UNIVERSIDAD SAN CARLOS DE GUATEMALA
CENTRO UNIVERSITARIO DE OCCIDENTE
DIVISIÓN CIENCIAS DE LA INGENIERÍA
CARRERA DE INGENIERÍA CIENCIAS Y SISTEMAS

LABORATORIO REDES DE COMPUTADORAS 1
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TEMA: "CÓDIGO SWITCH HIBRIDO"

Repositorio GitHub:
https://github.com/jamesg19/switch_redes1/blob/main/SetupWiFi.sh

Fuentes de consulta y material de apoyo para el proyecto:
Cómo usar una PC con Debian como punto de acceso
inalámbrico a internet | Nachintoch (wordpress.com)

FECHA: 29 de marzo de 2,022

CÓDIGO AP SWITCH

```bash
#!/bin/bash
apt-get install -y hostapd dnsmasq wireless-tools iw wvdial

sed -i 's#^DAEMON_CONF=.*#DAEMON_CONF=/etc/hostapd/hostapd.conf#'
/etc/init.d/hostapd


cat <<EOF > /etc/network/interfaces
auto lo
iface inet loopback
#eno1 inteface ethernet
iface eno1 inet manual
#wlo1 interface wireless card
iface wlo1 inet manual

EOF

cat <<EOF > /etc/dnsmasq.conf
log-facility=/var/log/dnsmasq.log
#address=/#/10.0.0.1
#address=/google.com/10.0.0.1
interface=wlo1
dhcp-range=10.0.0.10,10.0.0.250,12h
dhcp-option=3,10.0.0.1
dhcp-option=6,10.0.0.1
#no-resolv
log-queries
EOF

service dnsmasq start
#inteface wifi  es wlo1 para mi
ifconfig wlan0 up
ifconfig wlan0 10.0.0.1/24

iptables -t nat -F
iptables -F
iptables -t nat -A POSTROUTING -o eno1 -j MASQUERADE
```

```
iptables -A FORWARD -i wlo1 -o eno1 -j ACCEPT
echo '1' > /proc/sys/net/ipv4/ip_forward

cat <<EOF > /etc/hostapd/hostapd.conf
interface=wlo1
driver=nl80211
channel=1

ssid=WiFiAP
wpa=2
wpa_passphrase=APSWITCH
wpa_key_mgmt=WPA-PSK
wpa_pairwise=CCMP
# Change the broadcasted/multicasted keys after this many seconds.
wpa_group_rekey=600
# Change the master key after this many seconds. Master key is used as a
basis
wpa_gmk_rekey=86400

EOF

service hostapd start
```

CODIGO VSWITCH

```bash
#!/bin/bash
apt-get install -y hostapd dnsmasq wireless-tools iw wvdial

sed -i 's#^DAEMON_CONF=.*#DAEMON_CONF=/etc/hostapd/hostapd.conf#'
/etc/init.d/hostapd


cat <<EOF > /etc/network/interfaces
auto lo
iface inet loopback
#eno1 inteface ethernet
iface eno1 inet manual
#wlo1 interface wireless card
iface wlo1 inet manual

EOF

cat <<EOF > /etc/dnsmasq.conf
log-facility=/var/log/dnsmasq.log
#address=/#/10.0.0.1
#address=/google.com/10.0.0.1
interface=wlo1
bridge=br0
dhcp-range=10.0.0.10,10.0.0.250,12h
dhcp-option=3,10.0.0.1
dhcp-option=6,10.0.0.1
#no-resolv
log-queries
EOF

service dnsmasq start
#inteface wifi  es wlo1 para mi
ifconfig wlan0 up
ifconfig wlan0 10.0.0.1/24
ifconfig eno1 up
ifconfig eno1 10.0.0.1/24
```

```
iptables -t nat -F
iptables -F
iptables -t nat -A POSTROUTING -o eno1 -j MASQUERADE
iptables -A FORWARD -i wlo1 -o eno1 -j ACCEPT
echo '1' > /proc/sys/net/ipv4/ip_forward

cat <<EOF > /etc/hostapd/hostapd.conf
interface=wlo1
driver=nl80211
channel=1

ssid=VSWITCH
wpa=2
wpa_passphrase=HolaMundo22
wpa_key_mgmt=WPA-PSK
wpa_pairwise=CCMP
# Change the broadcasted/multicasted keys after this many seconds.
wpa_group_rekey=600
# Change the master key after this many seconds. Master key is used as a
basis
wpa_gmk_rekey=86400

EOF

service hostapd start
```