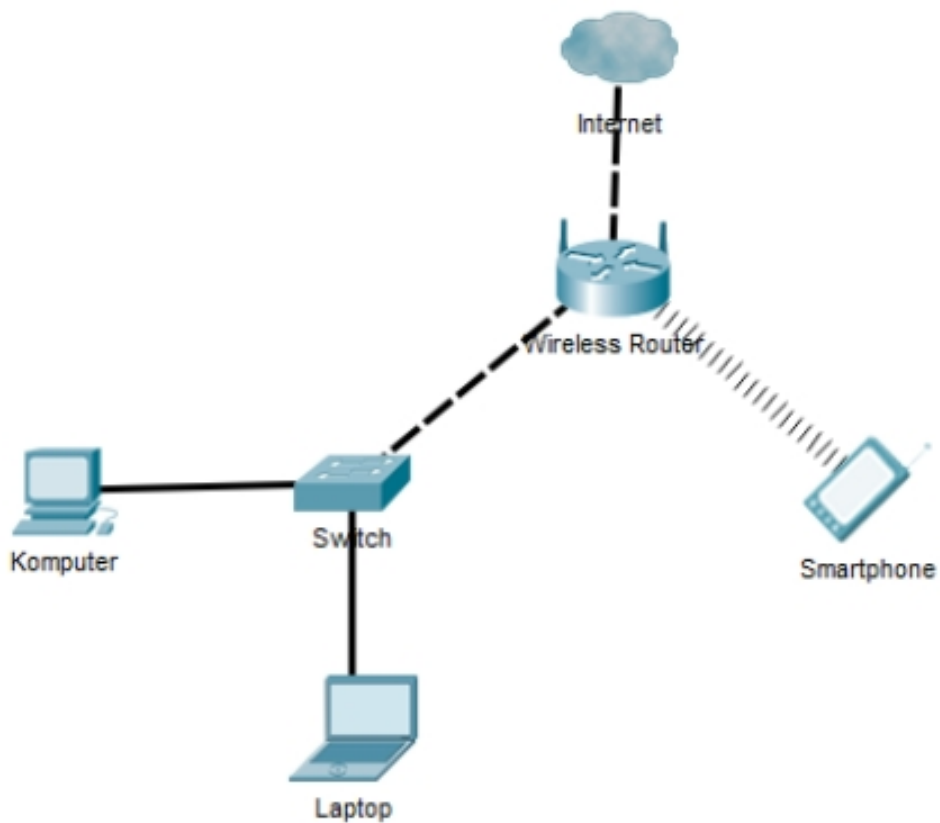


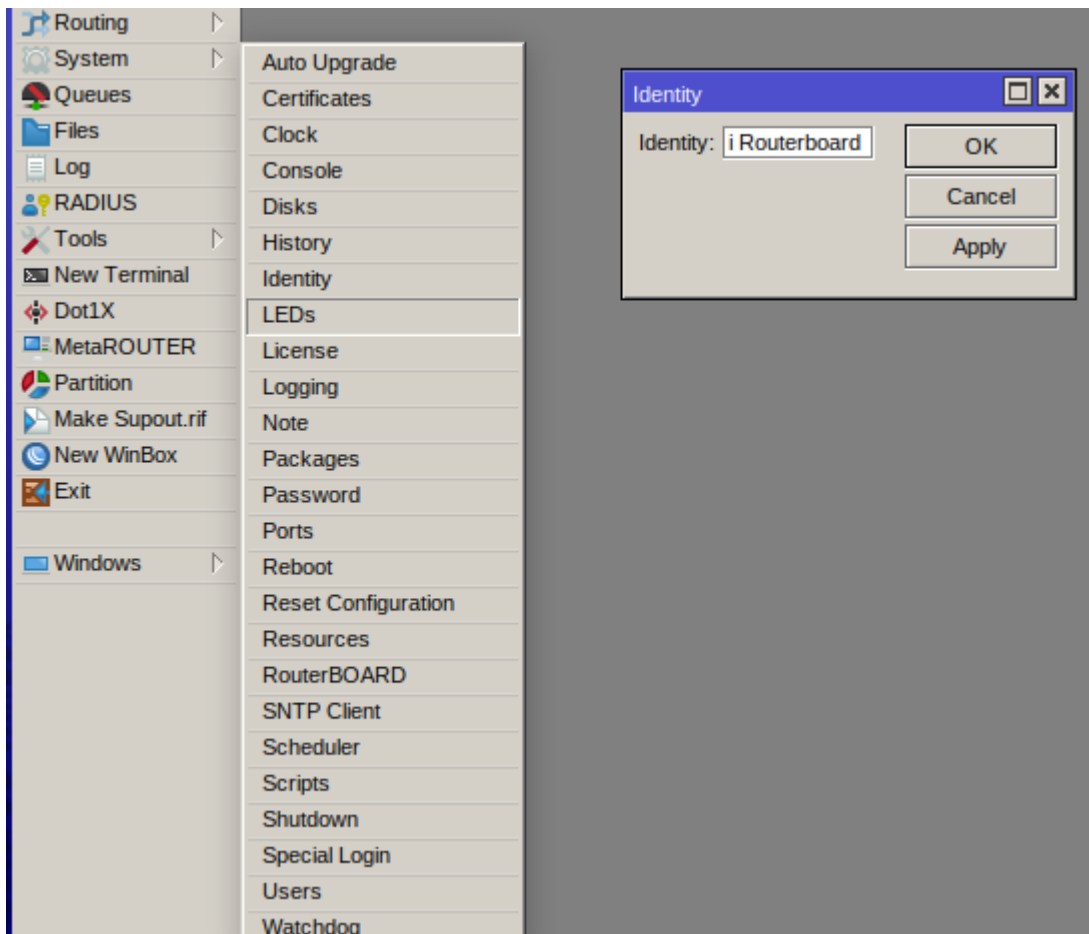
Dokumentasi Pengerjaan

By. Choirul Abidin and asesor Fajar Septian

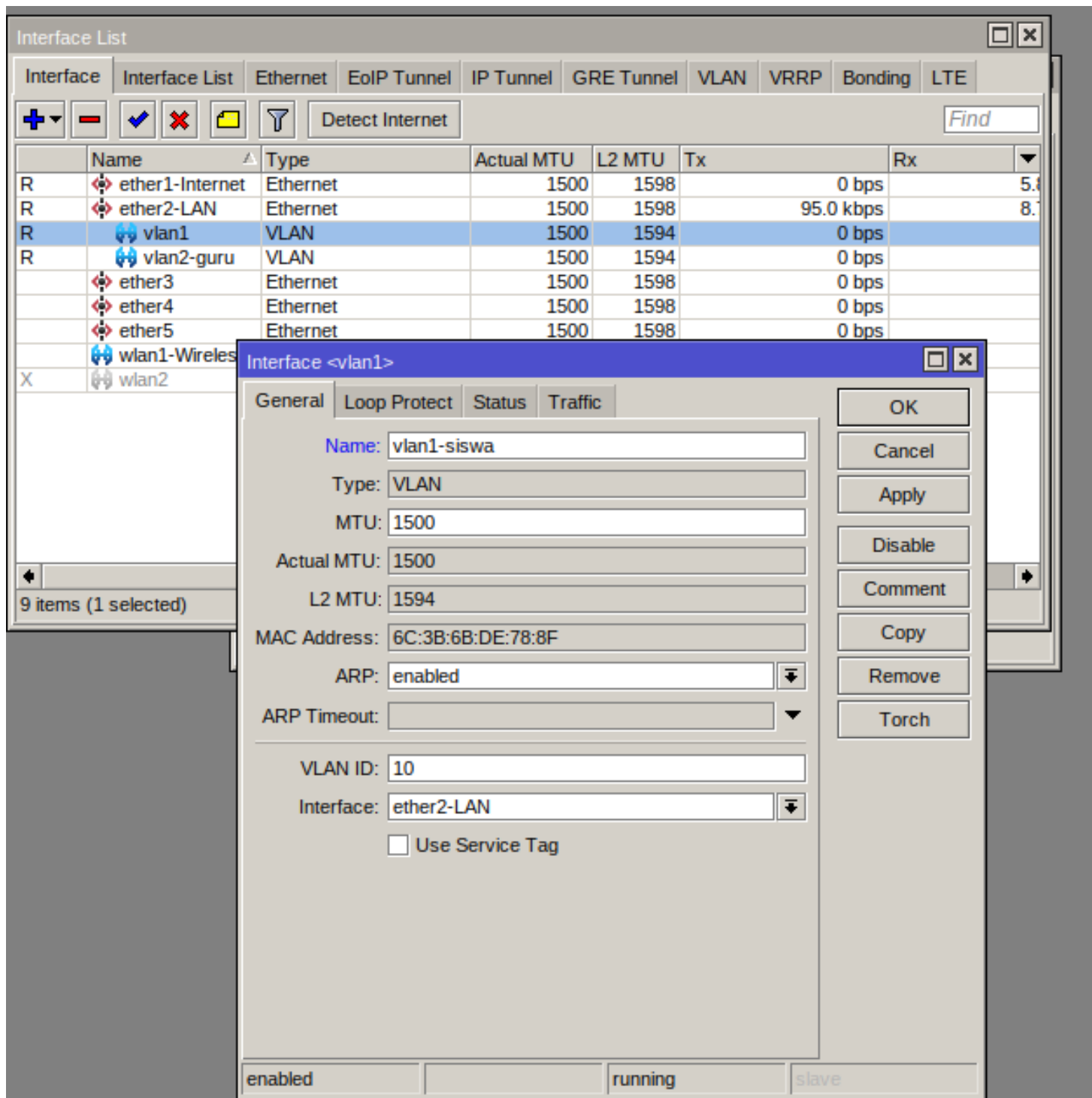
GAMBAR TOPOLOGI



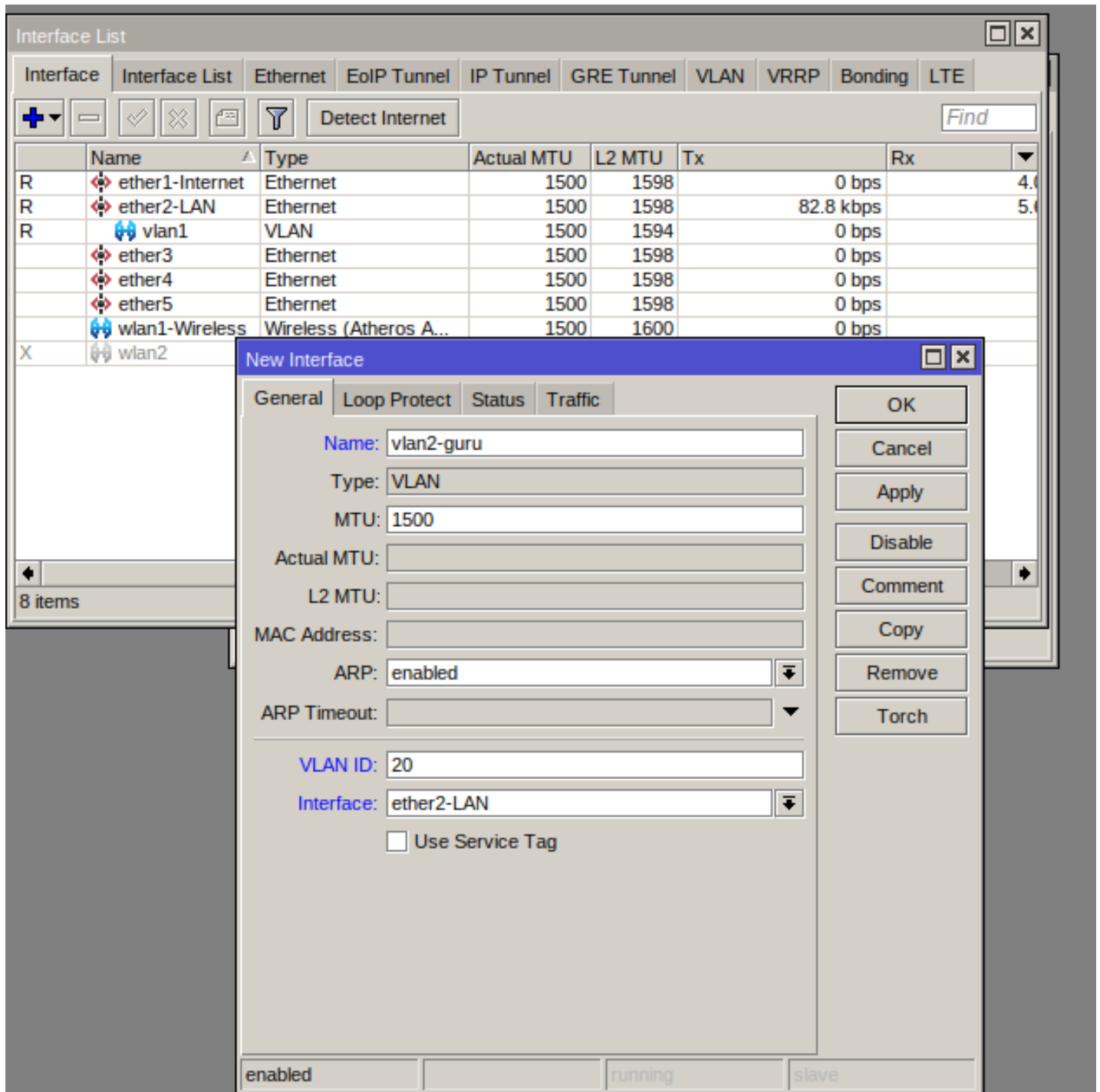
Konfigurasi Router 1



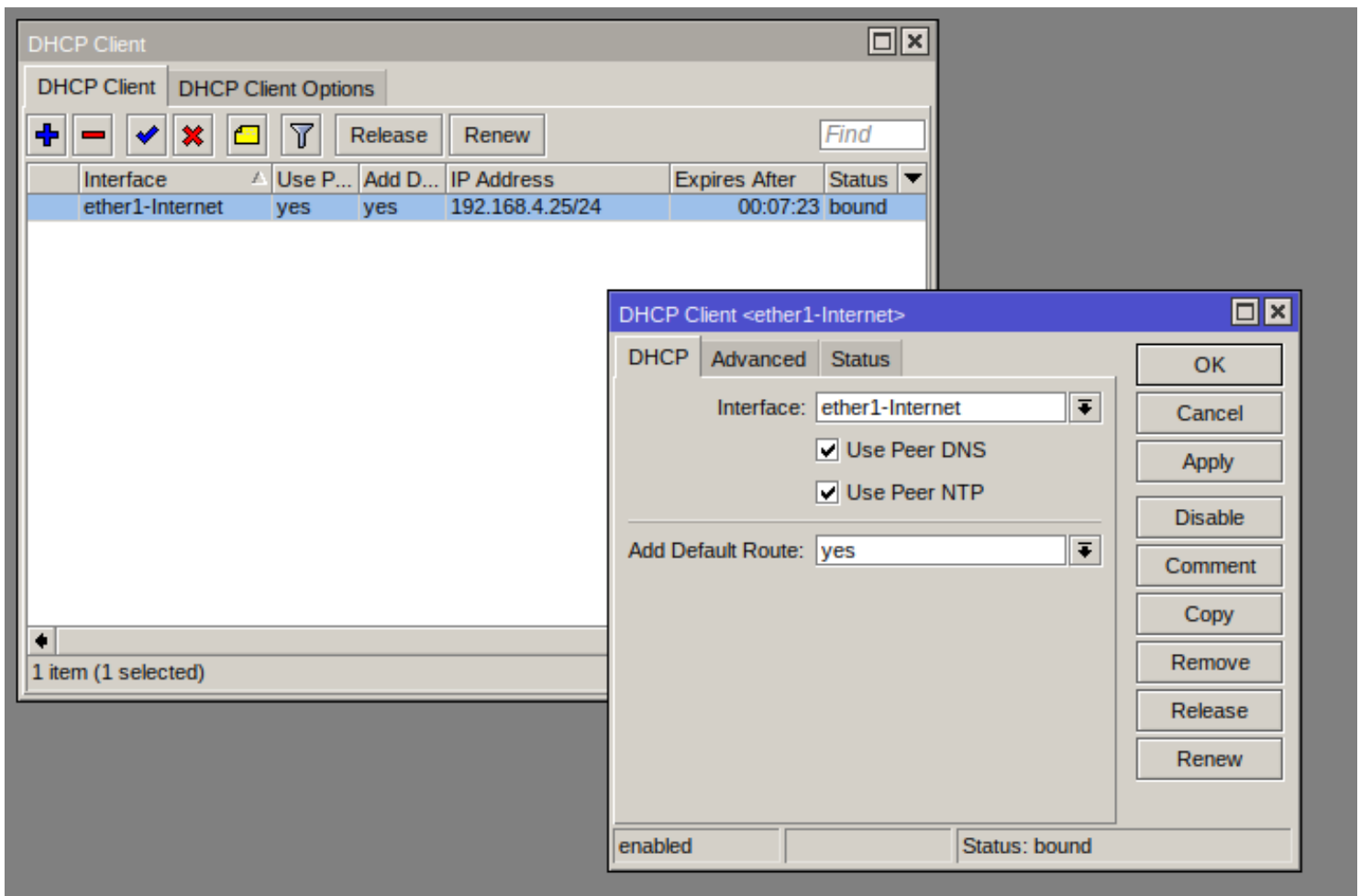
Tampilan untuk mengubah nama Mikrotik menjadi **Wifi Routerboard**



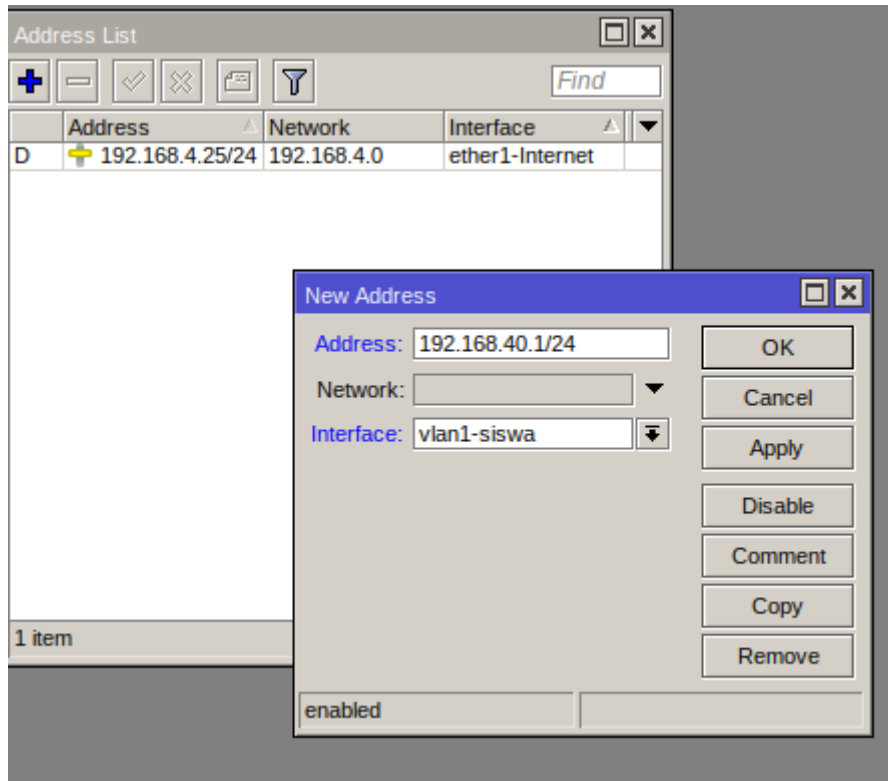
Membuat VLAN1 dengan menggunakan Interface ether2



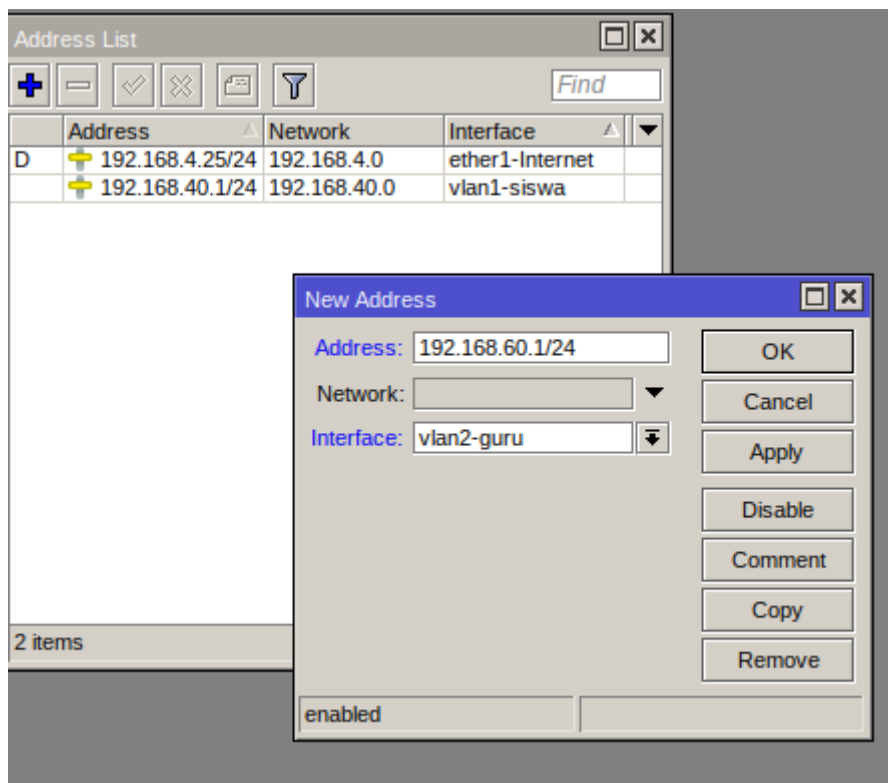
Membuat VLAN2 dengan menggunakan Interface ether2



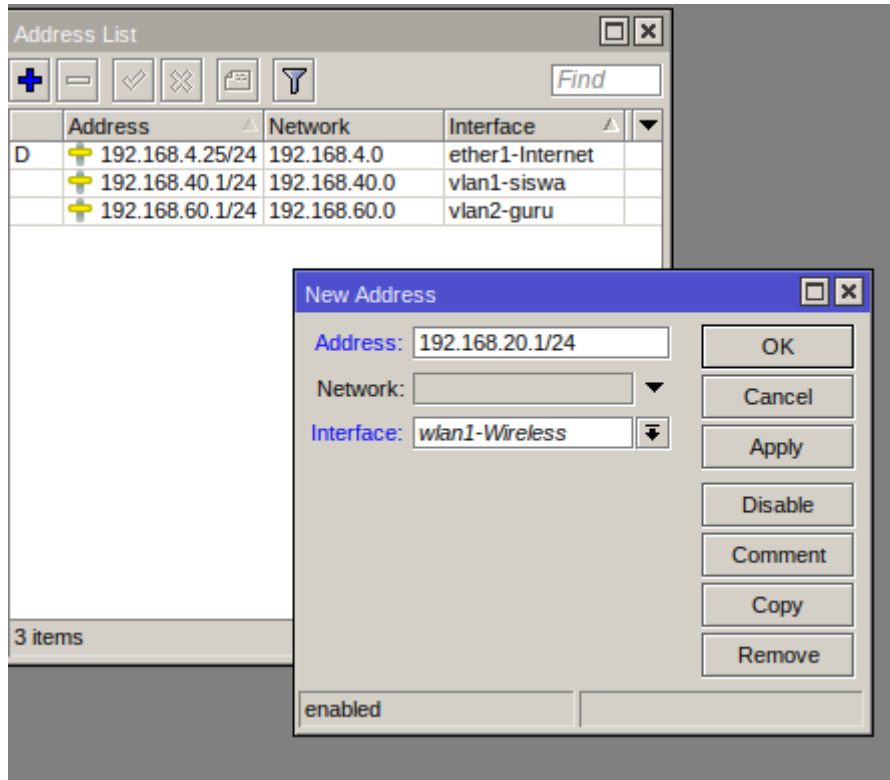
Membuat ether1 dengan menggunakan DHCP-Client



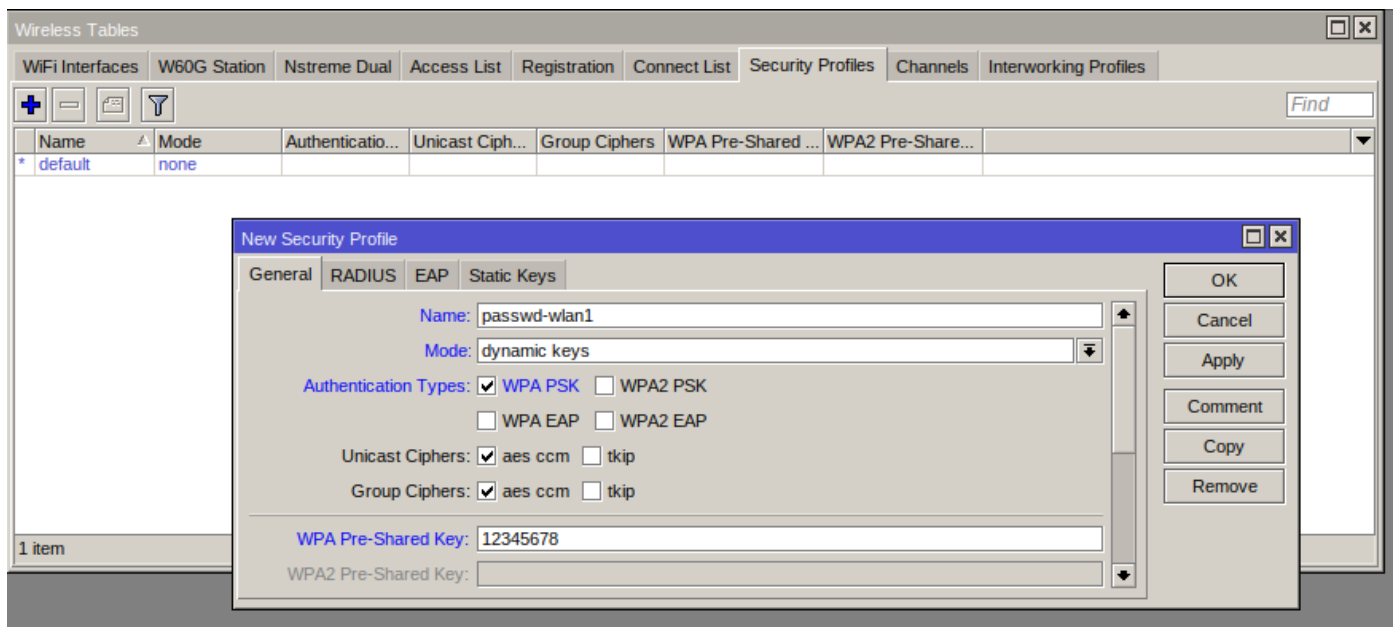
Konfigurasi IP Address vlan1



Konfigurasi IP Address vlan2



Konfigurasi IP Address Wlan



Membuat Security Profile untuk wlan

Wireless Tables

WiFi Interfaces | W60G Station | Nstreme Dual | Access List | Registration | Connect List | Security Profiles | Channels | Interworking Profiles

Name	Type	Actual MTU	Tx	Rx	Tx Packet (p/s)	Rx Packet (p/s)	FP Tx
wlan1-Wireless	Wireless (Atheros A...	1500	0 bps	0 bps	0	0	
wlan2	Wireless (Atheros A...	1500	0 bps	0 bps	0	0	

2 items out of 9 (1 selected)

Interface <wlan1-Wireless>

General | **Wireless** | HT | WDS | Nstreme | NV2 | Status | Traffic

Mode:

Band:

Channel Width:

Frequency: MHz

SSID:

Security Profile:

WPS Mode:

Frequency Mode:

Country:

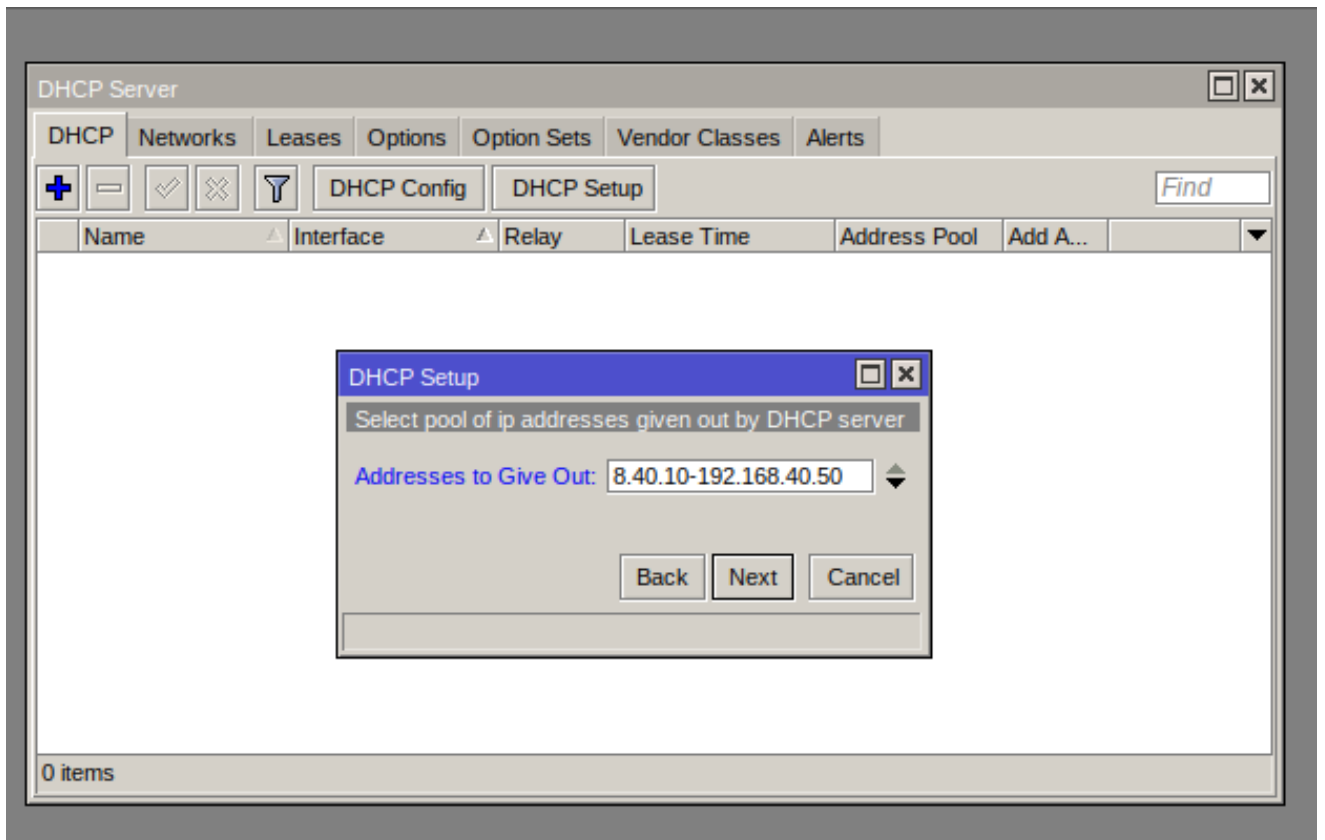
Installation:

Default AP Tx Limit: bps

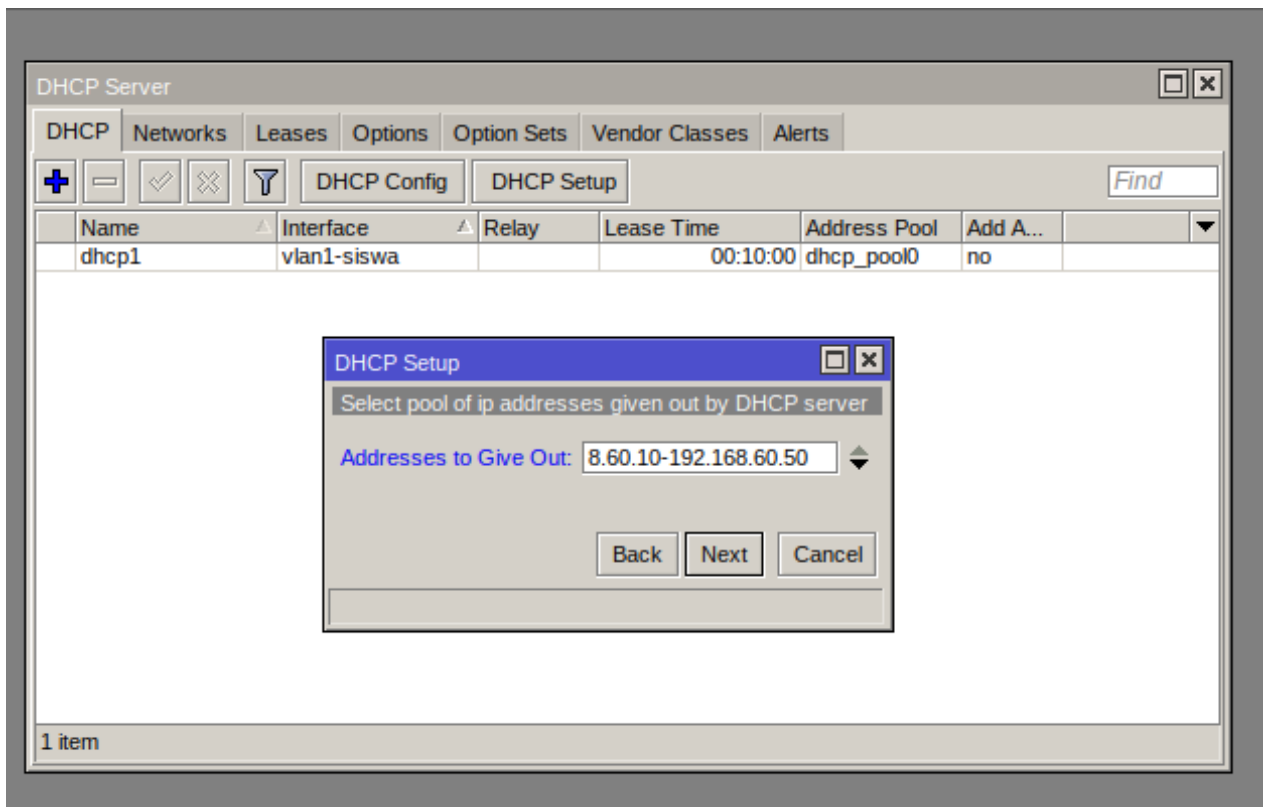
Default Client Tx Limit: bps

Default Authenticate
 Default Forward
 Hide SSID

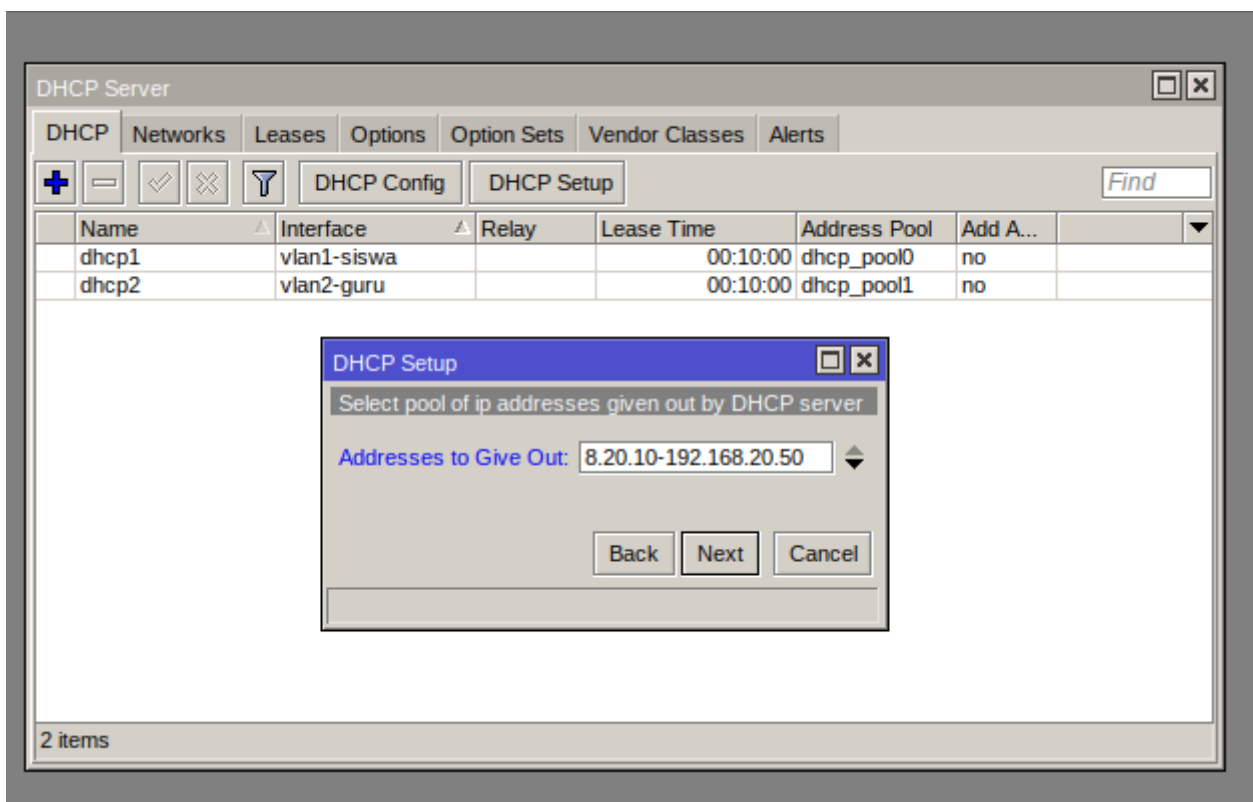
Konfigurasi Wireless



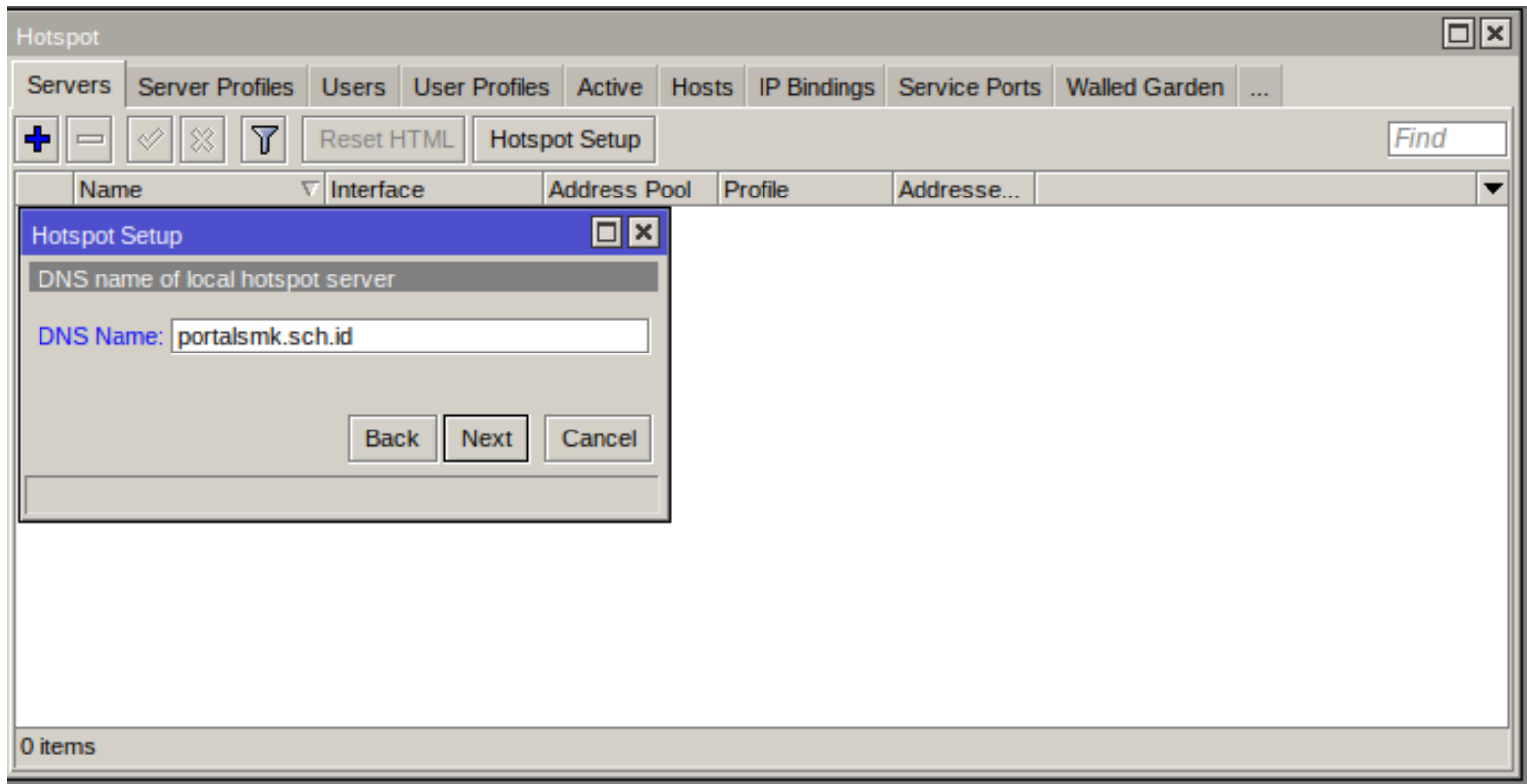
Membuat DHCP Server untuk VLAN1



Membuat DHCP Server untuk VLAN2



Membuat DHCP Server untuk Wlan1



Membuat alamat Login Hotspot

Hotspot

Users User Profiles Active Hosts

Name	Session Time...	Idle
* default		

1 item

New Hotspot User Profile

General Queue Scripts

Name:

Address Pool:

Session Timeout:

Idle Timeout:

Keepalive Timeout:

Status Autorefresh:

Shared Users:

Rate Limit (rx/tx):

Add MAC Cookie

MAC Cookie Timeout:

Address List:

Incoming Filter:

Outgoing Filter:

Incoming Packet Mark:

Outgoing Packet Mark:

Open Status Page:

Transparent Proxy

OK
Cancel
Apply
Copy
Remove

default

Membuat Konfigurasi Rate limit/Kecepatan untuk user kepala sekolah

Hotspot

Users User Profiles Active Hosts

Name	Session Time...	Idle
* default		
kepsek		

2 items

New Hotspot User Profile

General Queue Scripts

Name: Guru

Address Pool: dhcp_pool2

Session Timeout: [dropdown]

Idle Timeout: none

Keepalive Timeout: 00:02:00

Status Autorefresh: 00:01:00

Shared Users: 1

Rate Limit (rx/tx): 256k/256k

Add MAC Cookie

MAC Cookie Timeout: 3d 00:00:00

Address List: [dropdown]

Incoming Filter: [dropdown]

Outgoing Filter: [dropdown]

Incoming Packet Mark: [dropdown]

Outgoing Packet Mark: [dropdown]

Open Status Page: always

Transparent Proxy

OK Cancel Apply Copy Remove

default

Membuat Konfigurasi Rate limit/Kecepatan untuk user Guru

The image shows the Mikrotik Hotspot configuration interface. On the left, the 'User Profiles' tab is active, displaying a table with three entries: 'Guru', 'default', and 'kepsek'. The 'default' profile is selected. On the right, the 'New Hotspot User Profile' dialog box is open, showing the configuration for the 'Siswa' profile. The 'General' tab is selected, and the 'Rate Limit (rx/tx)' is set to '128k/128k'. Other settings include 'Name: Siswa', 'Address Pool: dhcp_pool2', 'Session Timeout: [empty]', 'Idle Timeout: none', 'Keepalive Timeout: 00:02:00', 'Status Autorefresh: 00:01:00', 'Shared Users: 1', 'Add MAC Cookie' checked, 'MAC Cookie Timeout: 3d 00:00:00', 'Incoming Filter: [empty]', 'Outgoing Filter: [empty]', 'Incoming Packet Mark: [empty]', 'Outgoing Packet Mark: [empty]', 'Open Status Page: always', and 'Transparent Proxy' unchecked.

Name	Session Time...	Idle
Guru		
* default		
kepsek		

3 items

New Hotspot User Profile

General Queue Scripts

Name: Siswa

Address Pool: dhcp_pool2

Session Timeout: [empty]

Idle Timeout: none

Keepalive Timeout: 00:02:00

Status Autorefresh: 00:01:00

Shared Users: 1

Rate Limit (rx/tx): 128k/128k

Add MAC Cookie

MAC Cookie Timeout: 3d 00:00:00

Address List: [empty]

Incoming Filter: [empty]

Outgoing Filter: [empty]

Incoming Packet Mark: [empty]

Outgoing Packet Mark: [empty]

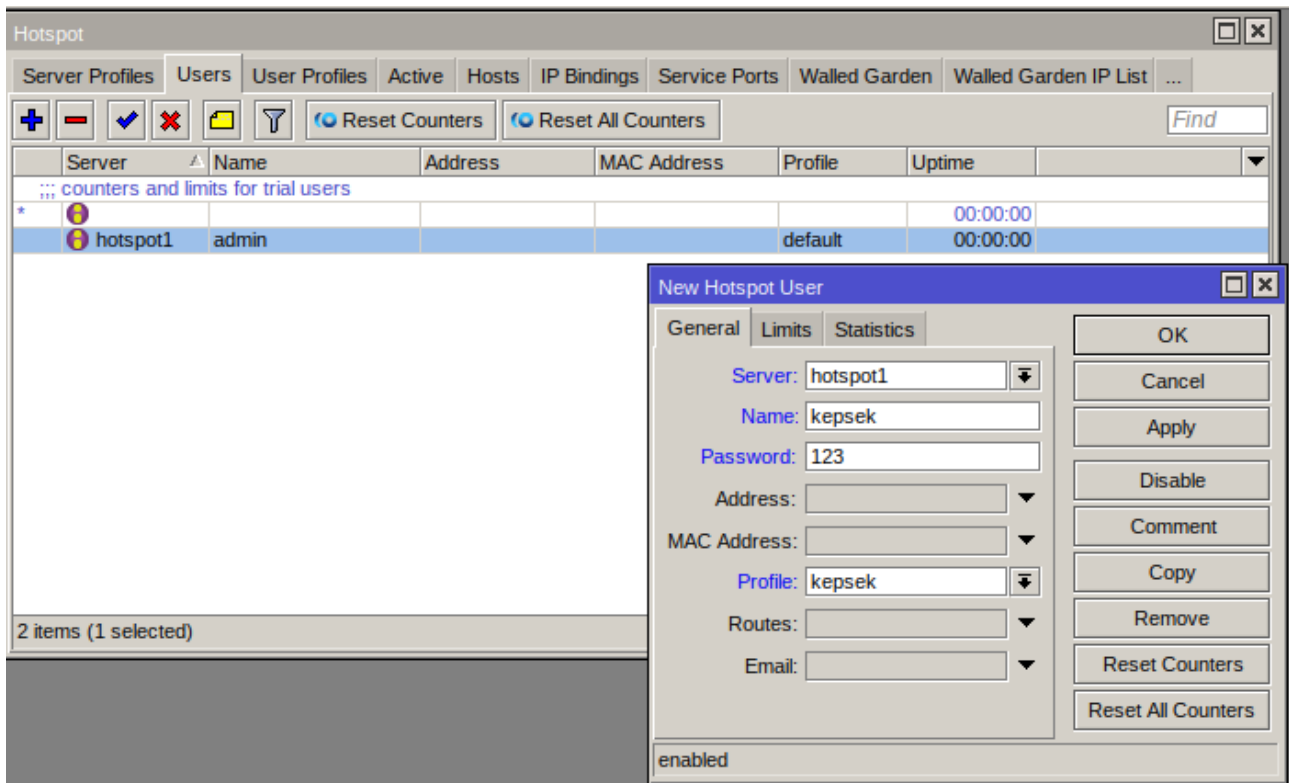
Open Status Page: always

Transparent Proxy

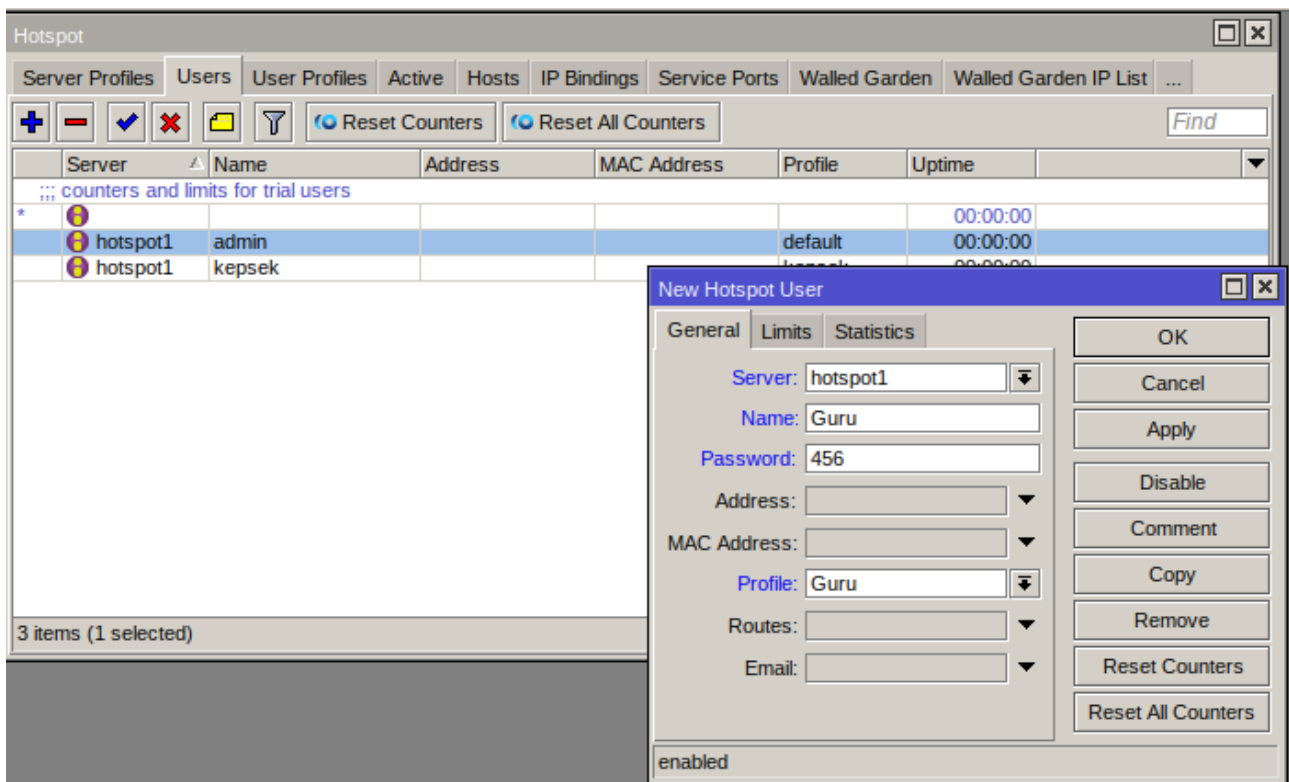
OK Cancel Apply Copy Remove

default

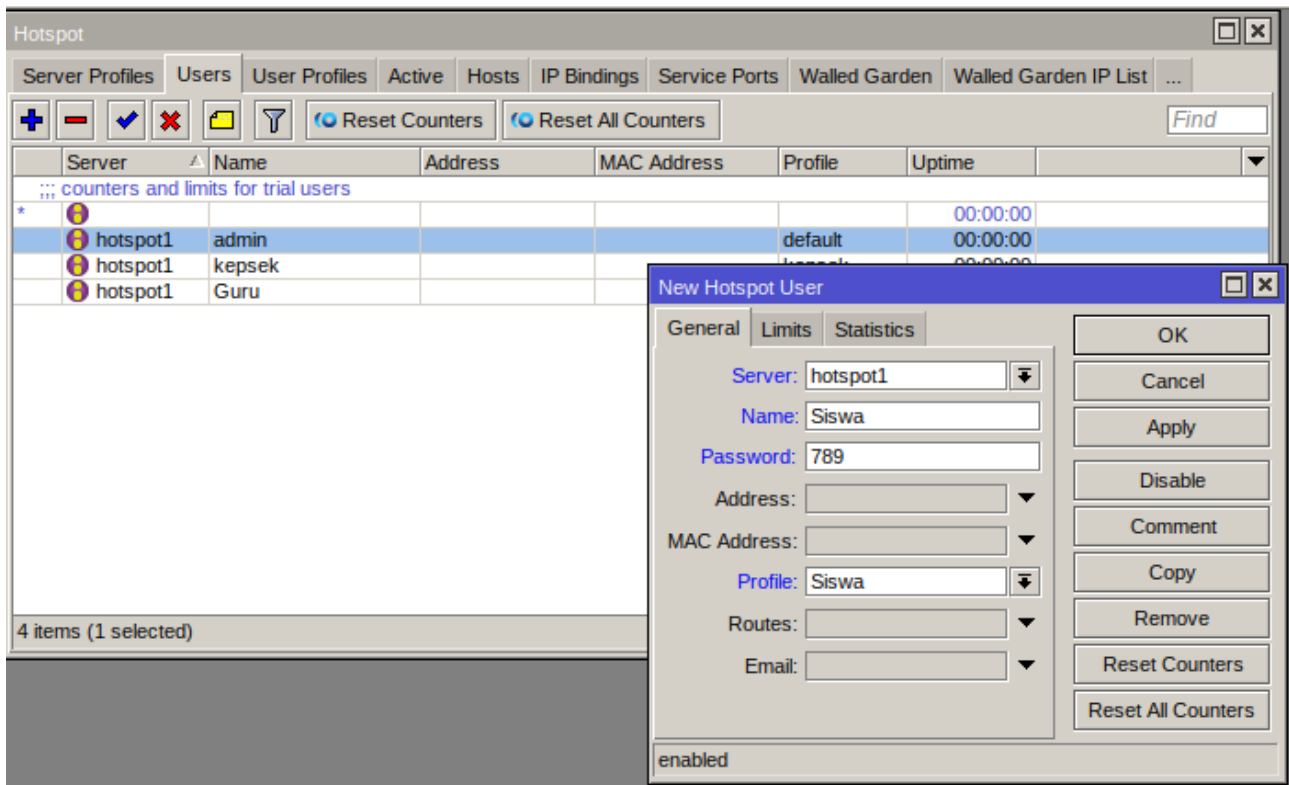
Membuat Konfigurasi Rate limit/Kecepatan untuk user Siswa



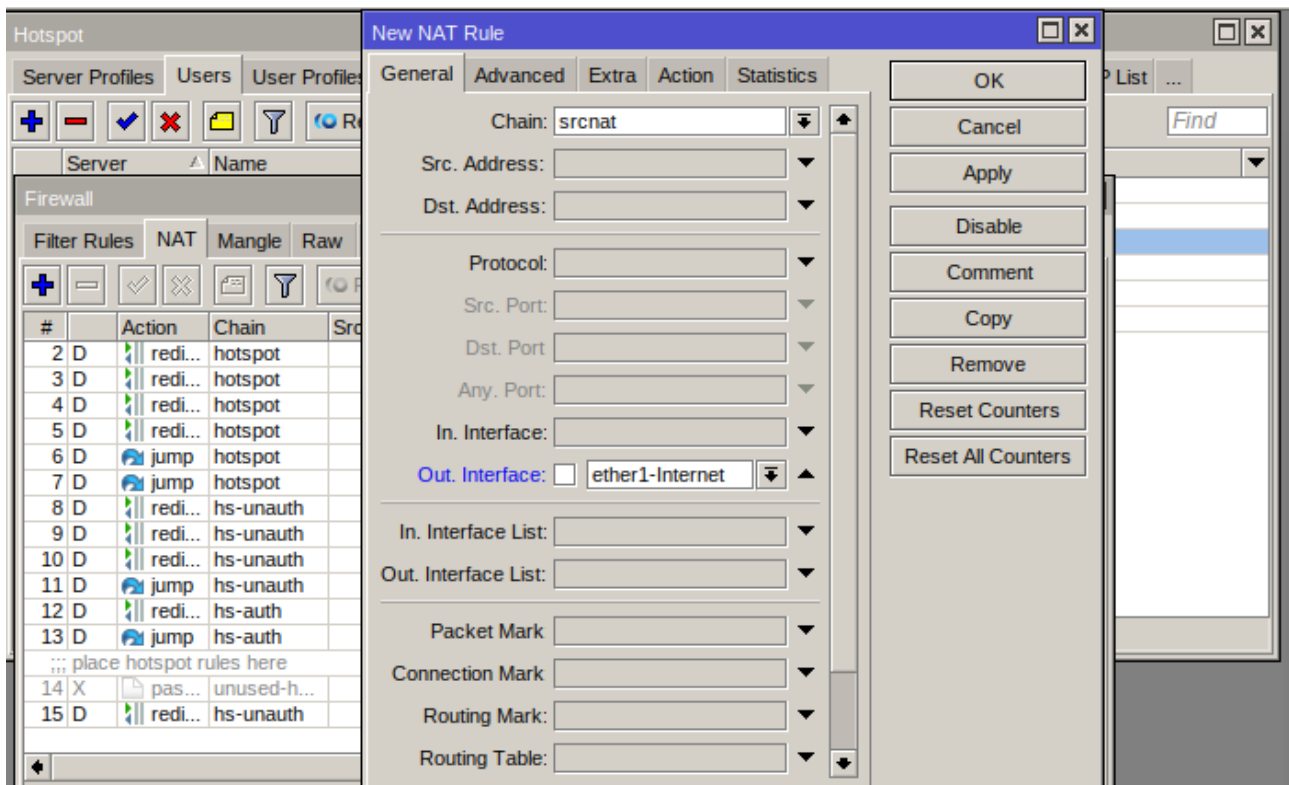
Membuat user kepek



Membuat user Guru



Membuat user Siswa



Menghubungkan Jaringan kabel dan Jaringan wireless ke internet

```
Terminal
<path d="M42.91,1.4c.1,0,.11,0,.12,11A16.55,16.55,0,0,0,48.26,13a16.6,16.6,0,0,0
,12,4.66c-10,4-20.55-5.6-17.33-16.28" fill="#fff" fill-rule="evenodd" /></svg>

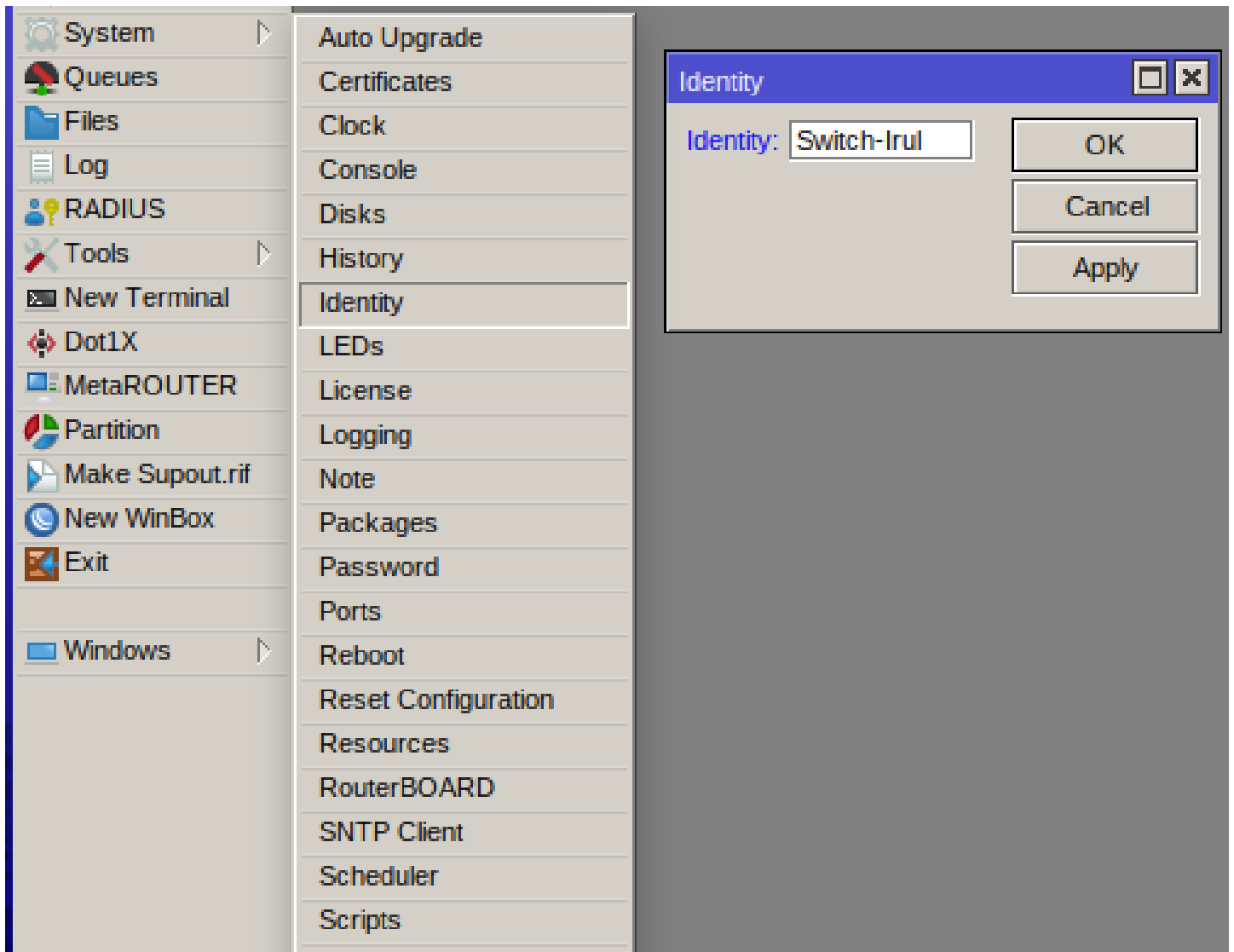
<p class="info $(if error>alert$(endif)">
  $(if error == "")Selamat Datang di Hotspot PeTIK$(if trial == 'yes')<br />Free t
rial available, <a href="$ (link-login-only)?dst=$(link-orig-esc)&username=T-$(mac-esc)">click here</
a>.$(endif)
  $(endif)
  $(if error)$(error)$(endif)
</p>
<label>
  
  <input name="username" type="text" value="$(username)" placeholder="Username" />
</label>

<label>
  
  <input name="password" type="password" placeholder="Password" />
</label>

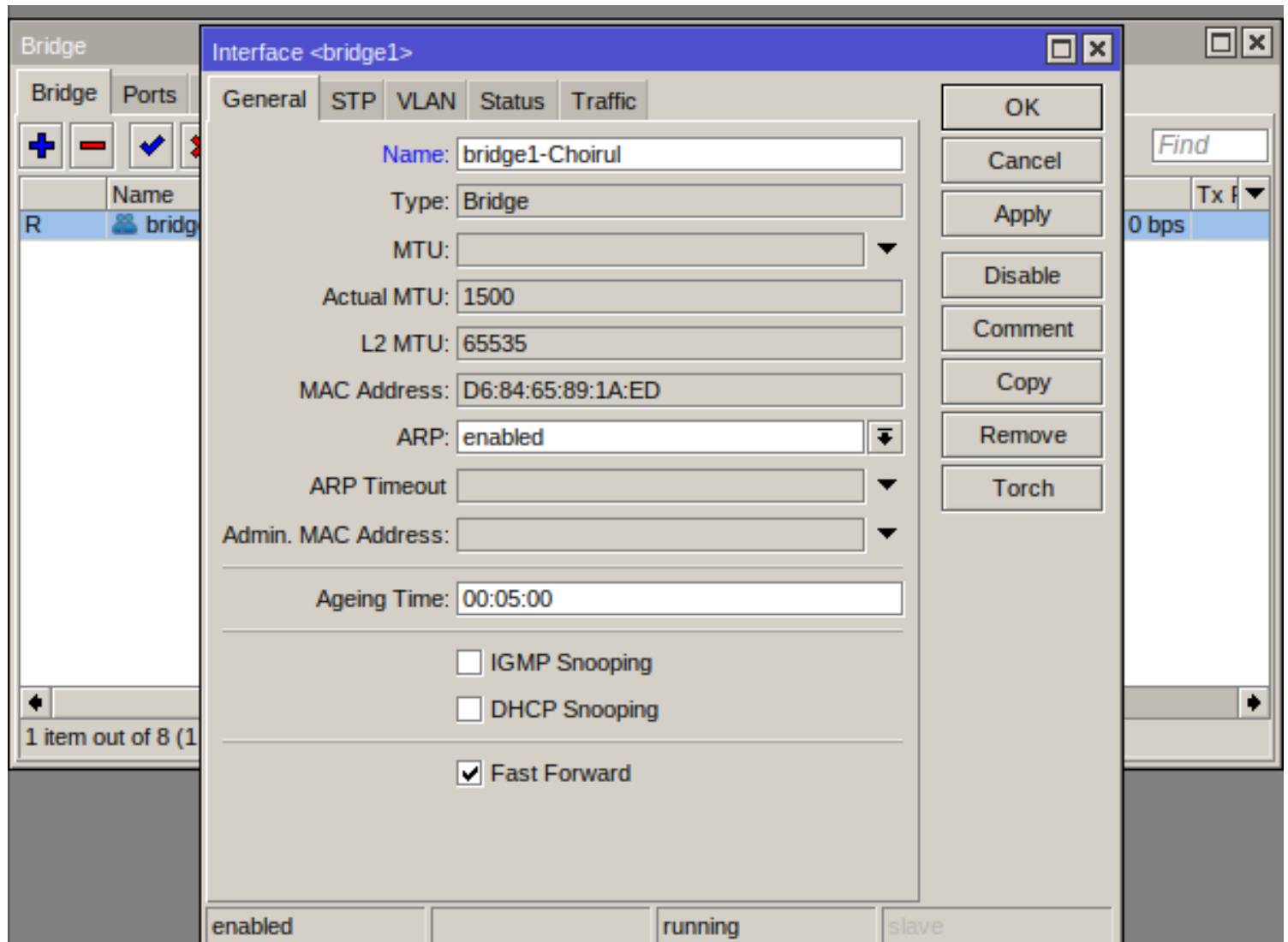
<input type="submit" value="Connect" />
-- INSERT --
54,73 83%
```

Edit dan tambah tulisan Selamat datang di file hotspot/login.html

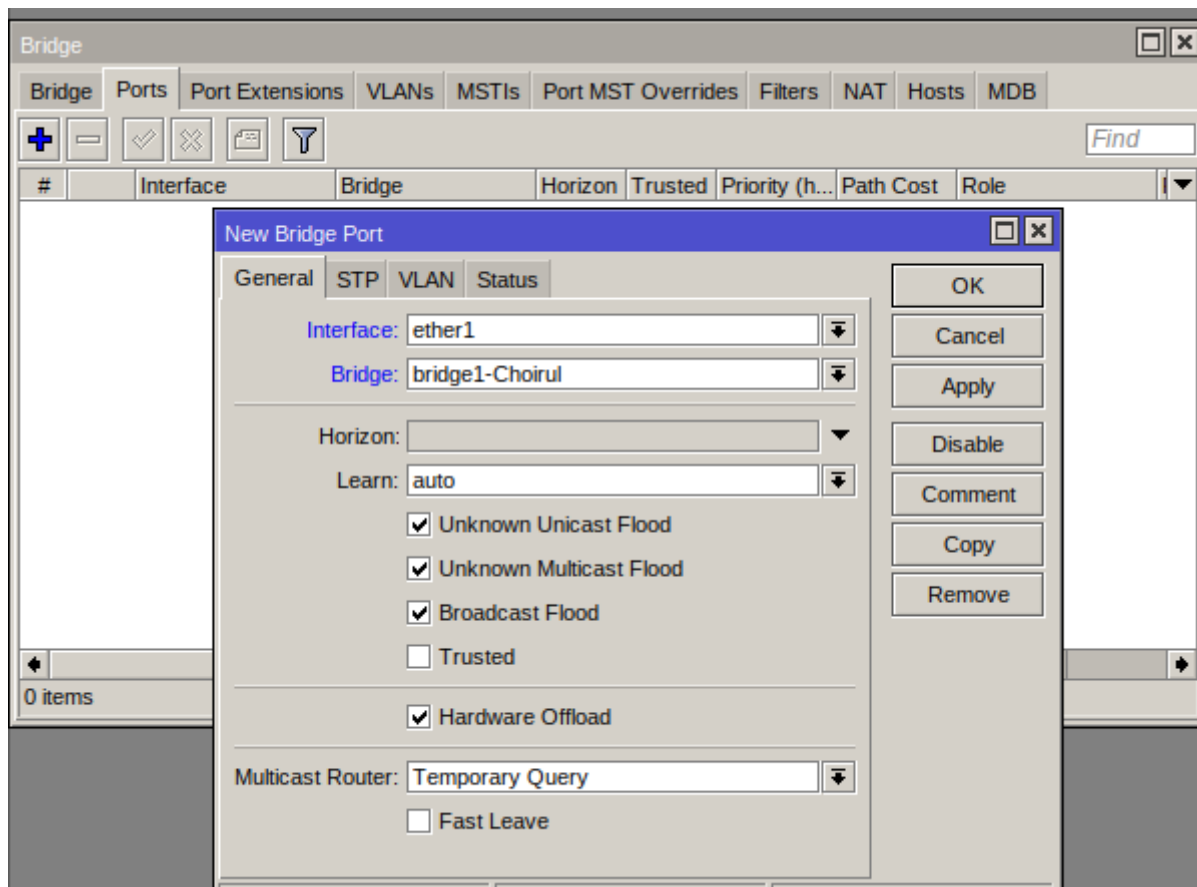
Konfigurasi Router 2



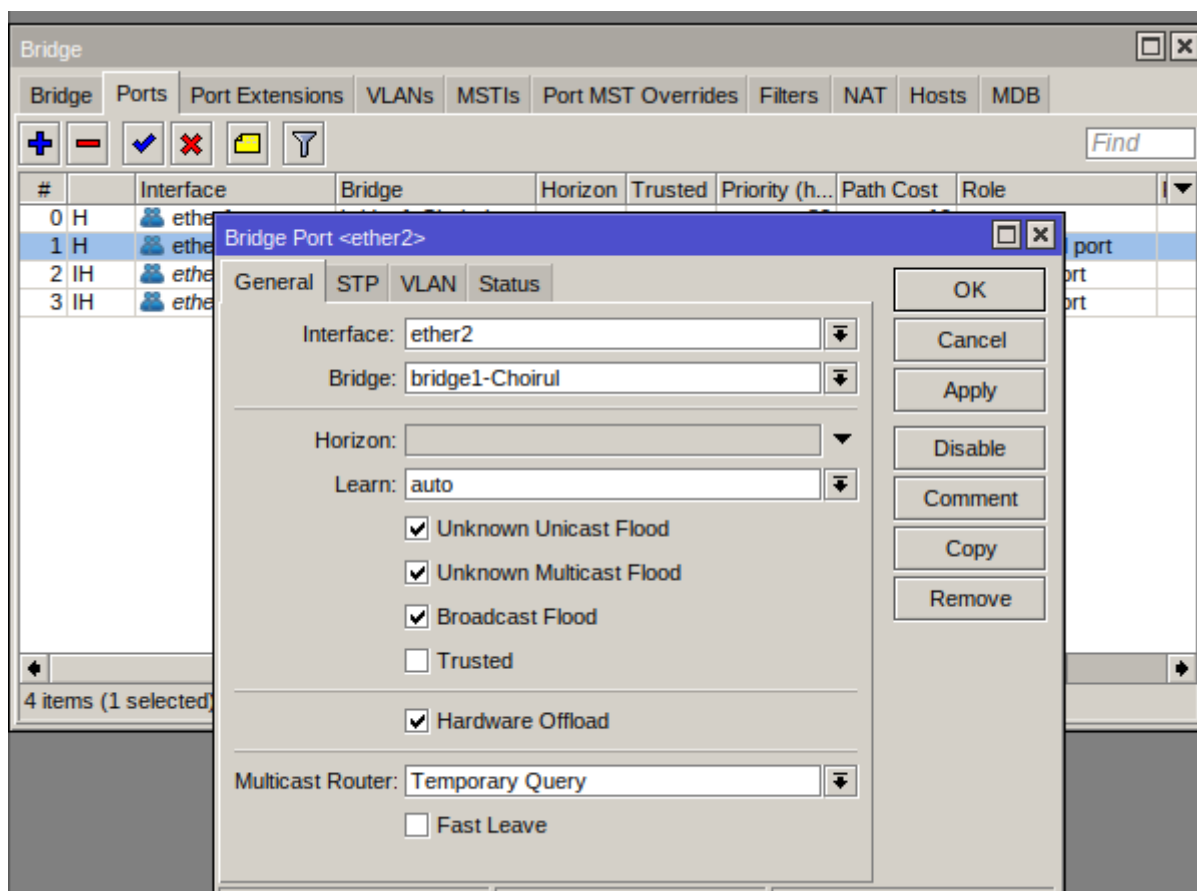
Mengubah nama Mikrotik menjadi Switch



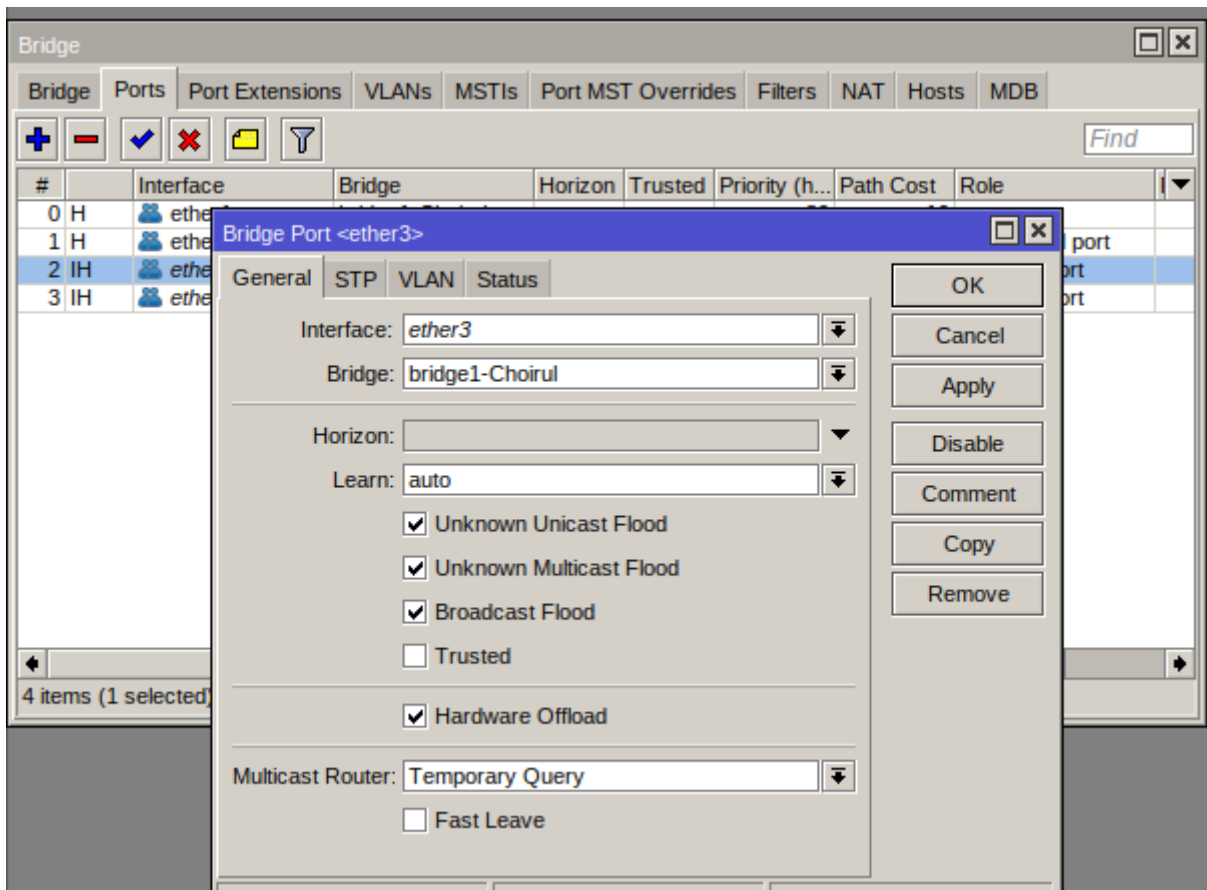
Membuat Konfigurasi Bridge



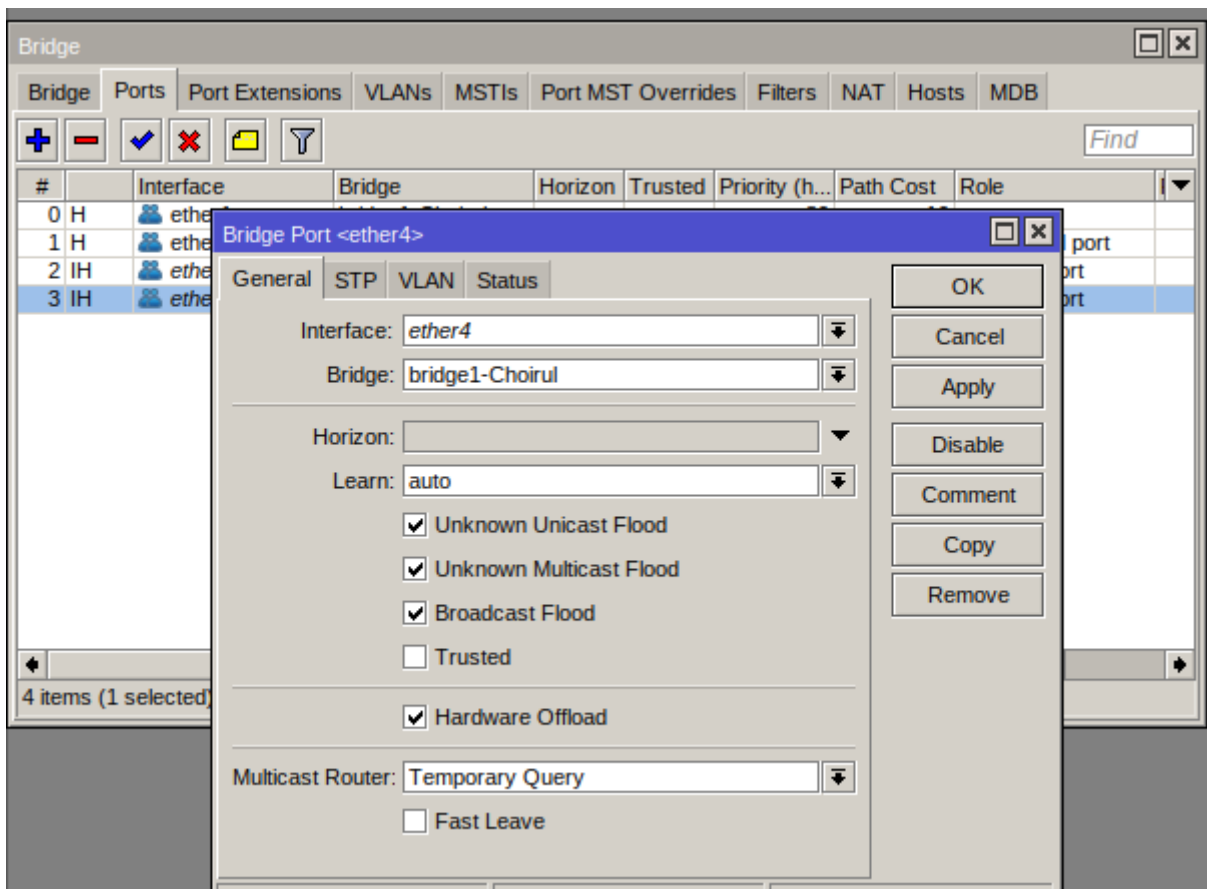
Membuat Port bridge untuk ether1



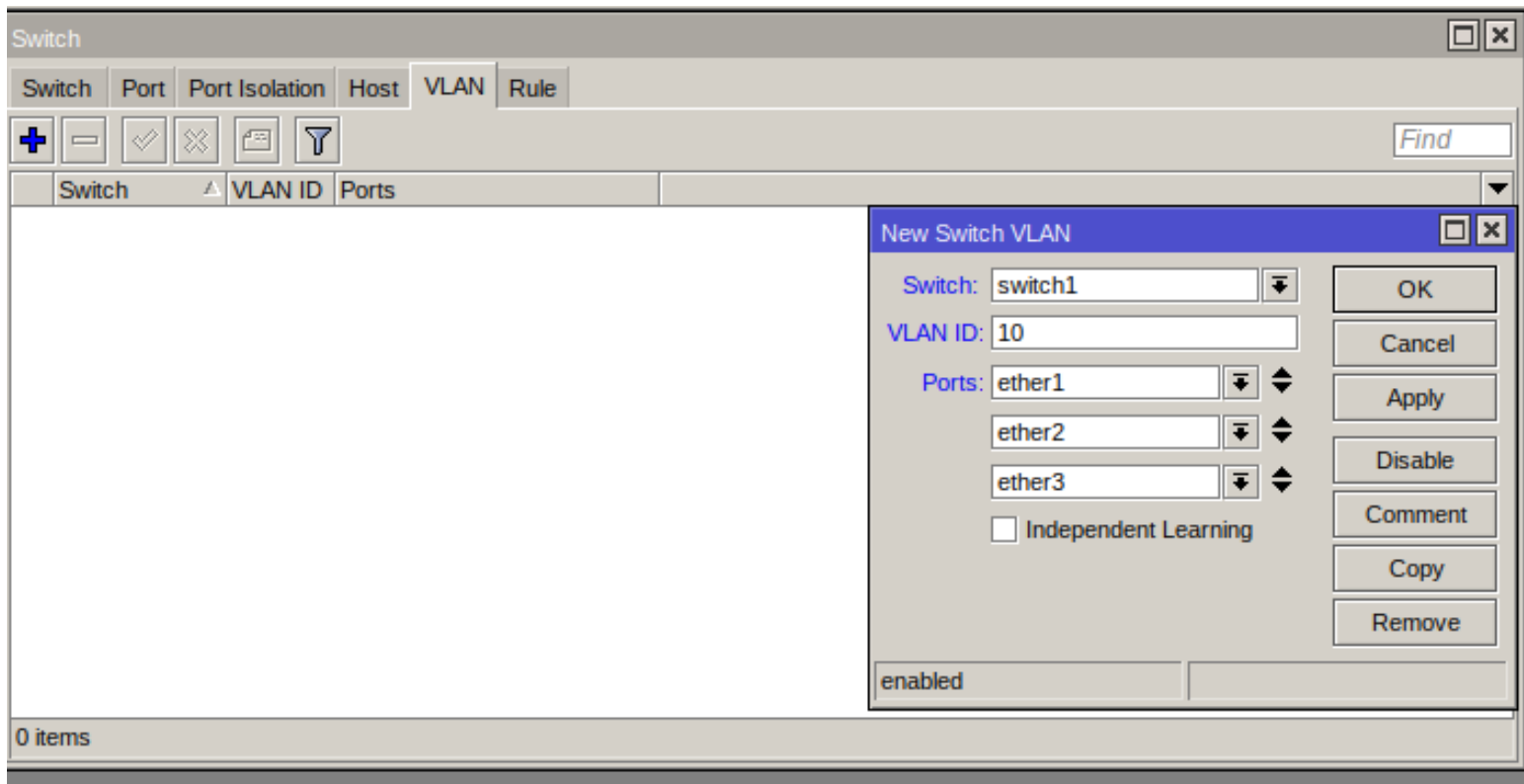
Membuat Port bridge untuk ether2



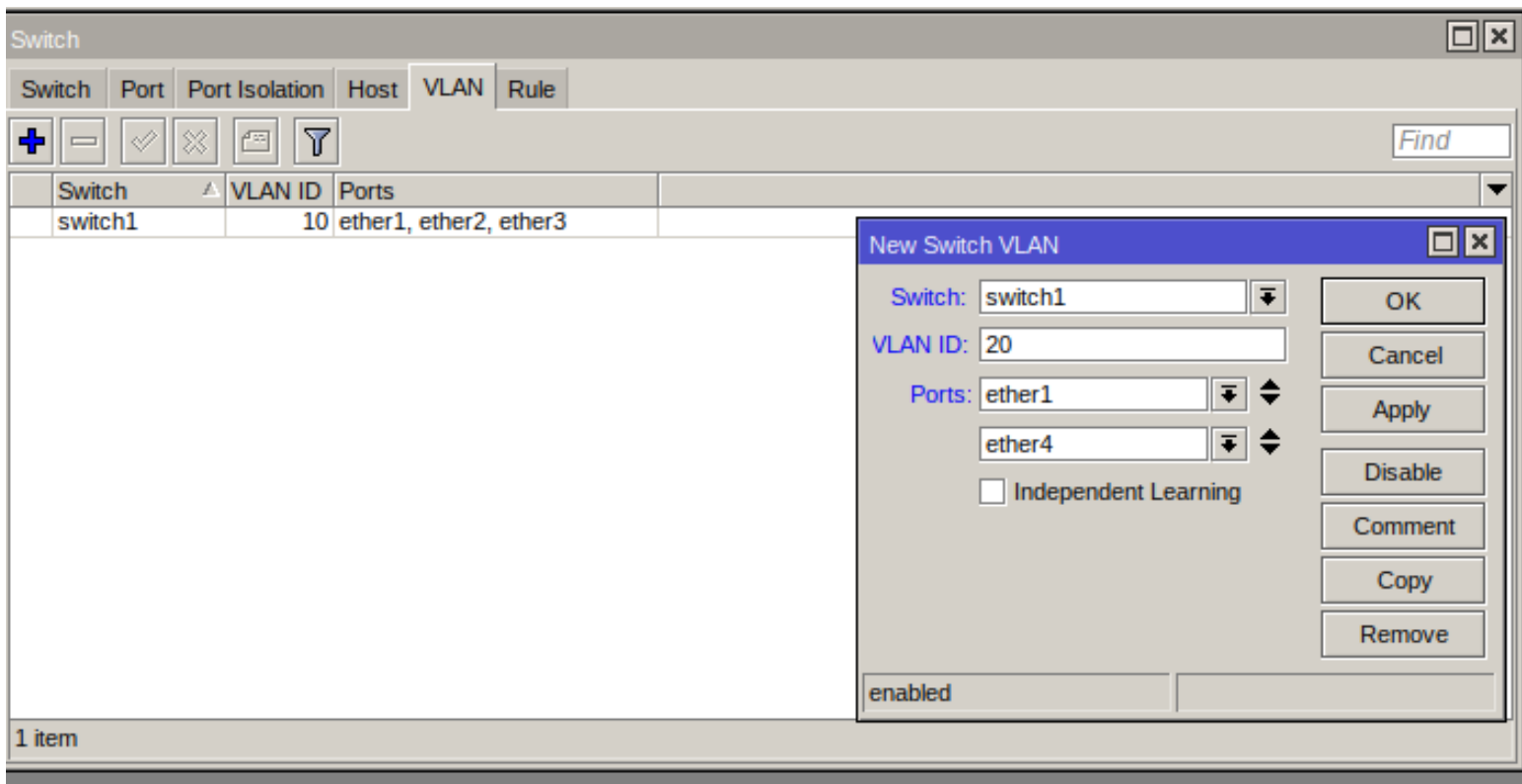
Membuat Port bridge untuk ether3



Membuat Port bridge untuk ether4



Membuat Switch VLAN ID 10



Membuat Switch VLAN ID 20

Switch

Switch Port Port Isolation Host VLAN Rule

Find

Name	Switch	VLAN Mode	VLAN Header	Default VLAN ID
ether1	switch1	disabled	leave as is	0
ether2	switch1	disabled	leave as is	
ether3	switch1	disabled	leave as is	
ether4	switch1	disabled	leave as is	
ether5	switch1	disabled	leave as is	
switch1 cpu	switch1	disabled	leave as is	

Switch Port <ether1>

Name: ether1

Switch: switch1

VLAN Mode: secure

VLAN Header: add if missing

Default VLAN ID: 0

OK

Cancel

Apply

6 items (1 selected)

Konfigurasi Port ether1

Switch

Switch Port Port Isolation Host VLAN Rule

Find

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

Switch Port <ether2>

Name: ether2

Switch: switch1

VLAN Mode: secure

VLAN Header: always strip

Default VLAN ID: 10

OK

Cancel

Apply

6 items (1 selected)

Konfigurasi Port ether2

Switch

Switch Port

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	disabled		
ether5	switch1	disabled		
switch1 cpu	switch1	disabled		

6 items (1 selected)

Switch Port <ether3>

Name: ether3

Switch: switch1

VLAN Mode: secure

VLAN Header: always strip

Default VLAN ID: 10

OK Cancel Apply

Konfigurasi Port ether3

Switch

Switch Port

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		

6 items (1 selected)

Switch Port <ether4>

Name: ether4

Switch: switch1

VLAN Mode: secure

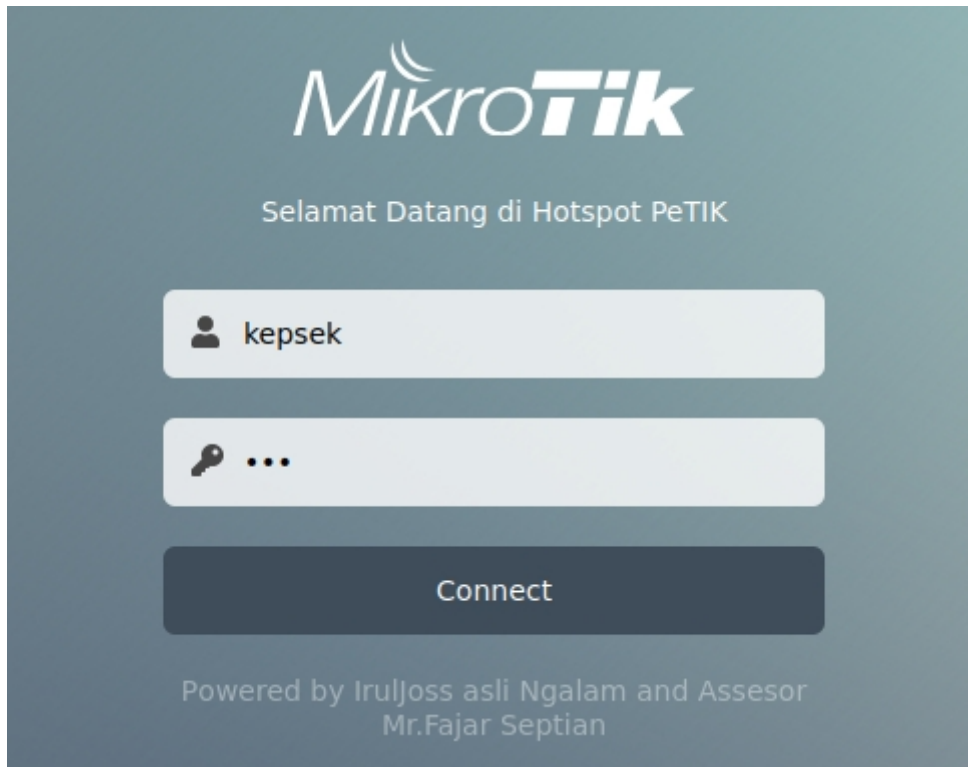
VLAN Header: always strip

Default VLAN ID: 20

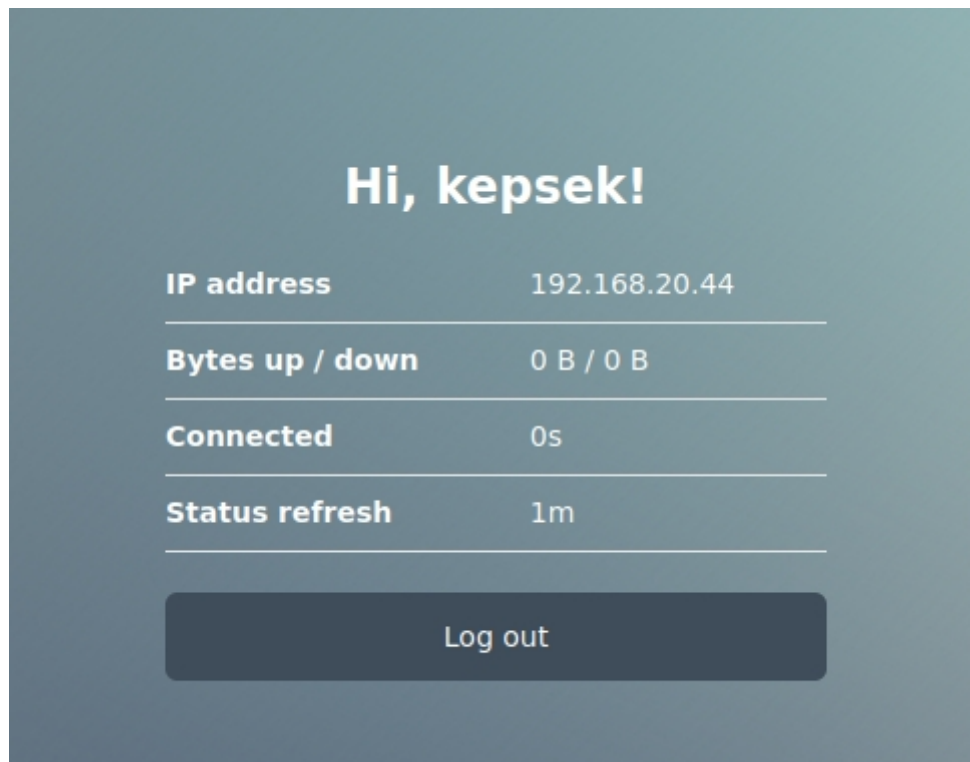
OK Cancel Apply

Konfigurasi Port ether4

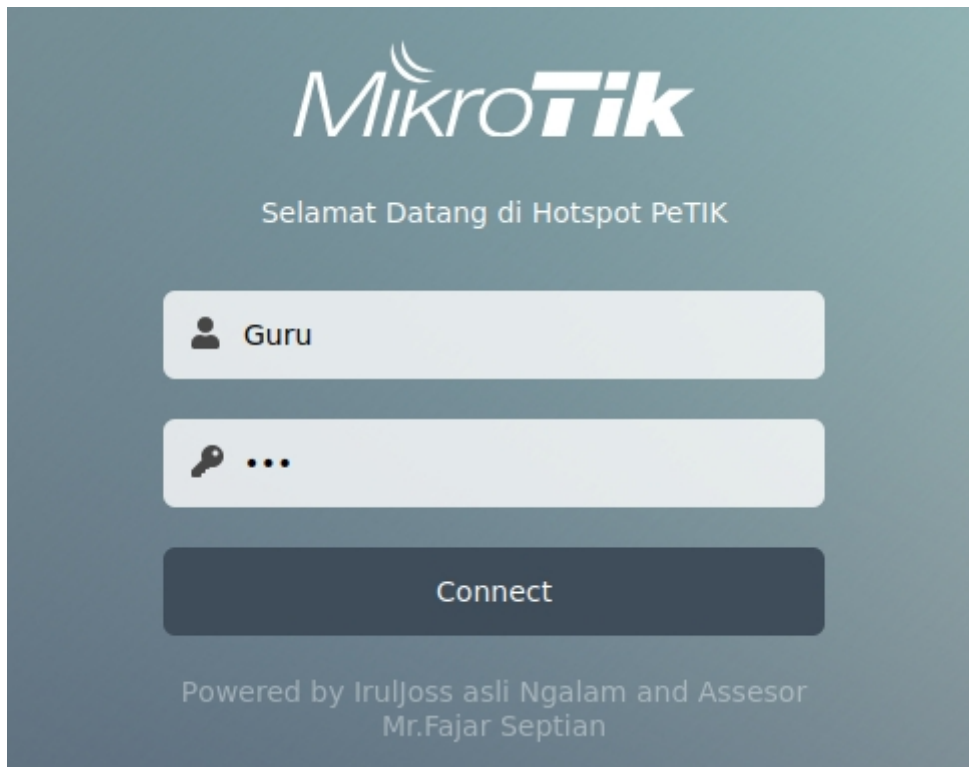
Tes Pengujian Hasil



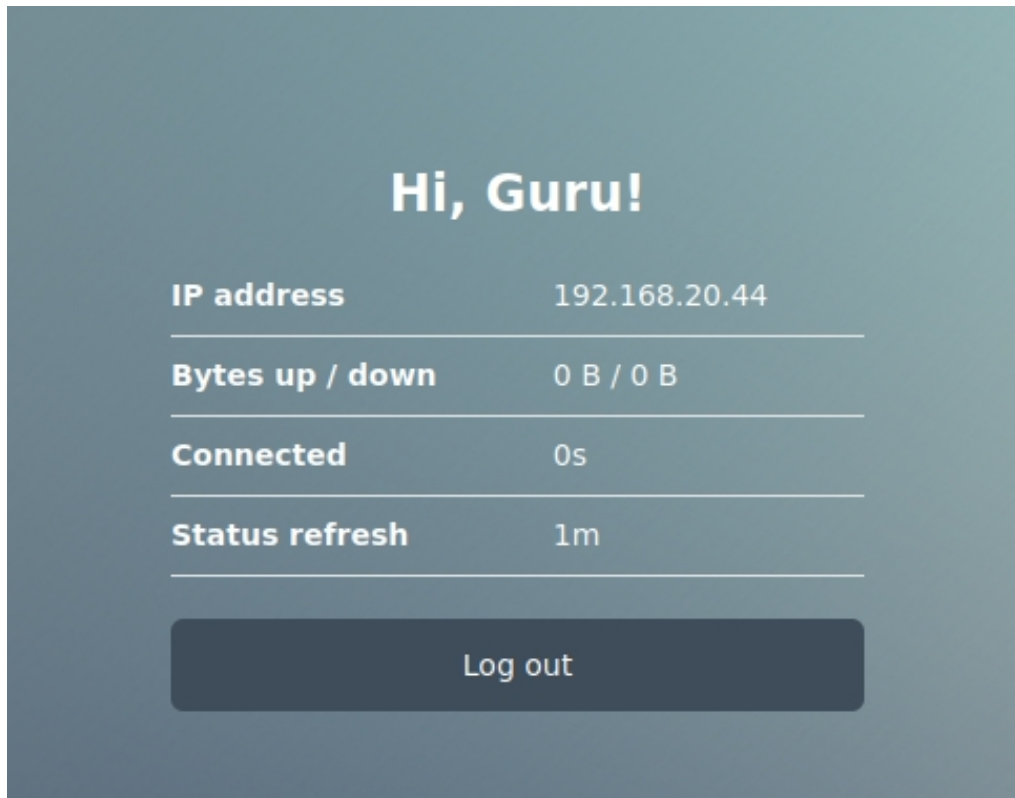
Tampilan Login hotspot untuk user kepsek



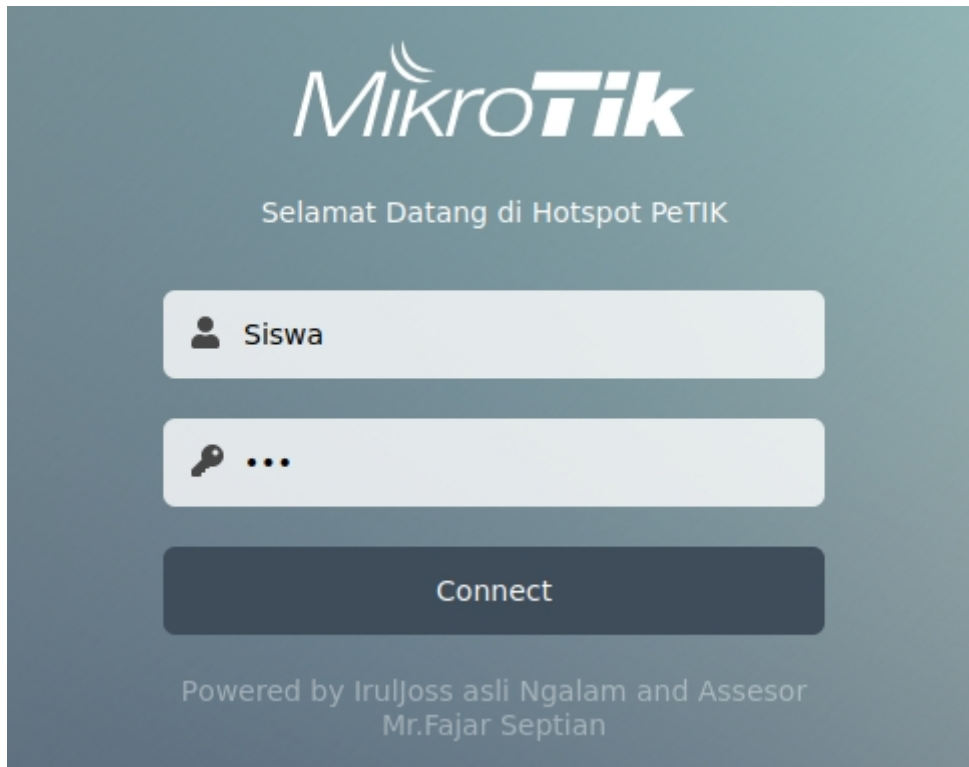
Tampilan Login hotspot untuk user kepsek



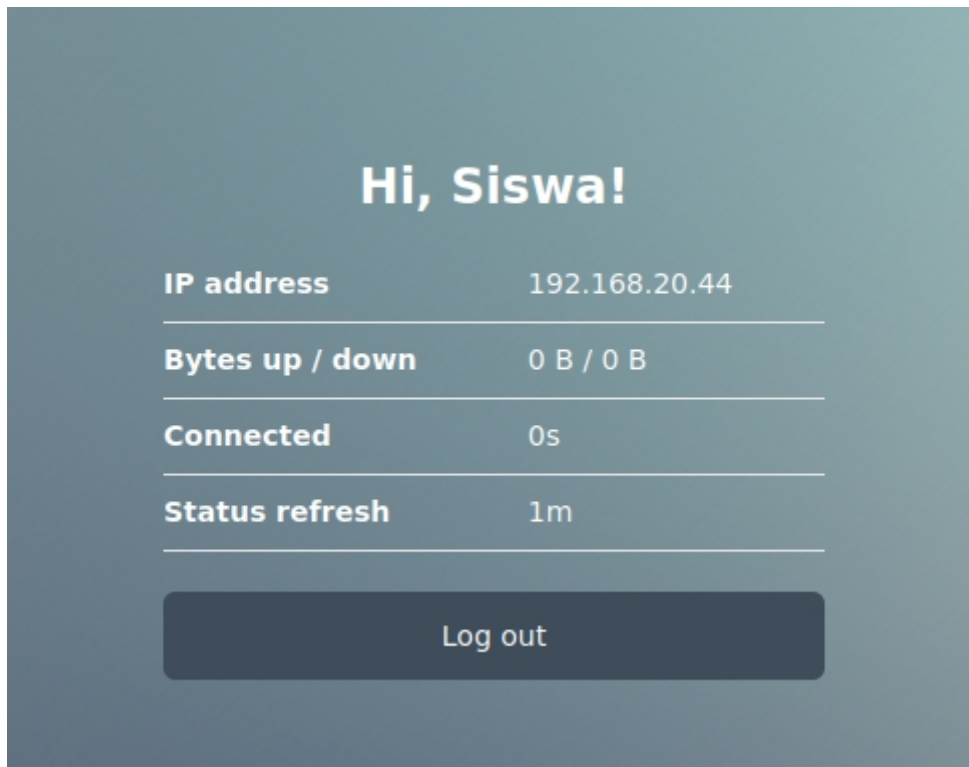
Tampilan Login hotspot untuk user Guru



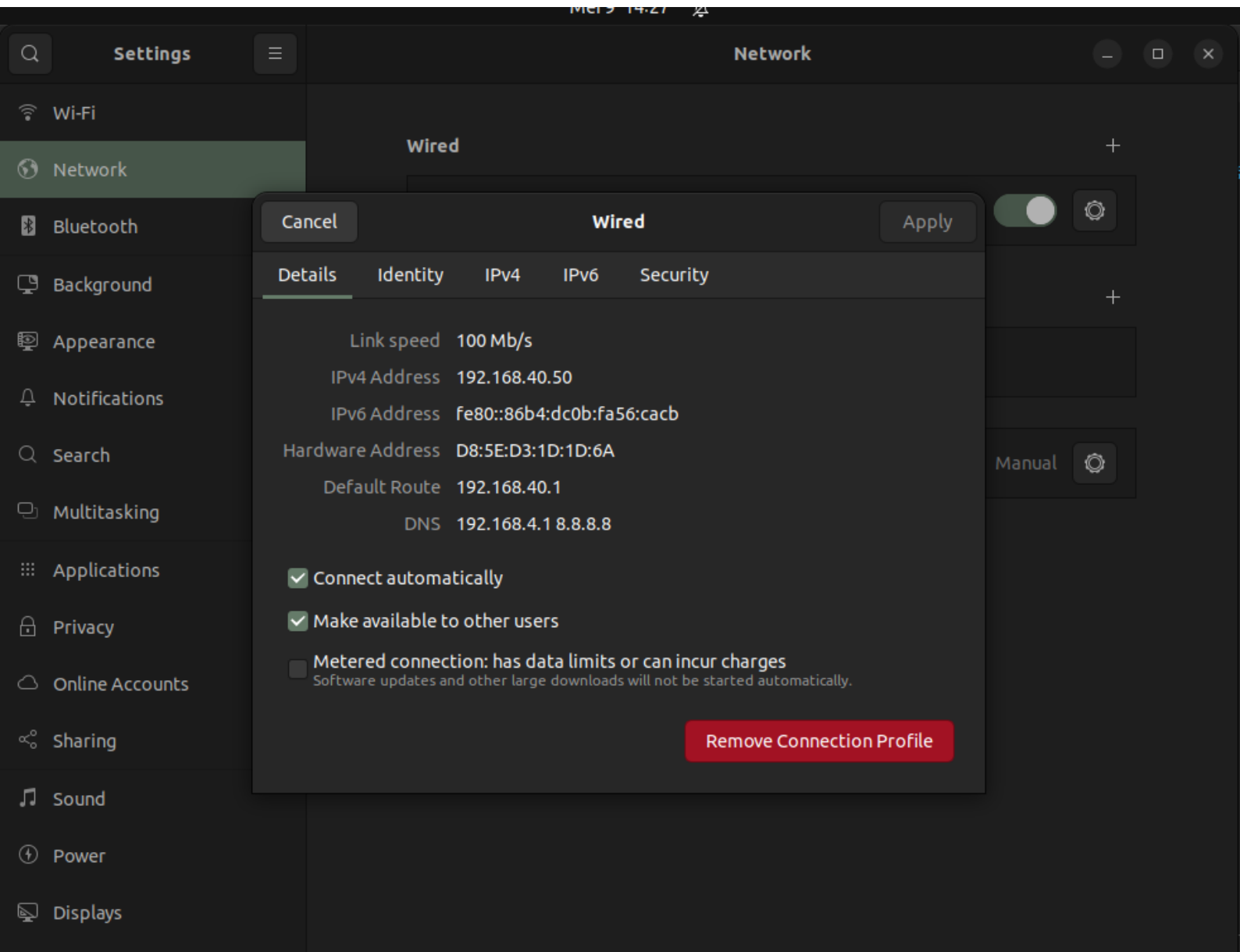
Tampilan Login hotspot untuk user Guru



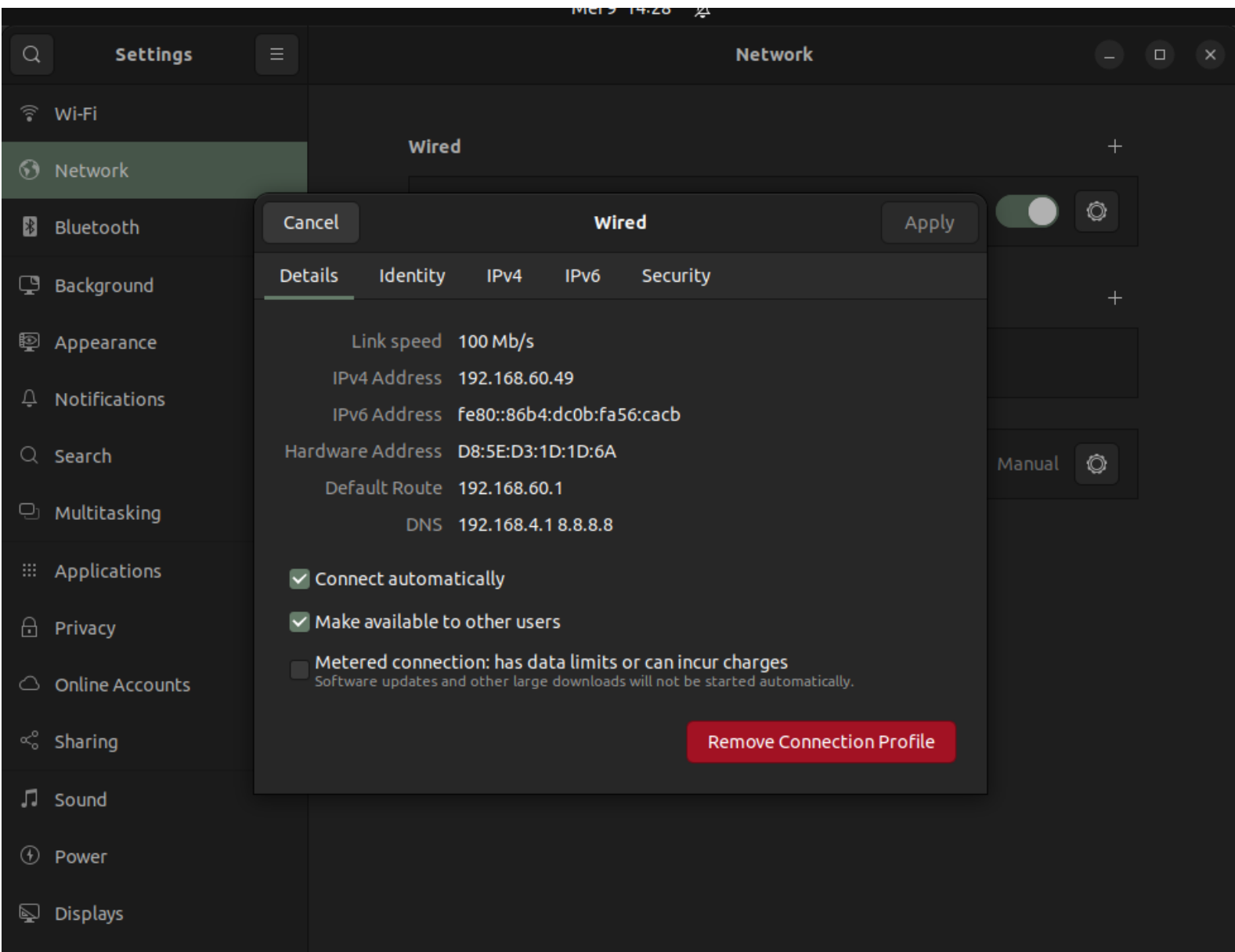
Tampilan Login Hotspot untuk user Siswa



Tampilan Login Hotspot untuk User Siswa

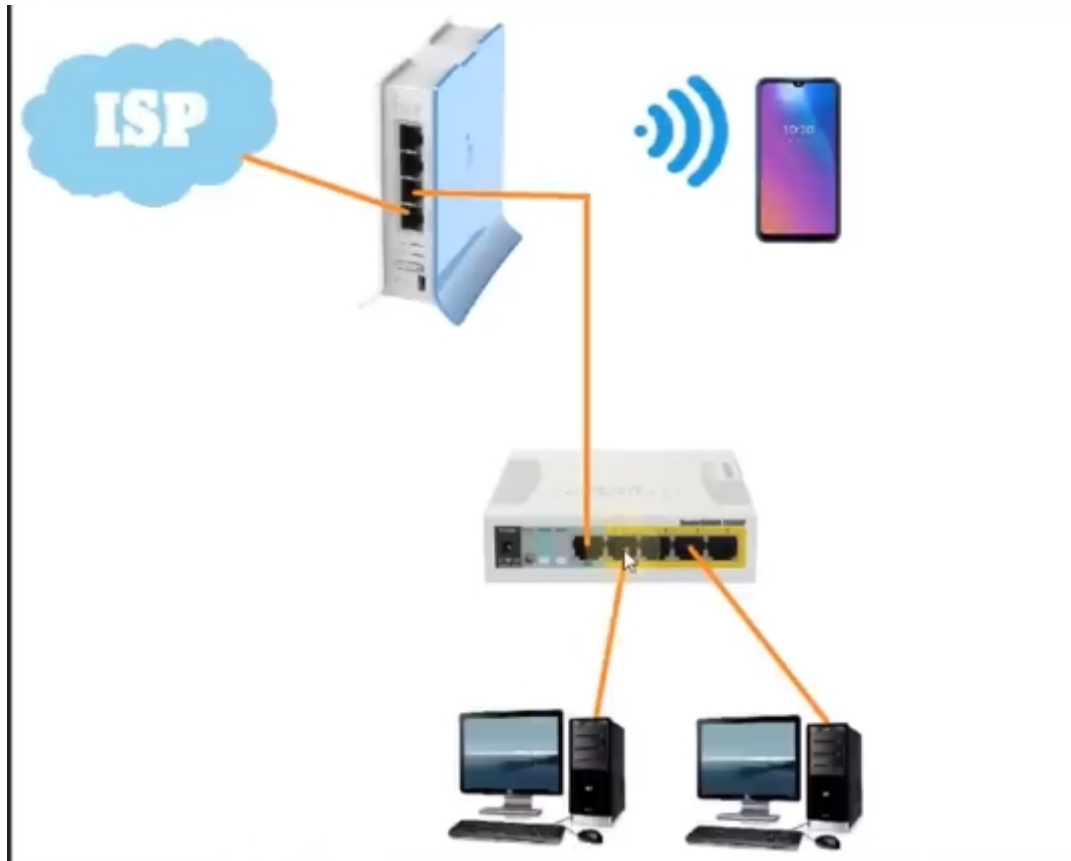


Tampilan IP Address Port 2 dan Port 3 di Router-Switch



Tampilan IP Address Port 4 di Router-Switch

Gambar Topologi versi Kabel port



Sosmed:

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Blogspot : teknologi-it-santri.blogspot.com/

~~~ To Be Exelent ~~~

\*Dibuat pada hari Selasa, 9 Mei 2023 dengan Assesor Pembimbing Fajar Septian