DOKUMENTASI KONFIGURASI

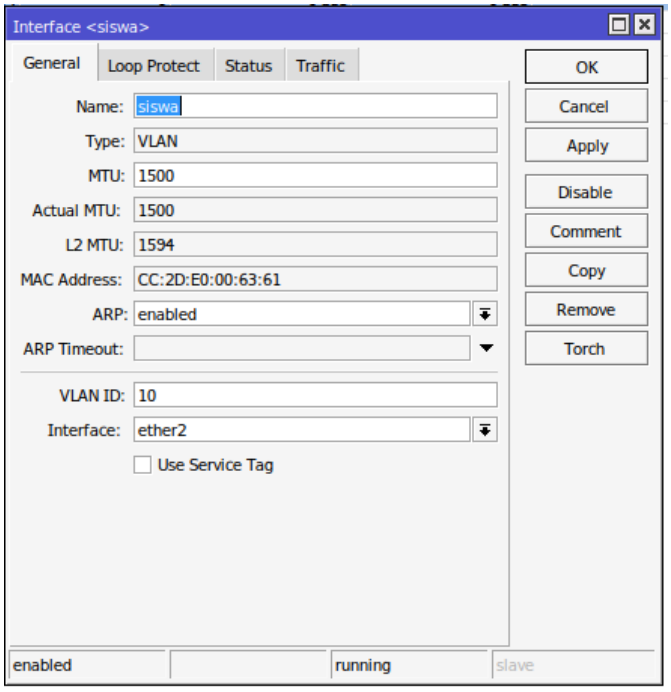
Oleh: Mohammad Riza Al Fahri

Konfigurasi Wifi Routerboard dengan ketentuan sebagai berikut:

a. Konfigurasi VLAN pada Ether2 dengan ketentuan:

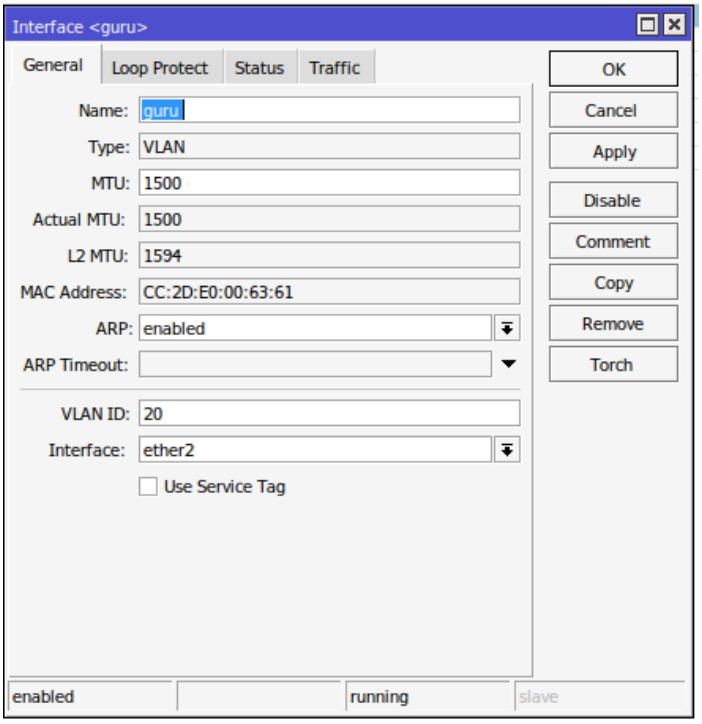
1) VLAN 1

- VLAN ID : 10
- Name: siswa

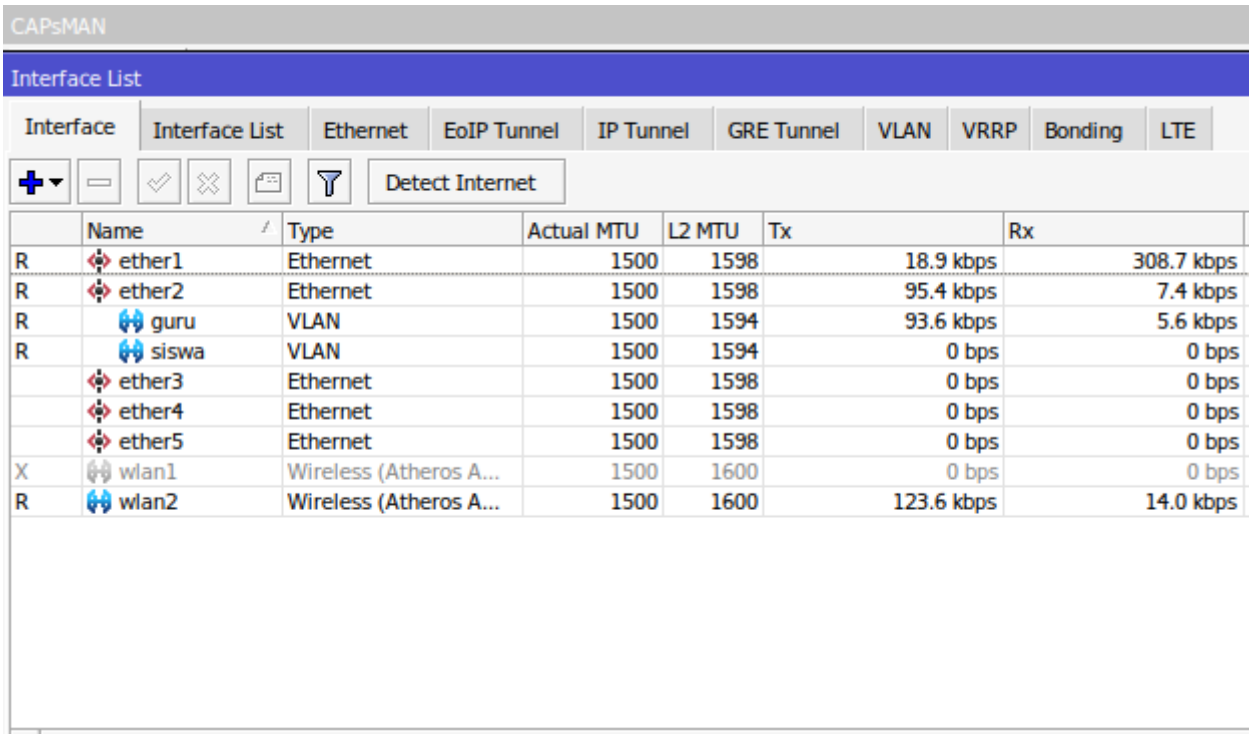


2) VLAN 2

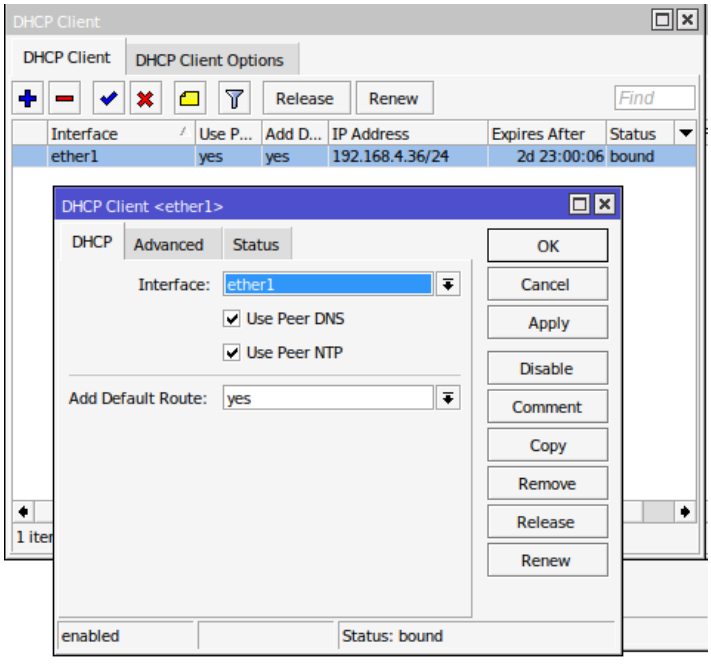
- VLAN ID : 20
- Name: guru

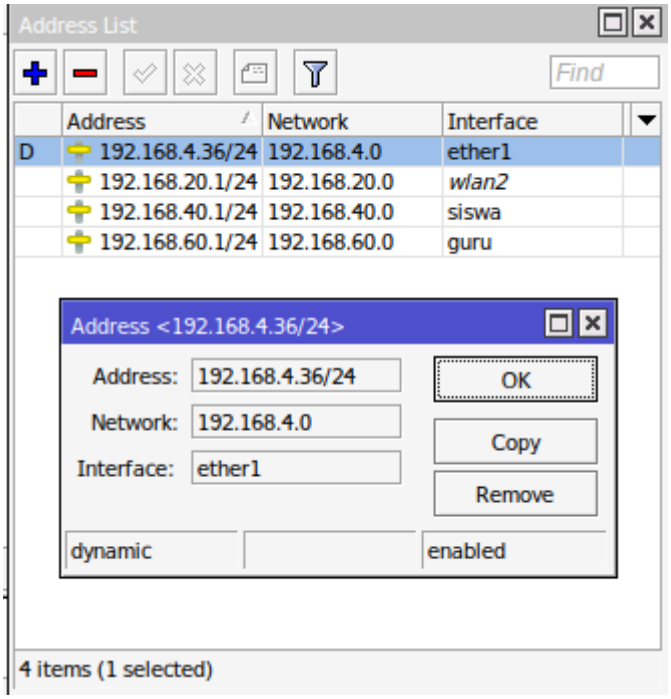


Hasilnya:

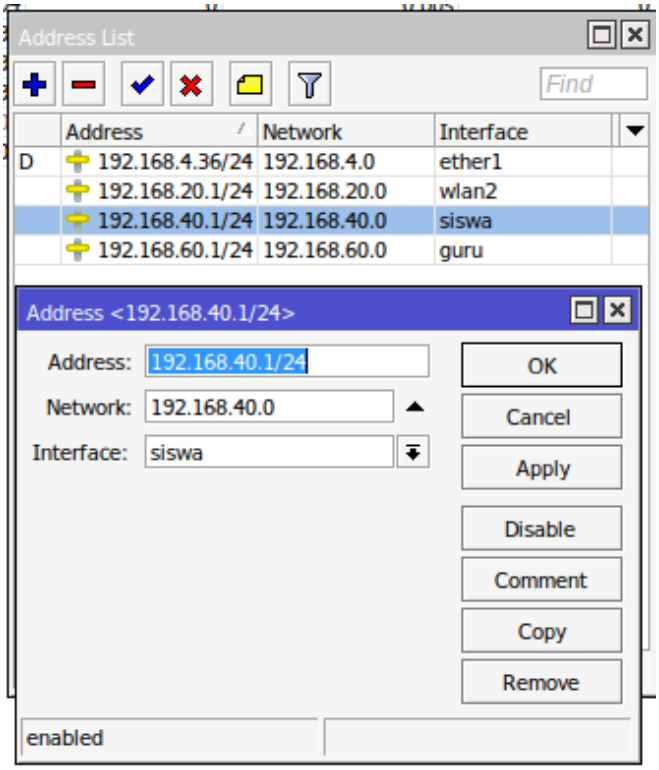


b. Konfigurasi
Ether 1:
- IP Ether1 : Sesuai dengan Network yang diberikan ISP
- Gateway : Sesuai dengan IP yang diberikan ISP

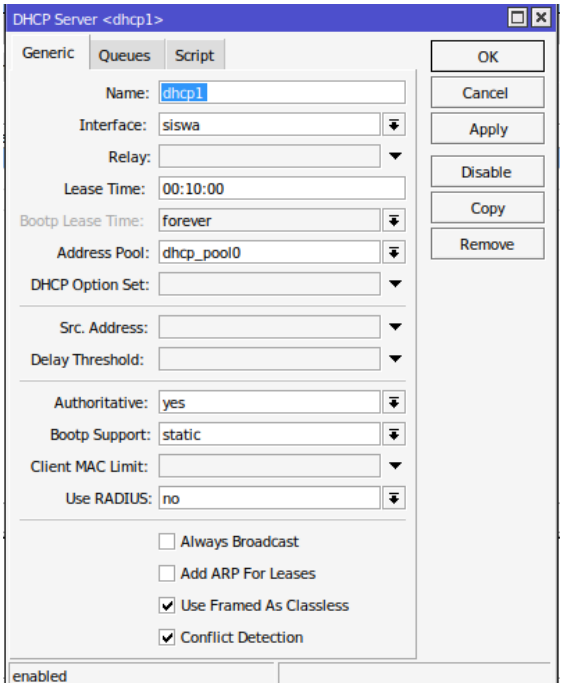


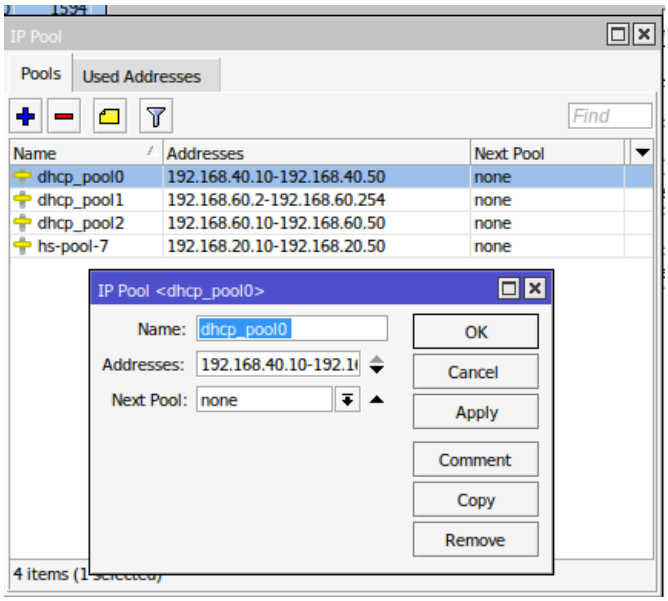


Ether 2 digunakan untuk jaringan LAN:
a) VLAN 1
- IP VLAN 1: 192.168.40.1/24

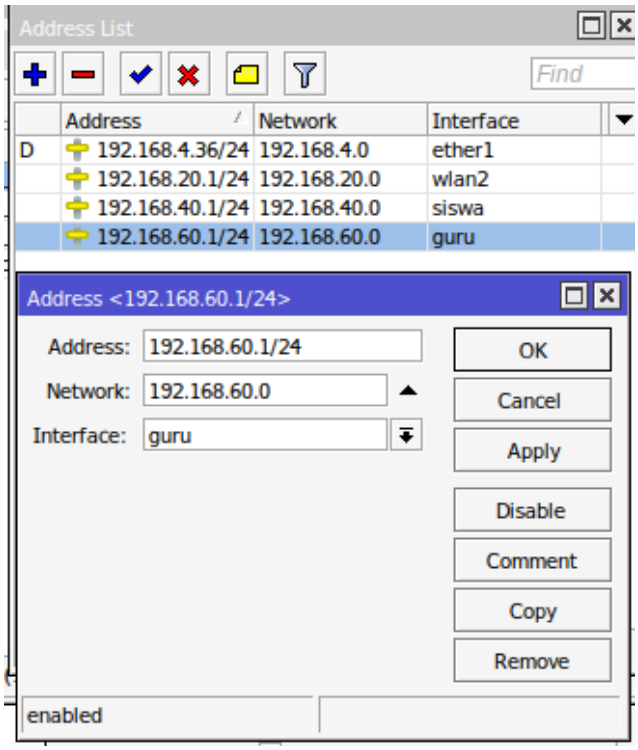


- DHCP Pool : 192.168.40.10 – 192.168.40.50

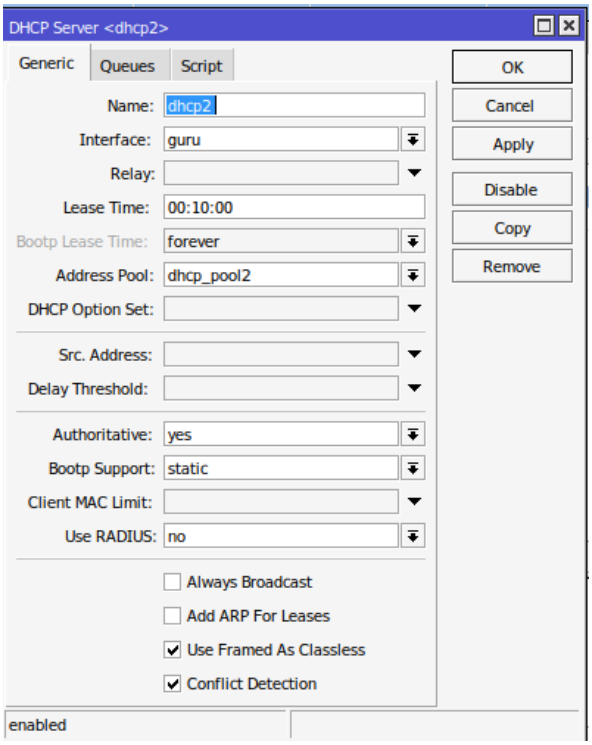


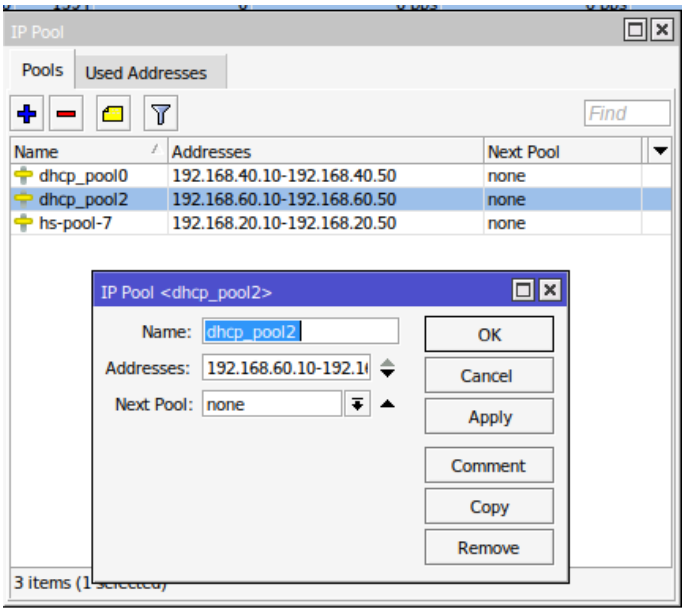


b) VLAN 2
- IP VLAN 2: 192.168.60.1/24

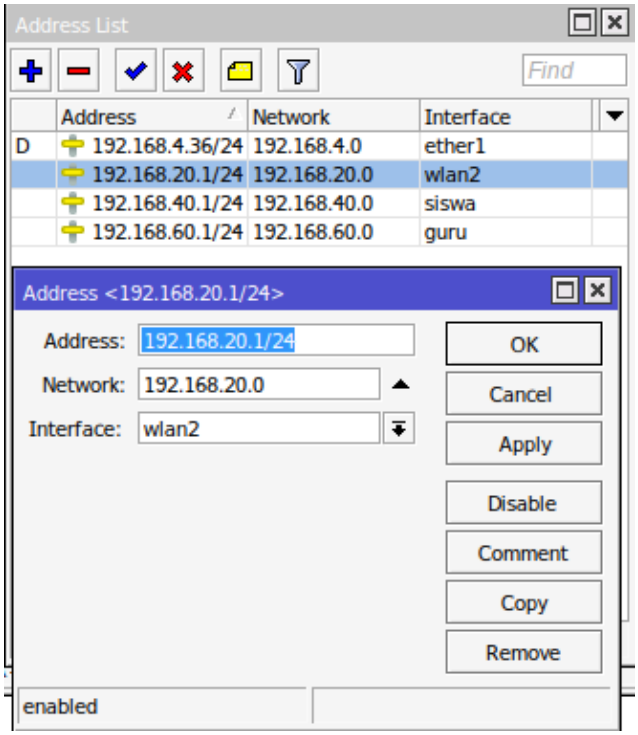


- DHCP Pool : 192.168.60.10 – 192.168.60.50

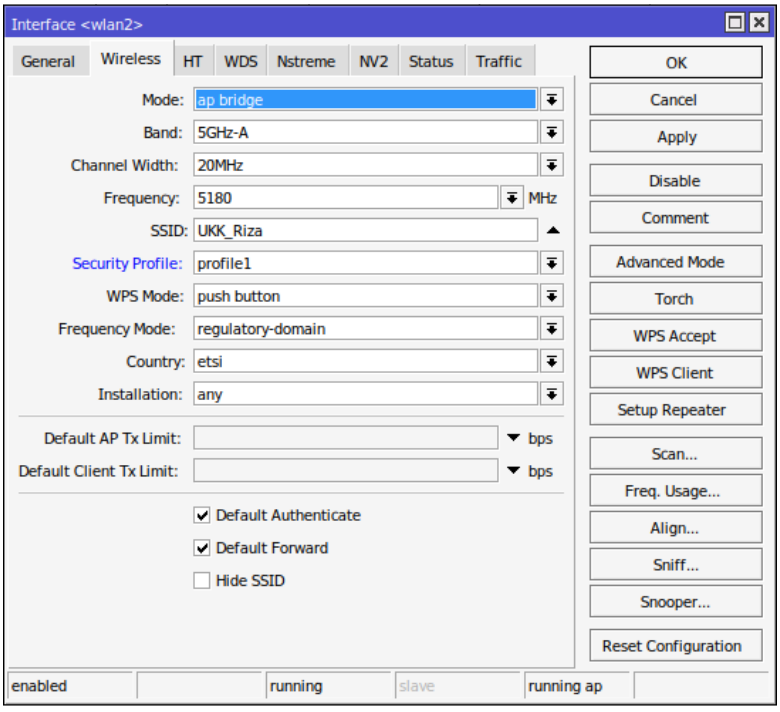




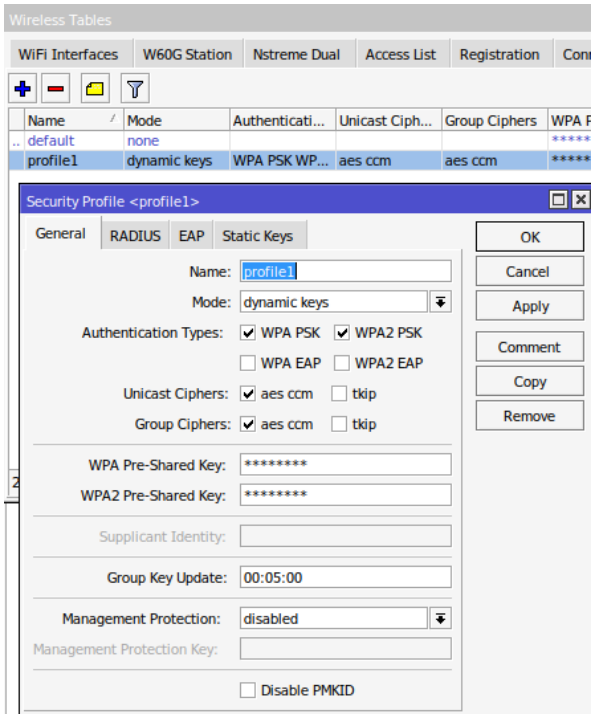
WLAN :
- IP WLAN: 192.168.20.1/24



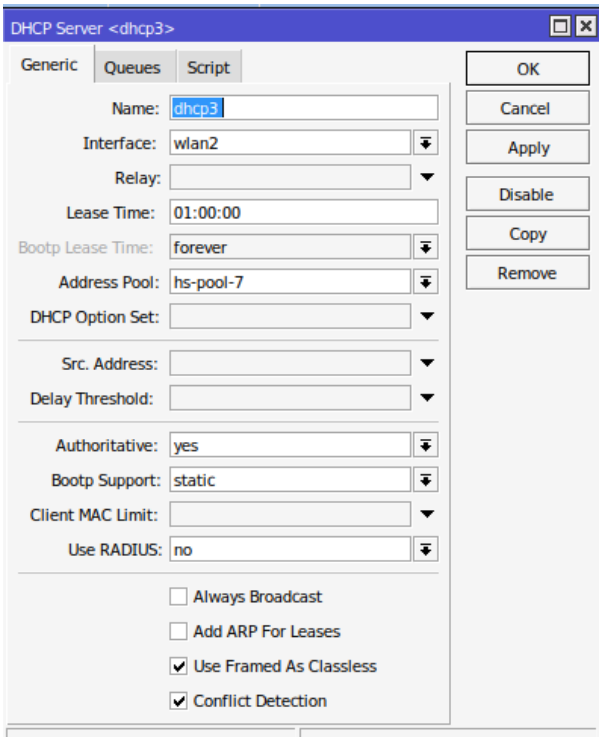
- SSID: UKK_Riza

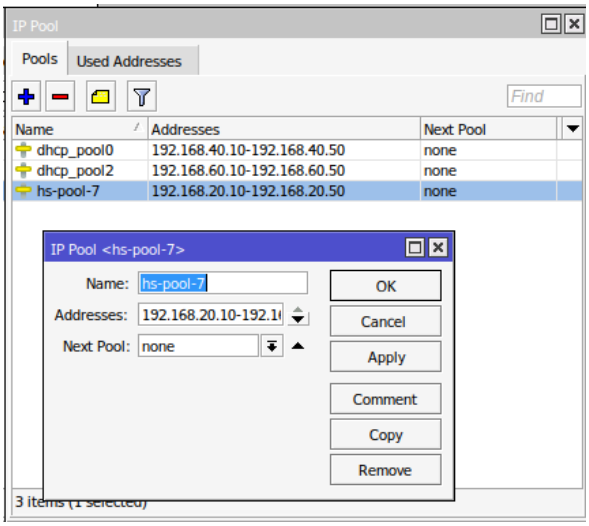


- Password: 12345678

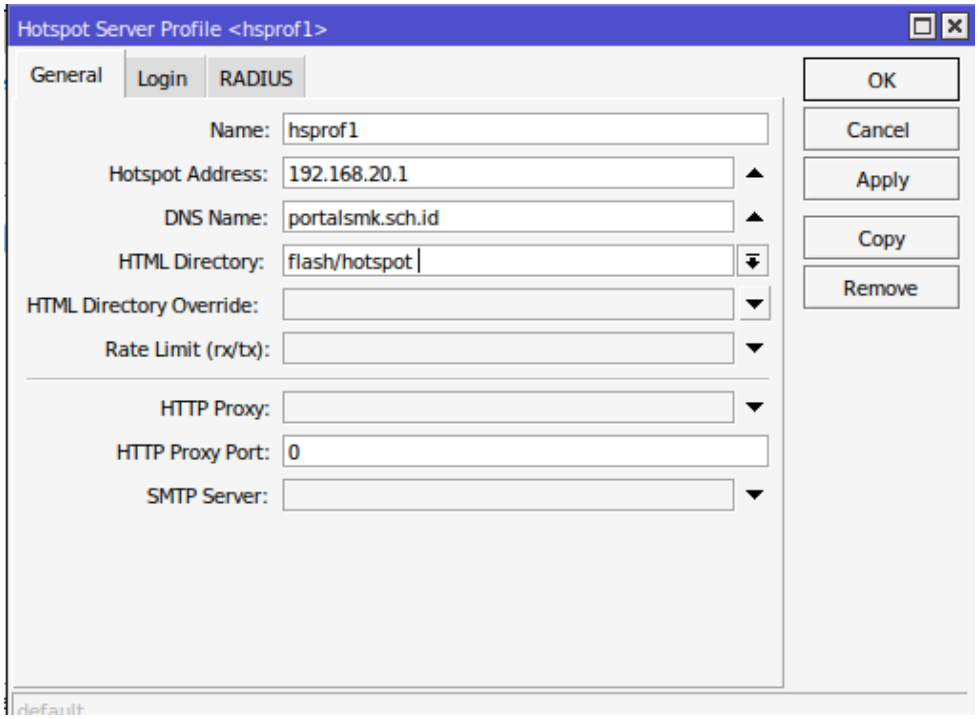


- DHCP Pool: 192.168.20.10 – 192.168.20.50

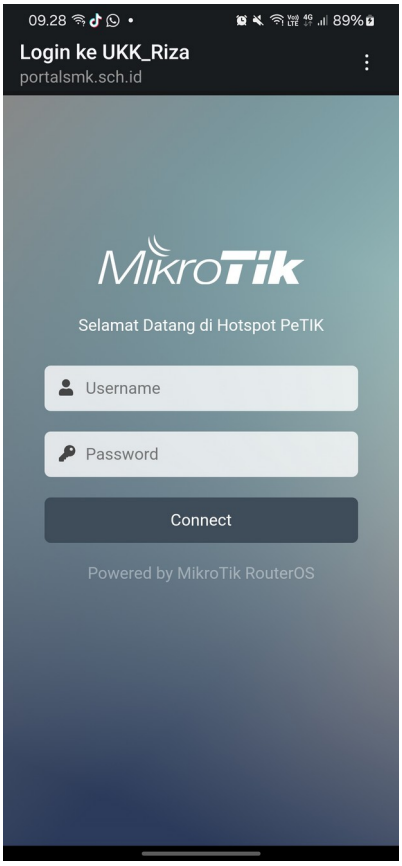




- Hotspot: alamat login hotspot = portalsmk.sch.id



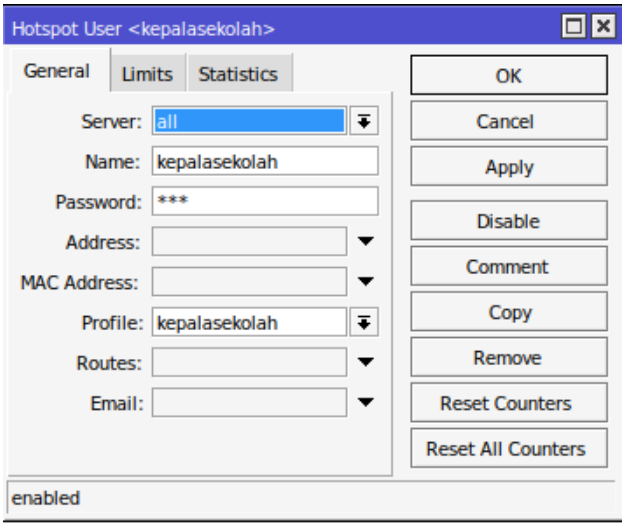
- Ubah tampilan halaman login hotspot sehingga minimal terdapat tampilan tulisan: “Selamat Datang di Hotspot PeTIK”

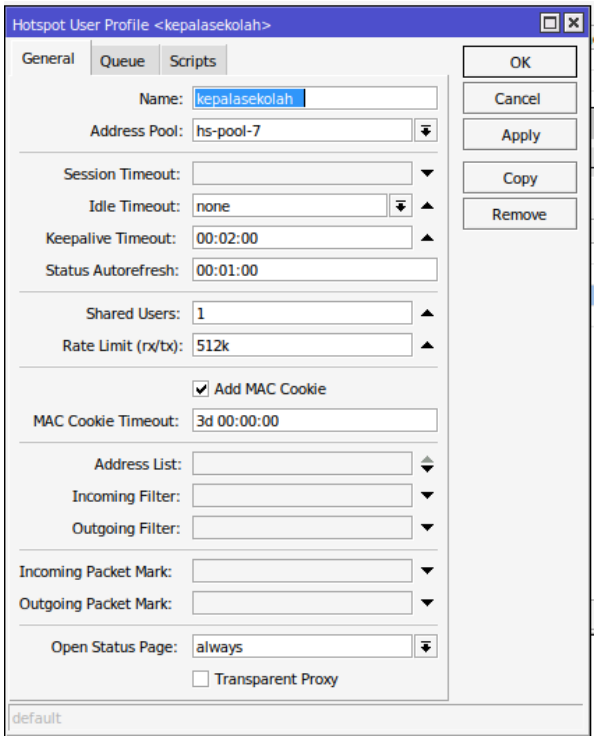


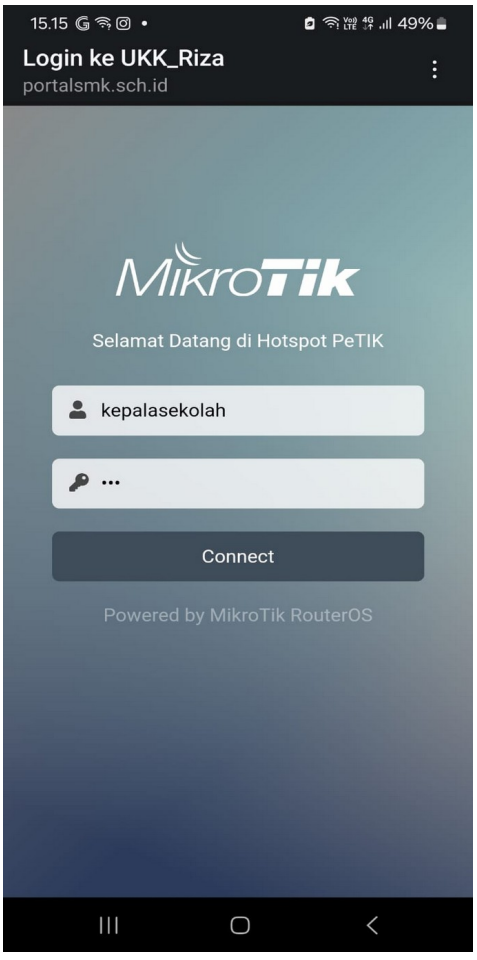
- Buatlah 3 user dengan ketentuan seperti berikut:

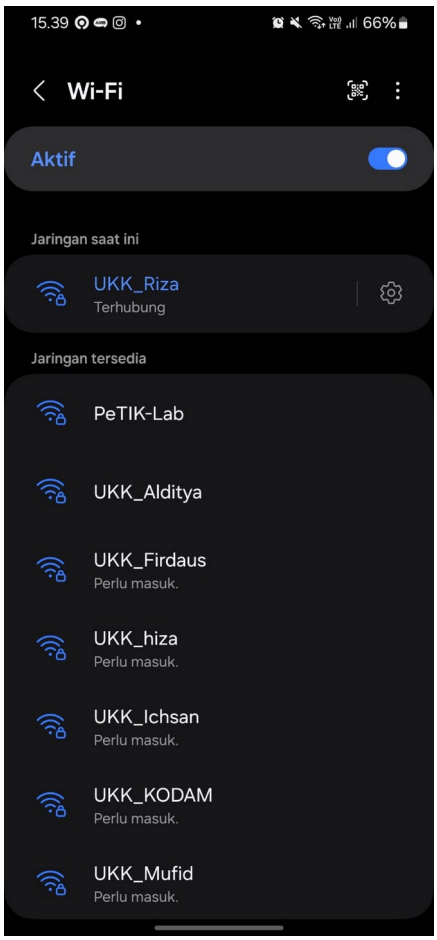
Username	Password	Kecepatan
kepalasekolah	123	512k
guru	456	256k
siswa	789	128k

1. kepalasekolah

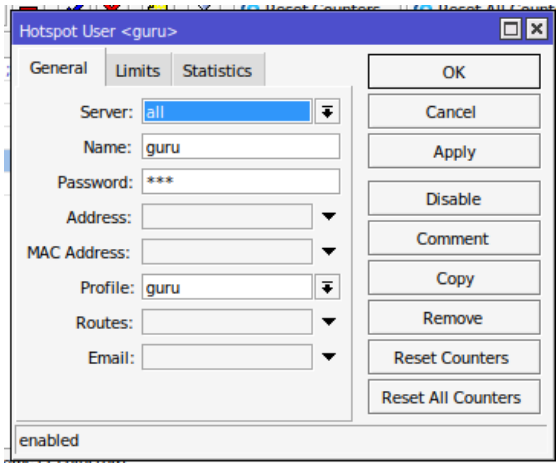


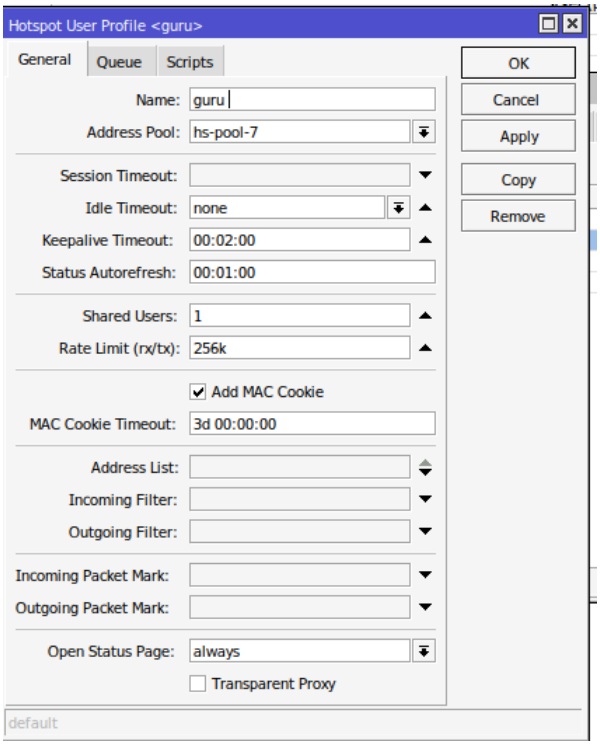


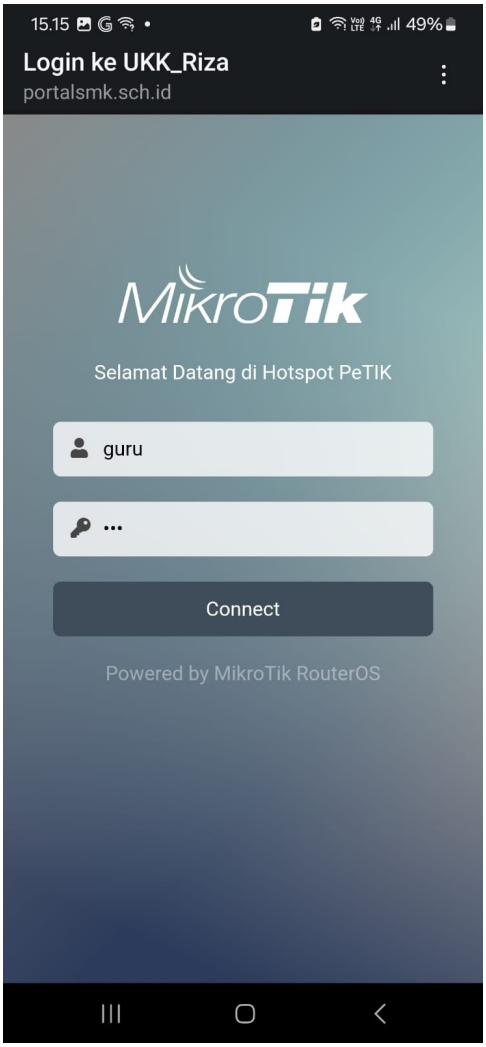


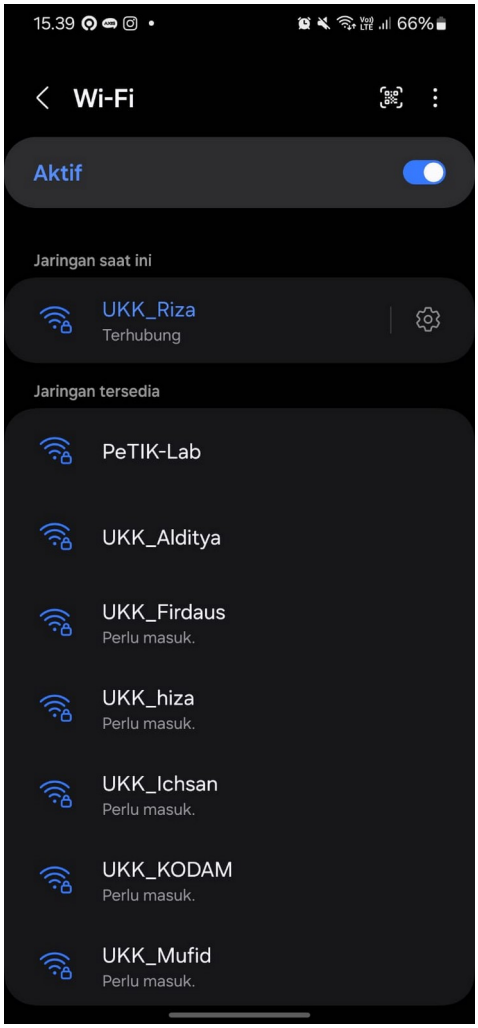


2. guru

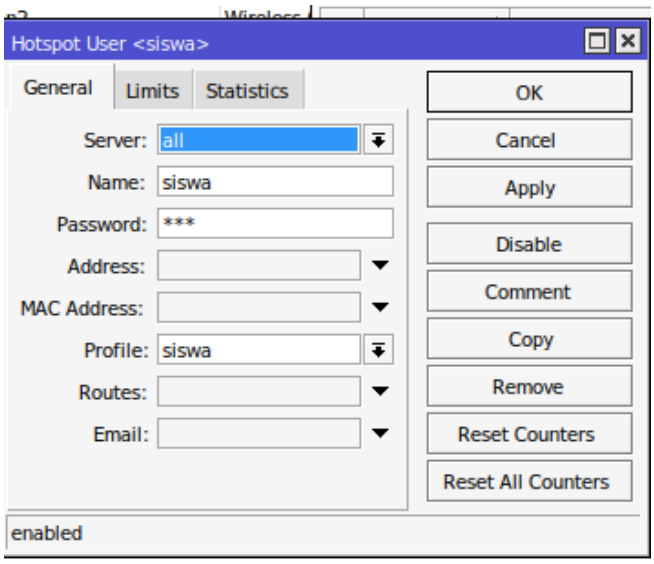

Hotspot User <guru>
General
Limits
Statistics
Server: all
Name: guru
Password: ***
Address:
MAC Address:
Profile: guru
Routes:
Email:
OK
Cancel
Apply
Disable
Comment
Copy
Remove
Reset Counters
Reset All Counters
enabled

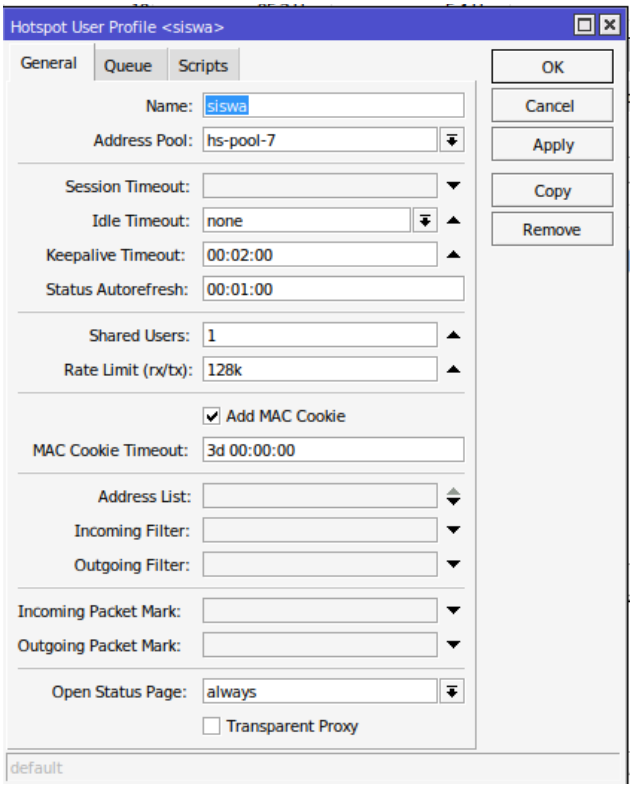

Hotspot User Profile <guru>
General
Queue
Scripts
Name: guru
Address Pool: hs-pool-7
Session Timeout:
Idle Timeout: none
Keepalive Timeout: 00:02:00
Status Autorefresh: 00:01:00
Shared Users: 1
Rate Limit (rx/tx): 256k
Add MAC Cookie
MAC Cookie Timeout: 3d 00:00:00
Address List:
Incoming Filter:
Outgoing Filter:
Incoming Packet Mark:
Outgoing Packet Mark:
Open Status Page: always
Transparent Proxy
OK
Cancel
Apply
Copy
Remove
default

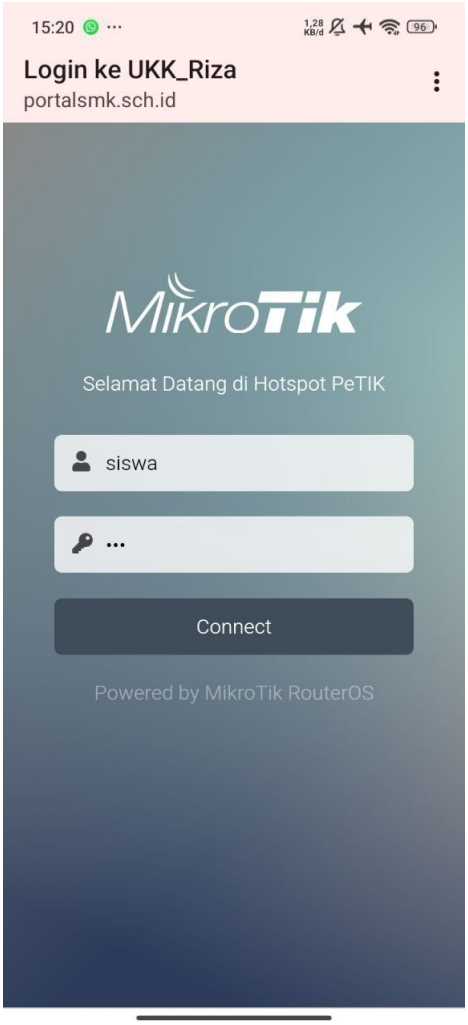

15.15
49%
Login ke UKK_Riza
portalsmk.sch.id
MikroTik
Selamat Datang di Hotspot PeTIK
guru
...
Connect
Powered by MikroTik RouterOS

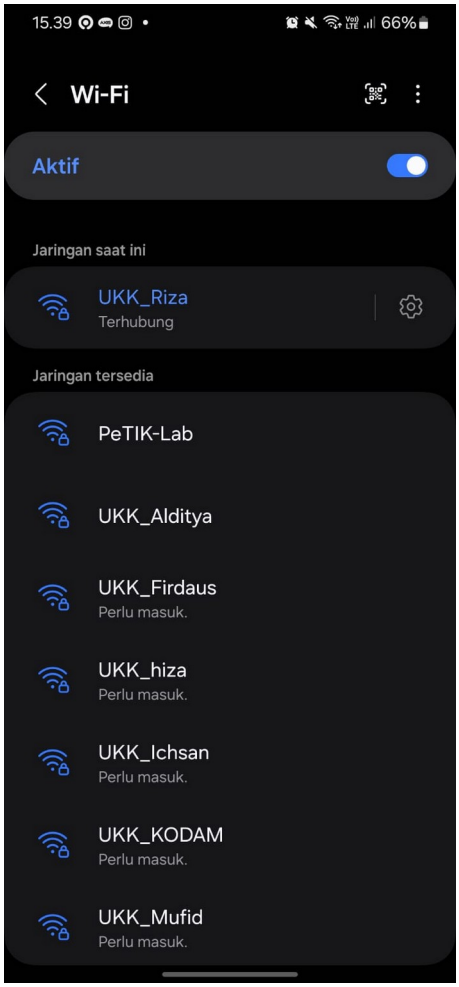

15.39
66%
Wi-Fi
Aktif
Jaringan saat ini
UKK_Riza
Terhubung
Jaringan tersedia
PeTIK-Lab
UKK_Aldítya
UKK_Firdaus
Perlu masuk.
UKK_hiza
Perlu masuk.
UKK_Ichsan
Perlu masuk.
UKK_KODAM
Perlu masuk.
UKK_Mufid
Perlu masuk.

3. siswa


Hotspot User <siswa>
General
Limits
Statistics
Server: all
Name: siswa
Password: ***
Address:
MAC Address:
Profile: siswa
Routes:
Email:
OK
Cancel
Apply
Disable
Comment
Copy
Remove
Reset Counters
Reset All Counters
enabled

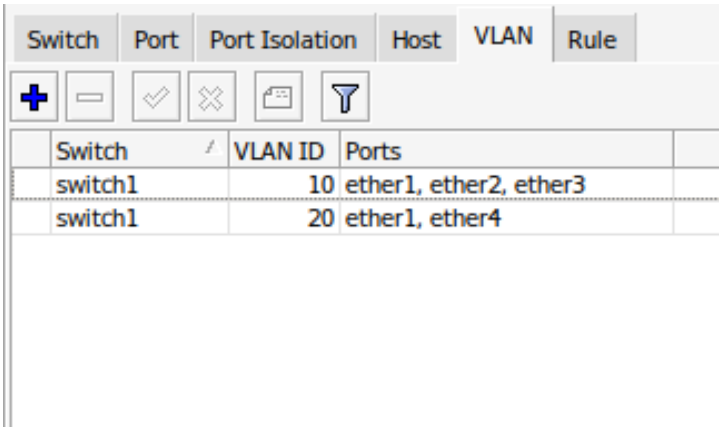

Hotspot User Profile <siswa>
General
Queue
Scripts
Name: siswa
Address Pool: hs-pool-7
Session Timeout:
Idle Timeout: none
Keepalive Timeout: 00:02:00
Status Autorefresh: 00:01:00
Shared Users: 1
Rate Limit (rx/tx): 128k
Add MAC Cookie
MAC Cookie Timeout: 3d 00:00:00
Address List:
Incoming Filter:
Outgoing Filter:
Incoming Packet Mark:
Outgoing Packet Mark:
Open Status Page: always
Transparent Proxy
OK
Cancel
Apply
Copy
Remove
default

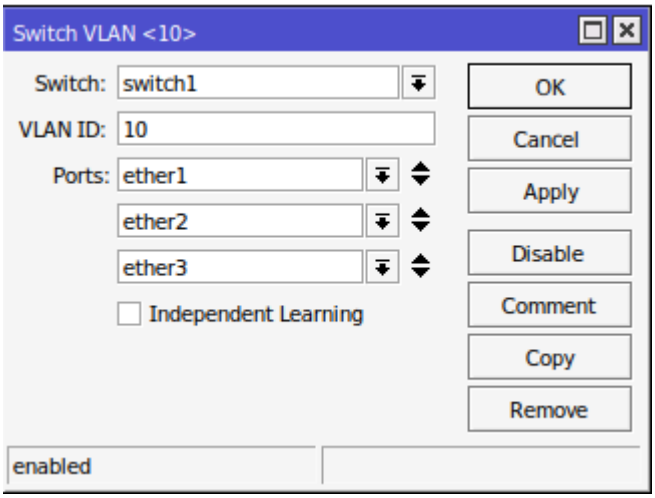

15:20
Login ke UKK_Riza
portalsmk.sch.id
MikroTik
Selamat Datang di Hotspot PeTIK
siswa
Connect
Powered by MikroTik RouterOS


15.39
66%
Wi-Fi
Aktif
Jaringan saat ini
UKK_Riza
Terhubung
Jaringan tersedia
PeTIK-Lab
UKK_Alditya
UKK_Firdaus
Perlu masuk.
UKK_hiza
Perlu masuk.
UKK_Ichsan
Perlu masuk.
UKK_KODAM
Perlu masuk.
UKK_Mufid
Perlu masuk.

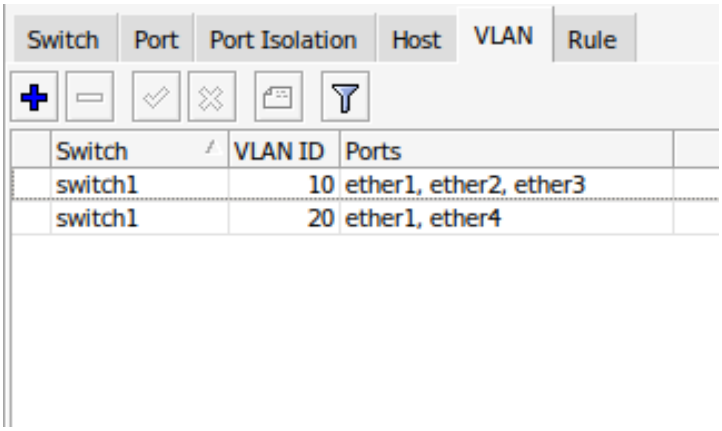
Konfigurasi VLAN pada Routerboard dengan ketentuan seperti berikut:

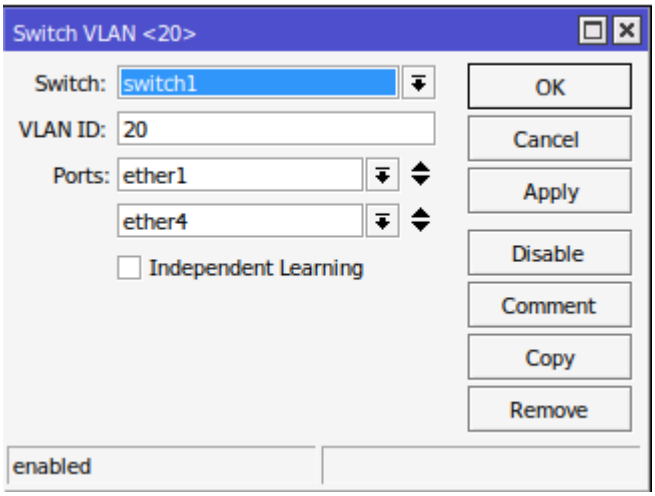
1) Port 1 terhubung ke Wifi Routerboard dan difungsikan sebagai port trunk
2) Port 2 dan 3 terhubung ke VLAN 1





3) Port 4 terhubung ke VLAN 2





4.) Gunakan mode VLAN secure dan logika “always-strip”

Switch

Switch | Port | Port Isolation | Host | VLAN | Rule

Name	Switch	VLAN Mode	VLAN Header	Default VLAN ID
ether1	switch1	secure	add if missing	0
ether2	switch1	secure	always strip	10
ether3	switch1	secure	always strip	10
ether4	switch1	secure	always strip	20
ether5	switch1	disabled	leave as is	0
switch1 cpu	switch1	disabled	leave as is	0

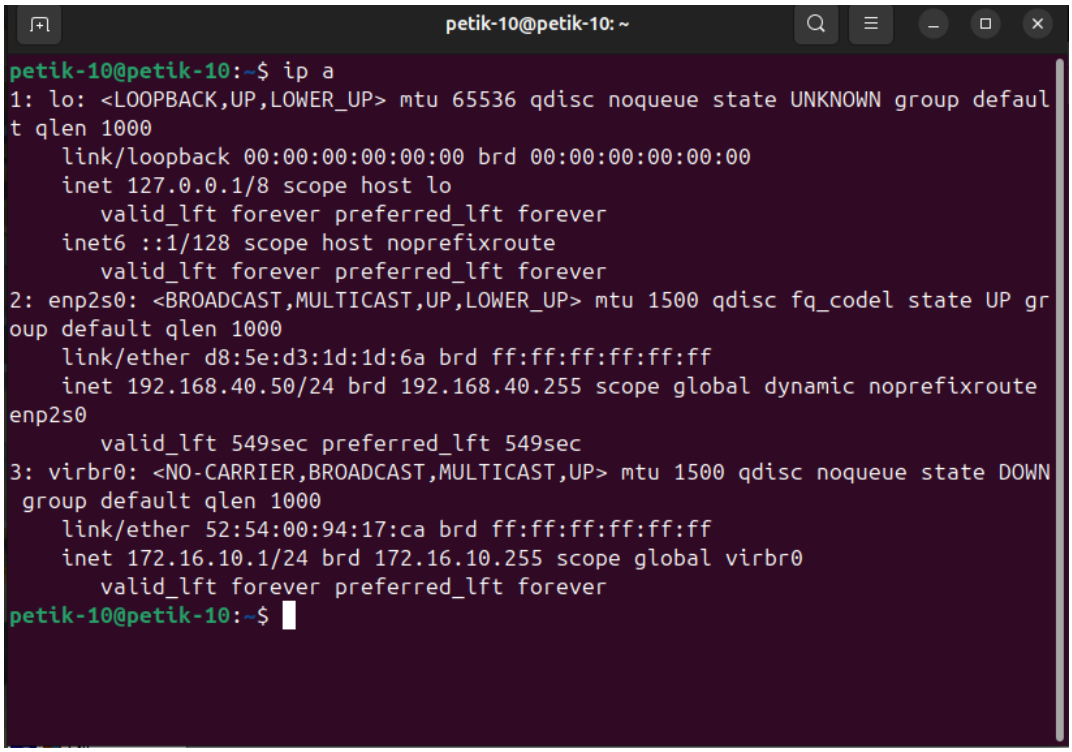
Pasang perangkat sesuai dengan desain topologi yang telah ditentukan

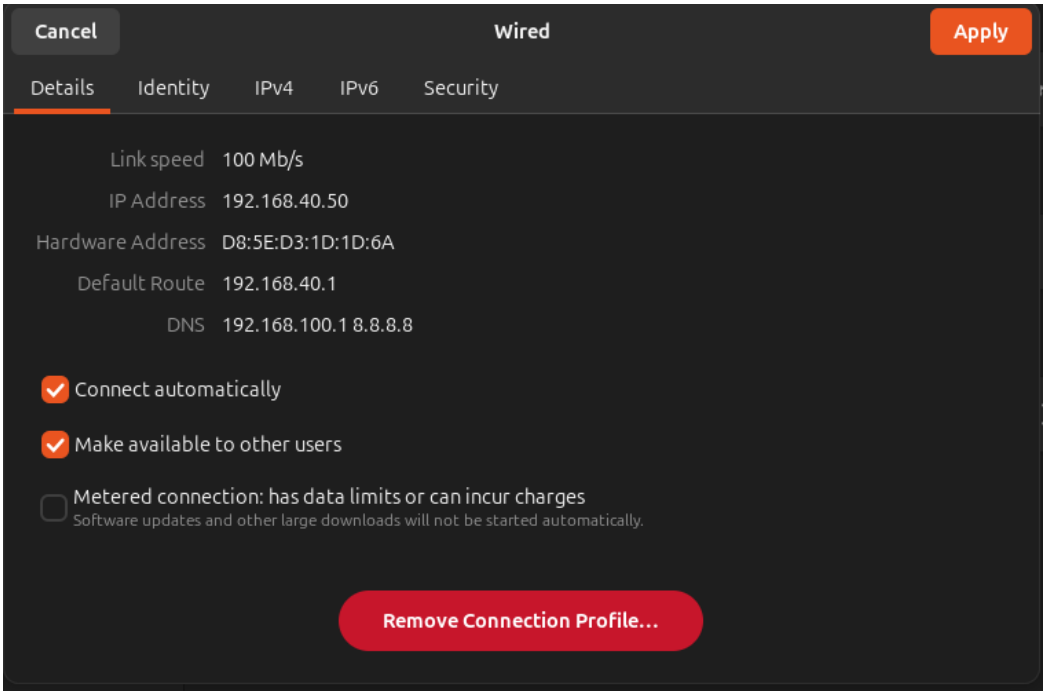
Lakukan persiapan dan pemasangan kabel jaringan

Lakukan pengujian pada seluruh client pada jaringan, dengan ketentuan sebagai berikut:

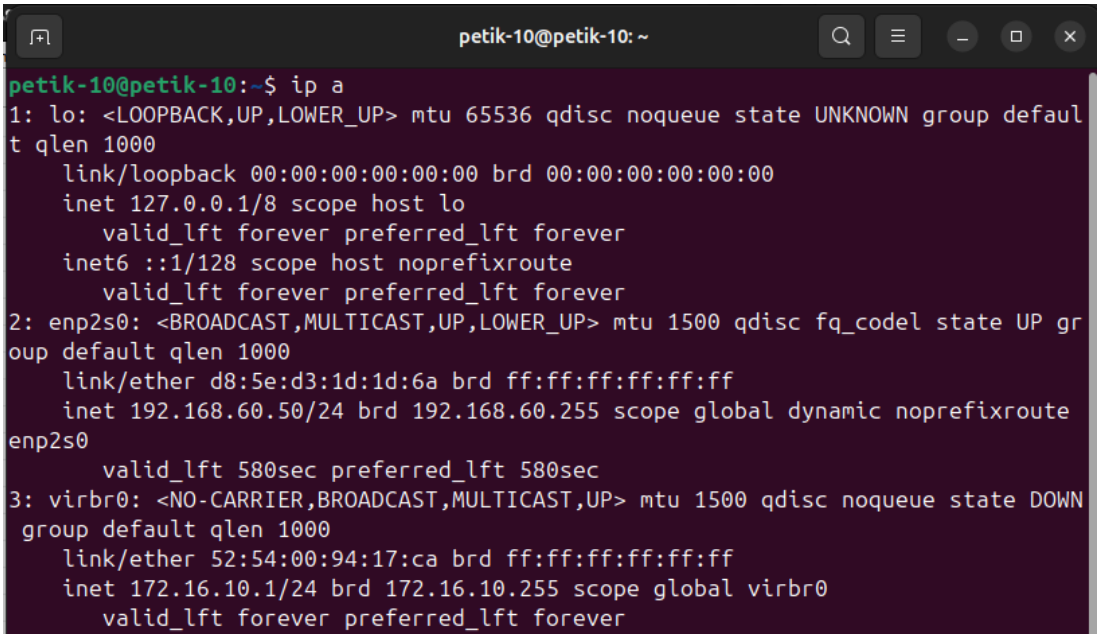
Client PC jaringan kabel:

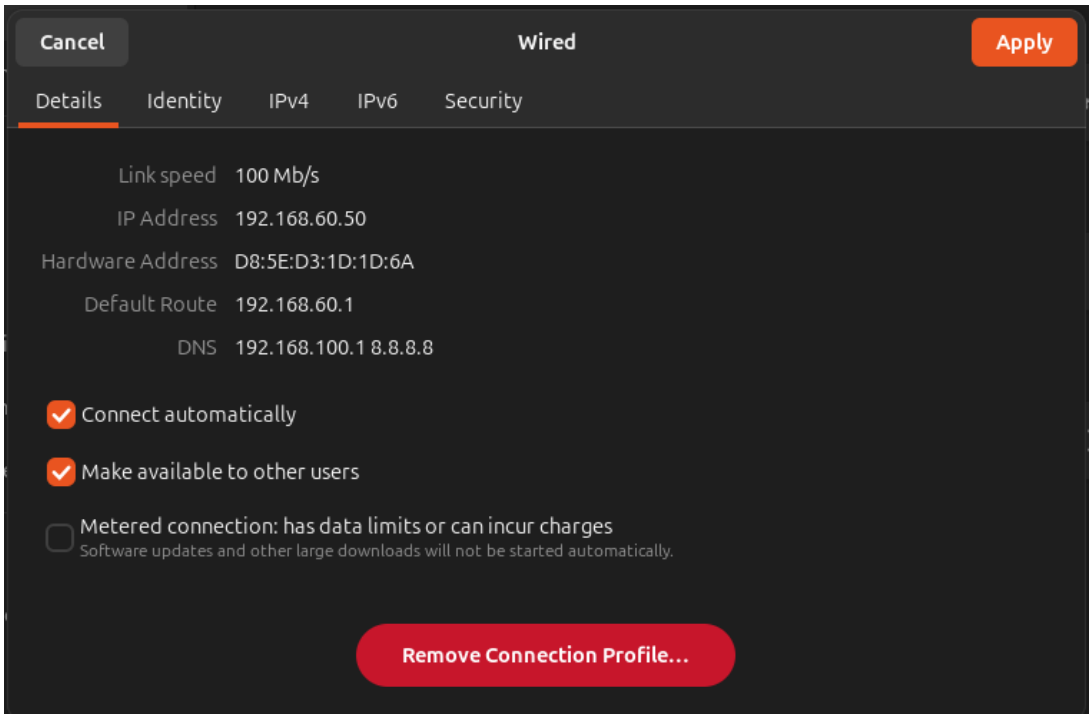
- Terhubung dengan port 2
- IP Address: DHCP





Client Laptop jaringan kabel:
- Terhubung dengan port 4
- IP Address: DHCP





Client jaringan wireless:
- IP Address: DHCP
- Sistem operasi : Android / IOS