Raspberry Pi

Installation Guide

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Install OS

Step 1: Download Raspbian Operating System from
https://www.raspberrypi.org/downloads/raspbian/

Step 2. Burn the Raspbian image to the SD card
for mac : https://www.balena.io/etcher/
for windows : https://win32diskimager.download/

Enable SSH

Step 3. Enable ssh to allow remote login

For security reasons, **ssh** is no longer enabled by default.

To enable it you need to place an empty file named ssh (no extension) in the root of the boot disk.

Windows instructions (ssh)

- Run **Notepad**
- In a new file put in one space and nothing more
- Click **File / Save As …**
- Be sure to set **Save as type** to **All Files** (so the file is NOT saved with a .txt extension)
- Call the file **ssh** and save it
- Close the file

Mac instructions (enable ssh)

Open up a terminal window and run this command:

```
touch /Volumes/boot/ssh
```

Enable WiFi

Step 4. Add your WiFi network info

Create a file in the root of **boot** called: wpa_supplicant.conf (instructions below).

Then paste the following into it (adjusting for your network name and network password):

```
country=IN
ctrl_interface=DIR=/var/run/wpa_supplicant GROUP=netdev
update_config=1

network={
    ssid="NETWORK-NAME"
    psk="NETWORK-PASSWORD"
}
```

Enable WiFi

Mac instructions (wifi settings)

Create a new empty file that will hold network info:

`touch /Volumes/boot/wpa_supplicant.conf`

Edit the file that you just created and paste the text above into it

(adjusting for the network name and network password):

Windows instructions (wifi settings)

1. Run **Notepad**
2. Paste in the contents above (adjusting for network name and network password)
3. Click **File / Save As …**
4. Be sure to set **Save as type** to **All Files** (so the file is NOT saved with a .txt extension)
5. Call the file `wpa_supplicant.conf` and save it
6. Close the file

Boot SD Card

Step 5. Eject the micro SD card

- Right-click on **boot** (on your desktop or File Explorer) and select the **Eject** option
- This is a “logical” eject - meaning it closes files and preps the SD card for removal

Step 6. Boot the Raspberry Pi from the micro SD card

SSH to Raspi

This part assumes that **ssh** is enabled for your image and that the default user is **pi** with a password of **raspberry**.

NOTE: Your machine must be on the same WiFi network that you configured the Pi for.

Install Putty

- Browse to: https://www.putty.org
- Download the 64-bit MSI (Windows Installer)
- Open it to run the installer (if asked for permission, click Yes)

Login over WiFi using Putty

1. Launch Putty
2. Set the **Host Name (or IP address)** field to **raspberrypi.local**
3. By default the **Port** should be set to **22** and **Connection type** should be set to **SSH**
4. Click **Open**
5. If you see a Security Alert select Yes
6. A new terminal window should appear prompting you for a user name
7. The default user name is: **pi**
8. The default password is: **raspberry**

Step 9. Get the latest updates

Once connected over WiFi,

the next thing you should do is run some updates:

```
sudo apt-get update -y
sudo apt-get upgrade -y
```

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