JELLYFISH MANAGER 3 GUIDE

TABLE OF CONTENTS

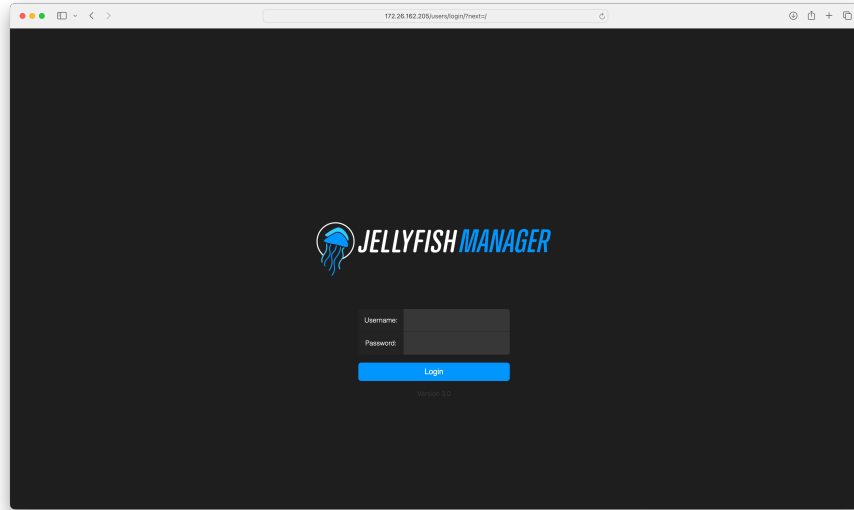*Media Manager is documented in a separate guide.*

SECTION 1

Log In

To log in the first time, you will need to use the default credentials, which are different than previous iterations of Jellyfish Manager:

<u>Default Credentials</u>:
Username: admin
Password: admin

Change your password when you first log in. We recommend a strong password. *For instructions on how to reset your password, please see Section 4.1 on Users.*

<u>How to Access Jellyfish Manager</u>

Use your web browser to navigate to your Jellyfish's **IP address** or **hostname** (with forward slash). Example hostname: jellyfish1234/ Example IP address: 172.27.1.250).

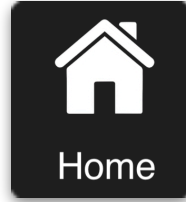In Jellyfish Connect, click the **Manager** button in the info panel:
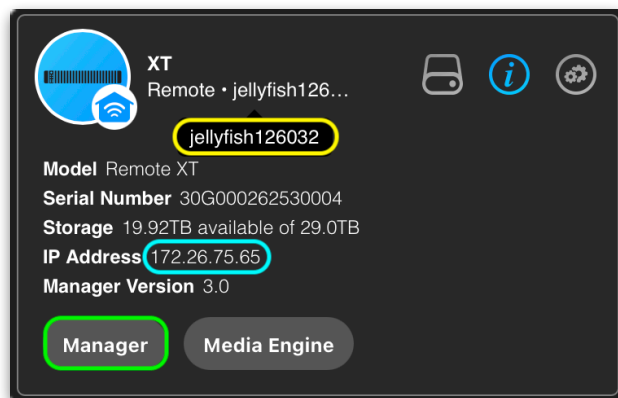
SECTION 2

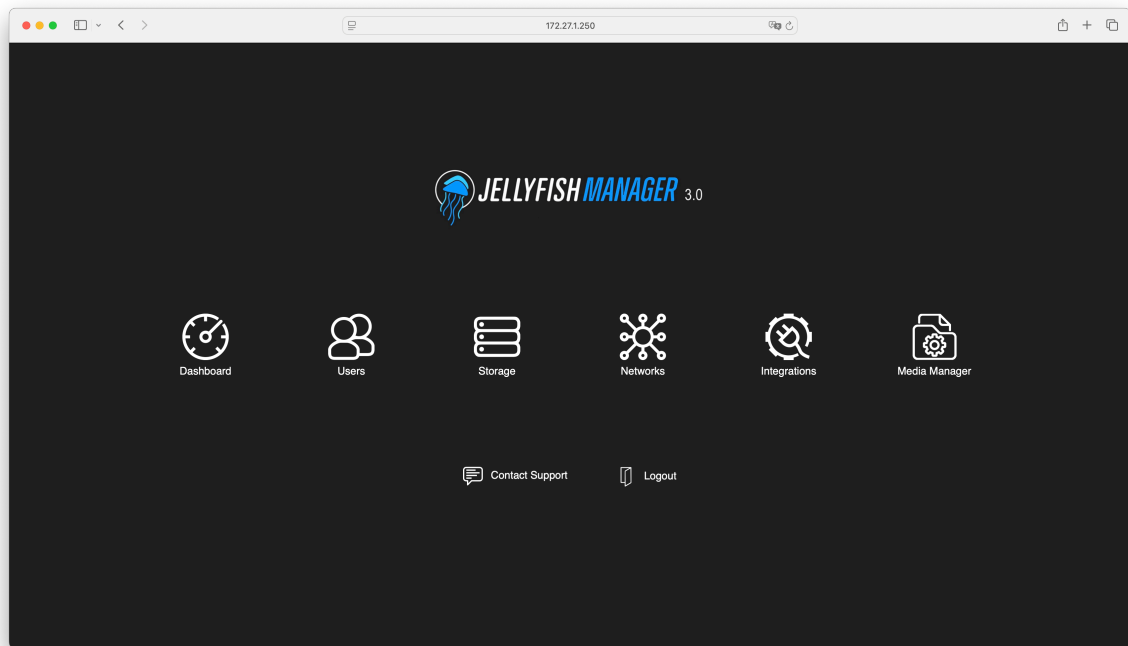### Home

Links to the Jellyfish's core functions.

Dashboard: System Status and Settings, including: Health, Time, Manager history, updates, etc. **Restart** or **shutdown** your Jellyfish here.

Users: Manage users and groups.

Storage: Manage shares and edit permissions.

Networks: Manage network settings, create bonds, check port status, etc.

Integrations: Install and manage third party plug-ins.

Contact Support: Open the Jellyfish Support portal.

Media Manager: Manage media files directly on the Jellyfish.

Log Out: End session. *Always log out when not administrating the system.*
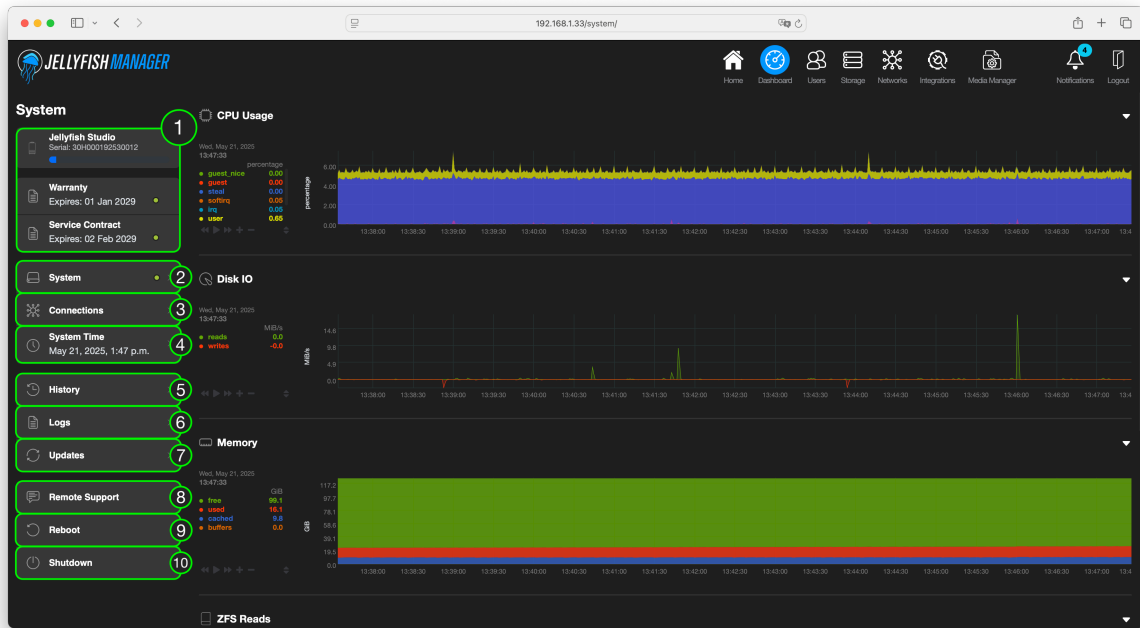
SECTION 3

Dashboard

System Status and Settings

1 - **Info** - Shows model, serial, Limited Warranty, Service Contract status and more.

2 - **System** - Pool/Disk management page. Displays disk health.

3 - **Connections** - Shows connected users.

4 - **System Time** - Set timezone, date, time, or enable NTP (Network Time Protocol).

5 - **History** - Shows actions taken in Jellyfish Manager.

6 - **Logs** - Download logs to provide to Jellyfish Support.

7 - **Updates** - Updates Jellyfish Manager, and links to changelog on OWC.com.

8 - **Remote Support** - Enables the Support Super User to provide Jellyfish Support access to service your system. <u>You are required to monitor.</u> Deactivates after one hour.

9 - **Reboot** - Reboots the Jellyfish. **Active users will not be warned.**

10 - **Shutdown** - Initiates shutdown. **Active users will not be warned.**

Section 3.1
REAL TIME DASHBOARD

Real Time Dashboard provides tools for monitoring the behavior of your Jellyfish. This can help identify potential issues. *Your readout may differ from the examples shown*.

CPU Usage - Useful for identifying peaks in activity or unusually high CPU usage.
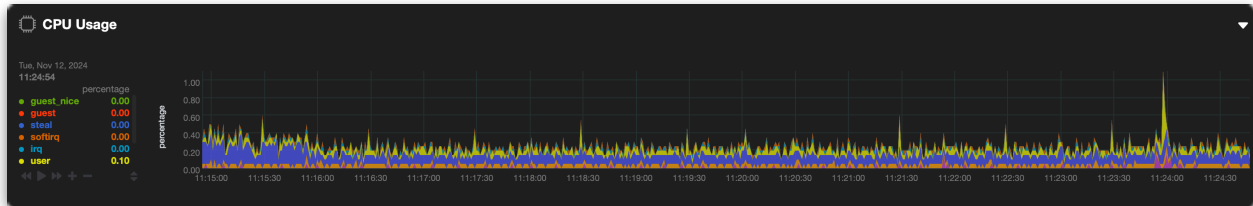
Disk I/O - Shows I/O in **write** (data entering) and **read** (data exiting) to measure disk activity. High peaks can indicate heavy ingests or a large number of concurrent users.
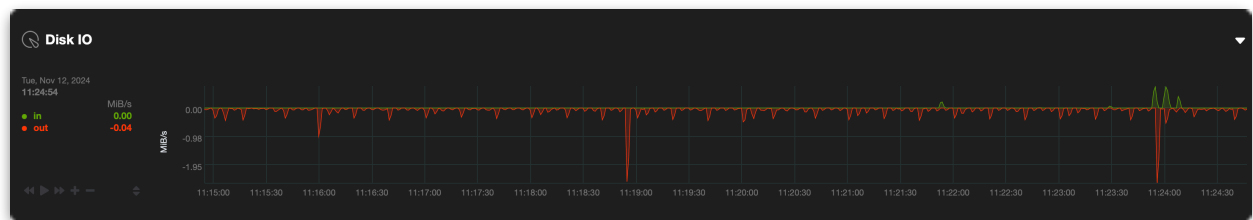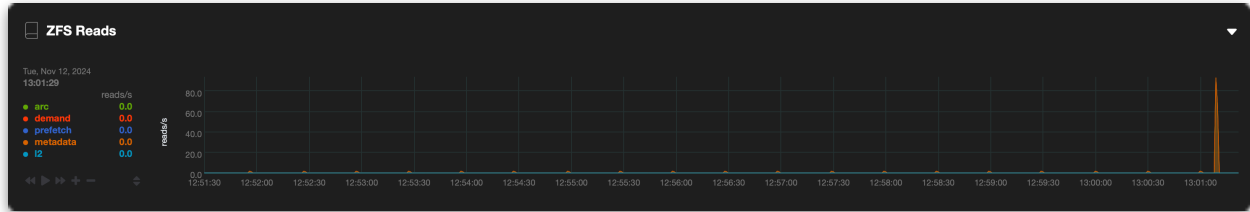

Memory - The Jellyfish's memory load. Memory is used to ensure you always have the best speeds. High memory usage is normal and should not be a cause of concern.
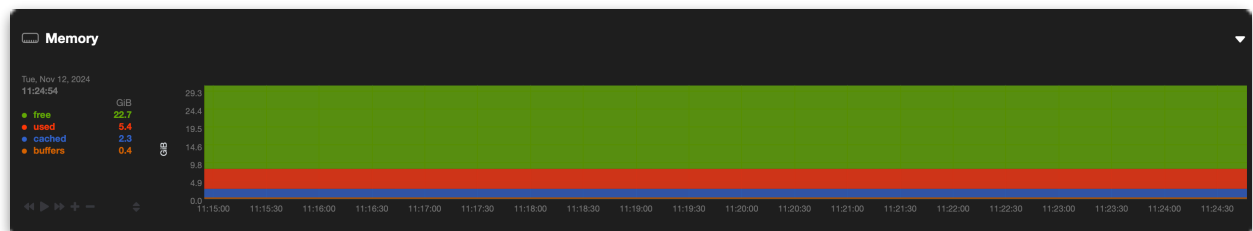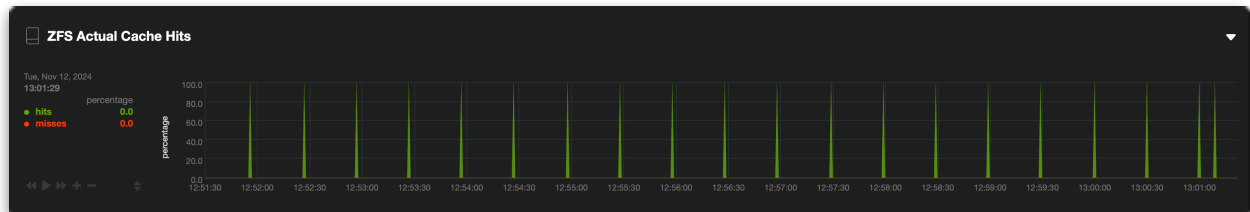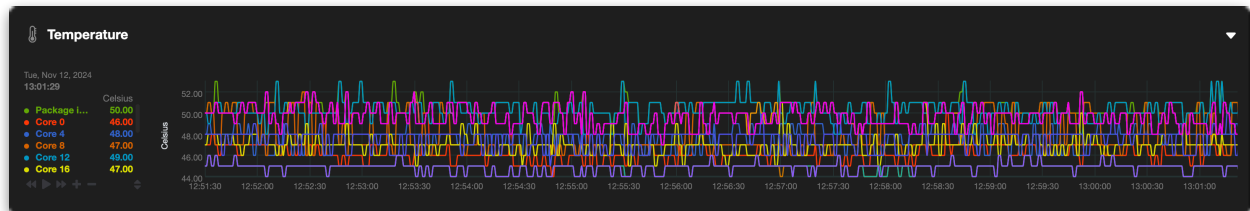
ZFS Reads - ZFS read performance. Used with Disk I/O to analyze busy systems.

ZFS Actual Cache Hits - Amount of data being served out of the system READ cache.

Temperature - Running temperature -- slow or abnormal behavior can be linked to system temperature. Temperatures above 80 degrees celsius should be investigated.
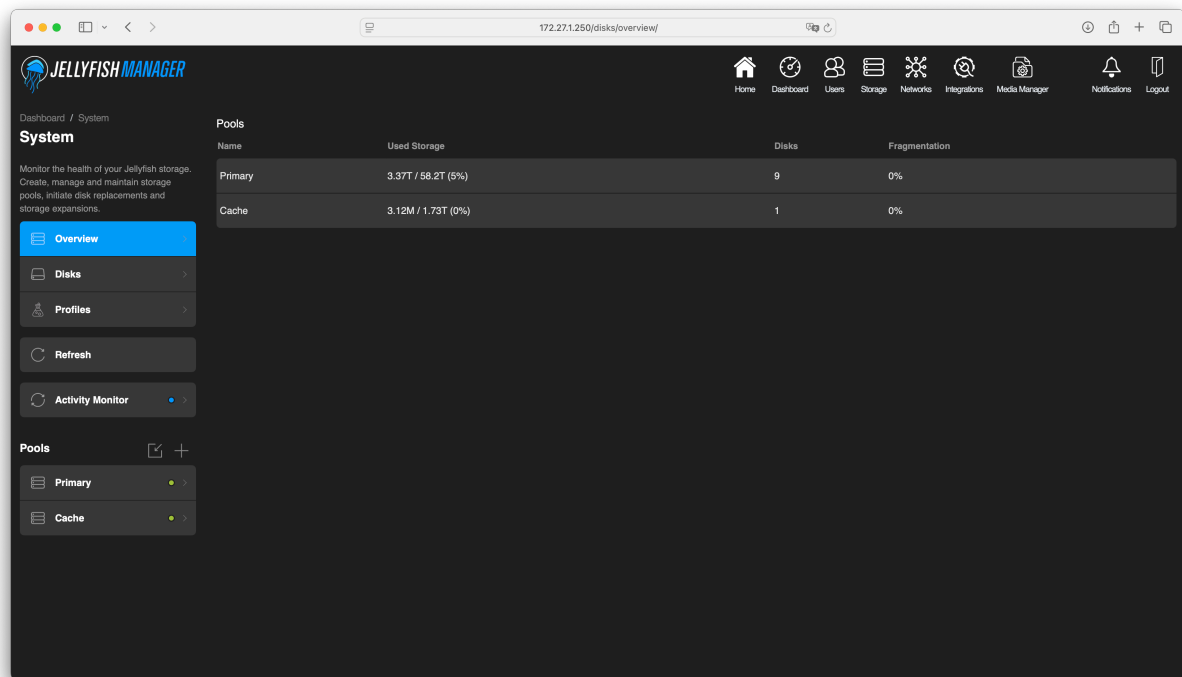

Run your cursor over a graph to show stats and timestamp for that moment — and on all other graphs too!
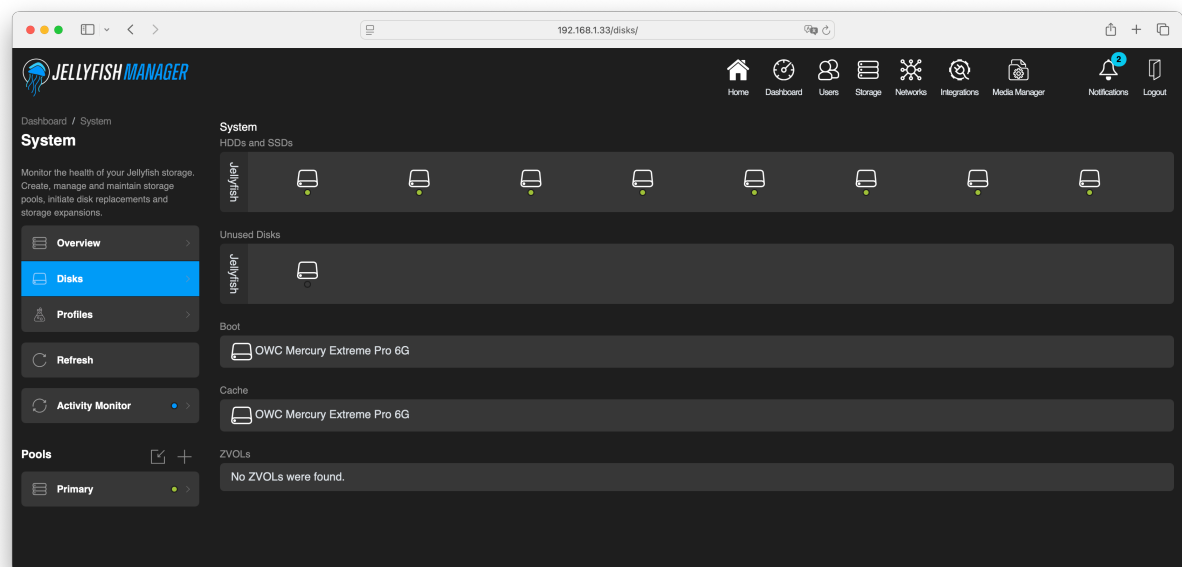
Section 3.2
SYSTEM

Check pool and disk health/details, initiate a disk replacement and more.

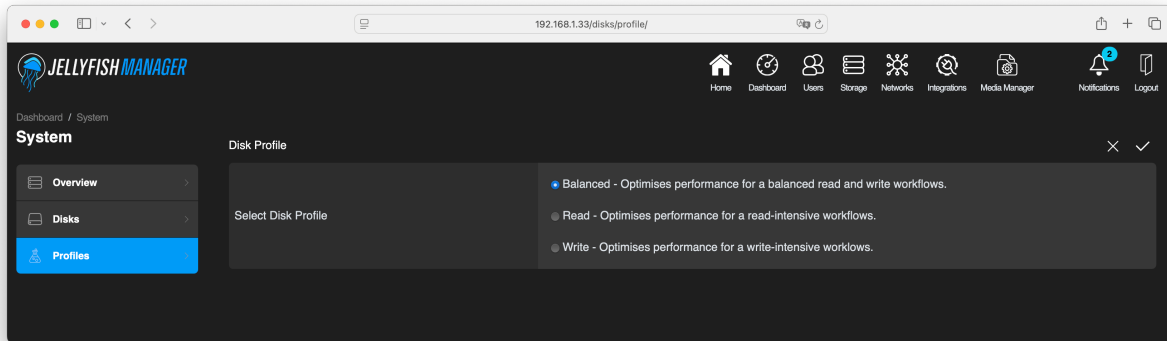**Overview** - Pool stats: used storage, number of disks, and fragmentation.

Disks - Displays the health of all disks in your Jellyfish. Hover over a disk to show details. Click for more info or to replace the disk.
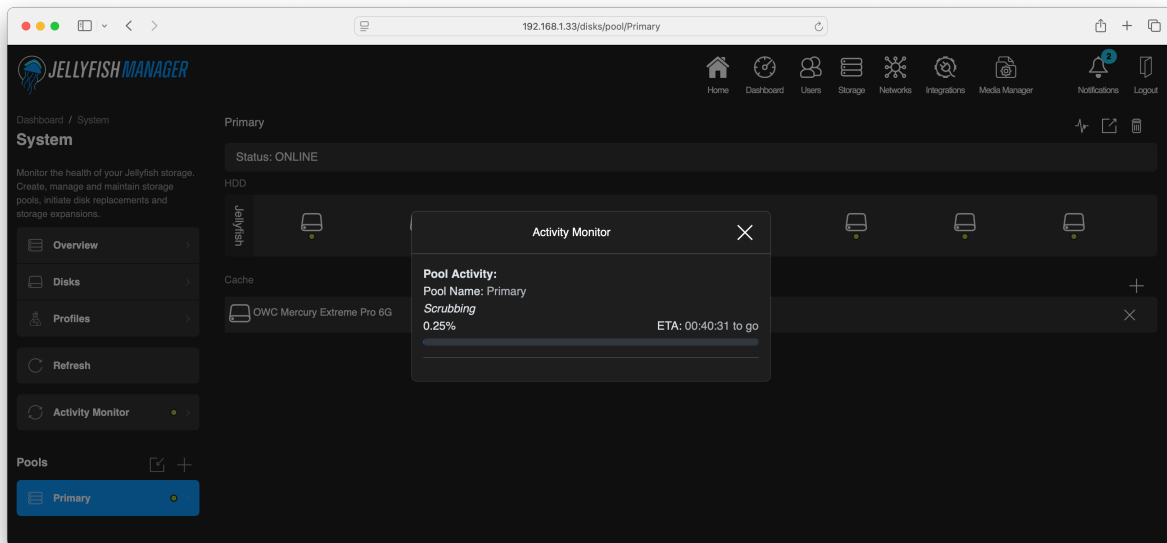
Profiles - Set performance parameters for your Jellyfish: Balanced, Read, or Write.

Balanced provides solid performance without favoring either read or write.
Read favors read performance over write performance.
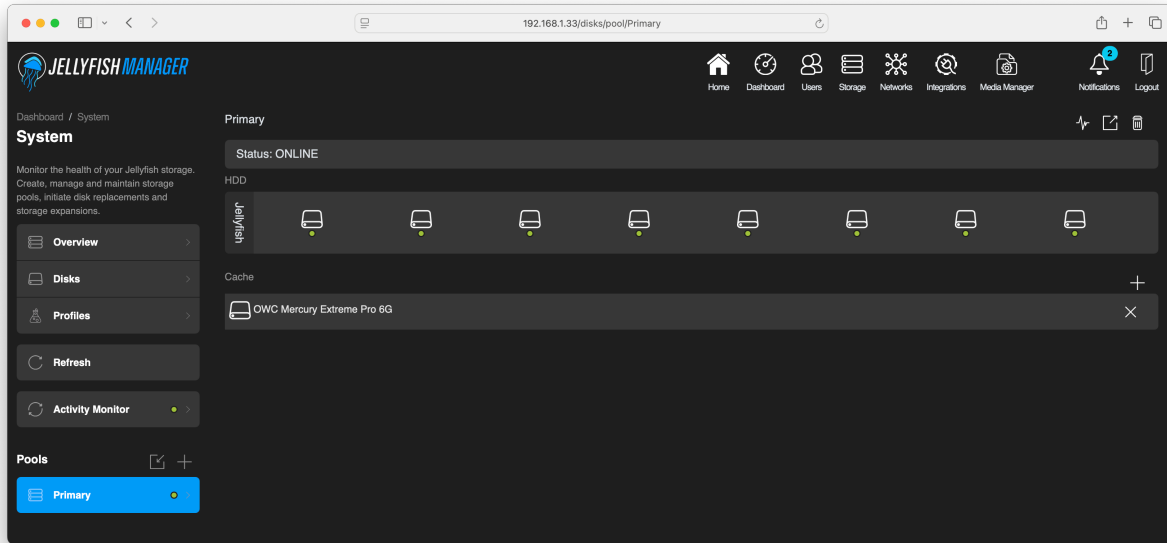*Write* favors write performance over read performance.

Refresh - Refreshes the stats on the System page.

Activity Monitor - Status of a disk replacement or pool scrub can be found here.

Pools - Select a pool to check its health, or import / create a pool.

 Exports your active pool**. Active users will not be warned**.

 Imports an existing pool.

 Creates a new pool. Cannot be performed on disks that are already part of a pool.

 Scrub - Verifies the checksums in this pool. It will automatically repair any damage discovered during the scrub. May impact performance until complete. *It is recommended to scrub no more than one time per month.*

 Destroys the selected pool and all data therein. **Active users will not be warned. Cannot be undone**.

> *If you are using **Jellyfish Nomad**, you can export your pool to quickly and easily change over to new shuttles.*
>
> *Simply click to export your current pool, install your new shuttles, and either create a new pool ( ) or import ( ) an existing one. **Do not export while in use**.*

<u>Explaining the Status Indicators:</u>
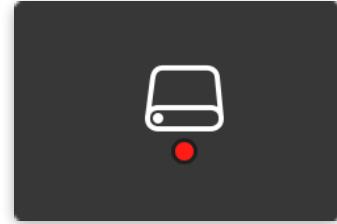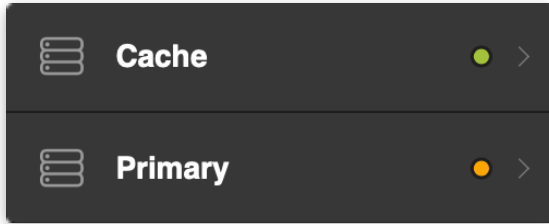
Green = Normal

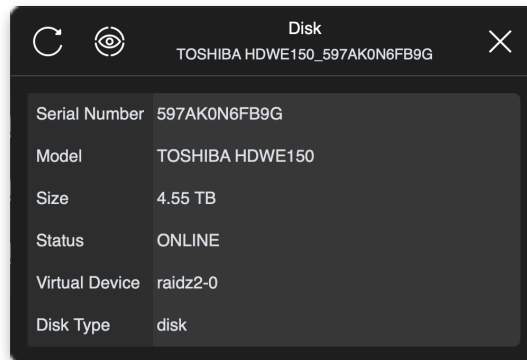**Yellow = Attention:** Errors detected, but device is still available. Further investigation recommended.

Red = Critical: Device is offline and needs immediate action.

<u>Disk Details</u>

Click a disk to see details or initiate a replacement. On rack-mounted models, there is a button to blink the disk's activity light which helps find its location.

Section 3.2.1
REPLACE A DISK

Click the Replace button on the disk details panel.

To locate the drive, click to blink the drive's status light (eligible models only).

Only replace one disk at a time.

If the disk's location is unknown, shutdown the Jellyfish before removing disks.

For performance and stability, only qualified disks should be used in a Jellyfish.

Click **continue**, and Jellyfish Manager will locate the new drive and replace the original.
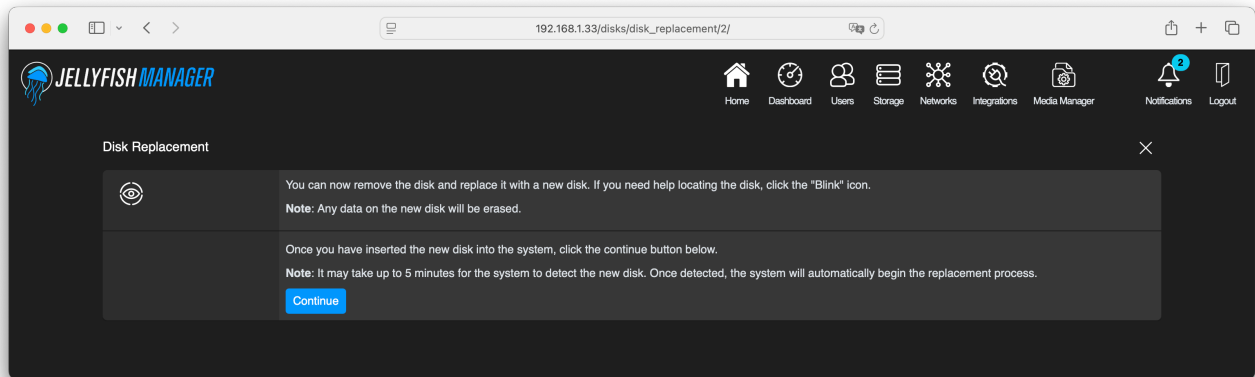
The time required to replace a disk will vary, but usually takes at least one day. Performance may be impacted during this time, but will normalize once complete.

Instructions on how to physically access your disks are in your Jellyfish product manual.

Need a replacement or spares? Contact our Enterprise Solutions Team.

Section 3.3
CONNECTIONS

This shows what users are connected to which share(s) and via what IP address. In the case of NFS, no user will be listed, but the IP address will be.

Stale connections can be removed by clicking 'X'.

Section 3.4
SYSTEM TIME

System Time is where you can set Date & Time, as well as time zone.
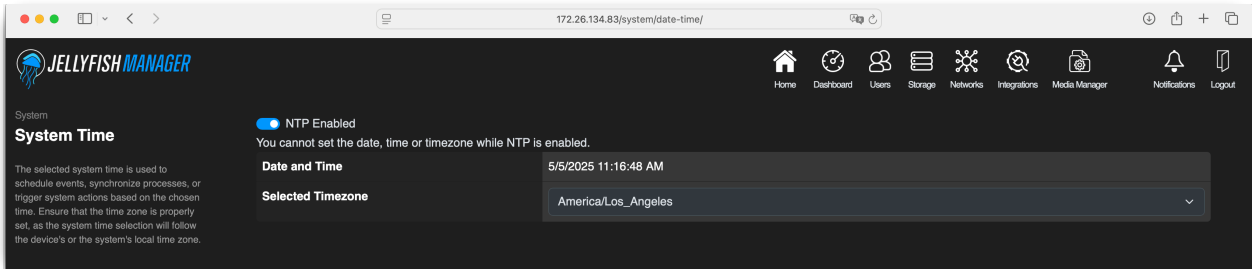
MANUAL

To manually set Date & Time, simply click on the field to set it. You can change your timezone in the second field.

AUTOMATIC

If internet connected, click "NTP" to enable Network Time Protocol, which maintains Date & Time automatically.

Timezone must be selected prior to enabling NTP. To change timezone after NTP is enabled, you must temporarily deactivate NTP.

NTP is recommended if using cloud-based services. Certain services require accurate Date & Time to function.

**Section 3.5
HISTORY**

History provides detail on user actions taken in Jellyfish Manager, such as updating Jellyfish Manager, creating or deleting new users, shares or groups, etc.

Non-admin users will only be able to see actions they have taken.

Section 3.6
UPDATES

If there is an update available for your Jellyfish, you will see this:
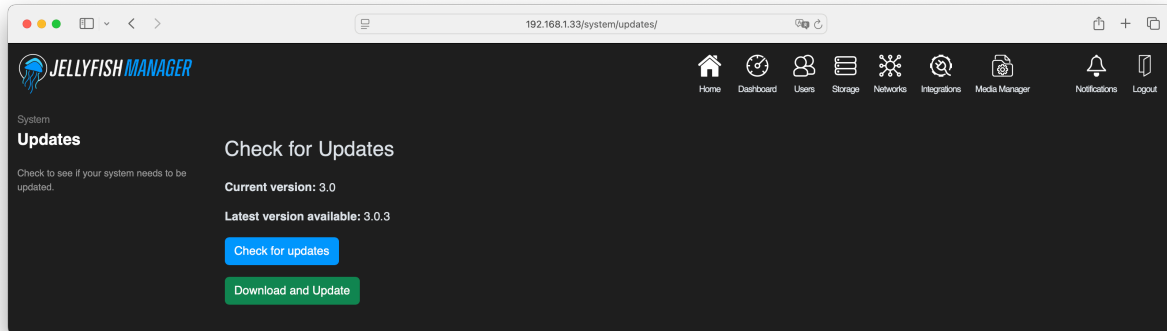
Jellyfish updates are lightweight and incremental, and usually only take a minute or two.

if your Jellyfish is up to date, you will see this:
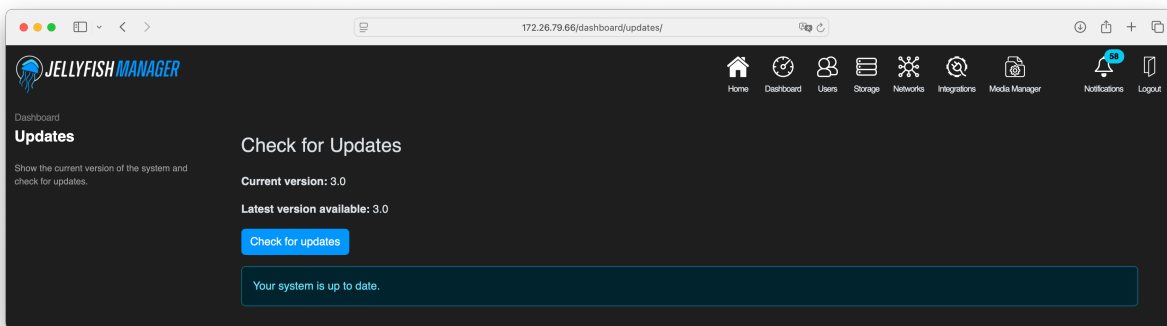
You can manually check for updates by clicking on "Check for Updates".

An active Support Plan is required to download and install updates. If you want to purchase for or renew a Support Plan, please contact our Solutions Team.

SECTION 4

Users

Create, edit and remove users and groups.
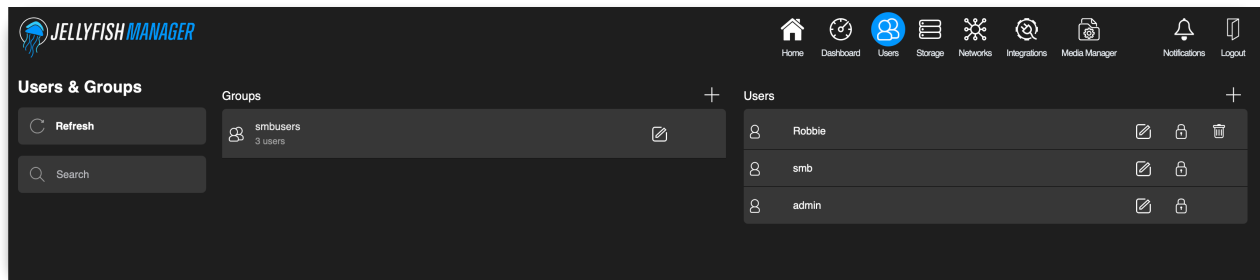
Search - If you have more users or groups than can be displayed on the page, use search to quickly locate a user or group.

Refresh - Refreshes the Users & Groups list.

Section 4.1
USERS

Individual users need to be created for each person who will use the Jellyfish. A single user cannot log in via multiple workstations simultaneously.

Create a new user: Click ➕ in the Users column.
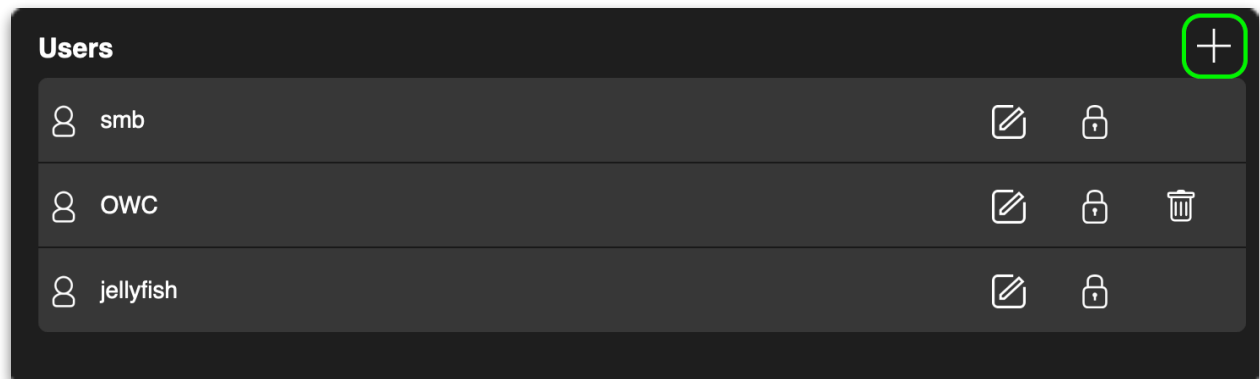
Admin Status - Enables Jellyfish Manager admin rights. Admins can modify delete users, shares and pools. *Only grant when necessary.*

Username - Enter a unique username here. Usernames are case sensitive and cannot contain spaces. *Required field*.
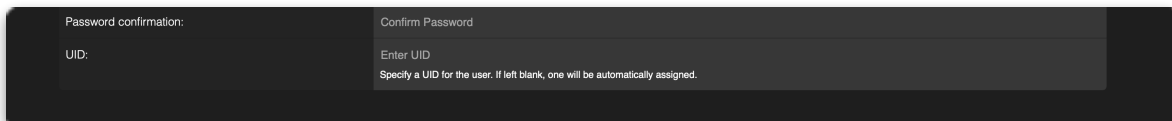
First name / Last name - Enter the name of the user for improved organization.

Email Address - Enter the user's email address in order to receive **Notifications** from the Jellyfish. **Notifications** still need to be set up in the **Notifications** tool.
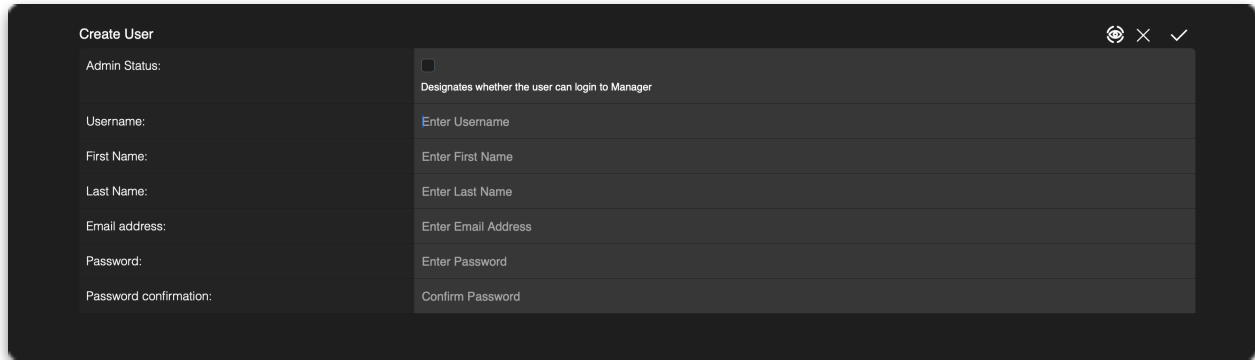
Password / Password Confirmation - Set the user password. Requirements will be listed when you click this field. Case sensitive. *Required field.*

Click ✅ to save.

If upgrading from JFM 2, turn on UID/GID editing by clicking 👁 *to manually link existing UIDs and GIDs to new users and groups, preserving your original permissions. A list of your JFM 2-based UIDs and GIDs can be obtained by Jellyfish Support **prior to performing the upgrade**. Jellyfish Support will need remote access to your Jellyfish in order to obtain this.*

To delete a user click 🗑 by the relevant user. **Cannot be undone**.

To change a user password, click 🔒.

Change Password: admin

Password:	Enter Password
	• Your password can't be too similar to your other personal information.
	• Your password must contain at least 8 characters.
	• Your password can't be a commonly used password.
	• Your password can't be entirely numeric.
Password confirmation:	Confirm Password
	Enter the same password as before, for verification.
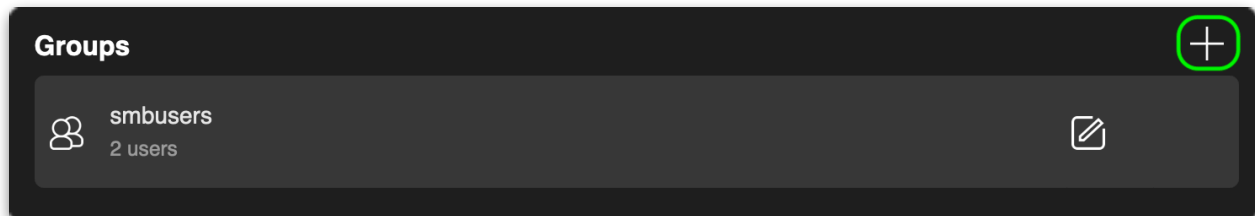
Click ☑ to save.

Section 4.2
GROUPS
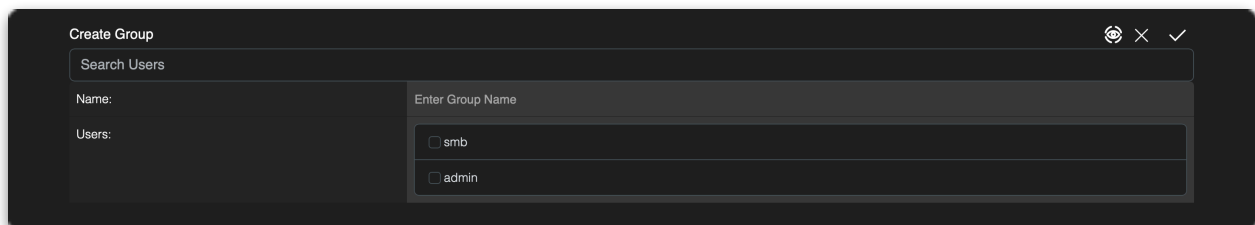
Useful for setting permissions by role or responsibility, instead of a per-user basis.

<u>Create</u> a new group: Click ➕ in the Groups column:

Groups   ⊕

👥 **smbusers**   🖉
   2 users

Create Group   👁 ✕ ✓

Search Users

Name:	Enter Group Name
Users:	☐ smb
	☐ admin

Name - Name for your group.
Users - Select users to add to the group.

Click ☑ to save.

To delete a group, click the 🗑 by the relevant group. **Cannot be undone**.

SECTION 5

Storage

Manage shares and edit permissions.

This is where you will find your existing shares, and where you can create new ones. Each share lists which pool it is on and capacity used.

Depending on your Jellyfish model, it will come with either one or two pre-configured shares: either just "Jellyfish", or also "Project." Both use SMB.

"Jellyfish" is for general storage; "Project" is for project storage. *"Project" does not have redundancy and should not be used to store important data*.

If your Jellyfish does not have the "Project" share, it is because the performance of the Jellyfish renders this unnecessary.

Section 5.1
CREATE A SHARE

To create a new share, click ⊞ in the SMB or NFS column.
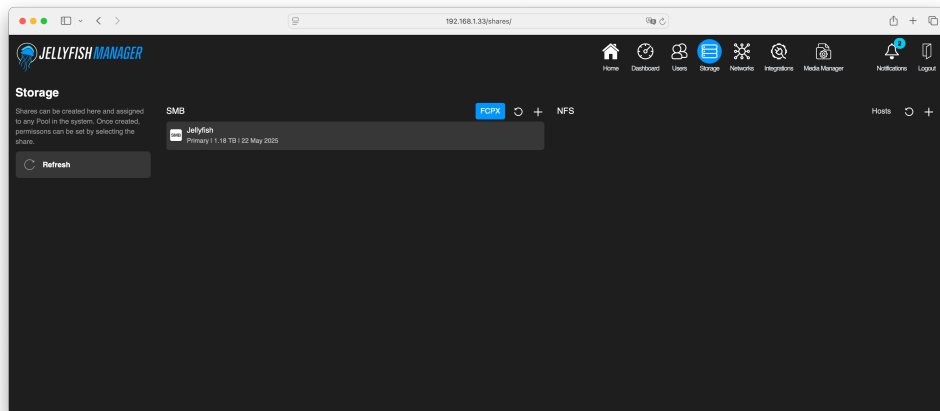
Whether you choose SMB or NFS depends on the needs of your workflow.

SMB is more performant when dealing with large files.

*NFS is more efficient when working with a high number or smaller files, but has lower bandwidth overall. Unless you know you need NFS for your specific use case, we recommend using SMB. **NFS is not compatible with Windows**.*

Name - Name your share. Be mindful of disallowed characters.

Pool - Select a pool. In most cases, you will only create a share on the Primary pool.
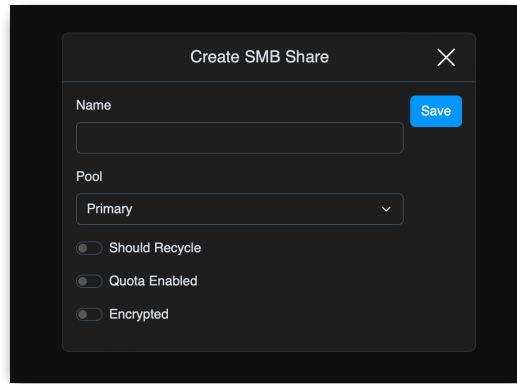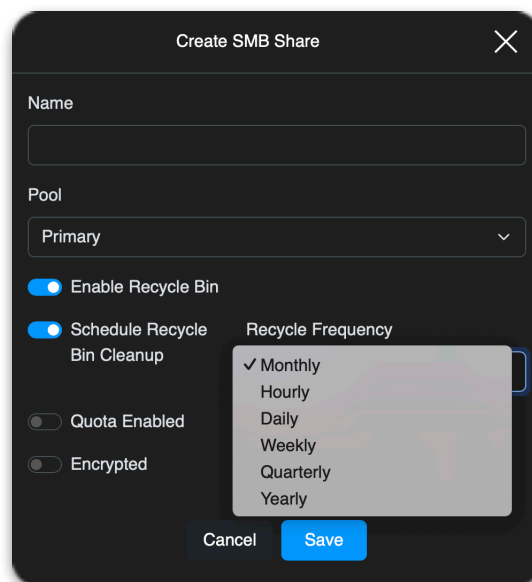**The Project pool is not redundant and should not be used to store important data.**

Recycle - When enabled, deleted files will go to the folder "_Recycle" at the top level of the share, serving as a "backstop" that allows you to recover deleted files.

> Recycle can set to empty on a schedule. When enabled, the default is monthly, however, you can change this to be more aggressive or lenient.

> *If Scheduled Cleanup is not enabled, you will need to manually empty the Recycle folder from time to time by selecting its contents and in macOS Finder or Windows File Explorer and then clicking delete.*
>
> ***Scheduled Cleanup clears the entire _Recycle folder on a regular cycle****. It* <u>*does not*</u> *clear only specific files (i.e. files that are 30 days old).*
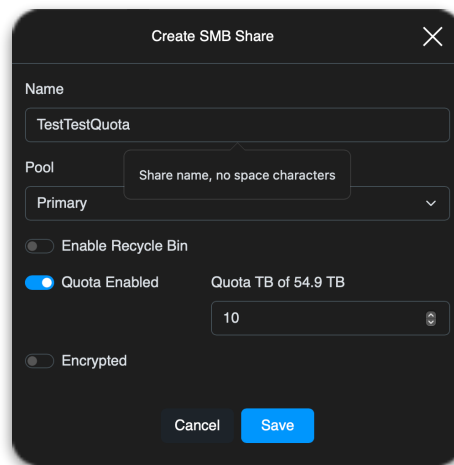
*When you enable Recycle, you must restart the SMB service for it to take effect. You can do this by clicking the refresh button in the SMB column. **Active SMB users will be disconnected**.*

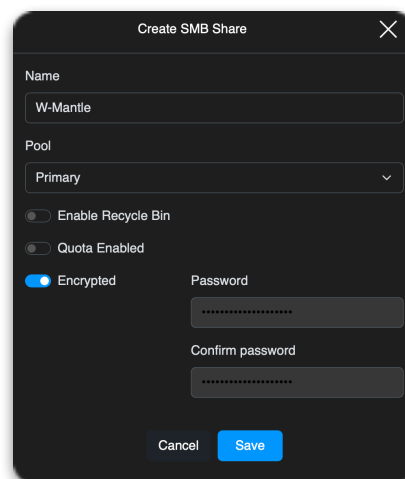*The _Recycle folder appears after at least one file has been deleted.*

Recycle is not available for NFS shares.

Quota Enabled - Set a maximum amount of storage space that the share can use. This is measured in TB and must be a whole number. This prevents one share from using all the storage on the entire pool.

Create SMB Share

Name

TestTestQuota

Pool

Share name, no space characters

Primary

Enable Recycle Bin

Quota Enabled   Quota TB of 54.9 TB

10

Encrypted

Cancel   Save

Encrypted - Enables encryption. Can only be enabled at the time of share creation. **If the encryption key is lost or forgotten, the data on that share will be permanently lost, and Jellyfish Support will be unable to assist.**

Create SMB Share

Name

W-Mantle

Pool

Primary

Enable Recycle Bin

Quota Enabled

Encrypted   Password

••••••••••••••••••

Confirm password

••••••••••••••••••

Cancel   Save

> *Upon startup or reboot, encrypted shares will be "incomplete" in Jellyfish Manager. To access your encrypted shares, you must follow these steps in Jellyfish Manager:*
>
> 1. *Click on each encrypted share*
> 2. *Designate the share type (SMB or NFS)*
> 3. *Enter the encryption passkey.*
>
> *For technical details on encryption, please contact Jellyfish Support.*

Need to **edit a share**? Click on the share you would like to modify.
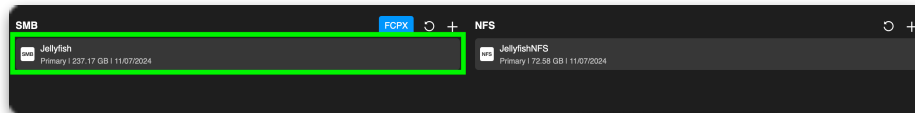
You can still turn Recycle on or off, set, change or remove a quota, and change the name of the share, but you won't be able to turn encryption on or off.

> *If you rename a share, you may need to relink media since the path changed.*

Click **Edit...** to edit permissions.

Click 🗑 delete a share. **Active users will not be warned. Cannot be undone.**

FCPX Compatibility Mode

Final Cut Pro users need to enable FCPX Compatibility Mode. To do this, click **FCPX** .

FCPX will not function with this disabled.

> *FCPX Compatibility Mode can only be turned on system-wide. This means either all SMB shares have Compatibility Mode turned on, or none do.*
>
> *As FCPX Compatibility Mode may lead to unexpected behaviors with other applications, it should only be enabled if you are using FCPX.*
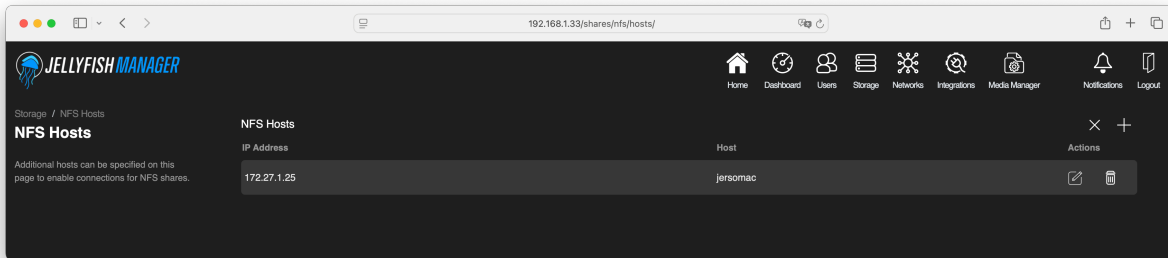
Section 5.1.1
SETTING UP NFS

If you want to work with NFS, you must create a list of workstations that will access the Jellyfish. This list must include the workstations IP address as well as its hostname. **Any typos or omissions may result in instability for all users.**
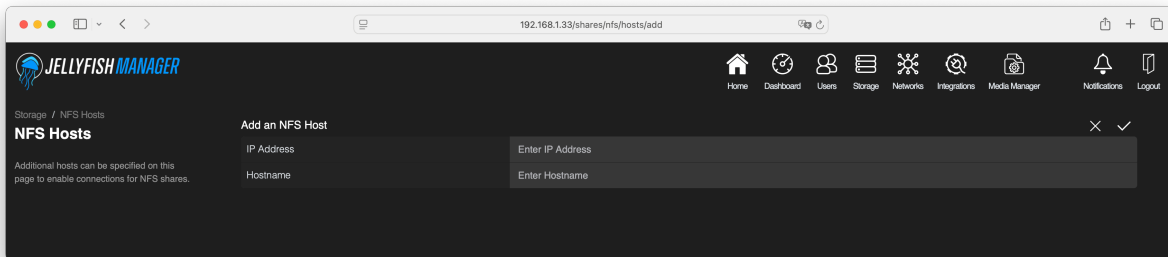
To create or edit your list of expected workstations, click "Hosts" in the NFS column:
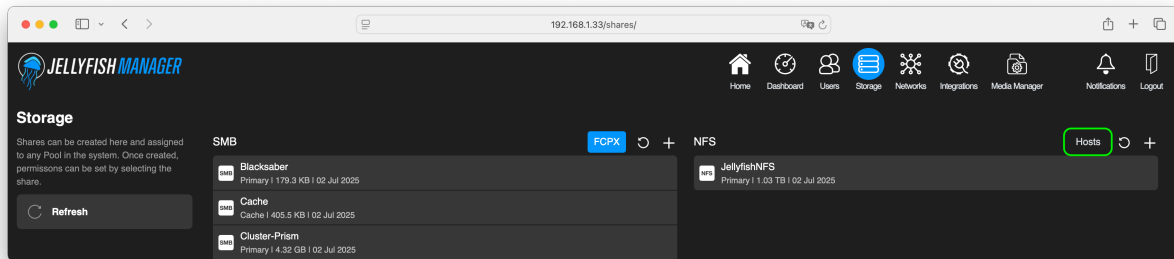
This will bring up the list of workstations that you expect to connect to NFS. While you can list workstations that don't connect to NFS, you cannot omit workstations that do.

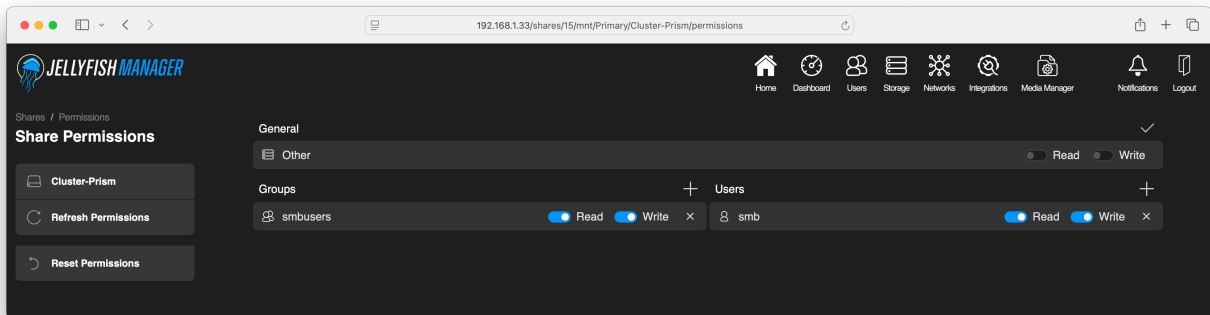To add a new workstation to the list, click + .

Double check your work, and click √ to save.

Section 5.2
PERMISSIONS

Permissions are how you control access to your Jellyfish.

NFS does not permissions. If permissions are a requirement, please use SMB shares.

Click on the SMB share for which you would like to edit the permissions. Then click `Edit...` to edit permissions.

Only the user "smb" and the group "smbusers" will have read/write access at first.

"Other" enables read and write access to all users and should be disabled unless necessary.

Add desired users and groups here. Click ➕ to do so. Users and groups that are added here have read and write disabled by default so make sure you set them as desired. Toggle will be blue when enabled. Click ✖ to remove a user or group.

Click ✅ to save.

Refresh Permissions - Forces a refresh of the permissions page.

Reset Permissions - Returns permissions to default. All non-default users and groups will be removed from the permissions scheme on this share.

To leave this view, you can click back in your browser or "Storage".

When setting permissions for a large number of users, it can be helpful to add them to groups so you can set permissions for the group rather than each user one by one.

When adding a user to multiple groups, use care that the permissions do not conflict.

SECTION 6

Networks

Manage network network interfaces.

Shows info for your network ports. Edit settings on a per-port basis here. The number of ports shown will vary from Jellyfish to Jellyfish.

Port - The name of your port. Cannot be edited.

State - Shows if the port is in plugged into a physical device.

IP Address - The IP address of the port. Computers that are connected to this port can connect manually by entering this address into the relevant OS tool (i.e. macOS Finder).

Subnet Mask - The subnet mask of the port.

DHCP - Indicates if DHCP is enabled.

DHCP Can only be enabled on one port or bond at a time.

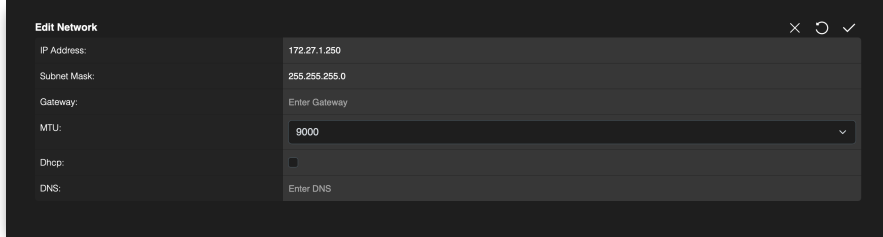*Cannot be disabled if you are connecting to the Jellyfish through it.*

Speed - Negotiated speed between the Jellyfish and the device that is connected to it.

Bonds - Create or manage a network bond. To create a new bond, click .

A port cannot be added to a bond when it is actively in use. This is to prevent accidental disconnection.

To view further details on a port, or to edit its settings, click :

Edit Network

IP Address:	172.27.1.250
Subnet Mask:	255.255.255.0
Gateway:	Enter Gateway
MTU:	9000
Dhcp:	
DNS:	Enter DNS

IP Address - Change the static IP address of this Jellyfish port.

Subnet Mask - Change the subnet mask of this Jellyfish port.

Gateway - Set the gateway for this Jellyfish Port.

Gateway cannot be changed if DHCP is enabled.

Gateway cannot be added if already set on another port.

MTU - Set the MTU of this Jellyfish Port. 9000 is recommended for 10G connections.

It is important to match what the device on the other end (workstation, switch, etc.) is set to. A mismatch can lead to poor performance and instability.

DHCP - Enable or disable DHCP, which is a quick and easy way to set up a network connection. However, a static IP address is recommended for switched environments.

Before enabling DHCP, The Jellyfish port must be connected to a switch port that has DHCP enabled. Additionally, DHCP cannot be set when it is active on another port.
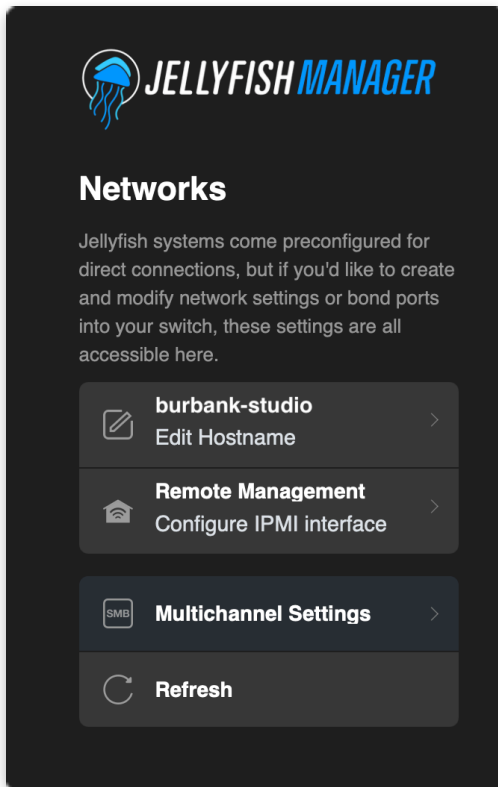
DNS - Enter the DNS you would like to use.

DNS and DNS Search cannot be set if DHCP is enabled on another port, or if DNS is already set on another port.

Click √ to save.

<u>**Additional Settings**</u> are located on the left hand margin of the Networks page:

Edit Hostname - Your Jellyfish will automatically generate a random hostname, but if you need to, you can edit the hostname here.

Remote Management - Alter your IPMI settings to allow it to be network accessible. ***Document any changes so you don't lose access to this vital port***.

SMB Multichannel - Direct connect up to four 10Gbps network ports of your computer to any Jellyfish, increasing the single client read / write speeds to ~30Gbps. ***SMB shares only.***

Further configuration may be required on your computer for SMB Multichannel. Please discuss with your IT administrator.

Refresh - If you believe the network list is stale, you can click Refresh to update it.

SECTION 7

Integrations

Install and manage third party plug-ins.
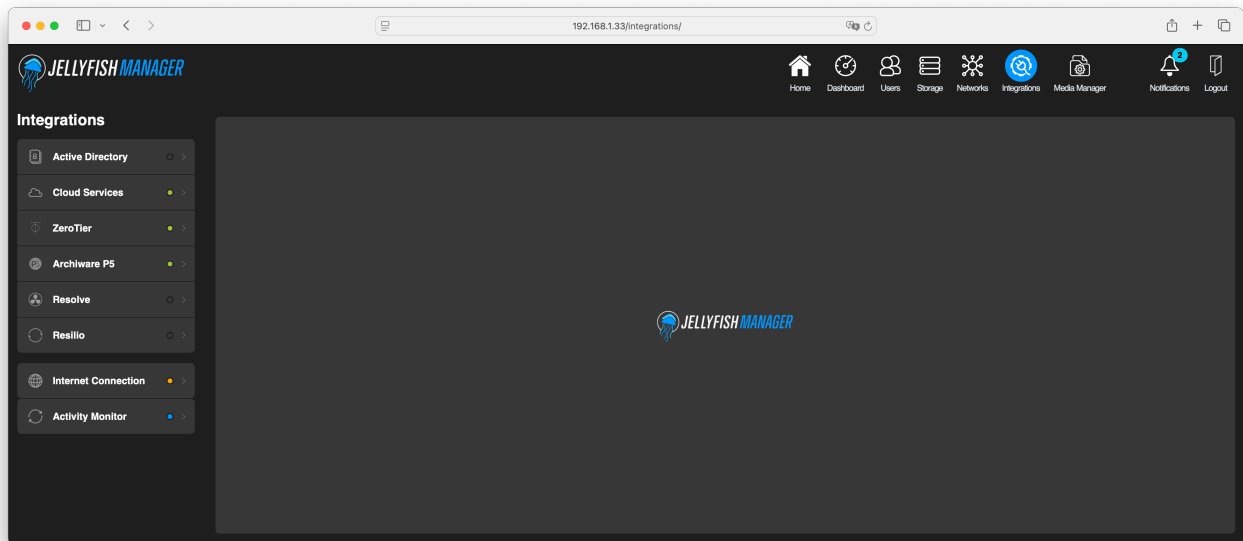
For details on each, please refer to the tool's developer.

Internet connection may be required. You can verify the Jellyfish's internet connection via the indicator in the lower left margin.
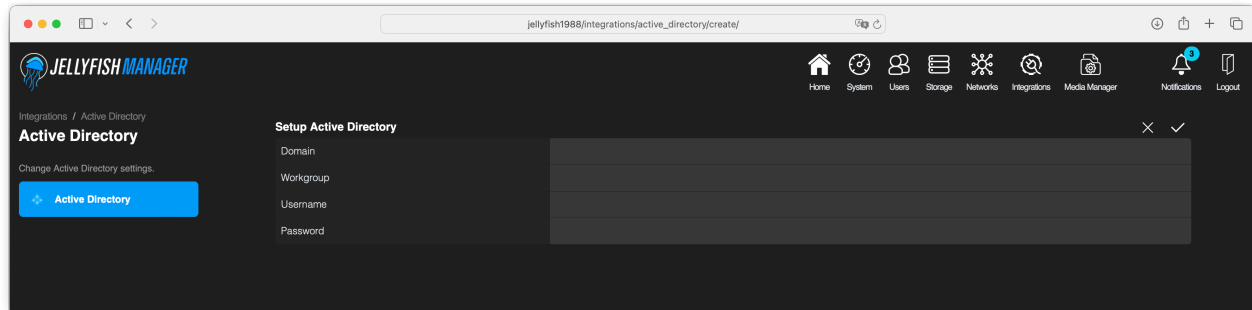
Fees may apply.

Section 7.1
ACTIVE DIRECTORY

Join your Active Directory environment. To get started, you will need your Domain, Workgroup, and an appropriate username / password.

Section 7.2
CLOUD SERVICES

Online backup solutions for your Jellyfish. If you don't have an account with your service of choice, you will need to create one first.

Internet connection required. Fees may apply.
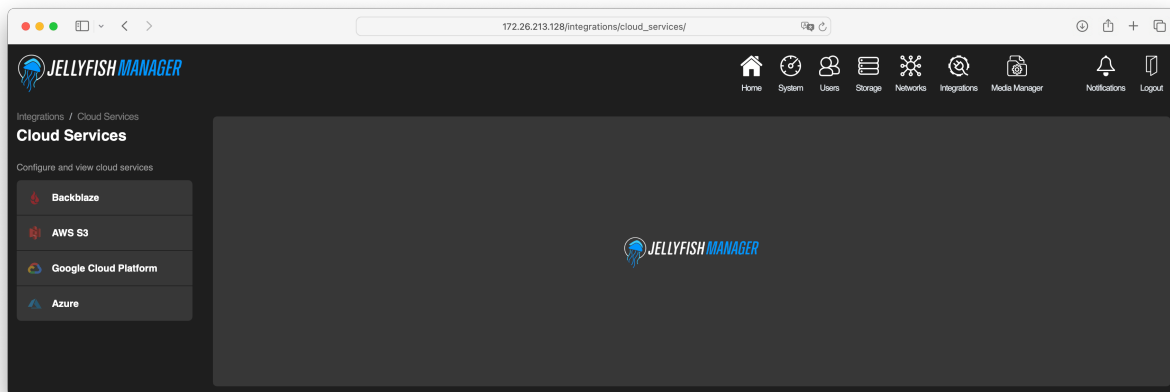
Each service will differ slightly in what is required for setup. You can obtain the required information through the service's web portal.

You can set up multiple services and multiple buckets simultaneously.

AWS S3

Azure

## Backblaze

Google Cloud Platform

Section 7.2.1
CLOUD SERVICE SETUP

Once logged in, select what you want to backup ("folder path"), where you want to backup ("bucket"), and set a schedule. You can click ⟳ to manually backup.

Click **Select Jellyfish Folder** to pick the directory to backup. If you wish to type in the folder path instead, remember to start with '/mnt/poolname/' (i.e. /mnt/Primary/).
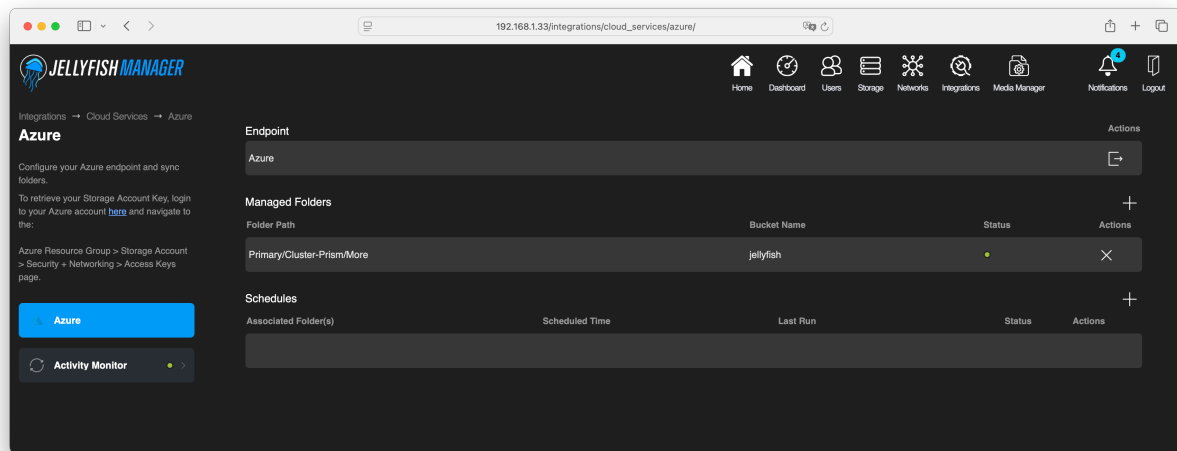
It may take a moment for Jellyfish Manager to load the the available source folders.
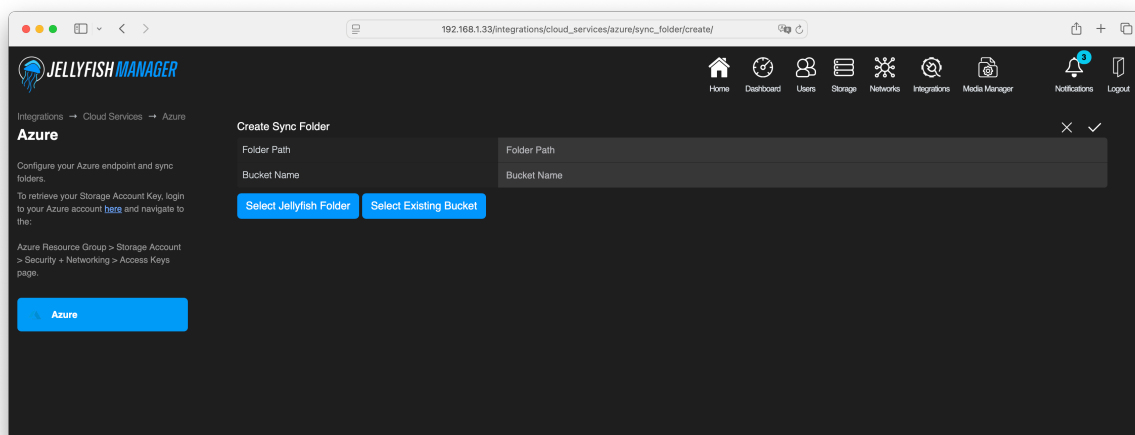

Click **Select Existing Bucket** to pick a destination for your backup from your cloud account's existing buckets, or type in the name of the bucket in the **Bucket Name** field.

Now you're ready to set a backup schedule. Click **+** in the Schedules section to begin.

Confirm the source, even if you have just one set up. Pick as many days to backup as you like, or select 'all' to backup daily. Enter the time you wish the backup to begin.
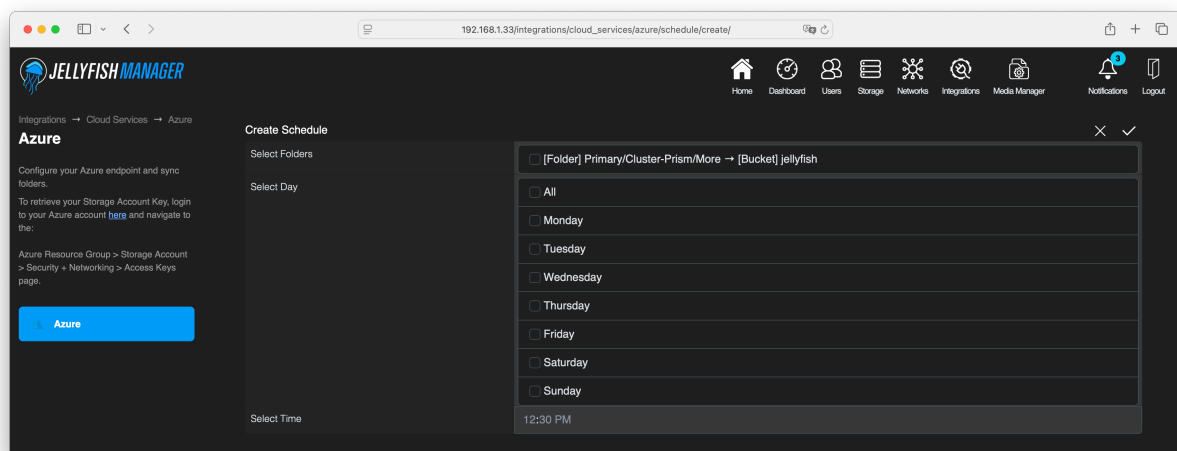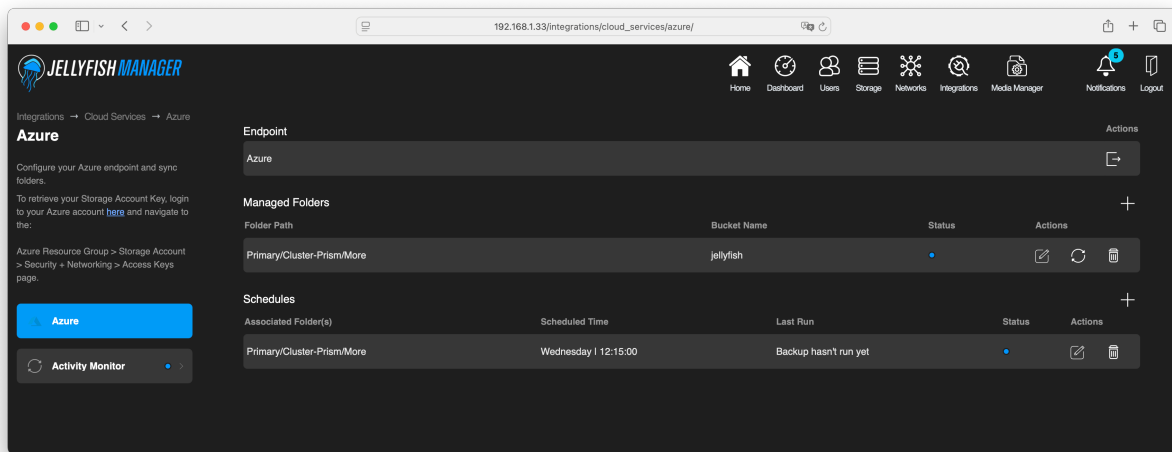

Click √ to save.

Congratulations! You have completed your cloud backup setup.

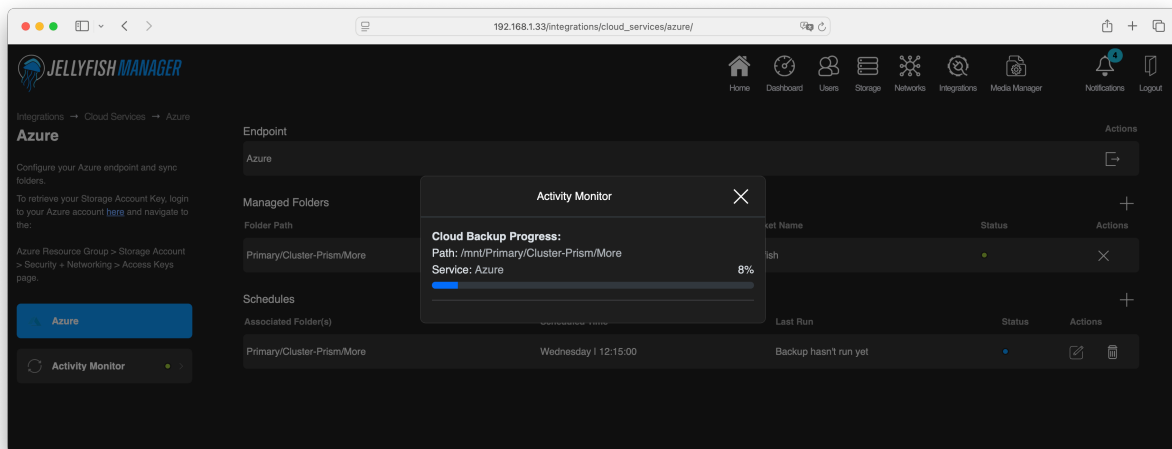From the main panel, you can see the folder you've set up to backup, the date(s) and time(s) it is set to run, and when the last backup completed.

To manually initiate a backup, click .

When a backup is underway, the indicator by Activity Monitor in the left margin will turn green. You can click Activity Monitor to check the progress.


*A new backup will not begin while another backup is running.*

Section 7.3
ZEROTIER

A peer-to-peer virtual network that allows remote users to connect to your Jellyfish. If you don't have a ZeroTier account already, you will need to create one.

You will need to install ZeroTier before you can proceed. Your Jellyfish must be connected to the internet for this step. Installation may take a few minutes.
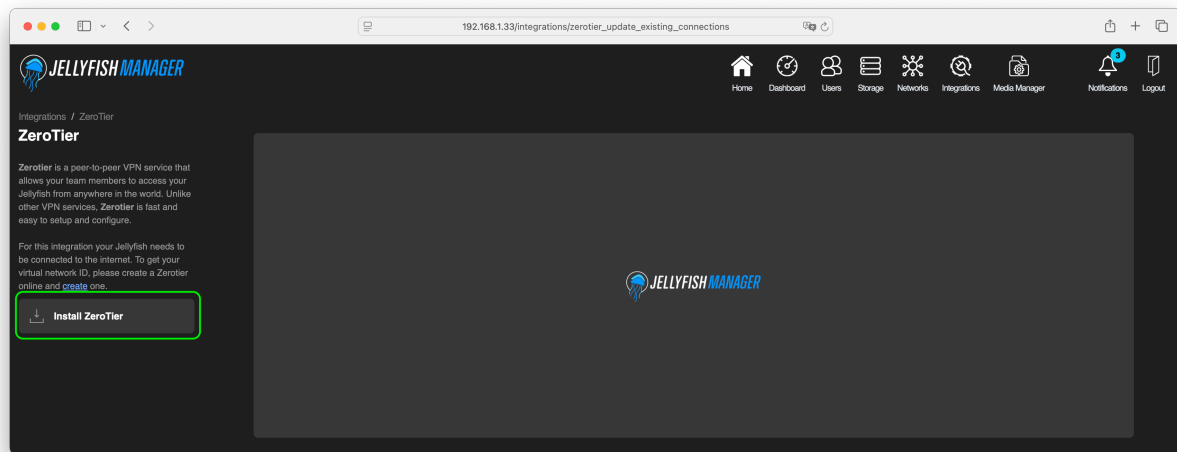
Once installed, enter your Network ID and click the checkmark to save. ZeroTier's software will complete the configuration.
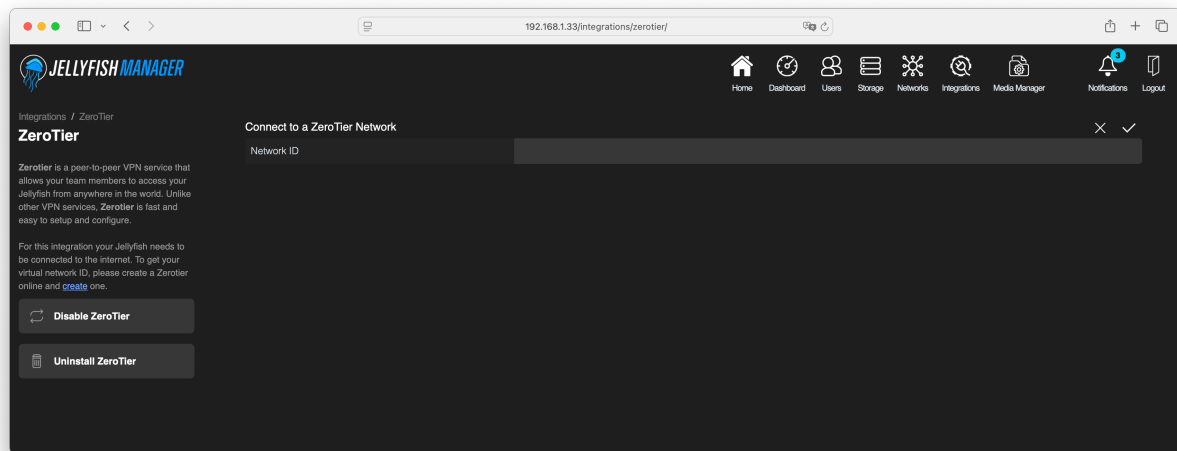

You will need to approve your Jellyfish's Host ID in ZeroTier's admin portal. Please see ZeroTier's knowledge base for full how-to and technical details.

Once you've set up your ZeroTier network, you will still need to configure your workstation's connection to the Jellyfish as you would with any other setup.

If Jellyfish Connect does not detect your Jellyfish over the ZeroTier network, you can manually connect by entering the Jellyfish's ZeroTier-provided IP address (macOS Finder > Connect to Server, or Windows Manually Map Network Drive.)

Your ZeroTier-provided IP address can be found here:
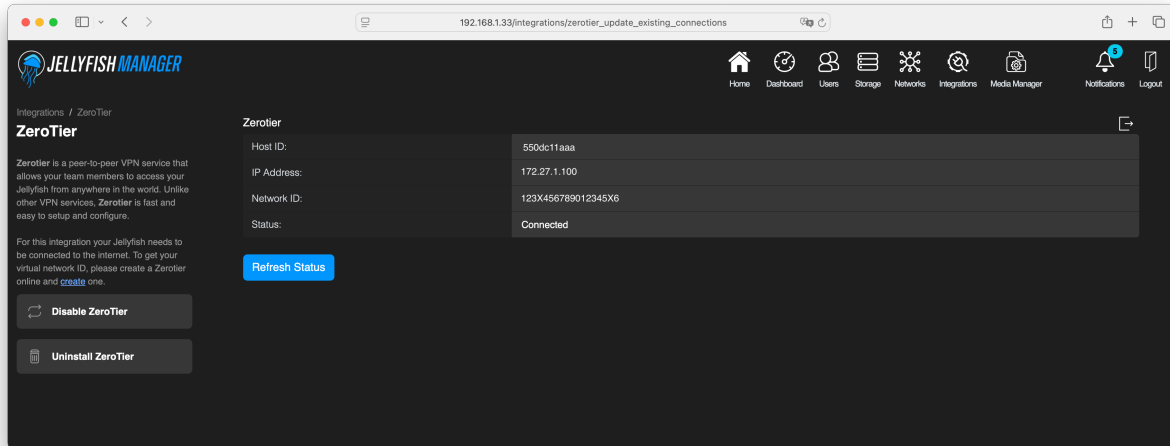
Performance is dependent on many factors, including bandwidth at both the user and Jellyfish ends, network / internet congestion, geographic distance, etc.

Some networking environments are hostile to ZeroTier's peer-to-peer design. Please refer to their documentation for guidance on troubleshooting.
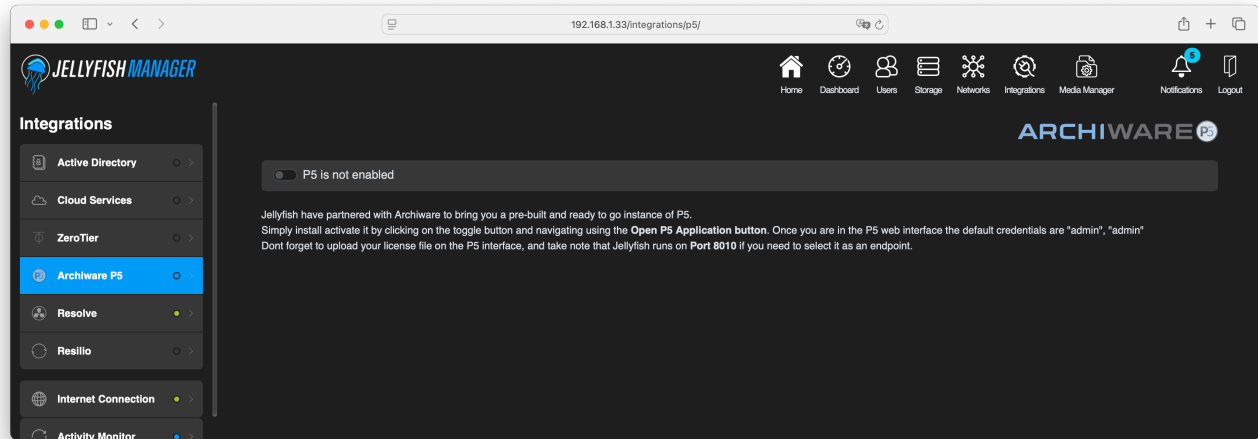
Section 7.4
ARCHIWARE P5

Data management software that is designed with Media and Entertainment industries in mind to conveniently archive, backup and synchronize to another Jellyfish, NAS or LTO. *License required.*

To enable, click the toggle and wait for Archiware P5 configure. Archiware P5 runs on Port 8010 if you need to set it as an endpoint.

Section 7.5
RESOLVE

A postgres database is already created for use with Resolve, so nothing needs to be installed or enabled. Default credentials are listed on the Resolve integration page.

We recommend connecting to Resolve's postgres database via a 10G network connection, with media accessed via a separate direct line.

It is strongly recommended that you backup your Resolve databases regularly.

You can backup your collaborative projects directly in Resolve's Project Manager.
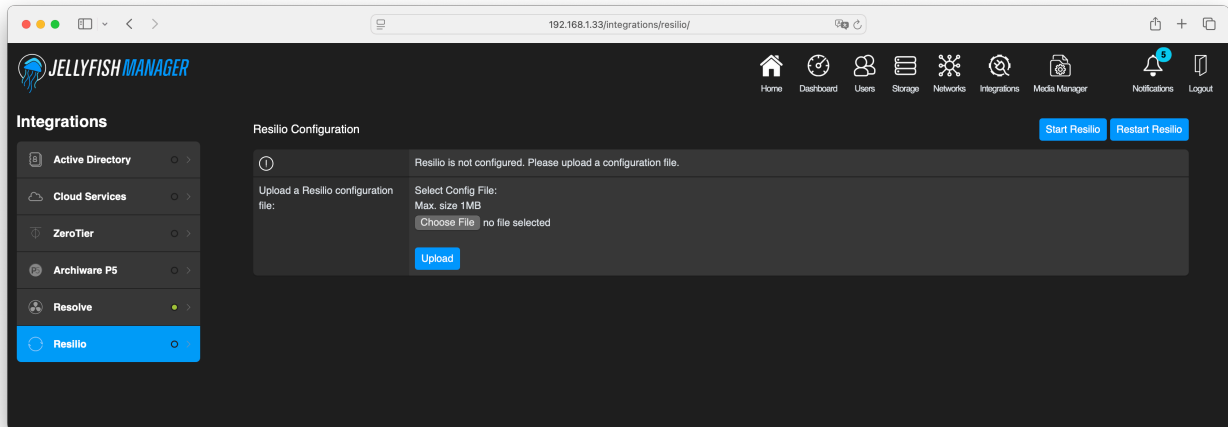
Section 7.6
RESILIO

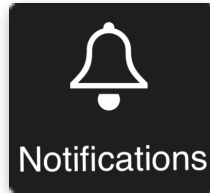Peer-to-peer synchronization software. Useful for transferring big files over the internet.
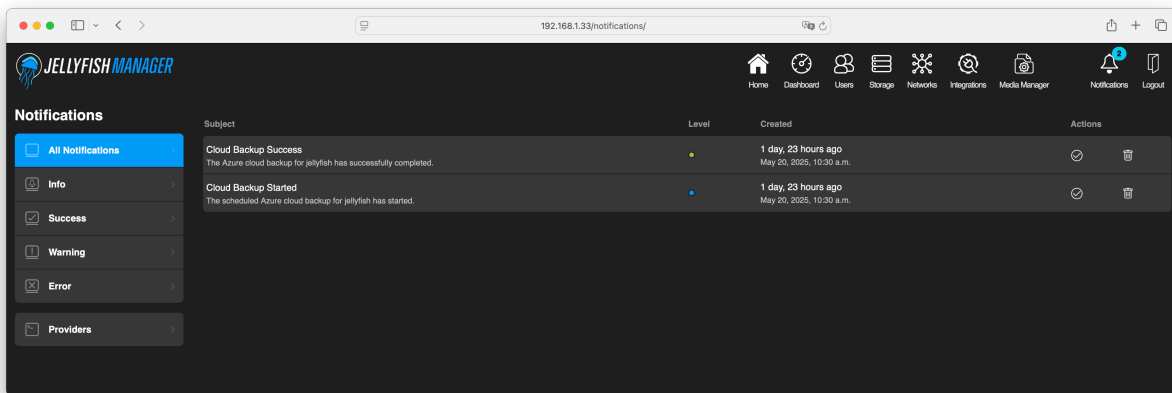
To get started, upload your Resilio configuration file.

Don't see a tool that you'd really like to use? Contact us at jellyfish.support@owc.com
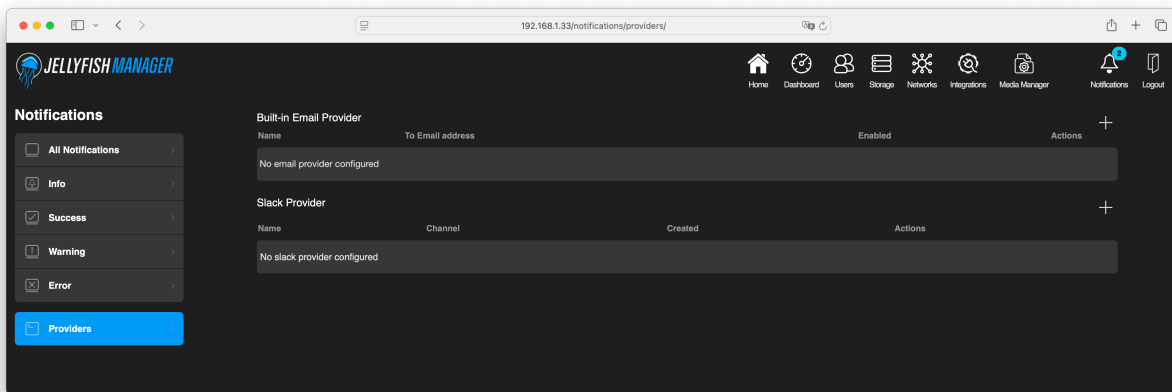
SECTION 8

Notifications

Notifications allows you to receive messages for certain major events like a disk failure. You can choose either email notifications or Slack messages. **Internet required.**

Click on a filter to simplify your view.

Click Providers to setup.

Click ✚ for either email or Slack. Fill out the required fields and save.

Have questions or feedback on this guide? Want to request a feature for Jellyfish Manager 3? Please contact us at jellyfish.support@owc.com