

Plane Tracking with Flightradar24

Presented by: TechnoThatch Industries

Materials:

- Raspberry Pi
- Micro SD Card
- Access to Wifi (Ethernet or Wireless)
- Power Supply for Raspberry Pi
- ADS-B USB Receiver Stick
- Monitor
- Mouse
- Keyboard
- Flightradar24 Account

Please ensure that you have physical or remote access to the Pi. Do this with either remote access software or a physical keyboard, monitor, and mouse.

 With your Raspberry Pi, download the software for your chosen operating system to the SD card. For this task, I will use a Pi 3B+ with Raspberry Pi OS 64-bit (released 2024-11-19).

Raspberry Pi OS (64-bit)



A port of Debian Bookworm with the Raspberry Pi Desktop (Recommended) (Recommended) Released: 2024-11-19 Online - 1.2 GB download

- 2. After you have downloaded the OS to the card, eject the card and insert it into the port on the Raspberry Pi. Don't force it in, as this could damage your Pi.
- 3. Turn on your Pi and wait until it boots up. Ensure that your monitor, mouse, antenna (receiver), and keyboard are all connected to the ports they need to be before continuing the setup of your computer.

4. Fire up the Command Line Interface and type in the following command:

Unset	
sudo apt upgrade && update	
<pre>sudo bash -c "\$(wget -0 - http://repo.feed.flightradar24.com/install_fr24_rpi.sh)"</pre>	

The screen will fill with many different lines of information after this command is inputted.

- 5. Fill out the questions it asks you. I will go through them below.
 - → Enter your email address: username@domain.ltd
 - → Enter your sharing key or press ENTER to continue: sharing key (leave empty if you have never done this before)
 - → Would you like to participate in MLAT calculations: I always say no
 - → Receiver selection: choose the receiver which you have. The one I use is the DVBT Stick.
 - → Additional dump1090 arguments: (leave empty)
 - → RAW data feed on port 30002: I said no
 - → Basestation data on port 30003: I said no
- 6. Open a new tab and input the following:

Unset

http://___.8754

7. You will see a dashboard for your receiver. This means that after a few hours, Flightradar will give you a Business account (worth \$500 a year). If you don't see a dashboard, retrace your steps to figure out what went wrong.

Aircraft Tracked: (ModeS, ADS-B, UAT)	5
Aircraft Uploaded: Receiver:	5 dvbt, Connected

8. Ensure that your receiver is tracking aircraft. Then, head over to Flightradar24. After entering the "My data sharing" page, you will see that your receiver is online. If it says that there is no data, retrace your steps.

Dump-1090 Gmap Setup (Optional)

1. Input the following command to install dump-1090:

Unset sudo apt install dump1090-mutability

2. Now, setup the document with:

Unset

sudo dpkg-reconfigure dump1090-mutability
sudo systemctl restart dump1090-mutability

- 3. The service will ask configuration questions before closing out. Answer these based on your wishes
- 4. Now, go to:

Unset

___.__._/dump1090/gmap.html

5. This pulls up a map of the aircraft only you are tracking.