Power on first time

* Click cancel when welcome screen is displayed
* Open the terminal

Setup

* sudo raspi-config
* Select option 4 ‘*localisation option*’
* Choose geographic region
* Select time zone
* Select ‘*keyboard layout*’
* Change to generic 101-key PC, or another keyboard configuration
* Select defaults for following selection menus
* Select ‘*Wi-Fi country’*
* Choose specific country
* Select option 5 *‘interfacing options’*
* Enable the following
* Camera
* SSH
* VNC
* SPI
* I2C
* Serial
* Select option 8 ‘*update*’
* Exit the raspi-config menu
* sudo nano /boot/cmdline.txt \*\*remove console\*\*

Installing Node.js full

* curl -sL <https://deb.nodesource.com/setup_9.x> | sudo -E bash –
* sudo apt install -y nodejs
* node -v ***\*\*to check version\*\****

Installing Node.js for **Raspberry pi Zero**

* curl -o node-v9.7.1-linux-armv6l.tar.gz <https://nodejs.org/dist/v9.7.1/node-v9.7.1-linux-armv6l.tar.gz>
* tar -xzf node-v9.7.1-linux-armv6l.tar.gz
* sudo cp -r node-v9.7.1-linux-armv6l/\* /usr/local/
* node -v
* npm -v

Installing Putty

* sudo apt-get install putty -y

Installing Samba (for systems with monitor)

* sudo nano /etc/samba/smb.conf \*\*scroll to the bottom\*\*
* Insert the following
* [pi]

comment= Raspi Share

path= /home/pi

browseable= Yes

writeable= Yes

only guest= No

create mask= 0740

directory mask= 0750

public= no

* to exit
* ctl + X
* type letter ‘y’
* then click enter
* sudo apt install -y samba
* password: \*\*default type ‘raspberry’\*\*

Using Samba on pc

Win key + R [\\raspberrypi\pi](file://\\raspberrypi\pi)

^hostname

Or

Win key + R [\\192.168.10.97\pi](file://\\192.168.10.97\pi)

^IP address

**For both Username: pi Password: raspberry**

Install pm2

* Sudo npm install -g pm2

Setting up Pi as an access point (servers only)

* sudo apt install dnsmasq hostapd
* sudo nano /etc/dhcpcd.conf
* insert the following
* interface wlan0

static ip\_address=192.168.4.1/24

nohook wpa\_supplicant

* to exit

ctl + X

type letter ‘y’

then click enter to exit to save

* sudo systemctl restart dhcpcd
* sudo mv /etc/dnsmasq.conf /etc/dnsmasq.conf.orig
* sudo nano /etc/dnsmasq.conf
* Insert the following

interface=wlan0

dhcp-range=192.168.4.2,192.168.4.20,255.255.255.0,24h

* sudo systemctl reload dnsmasq
* sudo nano /etc/hostapd/hostapd.conf
* Insert the following

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

* sudo nano /etc/default/hostapd
* Edit this line and delete the ‘#’ at the beginning of command line
* DAEMON\_CONF="/etc/hostapd/hostapd.conf"
* sudo systemctl unmask hostapd
* sudo systemctl enable hostapd
* sudo systemctl start hostapd