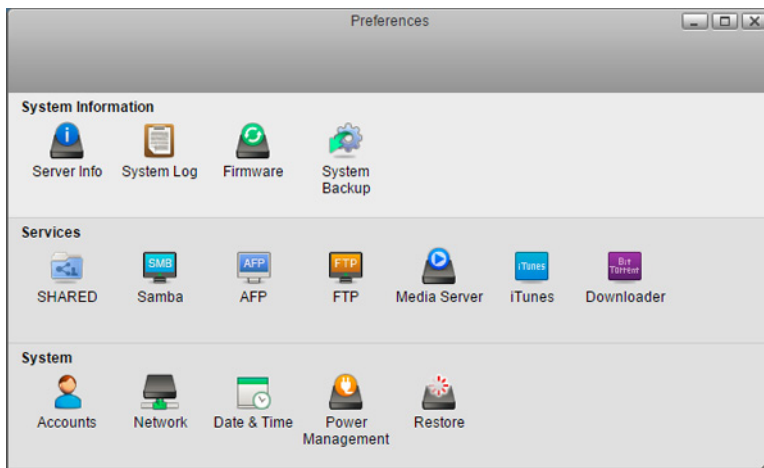
Enable or disable DLNA. If enabled, you can view or play files stored in the LinkStation from the DLNA-compatible devices. It is enabled by default.

DLNA is a set of guidelines for sharing digital media. The LinkStation includes a DLNA server compliant with DLNA guidelines. Movies, photos, and music saved on the LinkStation can be played on DLNA-compatible TVs, stereo equipment, game consoles, and other devices on the local network.

- 1 In Preferences, click *SHARED* and select a shared folder for the DLNA server.
- 2 Make sure that "minidlna" is enabled for the folder. If not, check the checkbox under "Enable" next to "minidlna", then click *Save*.



- 3 Click *Media Server*.



- 4 Check "Enable media server service" to enable DLNA connection.



- 5 Select other options if needed and click *Apply*.

Playing Files

To play back content from a DLNA-compatible device:

- 1 Connect the DLNA-compatible device to the same network as the LinkStation and turn it on.
- 2 Select the LinkStation in the software of the DLNA-compatible device.
- 3 Select the content to be played back.

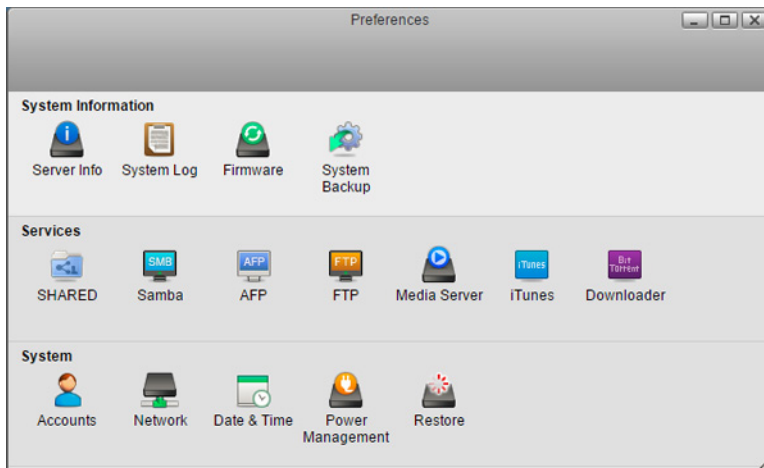
Note: For more information on playing files, see the DLNA-compatible devices' manuals.

iTunes

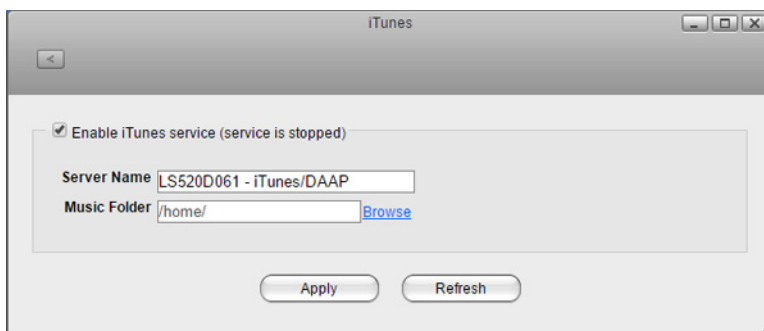
Enable or disable the iTunes server, change the server name, and select the folder for sharing. It is disabled by default.

If the iTunes server is enabled, computers on your network with iTunes can play music files stored on the LinkStation and transfer them to your iOS devices.

- 1 In Preferences, click *iTunes*.

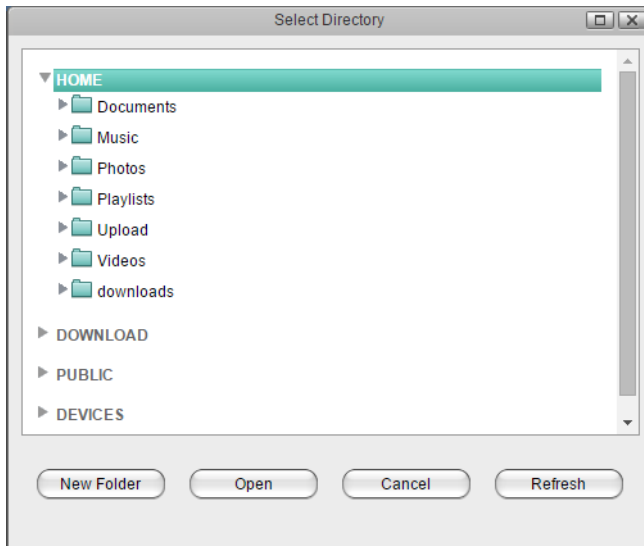


- 2 Check "Enable iTunes service" to enable the iTunes server and enter a desired service name.



Note: If you use the LinkStation name as the default service name and change it later, the changed LinkStation name may not be affected while the service is enabled. To apply changes, disable the service, then enable it again, or change the LinkStation name manually in the screen above.

- 3 Click *Browse* and select the folder to use for iTunes, then click *Open*.



- 4 Click *Apply*.

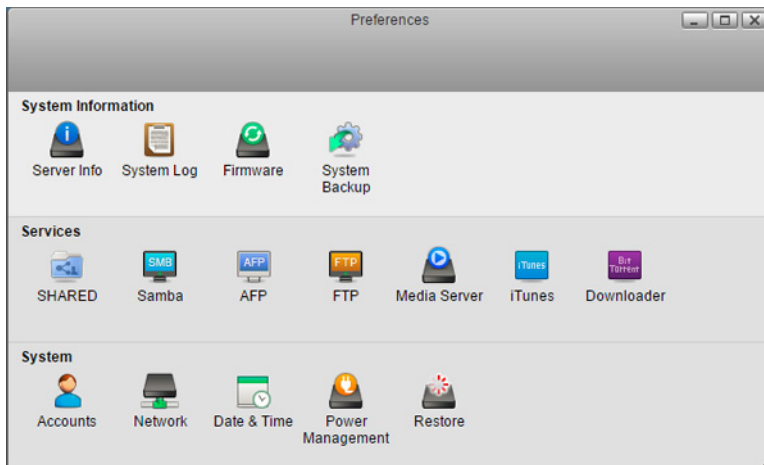
Downloader

Enable or disable BitTorrent. It is disabled by default.

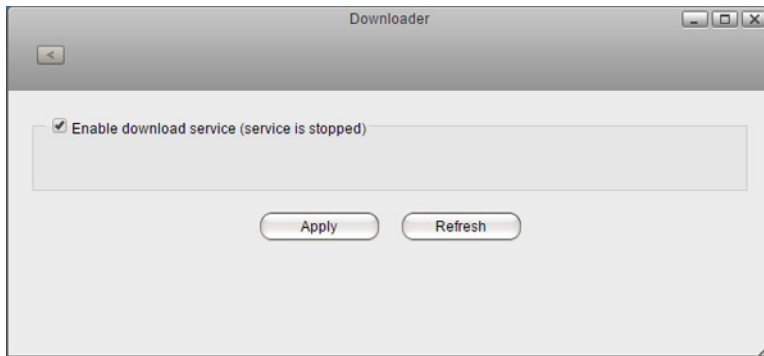
BitTorrent is a protocol for distributing large amounts of data efficiently. The information in this section is for users who are familiar with BitTorrent.

Enabling Downloader Service

- 1 In Preferences, click *Downloader*.

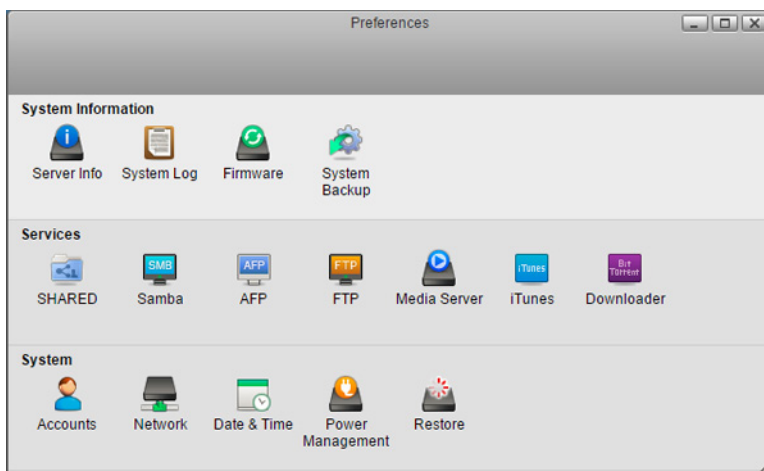


- 2 Click "Enable download service" to enable BitTorrent and click *Apply*.

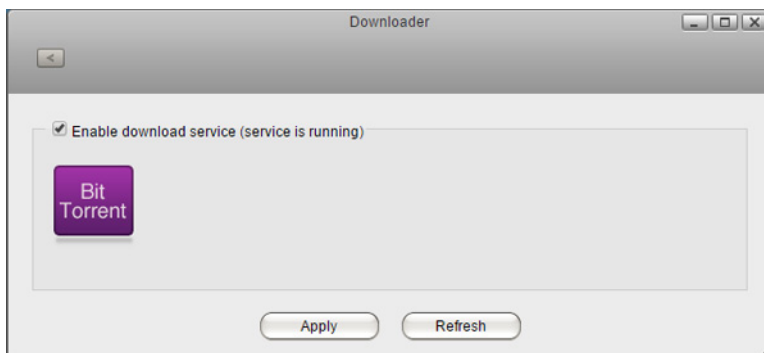


Opening the Download Manager

- 1 In Preferences, click *Downloader*.

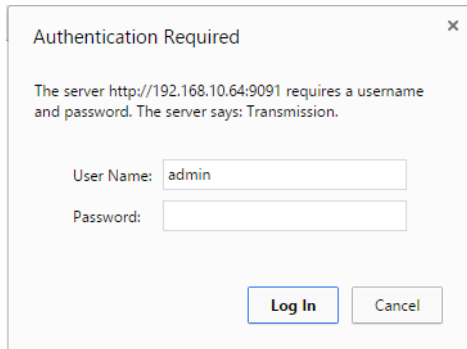


- 2 Click the icon displayed in the window. If no icon is displayed like the screen below, you should enable it by following the steps in the "Enabling Downloader Service" section.

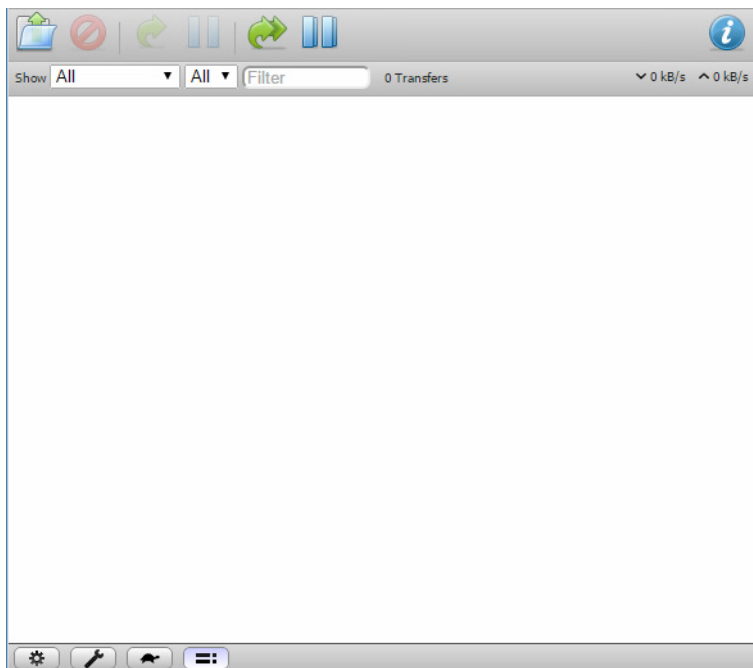


- 3 Enter a username and password, then click *Log In*.

The default username is "admin" and the default password is blank (no password).



4 The download manager will open.



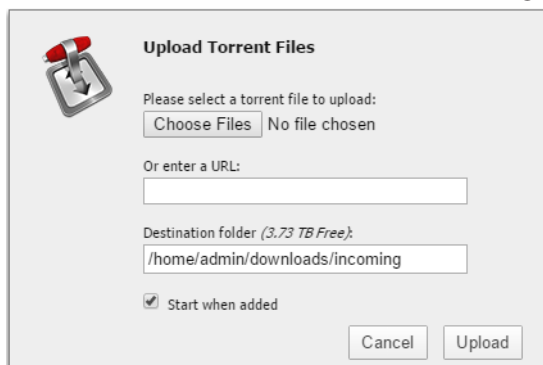
Downloading Files


1 Open the download manager.

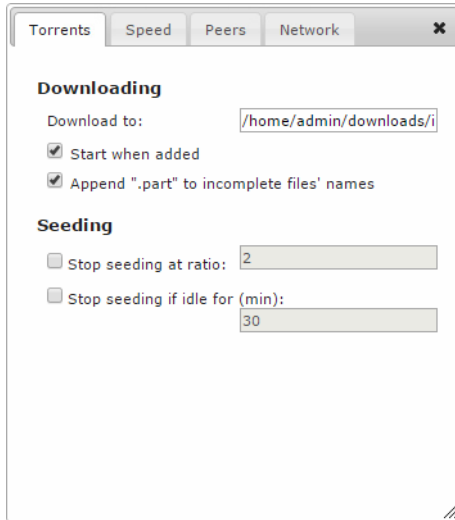
2 Click the  icon.

3 Select a file to upload or enter the URL into the "Or enter a URL:" field, specify the location to save the downloaded file, then click *Upload*.

Check "Start when added" to start downloading immediately after clicking *Upload*.



Note: By default, the downloaded file will be saved in the "incoming" folder in the personal folder. To change the download folder, click the  icon at the left bottom corner and change the directory at "Download to:".



4 The download will start.

To cancel downloading, click , then *Remove*. Click  to pause the download. Click  or  to resume.

Chapter 8 System

Accounts

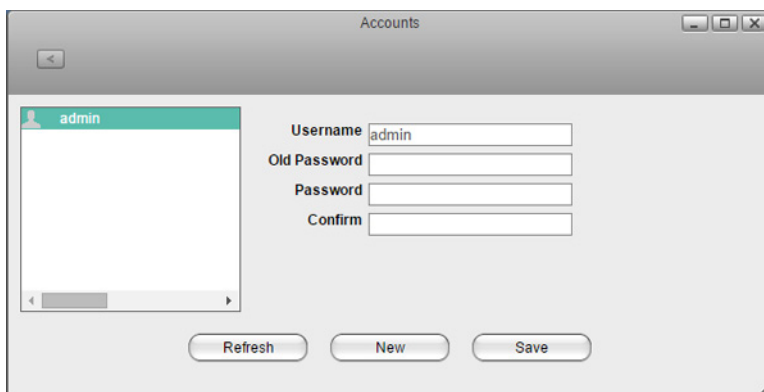
Create or delete users in the LinkStation, or change the administrator password.

Creating Users

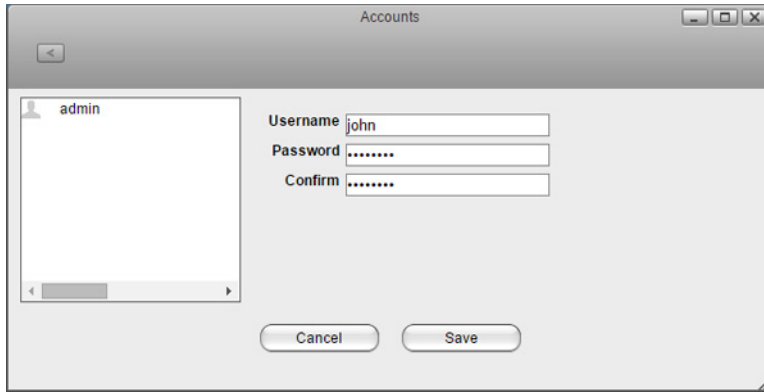
- 1 In Preferences, click *Accounts*.



- 2 Click *New*.



- 3** Enter a username and password, confirm the new password, then click *Save*.



A new user will be added to the list.

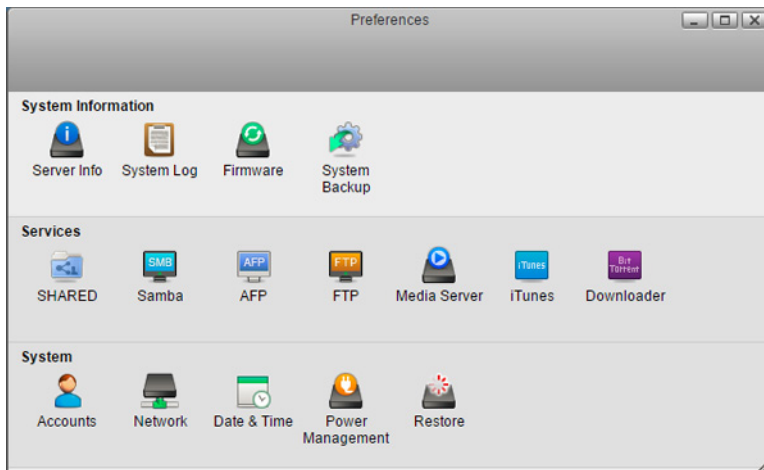
Notes:

- Usernames may contain up to 32 alphanumeric characters and the following symbols: - _ . ! # + \$ ^ %. Do not use a symbol as the first character.
- Passwords may contain up to 20 alphanumeric characters and the following symbols: - _ @ ! # \$ % & ' () * + , . / ; < > = ? " [] ^ { } | ~. Do not use a symbol other than an underscore (_) as the first character.
- When a new user is created, a shared folder that uses the username as its folder name is also created.

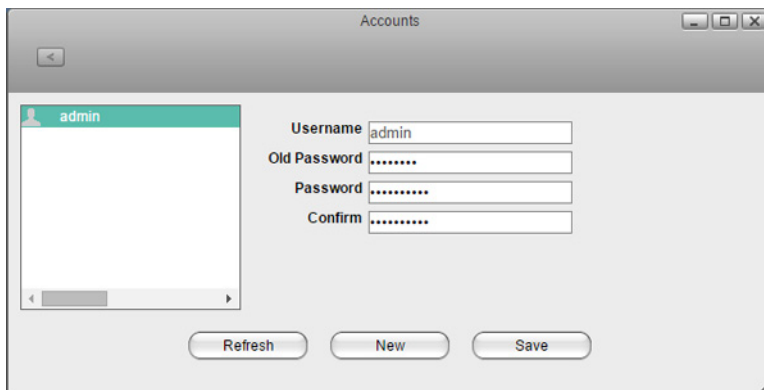
Changing Passwords

Administrator Password

- 1** In Preferences, click *Accounts*.



- 2** Enter the current password and new password, confirm the new password, then click *Save*.



Other Users' Passwords

- 1 Log in to Settings as a user who want to change its password.
- 2 Double-click *Applications* at the desktop.
- 3 Double-click *Password*.
- 4 Enter the current username and new password, confirm the new password, then click *Apply*.

Deleting Users

- 1 In Preferences, click *Accounts*.
- 2 Select a user and click *Delete*.
- 3 Click *OK*.

The selected user is deleted.

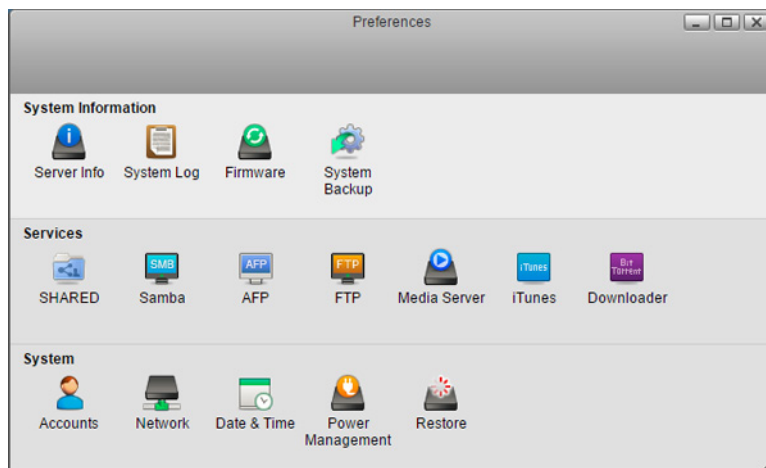
Note: Even if the user is deleted, that user's shared folder will remain. Delete it manually.

Network

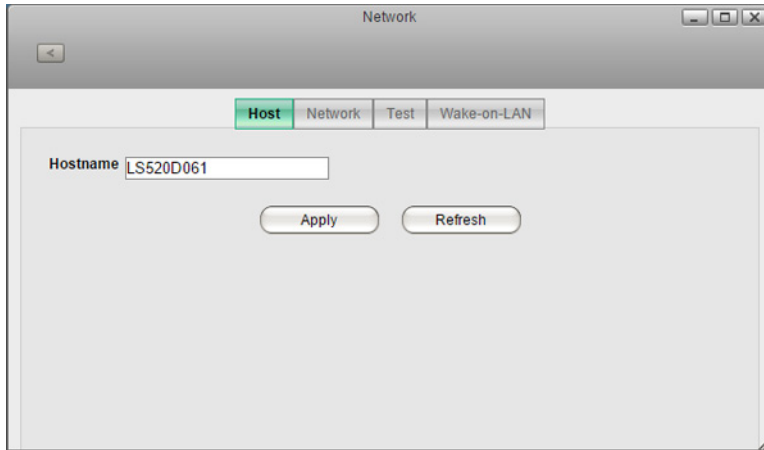
Configure network settings such as a hostname, IP address, or Wake-on-LAN.

Changing the Hostname

- 1 In Preferences, click *Network*.



- 2 Click the *Host* tab, configure the LinkStation's name, and click *Apply*.



Note: A hostname may contain up to 15 alphanumeric characters.

Changing the IP Address

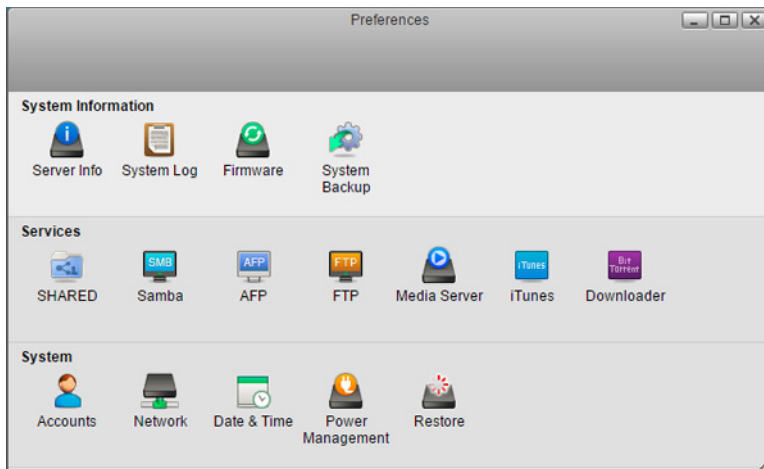
Note: If no DHCP server is available and the IP address settings are set to acquiring from the server automatically, then an IP address will be assigned as follows:

IP address: 192.168.0.9

Subnet mask: 255.255.255.0

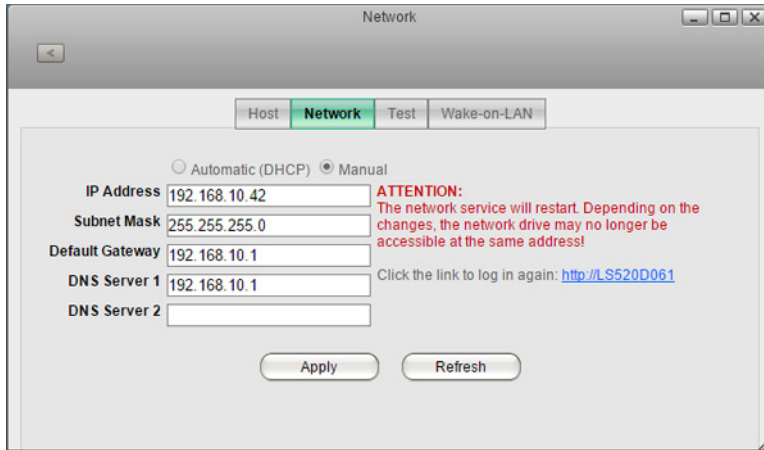
Do not place two or more LS520D units in such a network environment because of this specification. Their IP addresses will conflict and cause unexpected behavior.

- 1 In Preferences, click *Network*.



- 2 Click the *Network* tab.

- 3 Select *Manual*, enter the desired network address settings, and click *Apply*.



Note: The following IP addresses are reserved and should not be used. If you configure one of them by accident, initialize settings with the function button on the LinkStation.

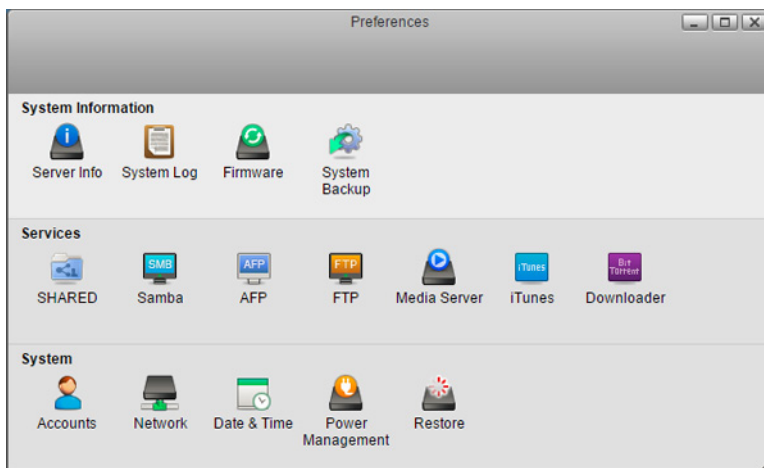
- Local loopback address: 127.0.0.1, 255.255.255.0
- Network address: 0.0.0.0, 255.255.255.0
- Broadcast address: 255.255.255.255, 255.255.255.0
- The IP address range from 224.0.0.0 to 255.255.255.0

Wake-on-LAN

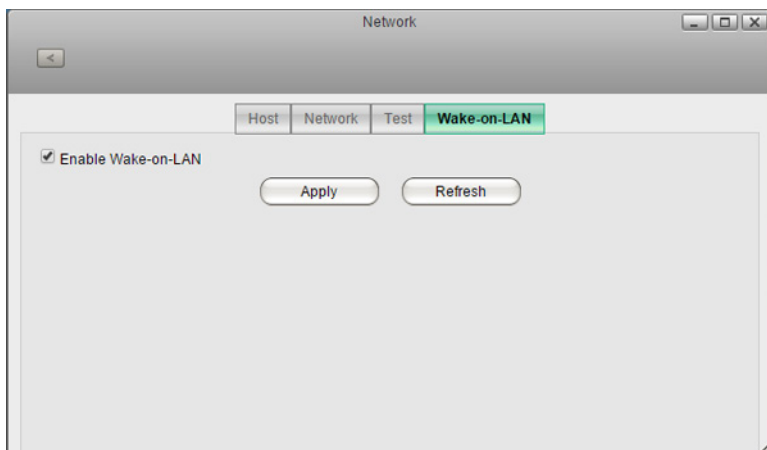
The LinkStation supports Wake-on-LAN, which allows it to be turned on remotely. You can only wake the LinkStation up when the LinkStation is in sleep (standby) mode.

Note: To use Wake-on-LAN, you'll need Wake-on-LAN software that sends magic packets. The LinkStation does not include Wake-on-LAN software.

- 1 In Preferences, click *Network*.



- 2 Click the *Wake-on-LAN* tab and check "Enable Wake-on-LAN" to enable Wake-on-LAN.

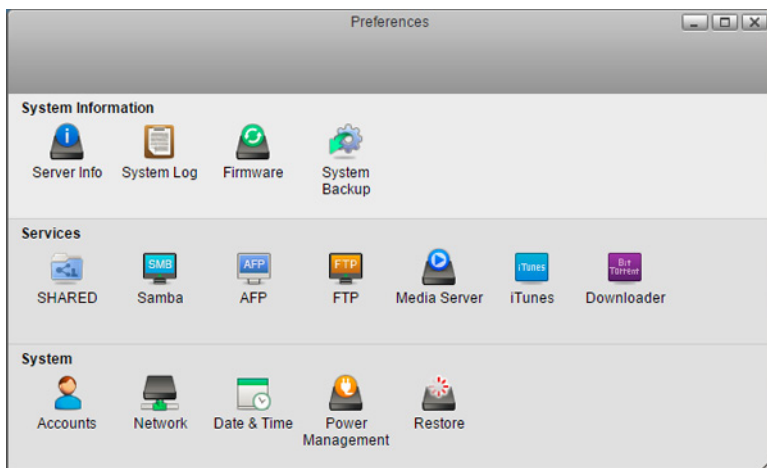


Date & Time

Configures time settings such as date and time or time zone.

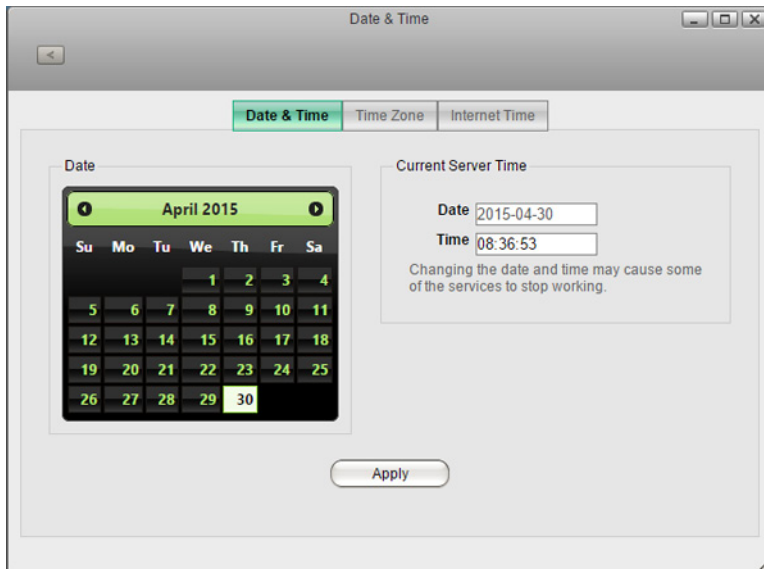
Changing Date and Time

- 1 In Preferences, click *Date & Time*.



- 2 Click the *Date & Time* tab.

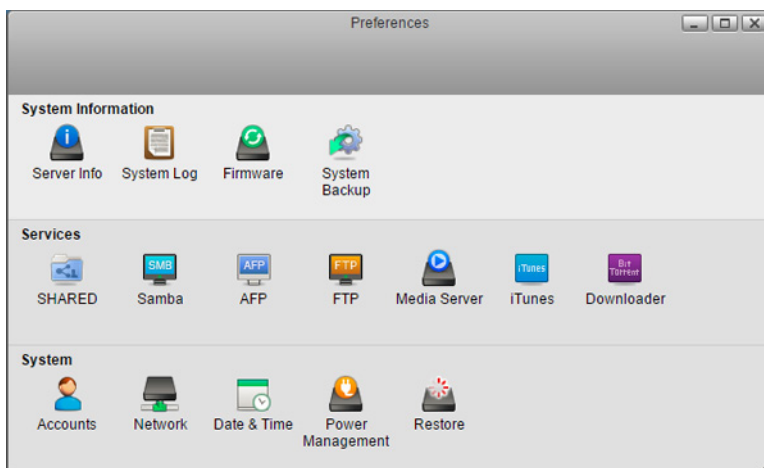
- 3 Select the date from the calendar and enter the time directly into the "Time" field.



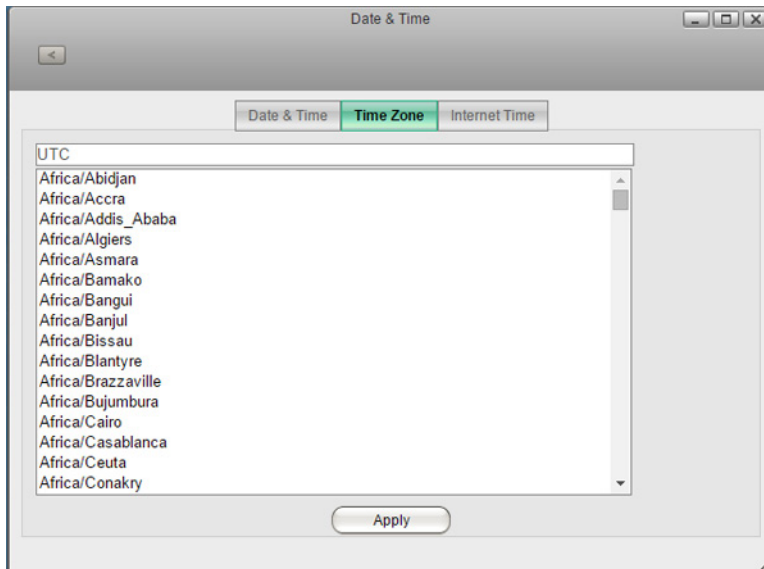
- 4 Click *Apply*.

Changing Time Zone

- 1 In Preferences, click *Date & Time*.



- 2 Click the *Time Zone* tab and select the desired time zone from the list, then click *Apply*.



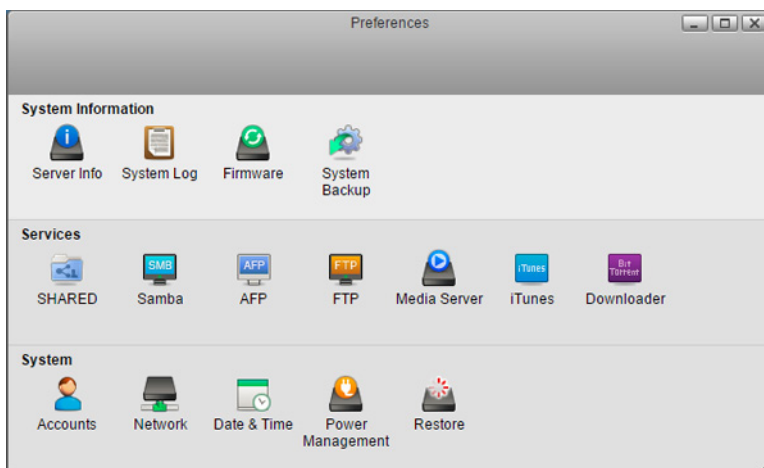
Power Management

Configures sleep settings for the system or hard drives.

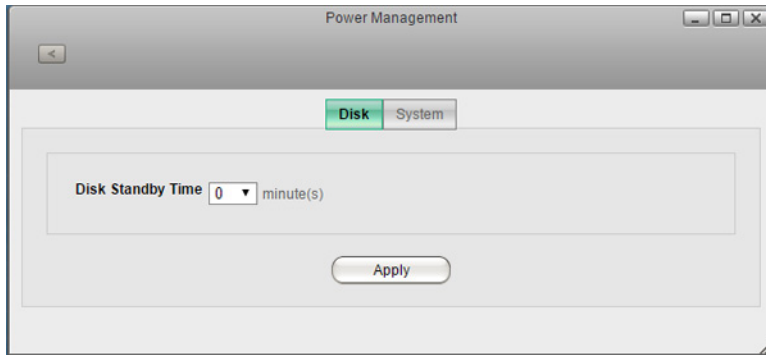
Drive Spin Down

With this function, only hard drives will enter sleep mode. This may help maintain hard drive longevity. While in spin down, hard drives will start working again once the LinkStation is accessed.

- 1 In Preferences, click *Power Management*.



- 2 Click the *Disk* tab and configure the time interval when the hard drive will spin down. For example, if you select 5 minutes as the standby time, the hard drive will spin down 5 minutes after no drive access.



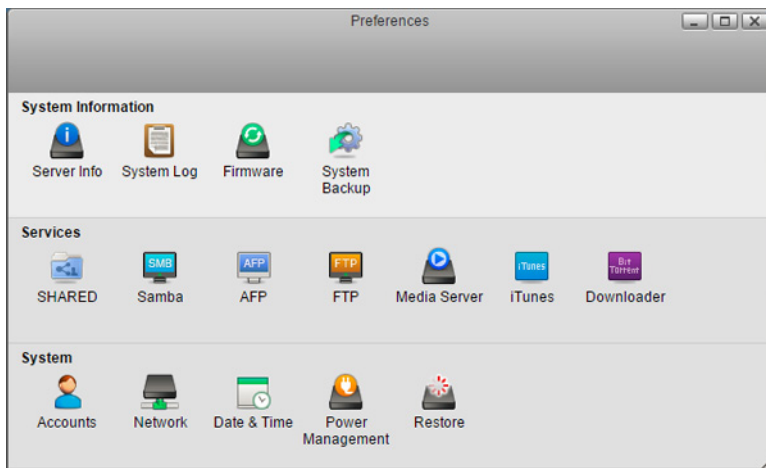
- 3 Click *Apply*.

Note: If you configure spin down settings after formatting internal drives or creating the RAID array with "Auto" settings from Disk Manager, drive spin down will not occur during specific periods because the formatting process is still working in the background.

Sleep Mode

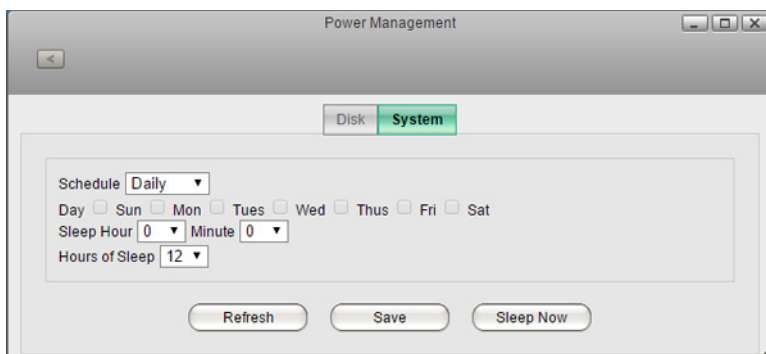
To save energy, you can configure a timer to have the LinkStation enter sleep (standby) mode at a designated time, where all hard drives and LEDs are turned off.

- 1 In Preferences, click *Power Management*.



- 2 Click the *System* tab.

- 3 Select the timer interval from "Daily" or "Weekly", time to go into sleep mode, and how long the LinkStation will be in sleep mode.



- 4 Click *Save*. If you want to make the LinkStation enter sleep mode immediately, click *Sleep Now*.

Notes:

- Examples of multiple timer settings are shown below.

Example 1:

If running at a current time of 10:00 Wednesday

- Schedule: Daily
- Sleep Hour: 0:00
- Hours of Sleep: 12

The unit goes into sleep mode at 0:00 am and wake up after 12 hours, 0:00 pm on Thursday.

Example 2:

If running at a current time of 10:00 Wednesday

- Schedule: Weekly Wednesday
- Sleep Hour: 20:00
- Hours of Sleep: 12

On every Wednesday, the unit goes into sleep mode at 8:00 pm and wake up after 12 hours, 8:00 am on Thursday.

- To turn on the LinkStation before the wake-up time when it is in sleep mode, press the function button, use Wake-on-LAN, or turn off, then on the LinkStation.

Restore

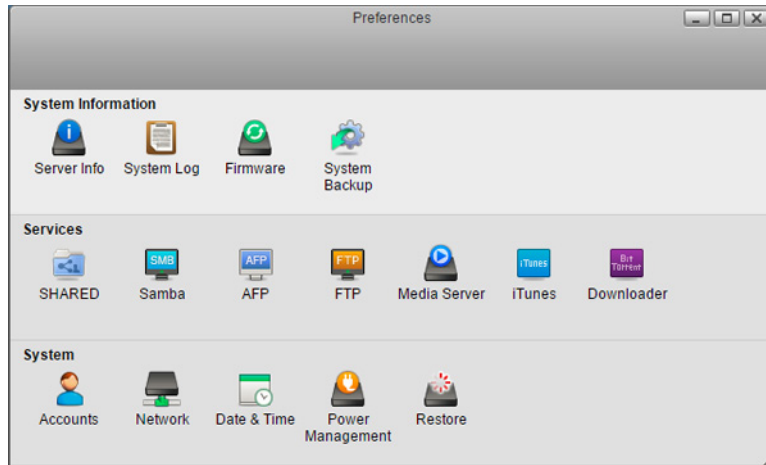
Enable or disable function button initialization or initialize the LinkStation to factory defaults from Settings.

Note: If you change the RAID mode manually and initialize settings, all partitions will be automatically dismounted because the mount path will be reset. Make sure you remount them after initialization.

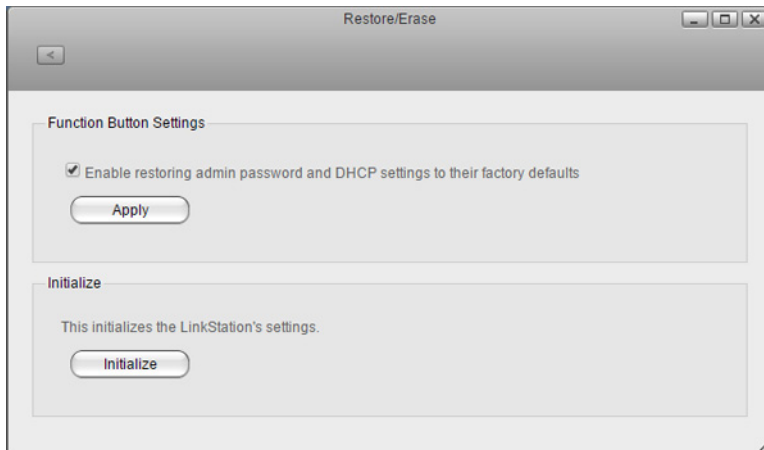
Initializing from Settings

When initializing the LinkStation from Settings, all values will be erased and restored to its factory default. The data stored in the LinkStation will be kept.

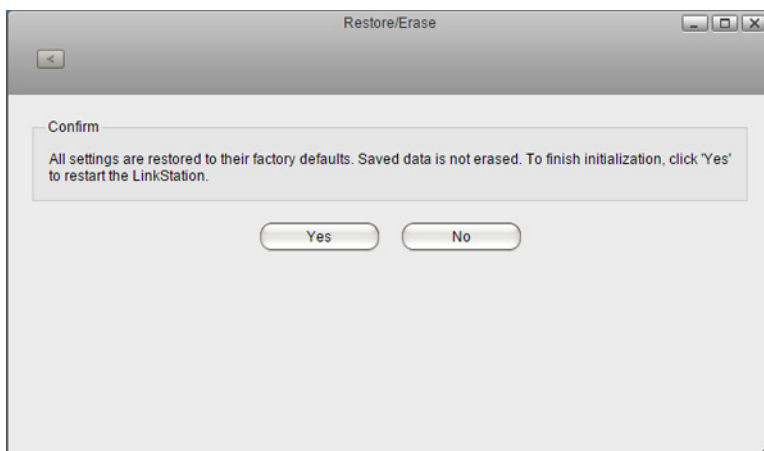
- 1 In Preferences, click *Restore*.



- 2 Click *Initialize*.



- 3 Read the confirmation and click *Yes*.



- 4 The LinkStation will be restored to its factory default settings.

Initializing with the Function Button

You can also initialize the admin password and IP address with the function button. The IP address will only be restored from manual to DHCP.

Note: To enable or disable the function button reset, navigate to *Preferences - Restore* and check or uncheck "Enable restoring admin password and DHCP settings to their factory defaults". If this is unchecked and you lose your admin password, you will not be able to reset it.

- 1 Turn off the LinkStation.
- 2 Turn the LinkStation on while holding down the function button until the power LED flashes amber.
- 3 Initialization will start. Do not power down the LinkStation while the power LED is blinking.
- 4 When the power LED glows a steady white, initialization is finished.

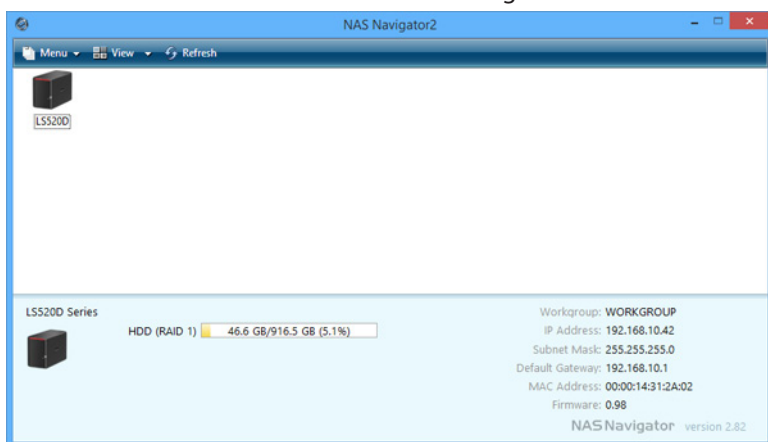
Chapter 9 Utilities

NAS Navigator2 for Windows

NAS Navigator2 is a utility program that makes it easy to display Settings, change the LinkStation's IP address, or check its hard drive. You can download NAS Navigator2 from the Buffalo website.

NAS Navigator2 will run in the system tray when the computer is on.

Double-click the  icon to start NAS Navigator2.



Click your LinkStation's icon to open a share on the LinkStation and display:

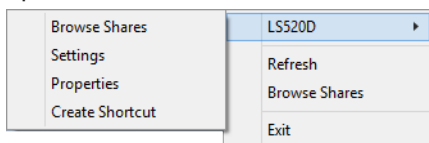
- Total capacity
- Capacity in use
- IP address
- Workgroup
- Subnet mask
- Default gateway
- MAC address
- Firmware version

Name	Description
Menu	Map All Remote Shares to Drive Letters Note: LS520D cannot be assigned as the network drive with this option.
	Create Desktop Shortcut*
	Launch NAS Navigator2 on Startup
	Display Errors
	Properties*
	Close

Name		Description
View	View	Icons: Displays icons. Details: Displays the hostname, product name, workgroup, IP address, subnet mask, and default gateway.
	Sort by	If you have multiple LinkStations and TeraStations on the network, you may choose to display them in order of hostname, product name, workgroup, IP address, subnet mask, or default gateway.
Browse*		Opens the selected LinkStation's or TeraStation's shared folders.
Refresh		Searches for NAS devices on the network again.
Displays when you right-click a device's icon.	Browse Shares	Opens the selected LinkStation's or TeraStation's shared folders.
	Settings	Opens Settings for the selected LinkStation or TeraStation.
	Properties	Opens the selected LinkStation's or TeraStation's properties page.
	Create Desktop Shortcut	Creates a desktop shortcut to the selected LinkStation's or TeraStation's shared folders.

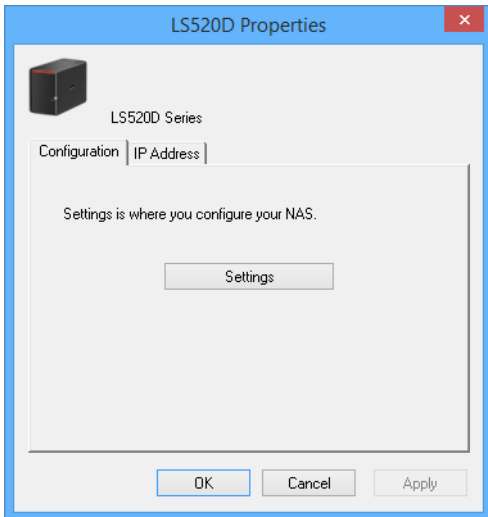
*Click on the selected LinkStation's or TeraStation's icon to display these options.

When NAS Navigator2 is minimized, right-click on the NAS Navigator2 icon in the system tray for the following options.




Name		Description
NAS Name	Browse Shares	Opens the selected LinkStation's or TeraStation's shared folders.
	Settings	Opens Settings for the selected LinkStation or TeraStation.
	Properties	Opens the selected LinkStation's or TeraStation's properties page.
	Create Shortcut	Creates a desktop shortcut to the selected LinkStation's or TeraStation's shared folders.
Refresh		Refreshes list of NAS devices.
Browse Shares		Displays NAS Navigator2 window.
Exit		Exits NAS Navigator2.

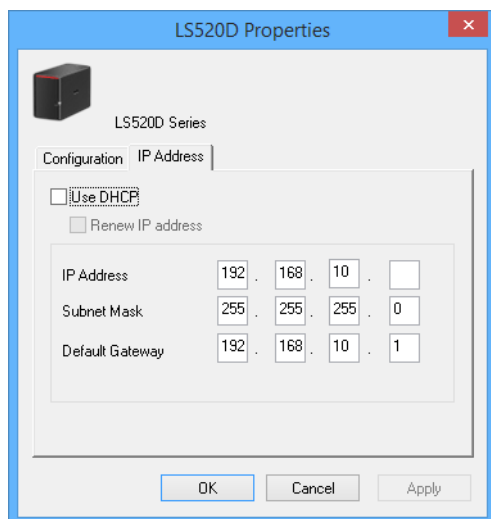
The following tasks may be performed from the properties page.



Name	Description
Configuration	Click <i>Settings</i> to open the configuration interface.
IP Address	Check <i>Use DHCP</i> to assign an IP address from the DHCP server automatically. If there is no DHCP server in the network, you cannot use this function. Check <i>Renew IP address</i> to obtain an IP address from the DHCP server. You can manually enter an IP address, subnet mask, and default gateway.

Changing the IP Address

- 1 Double-click the  icon to start NAS Navigator2.
- 2 Right-click on your LinkStation's icon and choose *Properties - IP Address*.
- 3 Uncheck "Use DHCP", enter the IP address and subnet mask, and click *OK*. If the username and password prompts appears, enter the admin username and password.



Note: The following IP addresses are reserved and should not be used. If you configure one of them by accident, initialize settings with the function button on the LinkStation.

Local loopback address: 127.0.0.1, 255.255.255.0

Network address: 0.0.0.0, 255.255.255.0

Broadcast address: 255.255.255.255, 255.255.255.0

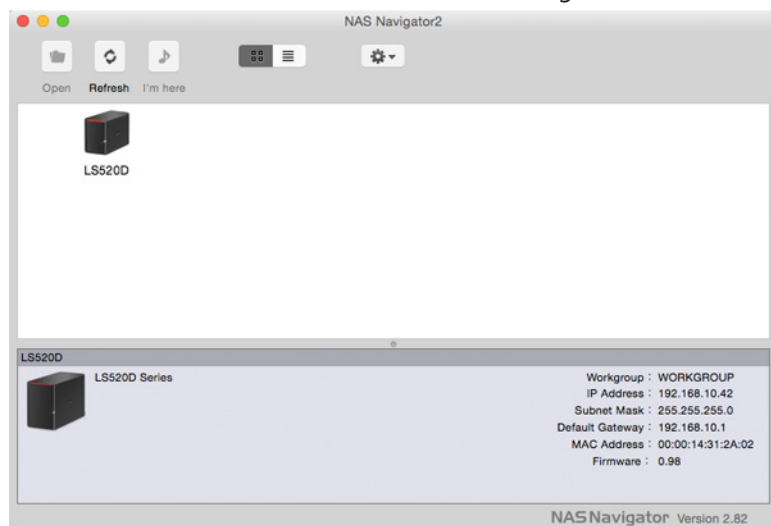
The IP address range from 224.0.0.0 to 255.255.255.255

NAS Navigator2 for Mac OS

NAS Navigator2 is a utility that makes it easy to display Settings, change the LinkStation's IP address, or check its hard drive. You can download NAS Navigator2 from the Buffalo website.



Click the icon in the Dock to start NAS Navigator2.




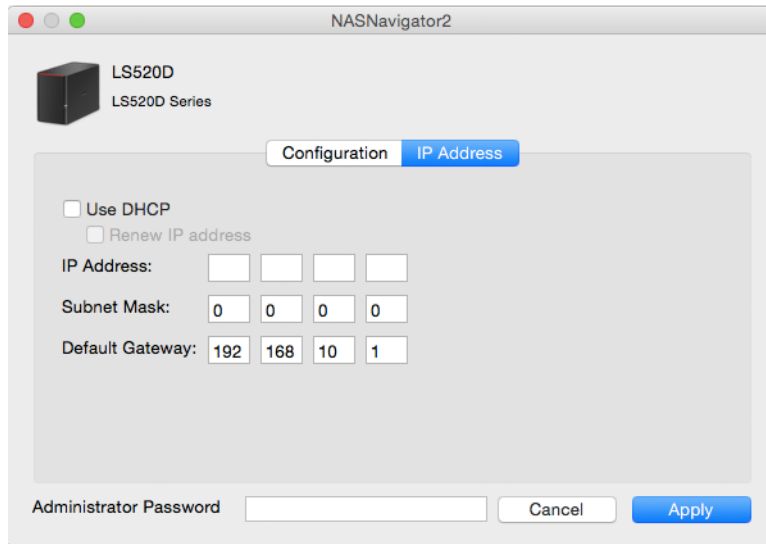
Click your LinkStation's icon to open a share on the LinkStation and display:

- Total capacity
- Capacity in use
- IP address
- Workgroup
- Subnet mask
- Default gateway
- MAC address
- Firmware version

Name	Description	
Open	Opens the default shared folder for a selected LinkStation or TeraStation.	
Refresh	Searches for NAS devices on the network again.	
Settings	Opens Settings for the selected LinkStation or TeraStation.	
Configure	Opens a window that lets you configure the NAS's IP address or open Settings.	
Label Color	Selects the color of the name displayed below the icon.	
View Options	Lets you choose icon size, position, and view mode.	
Auto Power Mode	Auto power mode can turn supported TeraStations and LinkStations on the network on and off automatically.	
To display these options, hold down the control key and click a device's icon.	Open Folder	Opens the selected LinkStation's or TeraStation's shared folder.
	Settings	Opens Settings for the selected LinkStation or TeraStation.
	Configure	Opens a window that lets you configure the NAS's IP address or open Settings.
	Label Color	Selects the color of the name displayed below the icon.

Changing the IP Address

- 1 Click the  icon in the Dock to start NAS Navigator2.
- 2 Hold down the control key, select your LinkStation, and choose *Configure - IP Address*.
- 3 Uncheck "Use DHCP", enter the desired settings and the administrator password, then click *Apply*.



Note: The following IP addresses are reserved and should not be used. If you configure one of them by accident, initialize settings with the function button on the LinkStation.

Local loopback address: 127.0.0.1, 255.255.255.0

Network address: 0.0.0.0, 255.255.255.0

Broadcast address: 255.255.255.255, 255.255.255.0

The IP address range from 224.0.0.0 to 255.255.255.255

NovaBACKUP

NovaBACKUP is a Windows utility that lets you back up the data on your computer or LinkStations.

The software is available at <http://d.buffalo.jp/LS520D/>. To download the installer, you need the serial number of your LinkStation. The serial number is printed on the label at the back of the unit.

Chapter 10 Appendix

When the Power LED Blinks

White

The power LED will blink white during bootup or shutdown.

Red

If there is an error, the power LED will blink red. You can also see any errors in NAS Navigator2.

Error Code	Description	Corrective Action
E04	The firmware is corrupted.	Save the firmware file to the root directory of a FAT32-formatted USB memory device. Power off the LinkStation, connect the USB memory device, then power the LinkStation back on. The firmware file will be restored automatically. http://86886.jp/ls500-r/ If the error still present, contact Buffalo technical support for assistance. Note: By recovering the firmware, all the LinkStation's settings will be initialized to default values, but the data on the LinkStation will be kept.
E11	An error occurred in the fan speed.	Check the fan. Use compressed air or tweezers to remove any dust or foreign objects. Confirm that the fan is spinning normally. If it is not, contact Buffalo technical support for assistance.
E12	A rise in the system temperature may have exceeded the allowable safety value.	Do not place objects in the area around the LinkStation. Also, move the LinkStation to a cool location.
E14	RAID array X cannot be mounted.	Run the RAID array disk check in Settings.
E15	The bad sectors have reached a dangerous level.	Replace the defective drive.
E16	Unable to find hard drive X.	Hard drive X may be disconnected or may have failed. Shut down the LinkStation and reinstall the hard drive.
E22	Unable to mount drive X.	Format the hard drive. After formatting, if the error still appears after rebooting, replace the hard drive. If the error is displayed again, contact Buffalo technical support for assistance.
E30	A hard drive error occurred.	Replace the faulty drive.

Amber

If there is a status message, the power LED will blink amber. You can also see any status messages in NAS Navigator2.

Information Code	Description	Corrective Action
I12	Operating in degraded mode.	-
I13	Formatting RAID array X.	-
I16	Creating RAID array X.	-
I18	Rebuilding RAID array X. Note: Transfer speeds are slower during the rebuilding process.	-
I19	Writing 0s to RAID array X, erasing all data.	-
I20	Formatting hard drive X.	Don't turn off the LinkStation.
I21	Checking hard drive X.	Don't turn off the LinkStation.
I22	Erasing the data for hard drive X.	-
I23	System is being initialized.	-
I25	Updating the LinkStation firmware.	-
I28	Formatting USB hard drive.	Don't turn off the LinkStation.
I52	A new firmware version has been released.	Update the firmware.

Default Settings

Administrator's Name	admin
Password	password
Shared Folders	"Public" and "admin" (for both Windows and Mac computers).
DHCP Client	Normally, the LinkStation will get its IP address automatically from a DHCP server on the network. If no DHCP server is available, then an IP address will be assigned as follows: IP address: 192.168.0.9 Subnet mask: 255.255.255.0
Microsoft Network Group Setting	WORKGROUP
SMB	Enabled
AFP	Disabled
FTP	Disabled
NTP	Enabled
DLNA	Enabled
iTunes Server	Disabled
BitTorrent	Disabled
Wake-on-LAN	Enabled
RAID Mode	RAID 1

Specifications

Check the Buffalo website for the latest product information and specifications.

LAN Port	Interface	IEEE 802.3ab (1000BASE-T) IEEE 802.3u (100BASE-TX) IEEE 802.3 (10BASE-T)
	Transfer Speed	1000 Mbps full duplex (auto-negotiation) 100 Mbps full duplex/half duplex (auto-negotiation) 10 Mbps full duplex/half duplex (auto-negotiation)
	Number of Ports	1 port (supports Auto-MDIX)
	Connector Type	RJ-45 8-pin
	Protocol	TCP/IP
	Access Method	CSMA/CD
	File Sharing	SMB/CIFS, AFP, FTP, HTTP
	Management	HTTP
USB Port	USB 3.0 Port (Series A) x 1	
Internal Hard Drive	If a hard drive in your LS520D malfunctions, replace it with a Buffalo OP-HDBST series of the same or more capacity, available from the Buffalo website.	
Power Supply	AC 100–240 V, 50/60 Hz	
Dimensions (W x H x D)	87 x 128 x 205 mm; 3.4 x 5.0 x 8.1 in	
Weight	Approx. 2.5 kg; 5.5 lb	
Power Consumption (Max.)	36 W	
Operating Environment	Temperature: 5–35°C; 41–95°F Environment humidity: 20–80% (no condensation)	
Compatible Devices and OS	<ul style="list-style-type: none"> • Windows computers with Ethernet interface (both 32-bit and 64-bit) Windows 8.1, Windows 8, Windows 7, Windows Vista • Intel Mac computers with Ethernet interface OS X 10.10, 10.9, 10.8, 10.7 <p>Note: The LinkStation requires an Ethernet connection with your computer for operation. It cannot be connected via USB. To use with mobile devices, Wi-Fi connection is required.</p>	

Chapter 11 Regulatory Compliance Information

For Customers in Europe

EU Declaration of Conformity



Dansk

Brug ikke USB-kabler, der er 3 meter eller længere for at tilslutte USB enheder til denne LinkStation serie. Der må kun bruges de kabler og det tilbehør der er inkluderet i pakken. Der må ikke bruges andet tilbehør eller kabler, medmindre det er udtrykkeligt beskrevet i dokumentationen.

Deutsch

Verwenden Sie keine USB-Kabel, die 3 Meter lang oder länger sind, um USB-Geräte an LinkStations dieser Serie anzuschließen.

Verwenden Sie ausschließlich die Kabel und Zubehörteile, die im Lieferumfang enthalten sind. Andere Zubehörteile oder Kabel dürfen nur dann verwendet werden, wenn dies in der Dokumentation ausdrücklich vorgeschrieben ist.

English

Do not use USB cables that are 3 meters or longer to connect USB devices to this LinkStation series.

Only use the cables and accessories that are included in the package. Don't use other accessories or cables unless specifically instructed to in the documentation.

Español

Utilice cables de una longitud inferior a 3 metros para conectar los dispositivos USB a este tipo de LinkStation.

Utilice únicamente los cables y accesorios incluidos en el paquete. No utilice otros accesorios ni cables a menos que así se indique en la documentación.

Français

Utilisez des câbles d'une longueur de moins 3 mètres pour connecter les périphériques USB à ce type de LinkStation.

Utilisez uniquement les câbles et accessoires inclus dans ce package. N'utilisez aucun autre accessoire ou câble sauf instruction spécifique de la documentation.

Italiano

Non utilizzare cavi USB lunghi 3 metri o più per collegare dispositivi USB a questa LinkStation.

Utilizzare esclusivamente i cavi e gli accessori inclusi nell'imballaggio. Non utilizzare altri accessori o cavi a meno che non sia specificamente indicato nella documentazione.

Nederlands

Gebruik geen USB-kabels die 3 meter of langer zijn om USB-apparaten met deze LinkStation series te verbinden. Gebruik alleen de kabels en toebehoren die zich in de verpakking bevinden. Gebruik geen ander toebehoren of kabels tenzij dit uitdrukkelijk in de handleiding wordt aangegeven.

Norsk

Bruk ikke USB-kabler på tre meter eller mer for å koble USB-enheter til denne LinkStation-serien. Bruk kun kabler og tilbehør som er inkludert i pakken. Ikke bruk annet tilbehør eller kabler med mindre spesielt instruert til å gjøre det i dokumentasjonen.

Português

Não usar cabos USB de 3 metros ou mais para ligar dispositivos USB a esta série LinkStation. Utilizar apenas cabos e acessórios incluídos na embalagem. Não utilizar outros acessórios ou cabos, salvo se especificamente indicado na documentação.

Suomi

Älä käytä 3m tai pitempiä USB-kaapeleita USB-laitteiden liittämiseen näille LinkStation-sarjoille. Käytä ainoastaan pakkauksen mukana toimitettuja kaapeleita ja varusteita. Älä käytä muita varusteita tai kaapeleita ellei näin ole erityisesti ohjeistettu asiakirjoissa.

Svensk

Använd inte USB-kablar som är 3 meter eller längre för att ansluta USB-enheter till den här LinkStation-serien. Använd bara kablar och tillbehör som ingår i förpackningen. Använd inte andra tillbehör eller kablar om du inte får uttryckliga instruktioner om det i dokumentationen.

Türk

USB aygıtları bu LinkStation serisine bağlamak için 3 metre ve daha uzun USB kabloları kullanmayın. Yalnızca pakette bulunan kablo ve aksesuarları kullanın. Belgelerde özellikle belirtilmedikçe başka aksesuar ve kablolar kullanmayın.

AC Adapter

EU	Asian Power Devices Inc. WA-36A12
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