

Setting Up Immich on the Raspberry Pi



by Emmet

Updated Jan 21, 2025

Beginner

Media

Servers



Save as PDF

If you buy through our links, we may earn an affiliate commission. [Learn More.](#)

In this project, we will explore how to install and run Immich on the Raspberry Pi.



[Immich](#) is a self-hosted photo and video backup software with a great web interface and useful mobile application.

Using this software, you can very easily back up your photos and videos directly from your Mobile phone to Immich. People often use this software as an alternative to Google Photos or iCloud. This software allows you to retain control over your images and saves you a monthly subscription.

Immich even has some of the fancier features of iCloud and Google Photos, with it able to automatically process your images with facial recognition, geolocation, and more.



Ad ends in 4

LATEST VIDEOS

This software is also a solid alternative to the self-hosted [photo app called PhotoPrism](#).

Setting up Immich on your Raspberry Pi is a very simple process. The reason for this is that it is available as a Docker container that has support for ARM.

One thing to warn you is that when you first sync all your photos into Immich, your Raspberry Pi will be pushed pretty hard. The reason for this is that it needs to process all of the images. However, after the initial sync it uses minimal resources outside of processing new images.

For the best performance, we recommend using at least a Raspberry Pi 4. However, the faster the Pi, the faster Immich can process your images.

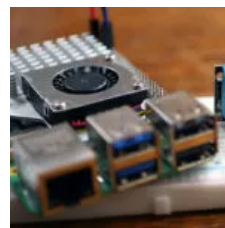
Additionally, Immich requires you to be running the 64-bit version of Raspberry Pi OS. 32-bit operating systems will not work.



[Setting up Home Assistant OS on the Raspberry Pi](#)



[Using Dropbox on the Raspberry Pi](#)



[Using the DHT11 Sensor on the Raspberry Pi](#)






Ad ends in 4








Equipment

Below, you can find the list of equipment we used when installing Immich on our Raspberry Pi.

Recommended

-  Raspberry Pi ([Amazon](#))
-  Micro SD Card ([Amazon](#))
-  Power Supply ([Amazon](#))
-  Ethernet Cable ([Amazon](#)) or Wi-Fi ([Amazon](#))
-  External Hard Drive ([Amazon](#)) or USB Drive ([Amazon](#))

Optional

-  Raspberry Pi Case ([Amazon](#))
-  USB Mouse ([Amazon](#))
-  USB Keyboard ([Amazon](#))
-  HDMI Cable ([Amazon](#))
-  Monitor ([Amazon](#))

This tutorial was last tested on a [Raspberry Pi 5](#) running Raspberry Pi OS Bookworm 64-bit.

Installing Immich on the Raspberry Pi

Over the following sections, we will be showing you how to install Immich on your Raspberry Pi.

Thanks to us being able to use Docker, this process is relatively straightforward. All we need to do is install Docker, pull some configuration files, and adjust some settings slightly.

Ad ends in 4

For most of the following steps we will be using the terminal. If you are using the Pi OS, you can open the terminal by pressing `CTRL + ALT + T`.

Backup your Photos using Immich and a Raspberry Pi



Preparing your Raspberry Pi for Immich

1. Before we install Immich on our Raspberry Pi, we should ensure our current system is up to date.

We can update the package list and then upgrade any out-of-date packages by using the following command.

```
Terminal $
```

 Copy

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

2. Our next step is to ensure that the wget package is installed on our system by using the command below.

We will [use wget](#) later to grab the Docker compose file and the environment configuration file.

```
Terminal $
```

Ad ends in 4

```
sudo apt install wget
```

3. We now need to install Docker so that we can easily run Immich on our device.

Please follow our guide on [installing Docker to the Raspberry Pi](#) to get this set up correctly.

4. After installing Docker, we can now create some directories where we will store the configuration files for Immich.

Create a directory called immich within the `"/opt/stacks/"` directory by [using the mkdir command](#).

```
Terminal $  
  
sudo mkdir -p /opt/stacks/immich
```

 Copy

5. With the directory now created, we can change into it by [using the cd command](#).

```
Terminal $  
  
cd /opt/stacks/immich
```

 Copy

Setting up the Docker Compose File

6. Luckily, the Immich team provided the Docker Compose file for us. All we need to do is download the file from their GitHub.

You can use `wget` to save this Docker compose file by running the command below.

```
Terminal $  
  
sudo wget https://github.com/immich-app/immich/releases/latest/download/docker-compose
```

 Copy

Writing the Environment File for Immich

7. Now that we have the Docker compose file for Immich saved to our Raspberry Pi, we can move on to its environment file.



Ad ends in 4

Immich's Docker container uses this environment file to set itself up. Download file to your Pi by using the command below.

```
Terminal $  
  
sudo wget -O .env https://github.com/immich-app/immich/releases/latest/download/example
```

We use the `-o` option so we can save this file as `.env` rather than `.example.env`.

8. Our next step is to begin editing this environment file to suit our needs better. The default settings will work but can be insecure and might save your images to a location you don't want to use.

```
Terminal $  
  
sudo nano .env
```

a. The first setting you will likely want to change is the upload location. This setting tells Immich where it should save files on your Raspberry Pi.

As images can very quickly take up a large amount of space, you will likely want to set this location to an external drive with ample space.

```
Replace With >  
  
UPLOAD_LOCATION=./library
```

b. The final value you need to set is the password Immich will use to interact with the Postgres database.

You will want to replace `postgres` with a secure long password.

```
Replace With >  
  
DB_PASSWORD=postgres
```

9. After making these changes to the environment file, you can save and quit by pressing `CTRL + X`, followed by `Y`, and then the `ENTER` key.

Starting Immich on your Raspberry Pi

10. We can now finally start up Immich on our Raspberry Pi by using the follo

ⓧ
Ad ends in 4

After running this, Immich will be downloaded to your Pi alongside the various
Depending on your internet connection, this may take a few minutes to compl

```
Terminal $  
  
docker compose up -d
```

By using the `-d` option, we are telling Docker to detach from the current terminal after it has started.

Accessing the Immich Web Interface

11. With Immich now up and running on your Raspberry Pi, we can access its web interface.

Ensure you replace `<YOURIPADDRESS>` with the [IP of your Raspberry Pi](#). If you are unsure what your IP is, you can use the `hostname -I` command.

Go To >

 Copy

```
http://YOURIPADDRESS:2283
```

12. When you first access Immich, you will be greeted with the following screen.

To proceed, you must click the `Getting Started` button.

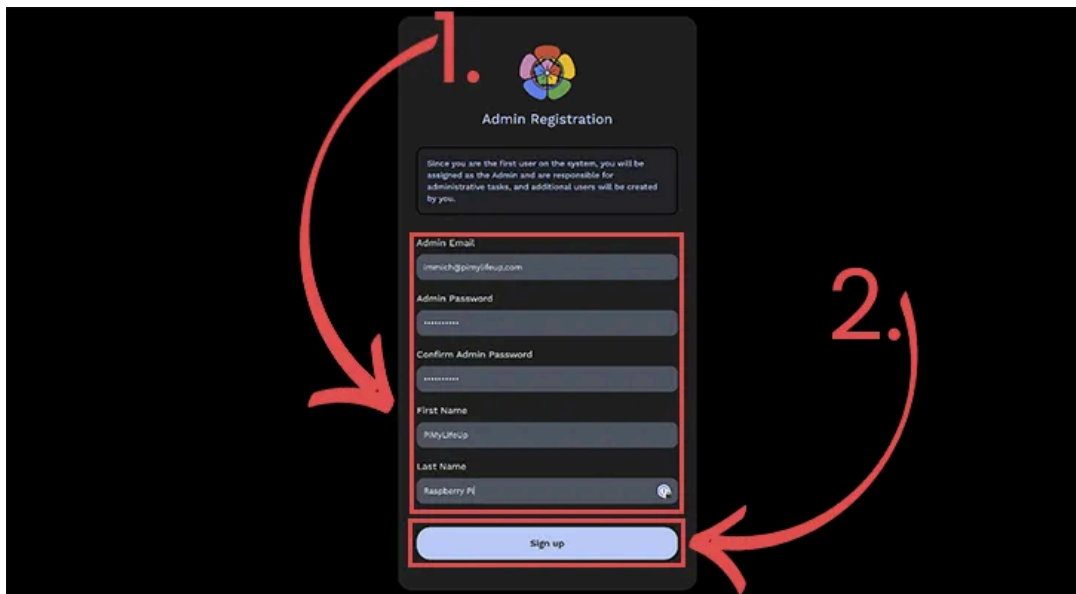


13. Next, you will be asked to create your admin account for Immich. Use the boxes to fill in the details for your admin account (1.).



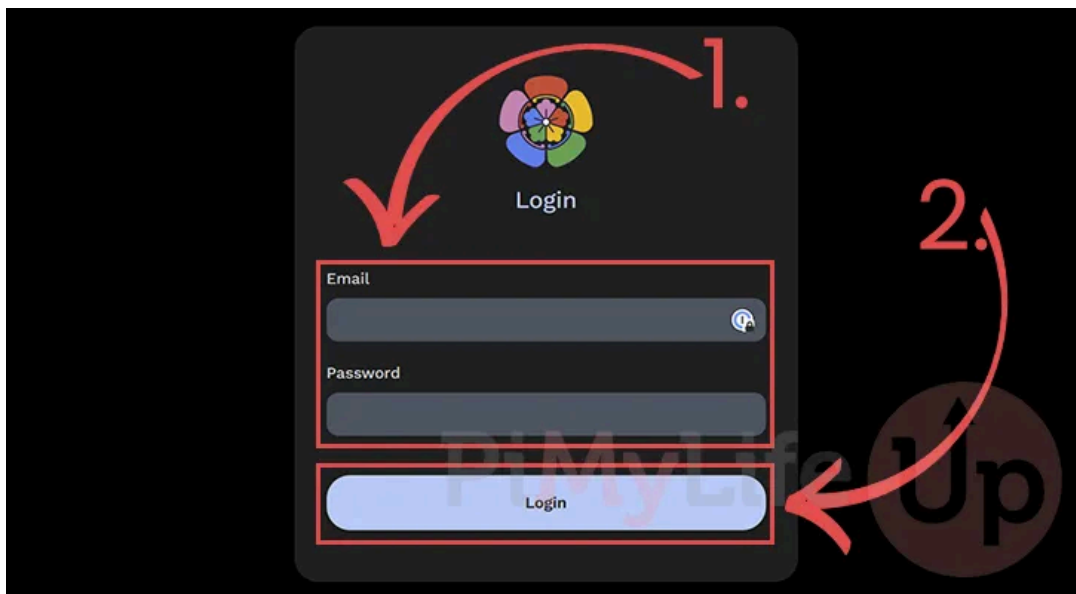
Ad ends in 4

After filling out your information, click the `Sign up` button (2.).



14. At this point, you can now log in to your new admin account by using the email and password you just set (1.).

After filling out your information, click the "Login" button (2.).

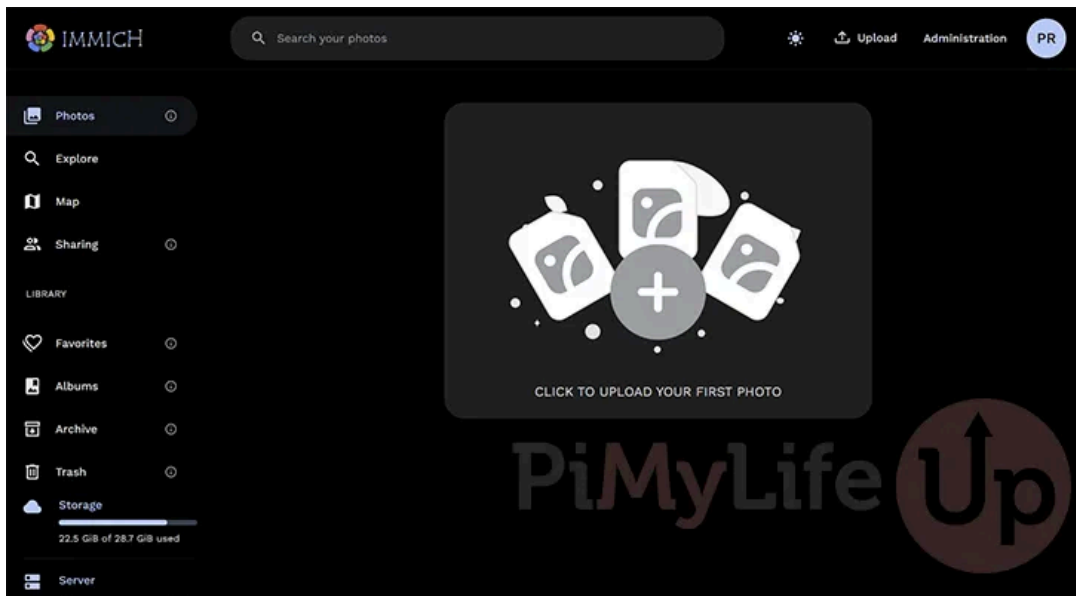


15. You now have access to Immich running on your Raspberry Pi.

You can start uploading your images, create new accounts, and more.



Ad ends in 4



Updating Immich on your Pi

Immich is a software that gets updated fairly often, so you will want to know how to update it.

Luckily, since we are running it as a Docker container, updating Immich on your Raspberry Pi is a really simple process.

1. First, you need to ensure you are in the Immich directory we created earlier on in this guide.

Change to this directory by running the command below.

```
Terminal $
```

 Copy

```
cd /opt/stacks/immich
```

2. Once we are in the correct directory, we can use Docker compose to pull the new Immich container to your Raspberry Pi.

All we need to do to pull the new images is to use the following command.



Ad ends in 4

```
Terminal $
```

```
docker compose pull
```

3. After pulling a new version of the container, you need to restart Immich by using the command below in your terminal.

Terminal \$

 Copy

```
docker compose up -d
```

Conclusion

Hopefully, at this point in the tutorial, you will now have Immich up and running on your Raspberry Pi.

Immich is a great solution for storing your photos and videos in one central location. It even has additional function such as grouping photos based on facial recognition or location they were taken.

Please feel free to leave a comment below if you have any questions about getting this software running on your Pi.

If you found this tutorial to be useful, be sure to check out our [many other Raspberry Pi projects](#).



Updates Straight To Your Inbox

Receive our Raspberry Pi projects, Home Assistant tutorials, Linux guides and more!

Recommended



[Build your own Raspberry Pi Google Assistant](#)



[Setting up Restreamer on the Raspberry Pi](#)



Ad ends in 4

[R](#)

[from a Raspberry Pi](#)



[Raspberry Pi Pi-Hole: A Network Wide Ad-blocker](#)



[Raspberry Pi Time-Lapse in Four Easy Steps](#)



[How to Run Steam on a Raspberry Pi](#)

Leave a Reply

Your email address will not be published. Required fields are marked *

Comment

Name *

Email *

Post Comment

6 Comments



pasco on January 27, 2025 at 6:52 am

Good and helpful guide. What is still missing is a step-by-step guide for creating a backup and restoring it. It would be nice if a guide for that could also be provided.

Ad ends in 4

Reply



Ken on January 27, 2025 at 6:01 am

Hello Emmet,

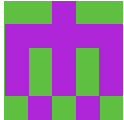
Thank you for the Immich setup, it went really smoothly. I wanted to ask if its possible to run Immich with https rather than http? I did give it a try with NGINX but I couldnt resolve the setup problems after a lot of effort, searching and trying things out.

I could share with you some of the setup steps and edits that I tried or if its a fast setup would you be able to direct the setup?

Many thanks for taking time to consider the request.

Best wishes Ken

Reply



David on November 12, 2023 at 12:33 am

Wondering how you solve this:

<https://github.com/typesense/typesense/issues/969>

As typesense container is unable.to start on newest Pi OS and keep restarting.

Reply



Emmet on November 12, 2023 at 1:31 am

 Editor

Hi David,

Just wondering is that an issue with using Immich? Or is it an unrelated Docker container.

If you are using a Raspberry Pi 5 with the new Pi OS, it is possible to work around the "jemalloc unsupported page size" issue by changing the kernel. I actually had to do this to use Geekbench when benchmarking my Pi 5.

Cheers,
Emmet



Ad ends in 4

Reply



Daniel on November 7, 2023 at 12:26 am

hi!

In step 10 I get the error message:

"no matching manifest for linux/arm/v8"

on a Raspi4. Any ideas?

Thanks!

Reply



Emmet on November 7, 2023 at 12:42 am

 Editor

Hi Daniel,

Sorry I forgot to write at the start of the tutorial that you must be running a 64-bit version of Raspberry Pi OS (ARM64).

32-bit operating systems (ARMv8) will unfortunately not work. I have quickly added a note to the opening segment to mention this.

Kind regards,
Emmet

Reply

[↑ Back to Top](#)

© 2025 Pi My Life Up | [f](#) [X](#) [P](#) [@](#) [v](#) [m](#) [s](#)

 Switch to Dark Theme

[Disclaimer & Privacy Policy](#) | [About Us](#) | [Contact](#)



Ad ends in 4