**Listing 1. Skrypt konfigurujący Raspberry Pi do pracy jako punkt dostępowy**

#!/bin/bash

apt-get update -q -y

apt-get install hostapd

apt-get install isc-dhcp-server

cp /etc/dhcp/dhcpd.conf /etc/dhcp/dhcpd.bak

sed -i -e 's/option domain-name "example.org"/# option domain-name "example.org"/g' /etc/dhcp/dhcpd.conf

sed -i -e 's/option domain-name-servers ns1.example.org/# option domain-name-servers ns1.example.org/g' /etc/dhcp/dhcpd.conf

sed -i -e 's/#authoritative;/authoritative;/g' /etc/dhcp/dhcpd.conf

echo -e "subnet 192.168.42.0 netmask 255.255.255.0 {

range 192.168.42.10 192.168.42.50;

option broadcast-address 192.168.42.255;

option routers 192.168.42.1;

default-lease-time 600;

max-lease-time 7200;

option domain-name \042local\042;

option domain-name-servers 8.8.8.8, 8.8.4.4;

}" >> /etc/dhcp/dhcpd.conf

cp /etc/default/isc-dhcp-server /etc/default/isc-dhcp-server.bak

sed -i -e 's/INTERFACES=""/INTERFACES="wlan0"/g' /etc/default/isc-dhcp-server

ifdown wlan0

mv /etc/network/interfaces /etc/network/interfaces.bak

echo "auto lo

iface lo inet loopback

iface eth0 inet dhcp

allow-hotplug wlan0

iface wlan0 inet static

address 192.168.42.1

netmask 255.255.255.0

" > /etc/network/interfaces

ifconfig wlan0 192.168.42.1

echo "$(tput bold ; tput setaf 2)Wprowadź nazwę (SSID) nowej sieci, Wi-Fi. Może mieć od 1 do 32 znaków. Zakończ wprowadzanie klawiszem [ENTER]:$(tput sgr0)"

read ssid

echo "$(tput setaf 6)Nazwa sieci została zapisana jako: $(tput bold)$ssid$(tput sgr0 ; tput setaf 6). Możesz edytować plik /etc/hostapd/hostapd.conf by ją zmienić.$(tput sgr0)"

pwd1="0"

pwd2="1"

until [ $pwd1 == $pwd2 ]; do

echo "$(tput bold ; tput setaf 2)Wprowadź hasło dostępowe do stworzonej sieci w naciśnij [ENTER]:$(tput sgr0)"

read -s pwd1

echo "$(tput bold ; tput setaf 2)Dla weryfikacji powtórz wprowadzone przed chwilą hasło i naciśnij [ENTER]:$(tput sgr0)"

read -s pwd2

done

if [ $pwd1 == $pwd2 ]; then

echo "$(tput setaf 6)Hasło zostało ustalone. Możesz je zmienićw pliku /etc/hostapd/hostapd.conf.$(tput sgr0)"

fi

echo "interface=wlan0

driver=rtl871xdrv

ssid=$ssid

hw\_mode=g

channel=6

macaddr\_acl=0

auth\_algs=1

ignore\_broadcast\_ssid=0

wpa=2

wpa\_passphrase=$pwd1

wpa\_key\_mgmt=WPA-PSK

wpa\_pairwise=TKIP

rsn\_pairwise=CCMP" > /etc/hostapd/hostapd.conf

cp /etc/default/hostapd /etc/default/hostapd.bak

sed -i -e 's/#DAEMON\_CONF=""/DAEMON\_CONF="\/etc\/hostapd\/hostapd.conf"/g' /etc/default/hostapd

cp /etc/sysctl.conf /etc/sysctl.bak

echo "net.ipv4.ip\_forward=1" >> /etc/sysctl.conf

echo "up iptables-restore < /etc/iptables.ipv4.nat" >> /etc/network/interfaces

sh -c "echo 1 > /proc/sys/net/ipv4/ip\_forward"

iptables -t nat -A POSTROUTING -o eth0 -j MASQUERADE

iptables -A FORWARD -i eth0 -o wlan0 -m state --state RELATED,ESTABLISHED -j ACCEPT

iptables -A FORWARD -i wlan0 -o eth0 -j ACCEPT

sh -c "iptables-save > /etc/iptables.ipv4.nat"

wget http://www.adafruit.com/downloads/adafruit\_hostapd.zip

unzip adafruit\_hostapd.zip

mv /usr/sbin/hostapd /usr/sbin/hostapd.ORIG

mv hostapd /usr/sbin

chmod 755 /usr/sbin/hostapd

rm adafruit\_hostapd.zip

service hostapd start

service isc-dhcp-server start

service hostapd status

hostapd\_result=$?

#if [ $hostapd\_result == 3 ]; then

# echo "ERROR: hostapd start failed."

# exit 1

#fi

service isc-dhcp-server status

dhcp\_result=$?

#if [ $dhcp\_result == 3 ]; then

# echo "ERROR: ISC DHCP server failed to start."

# exit 1

#fi

update-rc.d hostapd enable

update-rc.d isc-dhcp-server enable

mv /usr/share/dbus-1/system-services/fi.epitest.hostap.WPASupplicant.service ~/

reboot

exit 0

**Listing 2. Skrypt konfigurujący Raspberry Pi do pracy w sieci TOR**

#!/bin/bash

apt-get install tor -y

cp /etc/tor/torrc /etc/tor/torrc.bak

echo "Log notice file /var/log/tor/notices.log

VirtualAddrNetwork 10.192.0.0/10

AutomapHostsSuffixes .onion,.exit

AutomapHostsOnResolve 1

TransPort 9040

TransListenAddress 192.168.42.1

DNSPort 53

DNSListenAddress 192.168.42.1" >> /etc/tor/torrc

iptables -F

iptables -t nat -F

iptables -t nat -A PREROUTING -i wlan0 -p tcp --dport 22 -j REDIRECT --to-ports 22

iptables -t nat -A PREROUTING -i wlan0 -p udp --dport 53 -j REDIRECT --to-ports 53

iptables -t nat -A PREROUTING -i wlan0 -p tcp --syn -j REDIRECT --to-ports 9040

sh -c "iptables-save > /etc/iptables.ipv4.nat"

touch /var/log/tor/notices.log

chown debian-tor /var/log/tor/notices.log

chmod 644 /var/log/tor/notices.log

service tor start

update-rc.d tor enable

reboot

exit 0