

How to Install OpenMediaVault on a Raspberry Pi

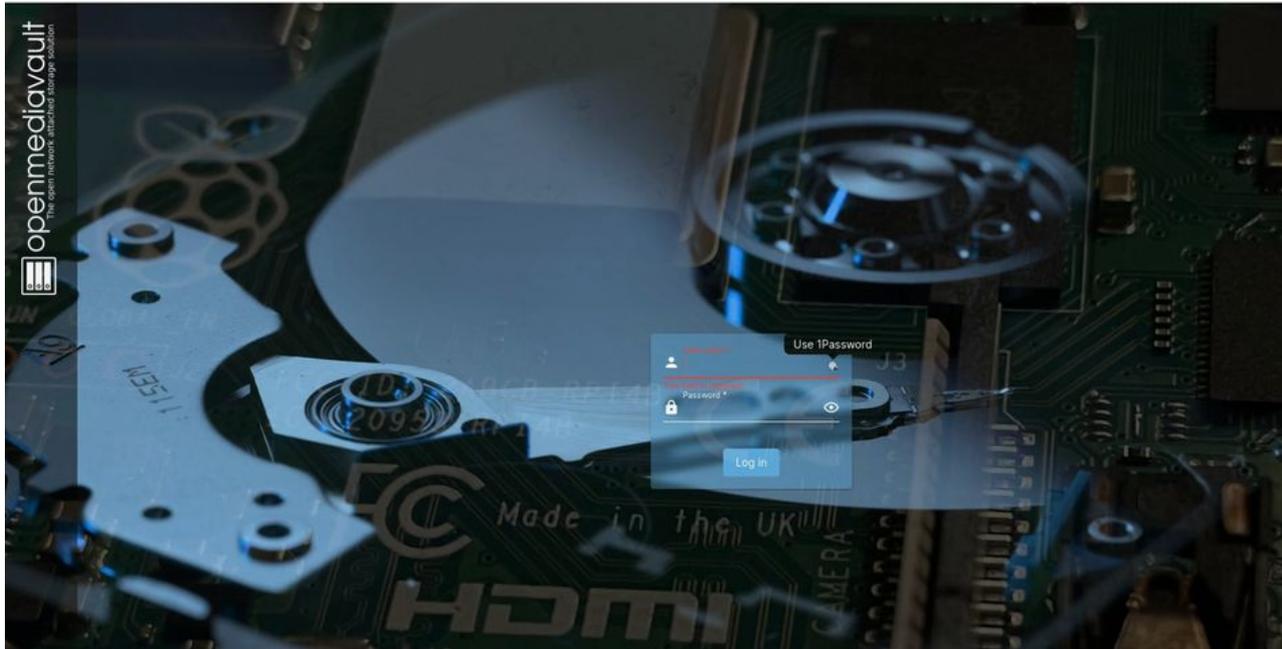
 makeuseof.com/install-openmediavault-raspberry-pi

October 5, 2022

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Published Oct 5, 2022

OpenMediaVault is great software for creating your own NAS, and the Raspberry Pi is an affordable and wonderfully low-powered device for the job.



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Many enthusiasts have rallied together to create some awesome free software (and excellent guides) to help the average user create a home server in as little as a few minutes. Thanks to their creativity, we now have so many options to choose from.

With the right tools, you can create a media server, network storage solution, ad blocking security, music streaming service, Apache web services, and more. OpenMediaVault is one such free home server solution that, when paired with the Raspberry Pi, creates an affordable server in your own home.

What Is OpenMediaVault?

OpenMediaVault was originally created as a network attached storage solution. Thanks to a simple interface you can perform much of the required server administration from any device (with a web browser) in your home.

As long as the web browser is on the same home network as your Raspberry Pi, you have the ability to add users, set up file sharing, install certificates (SSH and SSL), spin up docker containers, and review your server's performance from the comfort of your laptop

or tablet.

What You'll Need



Make sure you have the following items before starting to set up your home server on your Raspberry Pi.

- Raspberry Pi 4 (recommended)
- Storage
 - SD Card (Base installation: 8GB; up to 256GB for additional storage)
 - Additional Storage (External SSD/M.2 via USB) is recommended
- Monitor (during the initial installation)
- HDMI to micro-HDMI cable
- Ethernet outlet and cable
- Power supply (ensure the power supply is capable of powering your Raspberry Pi and external storage)
- Keyboard and mouse

Installing OpenMediaVault

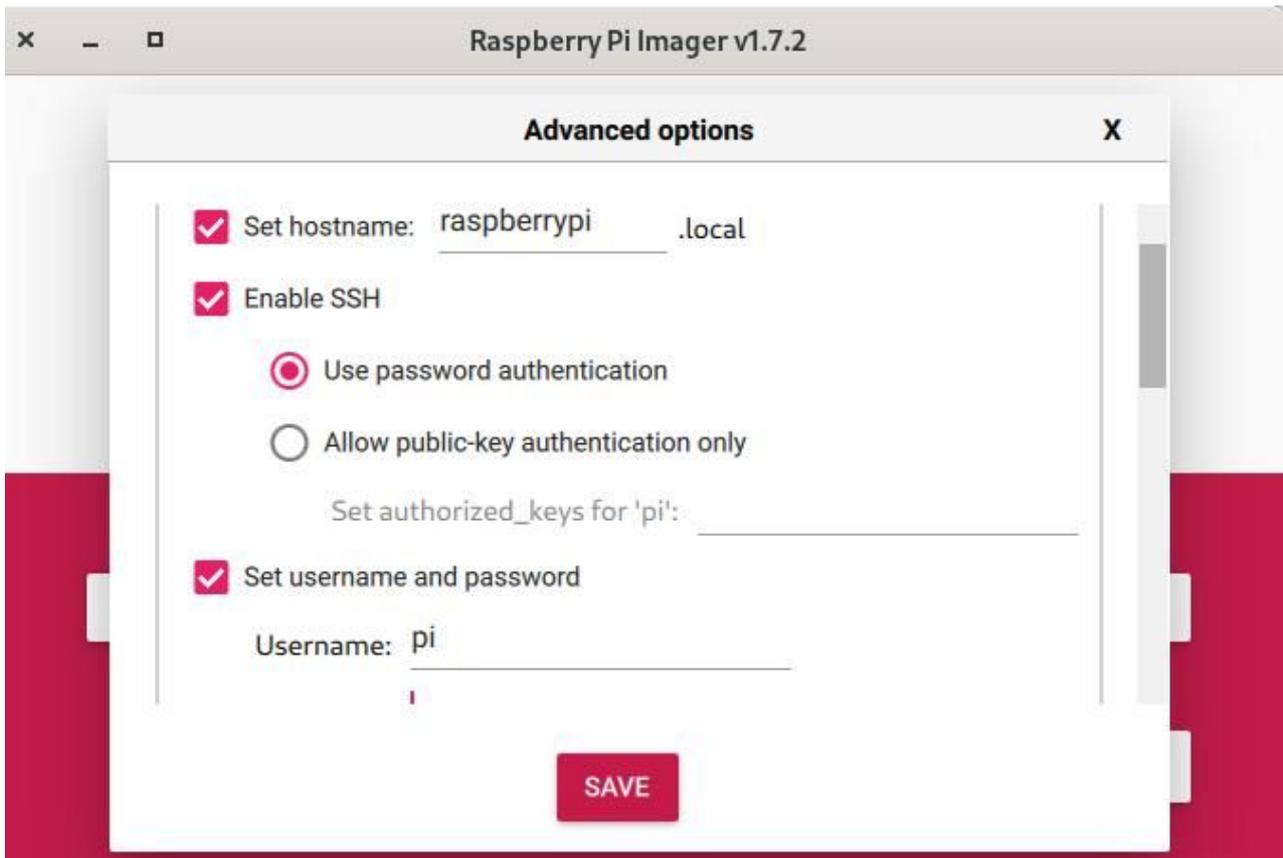
First, you'll need to install Raspberry Pi Lite OS on the SD card you wish to use with your Raspberry Pi. The easiest way to do that is by using the Raspberry Pi installer. Using Linux, open up a terminal and type:

```
sudo apt install rpi-imager (Debian)
```

```
sudo snap install rpi-imager (other Linux distributions)
```

Alternatively, you can use this guide for help with [installing Raspberry Pi Lite OS](#) from any operating system. Make sure to select Raspberry Pi OS Lite (64-Bit). Follow along with the intuitive prompts and relax. This will take a few minutes to complete.

As you go through the installation process, ensure that you select the advanced options in order to set a hostname and enable SSH. Setting a hostname is easier than having to memorize your IP address and an SSH connection will be required when you'll access your Raspberry Pi terminal remotely. When you set a username and password take extra care to remember this information.



screenshot

When the installation is complete the Raspberry Pi will come to a log in screen (this is where the monitor comes in handy).

```
OK ] Started Authorization Manager.  
Starting Modem Manager...  
[ OK ] Finished Permit User Sessions.  
[ OK ] Started Getty on tty1.  
[ OK ] Reached target Login Prompts.  
[ OK ] Started LSB: Switch to ondemand  
[ OK ] Started LSB: Resize the root fil  
[ OK ] Finished Check for Raspberry Pi  
[ OK ] Started Modem Manager.  
[ OK ] Started OpenBSD Secure Shell serv  
  
Debian GNU/Linux 11 raspberrypi tty1  
  
raspberrypi login: _
```

Enter your username and password you created during the initial installation. When you're logged in, it's a good practice to update the newly installed operating system, reveal the Raspberry Pi IP address, and installing the OpenMediaVault software.

Most operating system images that are bundled with installers do not come with the latest updates. It's easy to ensure that you're up-to-date with the following instructions. As well, enter your password when prompted:

```
sudo apt update && sudo apt upgrade
```

Now, you'll need to find your IP address. Type in either of the following commands:

```
ip addr  
ifconfig
```

You'll find your IP address under the **eth0** section and beside **inet**.

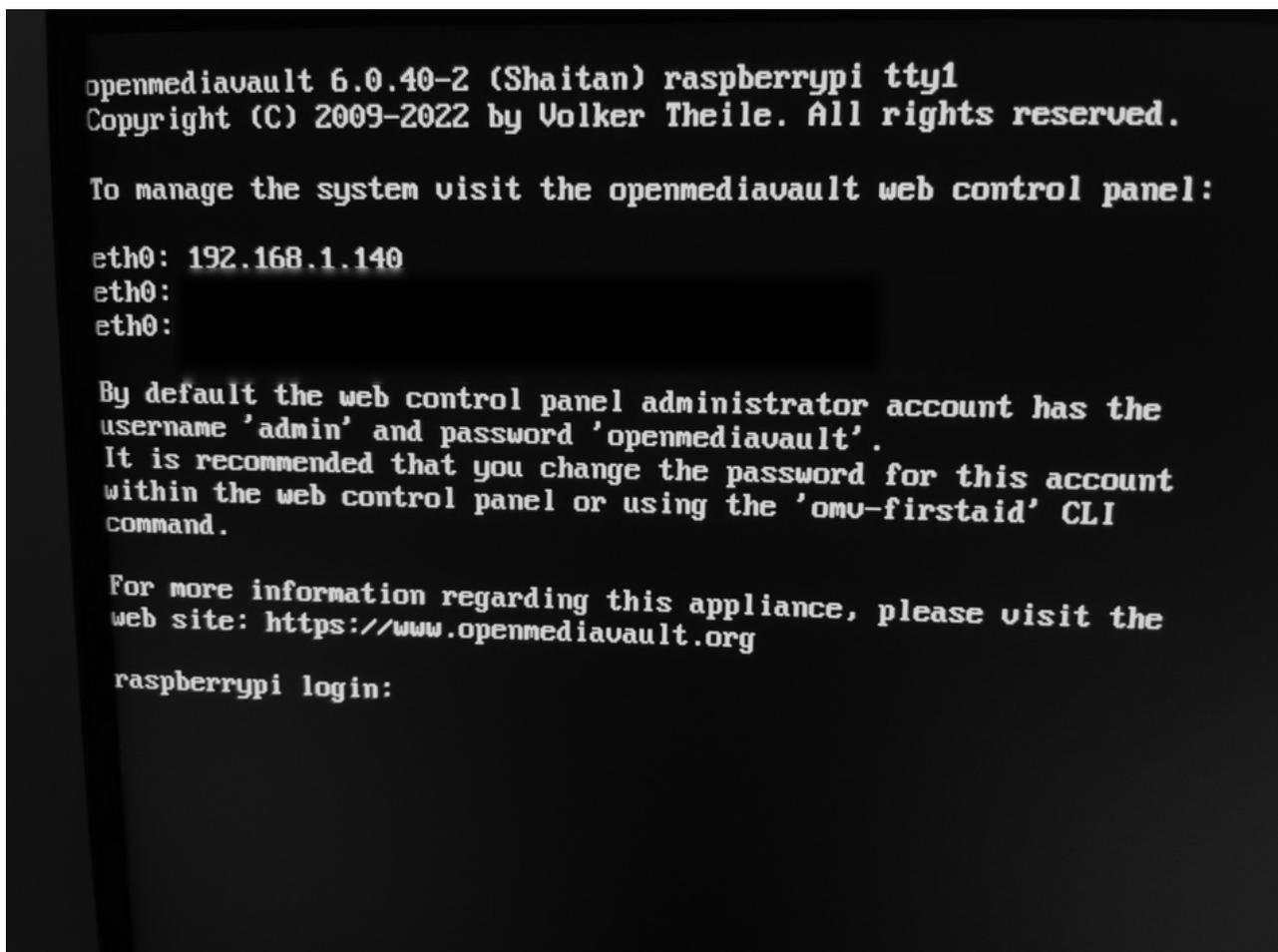
At the nearby computer, open up a terminal (or similar program) and type SSH user@IP Address (replace user with the username you created during the initial installation and the IP.Address with the IP address revealed moments ago. For help with connecting to your Raspberry Pi remotely, take a look at our [SSH into Raspberry Pi walk-through](#) for details.

Now that you have the foundation of your Raspberry Pi server set up and ready, it's now time to install OpenMediaVault.

In the same application that you connected to your Raspberry Pi remotely via SSH type the following command:

```
sudo wget -O - <a href="https://github.com/OpenMediaVault-Plugin-Developers/installScript/raw/master/install">https://github.com/OpenMediaVault-Plugin-Developers/installScript/raw/master/install</a> | sudo bash
```

Once prompted, enter your password to continue. This will take up to 10 minutes to complete. When this activity is completed, you should see a screen similar to the one in the image.

A terminal window showing the OpenMediaVault boot sequence. The text is as follows:

```
openmediavault 6.0.40-2 (Shaitan) raspberrypi tty1
Copyright (C) 2009-2022 by Volker Theile. All rights reserved.

To manage the system visit the openmediavault web control panel:

eth0: 192.168.1.140
eth0:
eth0:

By default the web control panel administrator account has the
username 'admin' and password 'openmediavault'.
It is recommended that you change the password for this account
within the web control panel or using the 'omv-firstaid' CLI
command.

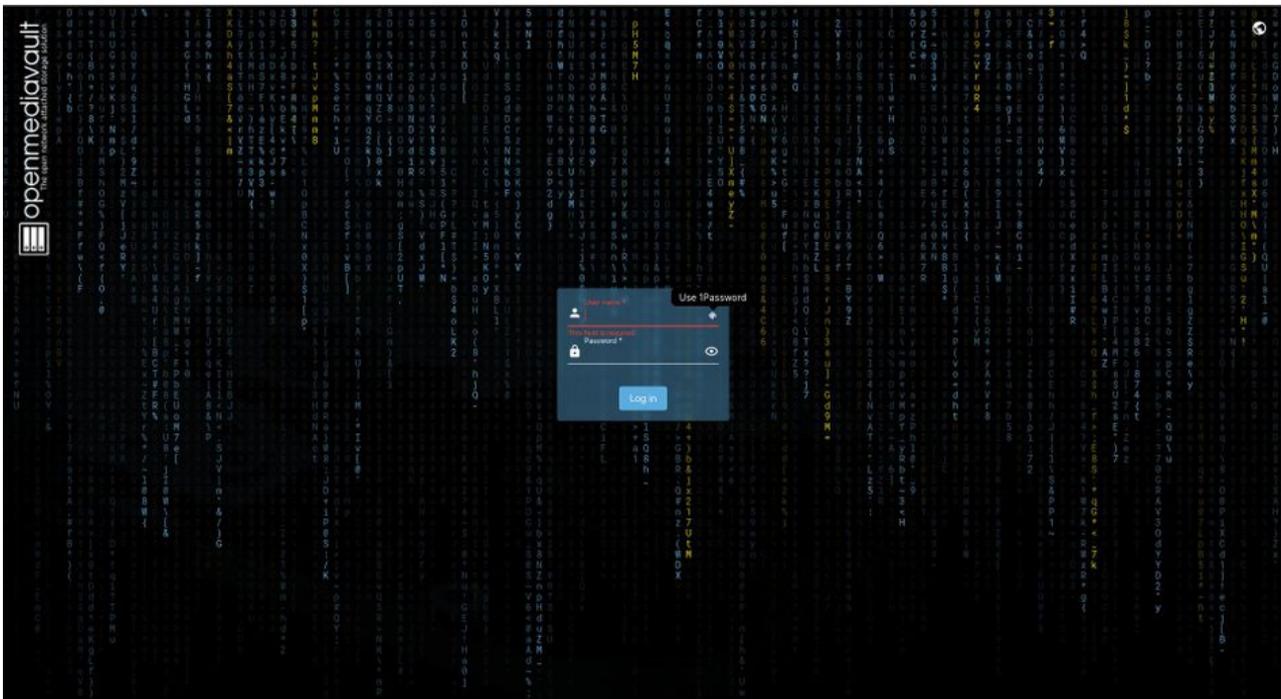
For more information regarding this appliance, please visit the
web site: https://www.openmediavault.org

raspberrypi login:
```

When your Raspberry Pi finishes rebooting, the IP address may have changed. You can either write down the new IP address (if it changed for you), or type raspberrypi.local in the address bar of the web browser at your remote computer.

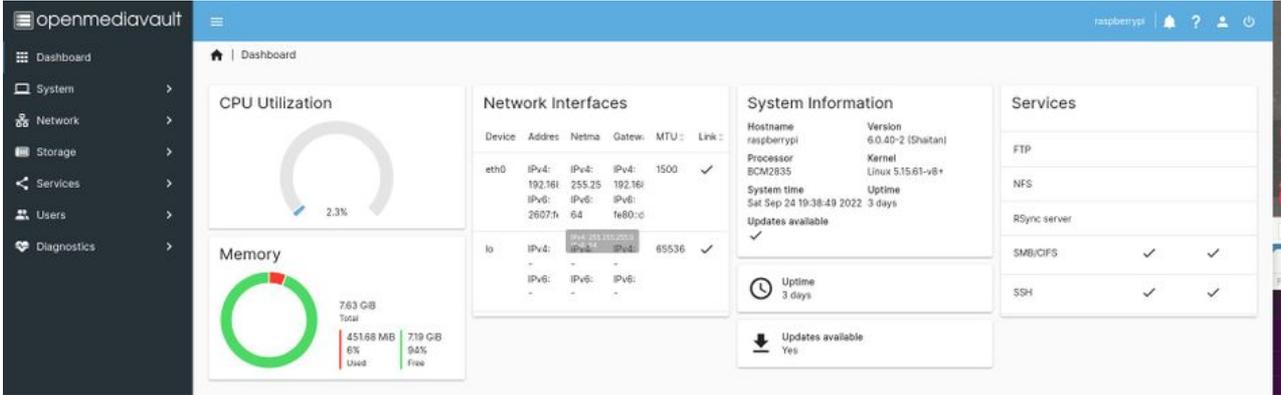
Take note of the default username (admin) and the default password (openmediavault) shared in the log-in greeting. This is *very* important. After you enter the IP address of your Raspberry Pi (or raspberrypi.local) into your computer's web browser, you will see a log in screen.

Customizing Your Server



Now, type in the default username and password to log in to your server! You'll be greeted with a dashboard that requires setting up. But, first be sure to change the default password. To do so, click on the person icon at the top right of the main OpenMediaVault screen.

The included dashboard includes monitoring information for your CPU, memory, containers, file systems, services, network interfaces, and other diagnostic tools. After selecting the settings page hyperlink (within the Information message) you'll be presented with a list of options. Click the boxes beside your preferred diagnostic metric and press save.

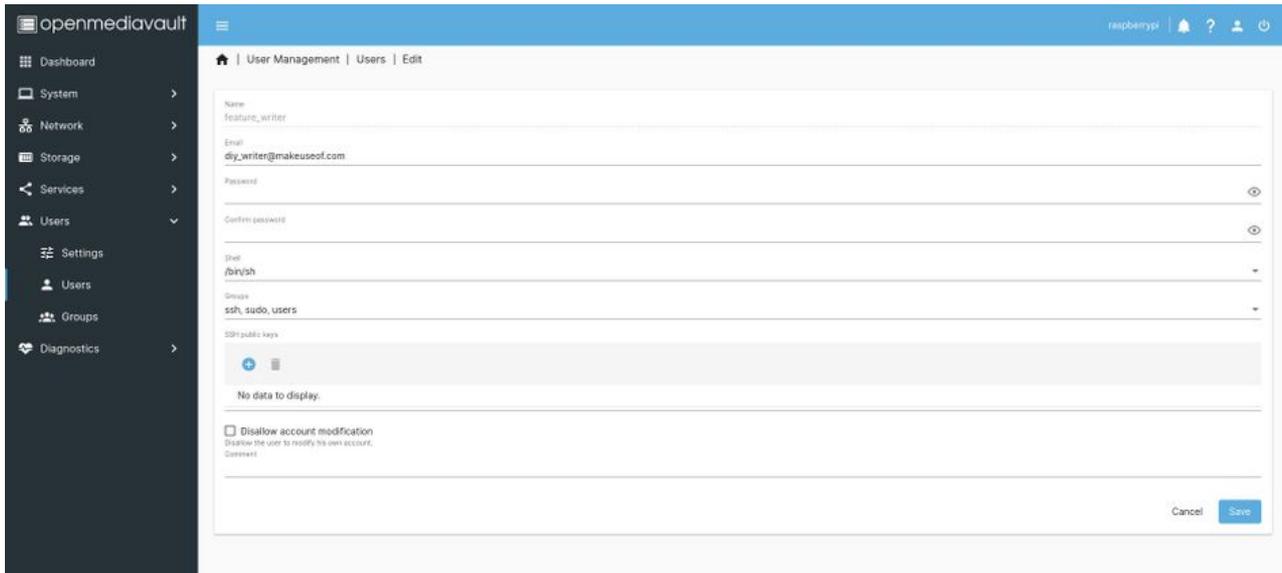


To modify your dashboard widget settings, simply click on the person icon at the top right and select dashboard.

Adding Users

Select **Users** > **Users** from the left-hand menu. Then choose the blue plus icon at the top left and fill out the required fields. Don't forget to press save.

You'll see your users listed in along with email and group information related to each user. To modify user details, click on the user row and press the pencil icon above the name heading. You should see something like the user details shown in the image.

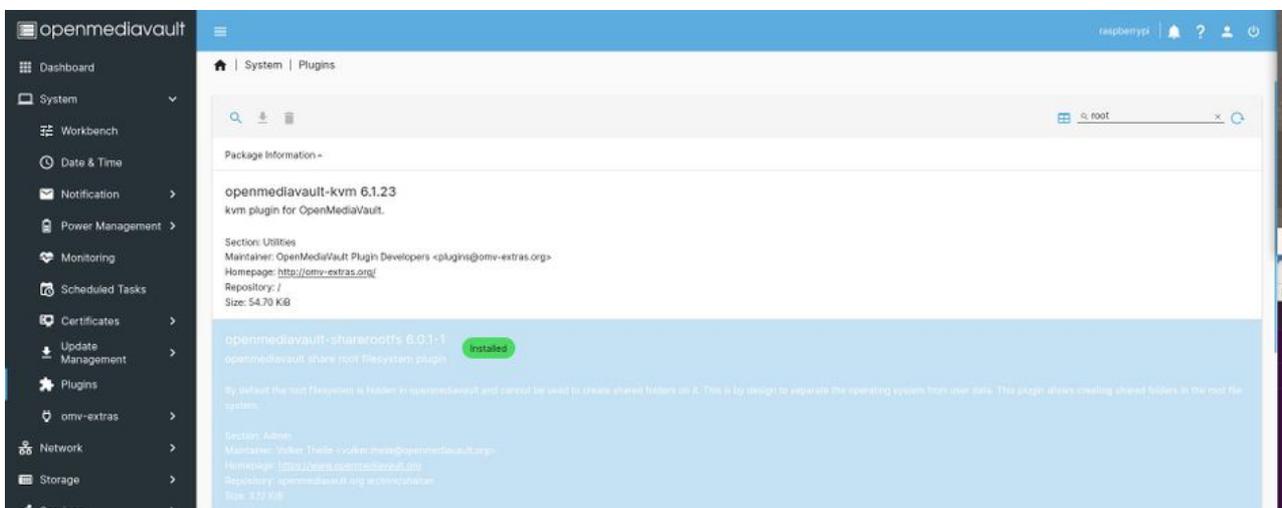


To better understand Linux user and group permissions, take a moment to review our guide for a detailed understanding of [Linux user and group permissions](#).

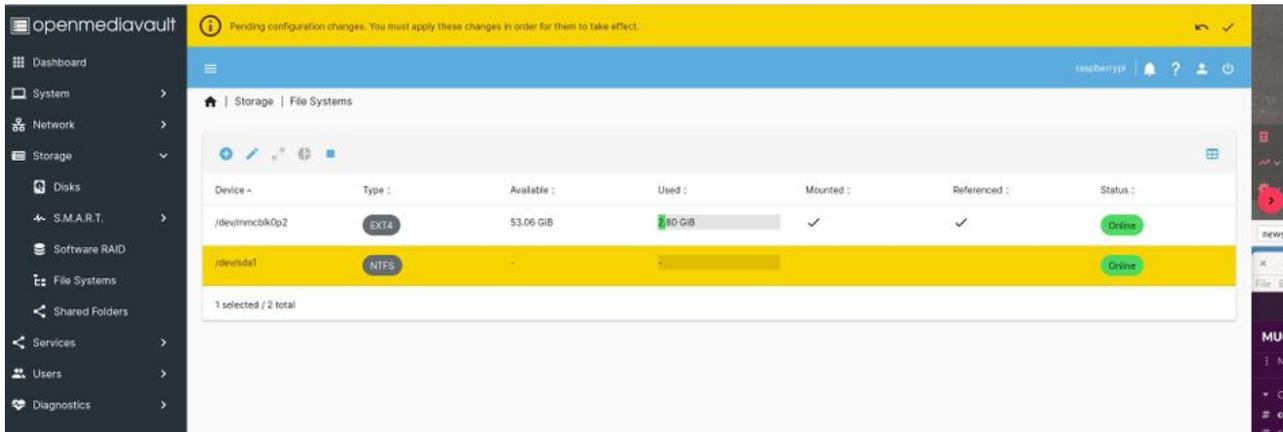
Connecting Storage

You can choose how you want to use your attached storage. For example, you can use that 128GB SD card that you bought with a Raspberry Pi kit. You can also use a larger usb drive that is collecting dust. Before you can use your SD card you'll need to tell OpenMediaVault to use the root file system for your server storage as well.

Choose **System > Plugins** on the left-hand menu. In the top right of this screen you'll see a magnifying glass and a line. Search for "root" and you'll see the "opemediavault-sharerootfs plugin." Simply select the plug in you want to install and then select the down arrow (above the words Package Information near the top of the screen).



With that out of the way, select **Storage (left side) > File Systems**. Once you're there, select the blue plus icon near the top of the screen and choose mount. Then, select the file system you want OpenMediaVault to connect to and press save.



You'll also notice a warning message at the top. Select the checkmark (top right of this admin tool) to ensure that your changes are saved. Press Yes when asked if you want to apply the changes.

Other Options

You can also add samba file sharing so that you can easily transfer files to your new Raspberry Pi server. To get started, choose **Services > SMB/CIFS**. Check out our guide to learn [what file transfer method is best for you](#).

To keep your server secure it is important to deploy certificates. Select **Certificates > SSH or Certificates > SSL**. Click on the plus and follow the simple prompts. OpenMediaVault does the rest! Explore our guide to learn the [purpose of an SSL certificate](#) for details.

What Will You Create Next?

Will you create a web server, reverse proxy, pi hole, or a plex media server? Of course, you can always stick to what OpenMediaVault was originally designed for - a NAS solution.

Poll

Alexa vs. Google Assistant vs. Siri: Which do you prefer?
