# Hotspot Script: Secure Hotspot without DMZ

Objective: This script configures a secure WiFi hotspot on a Raspberry Pi with Bluetooth management.

## Script:

import os  
  
# 1. System Update  
def update\_system():  
 os.system("sudo apt update && sudo apt upgrade -y")  
  
# 2. Install necessary packages (hostapd, dnsmasq, bluez, iptables, fail2ban, arpwatch)  
def install\_packages():  
 os.system("sudo apt install hostapd dnsmasq bluez iptables fail2ban arpwatch -y")  
  
# 3. WiFi Access Point Configuration  
def configure\_wifi():  
 with open("/etc/hostapd/hostapd.conf", "w") as hostapd\_conf:  
 hostapd\_conf.write("""  
interface=wlan0  
driver=nl80211  
ssid=Secure\_Hotspot  
hw\_mode=g  
channel=7  
wpa=2  
wpa\_passphrase=StrongPassword123  
""")  
  
 os.system("sudo sed -i 's|#DAEMON\_CONF=""|DAEMON\_CONF="/etc/hostapd/hostapd.conf"|' /etc/default/hostapd")  
 os.system("sudo systemctl start hostapd")  
 os.system("sudo systemctl enable hostapd")  
  
# 4. Bluetooth Configuration  
def configure\_bluetooth():  
 os.system("sudo systemctl start bluetooth")  
 os.system("sudo bluetoothctl pairable on")  
 os.system("sudo bluetoothctl discoverable on")  
  
# 5. Ban IP and MAC Addresses  
def ban\_ip\_mac(ip\_address, mac\_address):  
 os.system(f"sudo iptables -A INPUT -s {ip\_address} -j DROP")  
 os.system(f"sudo iptables -A INPUT -m mac --mac-source {mac\_address} -j DROP")  
  
# 6. Firewall Configuration with iptables  
def configure\_firewall():  
 os.system("sudo iptables -F")  
 os.system("sudo iptables -P INPUT DROP")  
 os.system("sudo iptables -A INPUT -m conntrack --ctstate ESTABLISHED,RELATED -j ACCEPT")  
 os.system("sudo iptables -A INPUT -p tcp --dport 22 -j ACCEPT")  
 os.system("sudo iptables -A INPUT -p tcp --dport 80 -j ACCEPT")  
 os.system("sudo sh -c 'iptables-save > /etc/iptables/rules.v4'")  
  
# Main function  
if \_\_name\_\_ == "\_\_main\_\_":  
 update\_system()  
 install\_packages()  
 configure\_wifi()  
 configure\_bluetooth()  
 configure\_firewall()  
 ban\_ip\_mac("192.168.50.200", "XX:XX:XX:XX:XX:XX")