SETTING UP ACCESSPOINT OF PI

<https://www.raspberrypi.org/documentation/configuration/wireless/access-point.md>

DOWNLOAD BATCH FILES FIRST

1. UPDATE
   1. sudo apt-get update
   2. sudo apt-get upgrade
2. Install the required software
   1. sudo apt-get install dnsmasq hostapd#
3. Reboot
   1. sudo reboot
4. Stop internet services before we begin
   1. Sudo systemctl stop dnsmasq
   2. Sudo systemctl stop hostapd
5. Go into this file, and delete everything
   1. CTRL+K
   2. Put in the following lines
   3. interface wlan0
   4. static ip\_address=192.168.4.1/24
   5. nohook wpa\_supplicant
6. Restart services
   1. Sudo service dhcpcd restart
7. Type in the following
   1. sudo mv /etc/dnsmasq.conf /etc/dnsmasq.conf.orig
   2. sudo nano /etc/dnsmasq.conf
8. Type in the following to the file
   1. interface=wlan0 # Use the require wireless interface - usually wlan0
   2. dhcp-range=192.168.0.11,192.168.0.30,255.255.255.0,24h
9. Type in command to create file, copy and paste the following
   1. ssid is the name of your netowkr, don’t put any stupid characters into it
   2. wpa\_passphrase is your password, has to be over 8 characters

interface=wlan0  
driver=nl80211  
ssid=NameOfNetwork

hw\_mode=g

channel=7

wmm\_enabled=0

macaddr\_acl=0

auth\_algs=1

ignore\_broadcast\_ssid=0

wpa=2

wpa\_passphrase=AardvarkBadgerHedgehog

wpa\_key\_mgmt=WPA-PSK

wpa\_pairwise=TKIP

rsn\_pairwise=CCMP

1. Type this abd boy in
   1. Sudo nano /etc/default/hostapd
   2. Find the line #DAEMON\_CONF and replace with
   3. DAEMON\_CONF="/etc/hostapd/hostapd.conf"
2. Start her up
   1. sudo systemctl start hostapd
   2. sudo systemctl start dnsmasq
3. Edit the file
   1. Sudo nano /etc/sysctl.conf
   2. net.ipv4.ip\_forward=1
4. Add a masquerade for outbound traffic on eth0
   1. sudo iptables -t nat -A POSTROUTING -o eth0 -j MASQUERADE
5. Save the table
   1. Sudo sh -c “iptables-save > /etc/iptables.ipv4.nat”
6. Edit the file
   1. iptables-restore < /etc/iptables.ipv4.nat
7. Reboot
   1. Sudo reboot

IF SOMETHING DOESN’T WORK, check the log file with

Sudo hostapd -dd /etc/hostapd/hostapd.conf > /tmp/hostapd.log

Sudo nano /tmp/hostapd.log