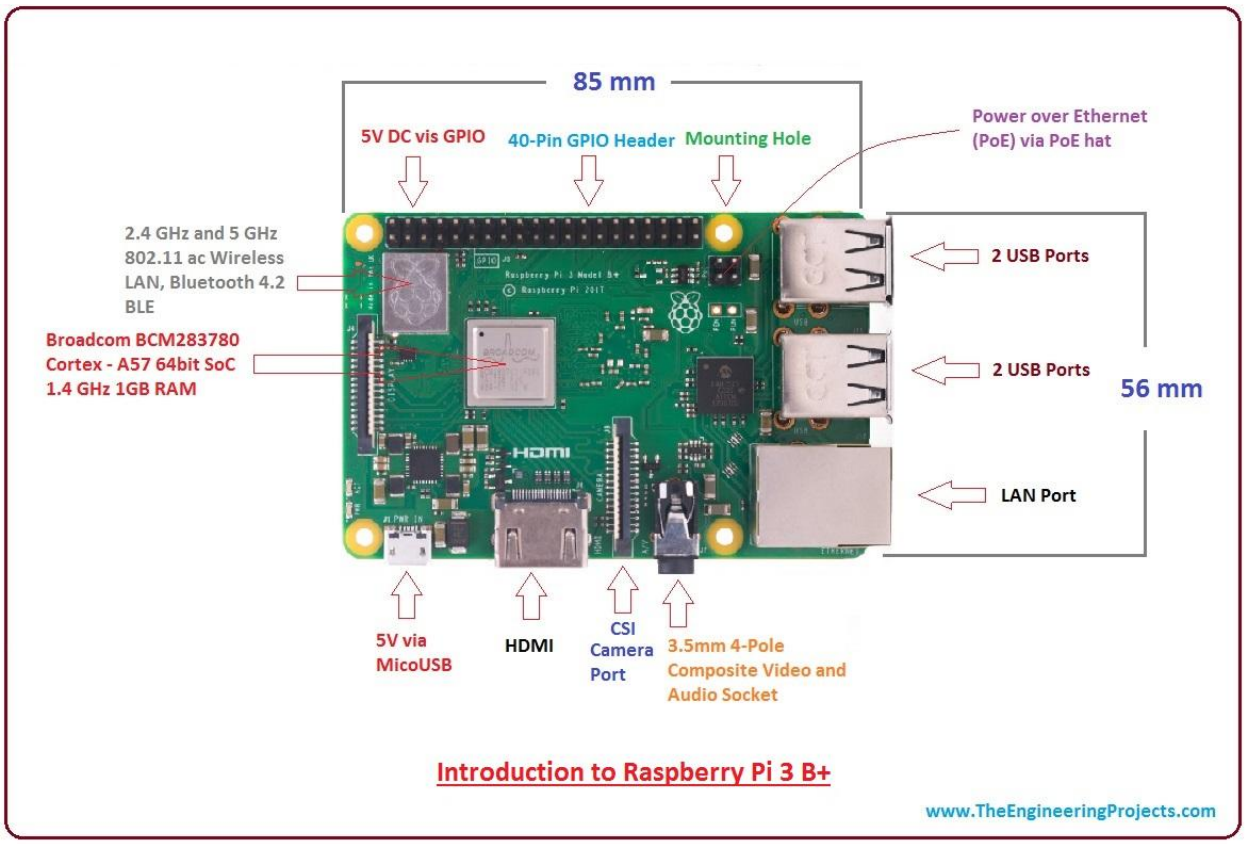


Explain how finicky the Pi's are
No session for pid 870 723 792

"*sudo apt-get install apache2 php mariadb-server php-mysql -y"*

Put the Pi together - If you're setting up a new Pi the instructions fail to tell you which heatsink goes to what. We ended up putting the larger heatsink on the Broadcom BCM… and the smaller one on the ethernet controller (the little blackbox)
Also put on the bottom part of the case first, otherwise it will not fit.

Either connect it up to the switch now or worry about it latter

1. In the gui go to the top right and select "Preferences" from the drop down menu. Select "Raspberry Pi Configuration". Then turn on SSH (PuTTY) or VNC (VNCviewer) (I've had more luck with VNCviewer but they are both there in case one does not work) If VNCserver does not download automatically (it'd be an icon in the top right tray) go to the terminal (ctrl + t) and type in "*sudo apt-get install VNCserver"* (this will not work until you have the securly certificate installed)

1. Still in the terminal type in "*CD /" - "CD boot" - "sudo nano config.txt"* Then in config.txt scroll down to "hdmi_force_hotplug = 0" change this value to 1, "hdmi_force_hotplug = 1"

This is necessary for running the Pis headless as without it the Pis will power off when not connected to HDMI.

2. At this point you have two options for getting the Securly Certificate and my script onto the Pi.
    - Use the file transfer option inside the VNCserver menu on the Pi
    - Throw the certificate and script onto a flash drive and plug the sucker in
    - Once you have both on your Pi's desktop go to the terminal and type in *"CD Desktop"* (or whatever you need to do to get to the desktop)
      Type in *"ls -l"* and explain how permissions work
      Also explain how switches work
      then *"sudo chmod 777 mikecert.sh"* (this will change the permissions on the script to allow you to run it, there are far better and far safer ways to type in that command, but this is what's worked for me) and finally *"sudo ./mikecert.sh"*. From there just follow the instructions the script tells you. If it's not working, nano into the script and put in all the commands manually.

https://projects.raspberrypi.org/en/projects/lamp-web-server-with-wordpress/2

We want to install mariadb-server before anything else, *"sudo apt-get install mariadb-server"*
Now we need to change where the Pi downloads things from - *cd /etc/apt* - *sudo nano sources.list* -change the content inside to: `deb http://mirror.ox.ac.uk/sites/archive.raspbian.org/archive/raspbian stretch main contrib non-free rpi`
Run *sudo apt update*

Now lets install apache, this will make our Pi the actual server the website is hosted on, once its installed go to terminal - *"ifconfig -a"* enter the ip address of the pi into the web browser and you should see the test website

Next we need to install php so we can actually edit the website
Once it's installed we need to delete the old html file - *cd /var/www/html* - *sudo rm* * (explain what asterisks do)
Nano into the file and change the contents then reload the webpage
If it isn't working try restarting apache

Install mysql - this is our database

Install wordpress - explain how ownerships work
Setup wordpress - MAKE SURE TO NOT SET *YOURPASSWORD* AS PASSWORD, I AM DUMB -

Switch Ip address : 192.168.103.37

The default password for the Pis is
username:
password: raspberry

1. In the gui go to the top right and select “Preferences” from the drop down menu. Select “Raspberry Pi Configuration”. Then turn on SSH (PuTTY) or VNC (VNCviewer) (I’ve had more luck with VNCviewer but they are both there in case one does not work) If VNCserver does not download automatically (it'd be an icon in the top right tray) go to the terminal (ctrl + t) and type in “*sudo apt-get install VNCserver”* (this will not work until you have the securly certificate installed)
2. Open up the terminal if it's not open yet. (ctrl +t) Type in “*sudo passwd*,” then type in your current password and the new password you want. We have been changing them to Password2021, just make sure to write down whatever you do.
3. Still in the terminal type in “*CD /” - “CD boot” - “sudo nano config.txt”* Then in config.txt scroll down to “hdmi_force_hotplug = 0” change this value to 1, “hdmi_force_hotplug = 1” This is necessary for running the Pis headless as without it the Pis will power off when not connected to HDMI.
4. Connect the Pi to whatever the connection is
5. In the terminal type in *“ifconfig -a”* Look for your MAC address and write it down.
6. On your own computer plug in the network adapter and connect to your router.
7. Log into whatever your router's default gateway is. Go to “*Advanced*” - “*DHCP Server”* Enter a new static address using the MAC Address you got and the naming scheme we talked about. (or whatever you want)
8. Back onto the Pi: In the terminal type in “sudo *dhclient”* (this will create the necessary files) then type in *“sudo dhclient -r”* (this will release the current lease) Some errors may pop up while doing this, you can ignore them. You should see the WiFi symbol in the top right corner blinking. Give it a minute then type in *“ifconfig -a*” and ensure you have the right ip address. If not, refer to *Troubleshooting Solutions* which can be found further into the packet.
9. At this point it may be worthwhile to reset the Pi.

You’ve been at this for awhile, don’t be afraid to take a break! Cooking is an act of love and it's best not to rush.

10. Click on the VNCServer icon in the top right tray. Ensure the ip address it gives you to connect to the Pi is the same as the ip address you assigned it.
11. On your computer: Download VNCViewer or PuTTY, enter in the ip address to connect to the Pi. If this doesn’t work refer to *Troubleshooting Solutions.*
12. At this point you have two options for getting the Securly Certificate and my script onto the Pi.
    - Use the file transfer option inside the VNCserver menu on the Pi
    - Throw the certificate and script onto a flash drive and plug the sucker in
13. Once you have both on your Pi’s desktop go to the terminal and type in *“CD Desktop*” (or whatever you need to do to get to the desktop) then *“sudo chmod 777 mikecert.sh”* (this will change the permissions on the script to allow you to run it, there are far better

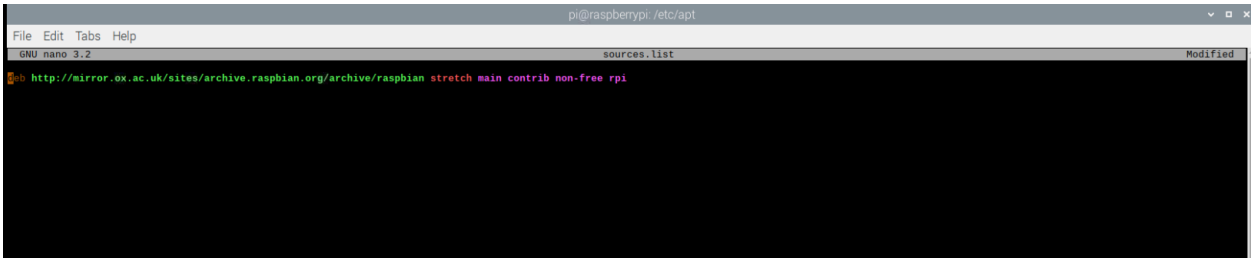
and far safer ways to type in that command, but this is what's worked for me) and finally *"sudo ./mikecert.sh"*. From there just follow the instructions the script tells you. If it's not working, nano into the script and put in all the commands manually.

Congrats! At this point you should be done. The Pi is set up for anything you want it to do.

14. As a final step I recommend installing samba, "*sudo apt-get install samba*" This will allow you to access and create shared network folders not only between the Pis but also \
15. windows. These make getting things on, off, and between the Pis much easier.

cd /etc/apt - sudo nano sources.list -change the content inside to: `deb http://mirror.ox.ac.uk/sites/archive.raspbian.org/archive/raspbian stretch main contrib non-free rpi`

Run *sudo apt update*



This will update where the Pi downloads files from

Open up terminal - *sudo apt-get install apache2 -y*

Open up the web browser and type in your pi's ip address to ensure you can connect to the website

Next we're gonna install php