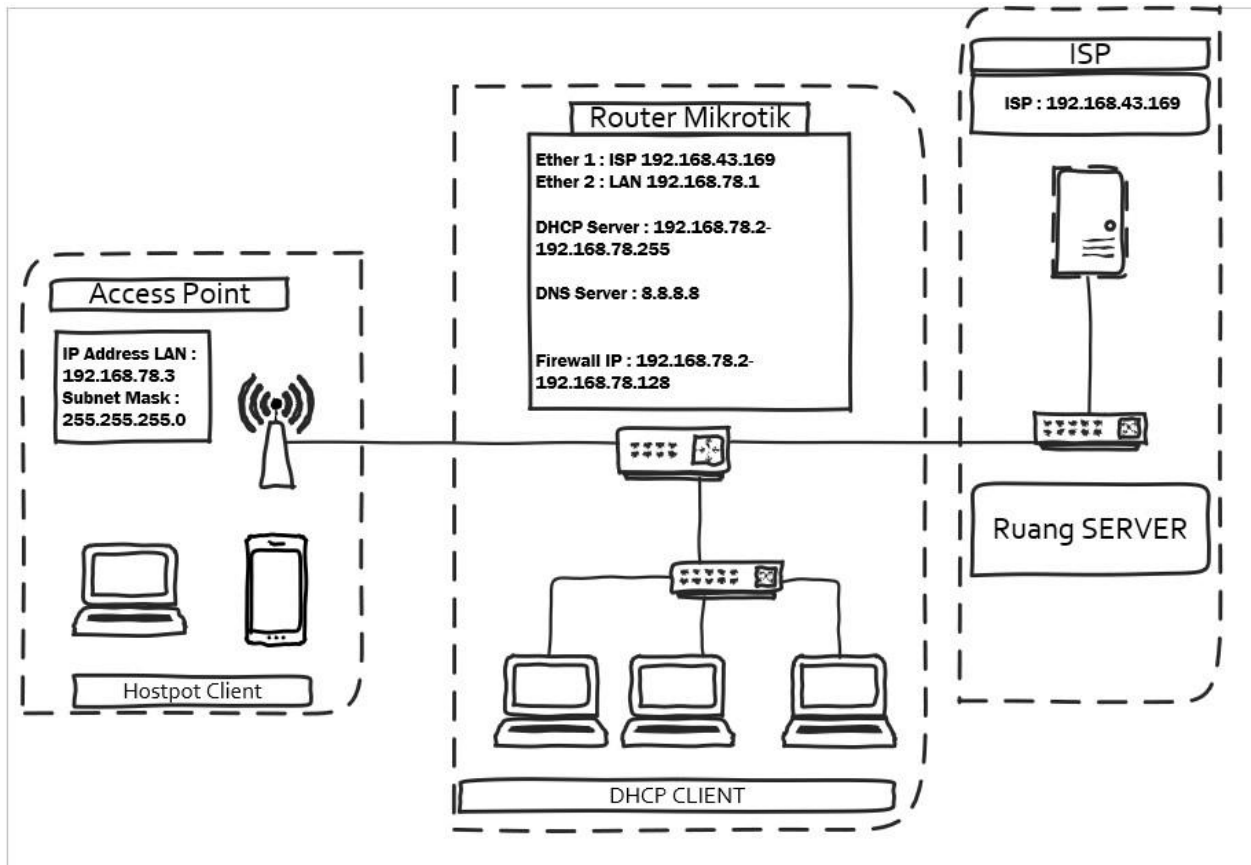


Nama : Bagus Made Arta Nugraha

Nim : 1915323021

Kelas : 5AMI

Topologi



1. Pertama Reset Configuration

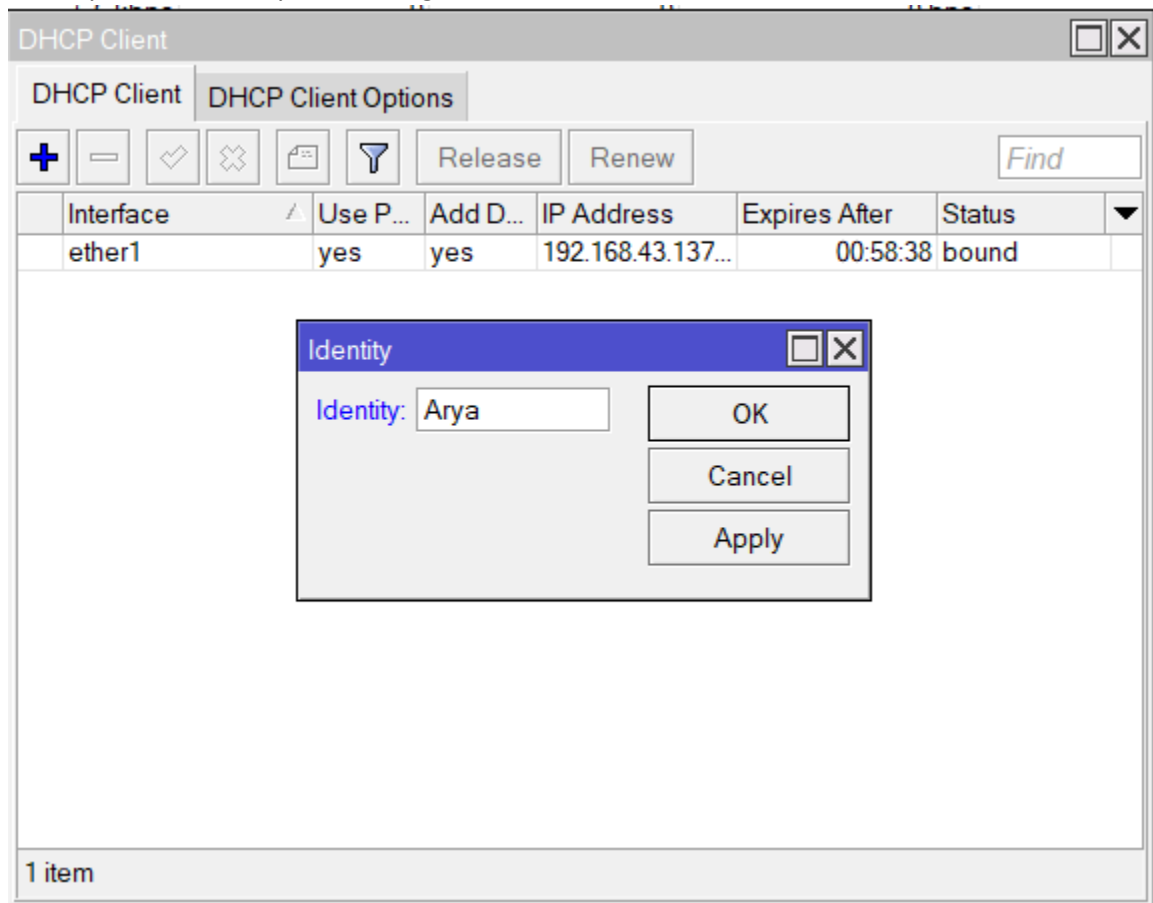
The screenshot shows the Mikrotik WinBox interface with the 'Reset Configuration' dialog box open. The dialog box contains the following options:

- ☐ Keep User Configuration
- ☒ No Default Configuration
- ☐ Do Not Backup
- Run After Reset: Default Configuration

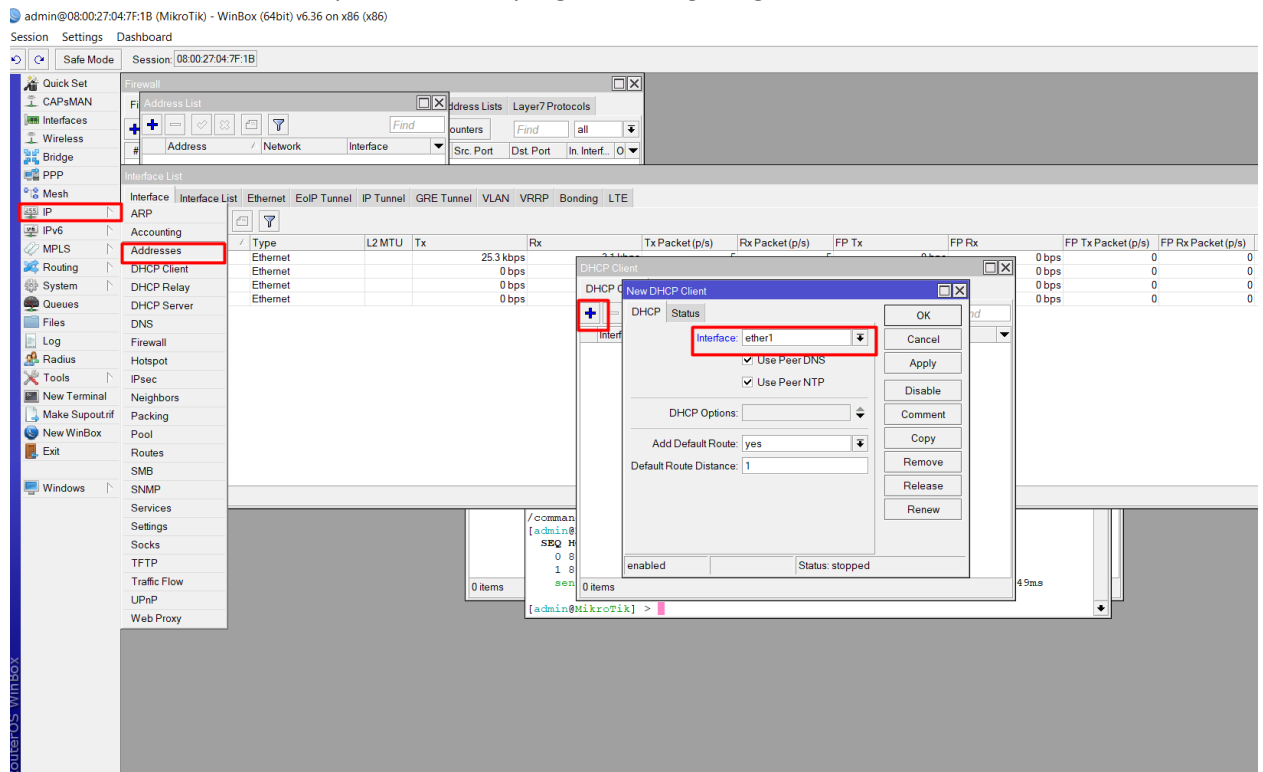
The background shows the WinBox menu and a table of network statistics.

Name	Type	L2 MTU	Tx	Rx	Tx Packet (p/s)	Rx Packet (p/s)	FP Tx	FP Rx	FP Tx P
R ether1	Ethernet		0 bps	0 bps	0	0	0 bps	0 bps	0 bps
R ether2	Ethernet		26.8 kbps	4.7 kbps	7	7	0 bps	0 bps	0 bps
Auto Upgrade	Ethernet		0 bps	0 bps	0	0	0 bps	0 bps	0 bps
Certificates	Ethernet		0 bps	0 bps	0	0	0 bps	0 bps	0 bps

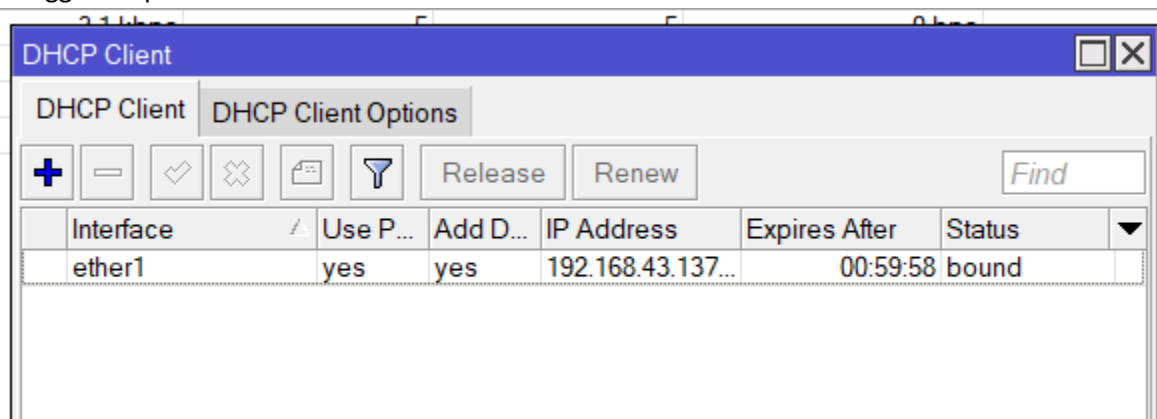
2. Buka System -> Identity kemudian ganti nama



3. Tambahkan IP DHCP Client pada ethernet yang terhubung dengan internet



4. Tunggu sampai bound



5. Test ping ke google.com

```

Terminal <3>

[?]                Gives the list of available commands
command [?]        Gives help on the command and list of arguments

[Tab]              Completes the command/word. If the input is ambiguous,
                    a second [Tab] gives possible options

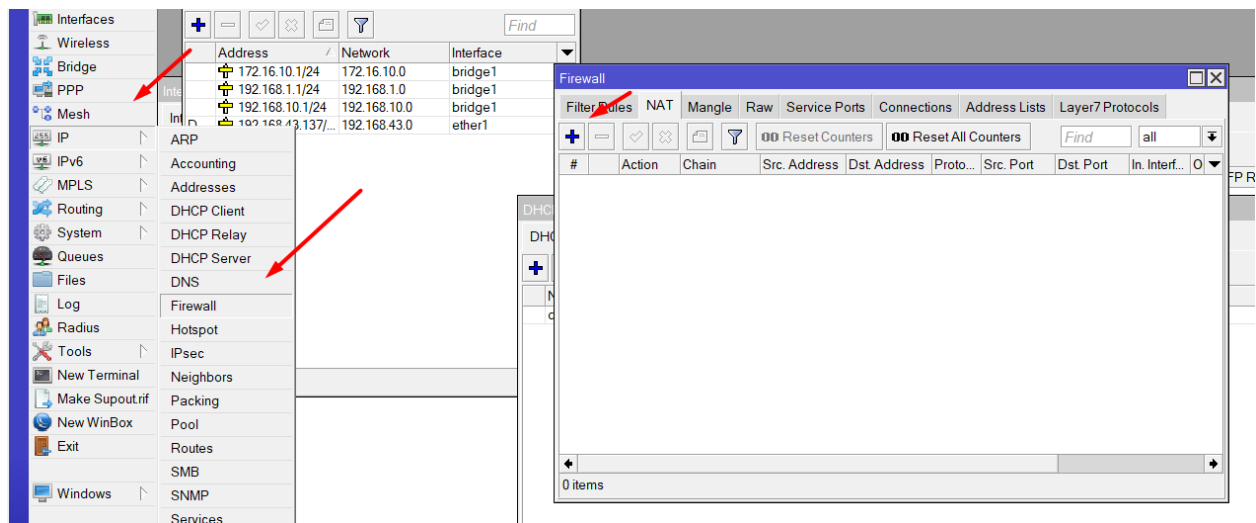
/                  Move up to base level
..                 Move up one level
/command           Use command at the base level
[admin@Arya] > ping google.com
  SEQ HOST                                SIZE TTL TIME  STATUS
    0 172.217.194.101                      56 103 85ms
  sent=1 received=1 packet-loss=0% min-rtt=85ms avg-rtt=85ms max-rtt=85ms

[admin@Arya] > ping google.com
  SEQ HOST                                SIZE TTL TIME  STATUS
    0 172.217.194.100                      56  49 73ms
    1 172.217.194.100                      56  49 71ms
    2 172.217.194.100                      56 101 64ms
    3 172.217.194.100                      56  49 58ms
  sent=4 received=4 packet-loss=0% min-rtt=58ms avg-rtt=66ms max-rtt=73ms

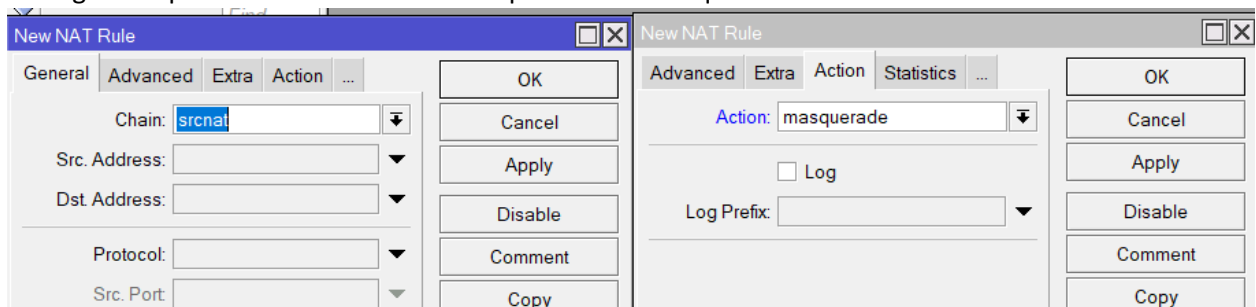
[admin@Arya] >

```

6. Tambahkan sebuah firewall nat IP -> Firewall-> NAT -> Add

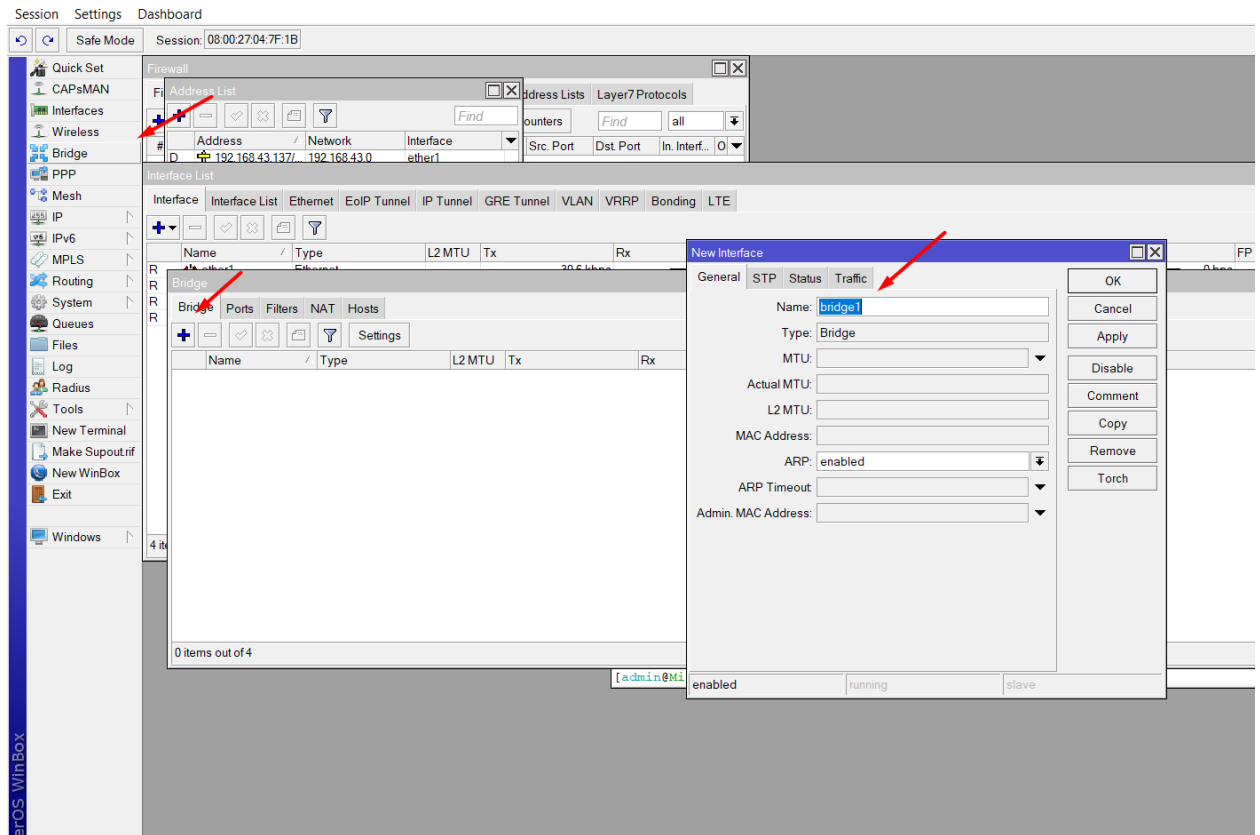


7. Pada general chain srcnat kemudian pilih action masquerade

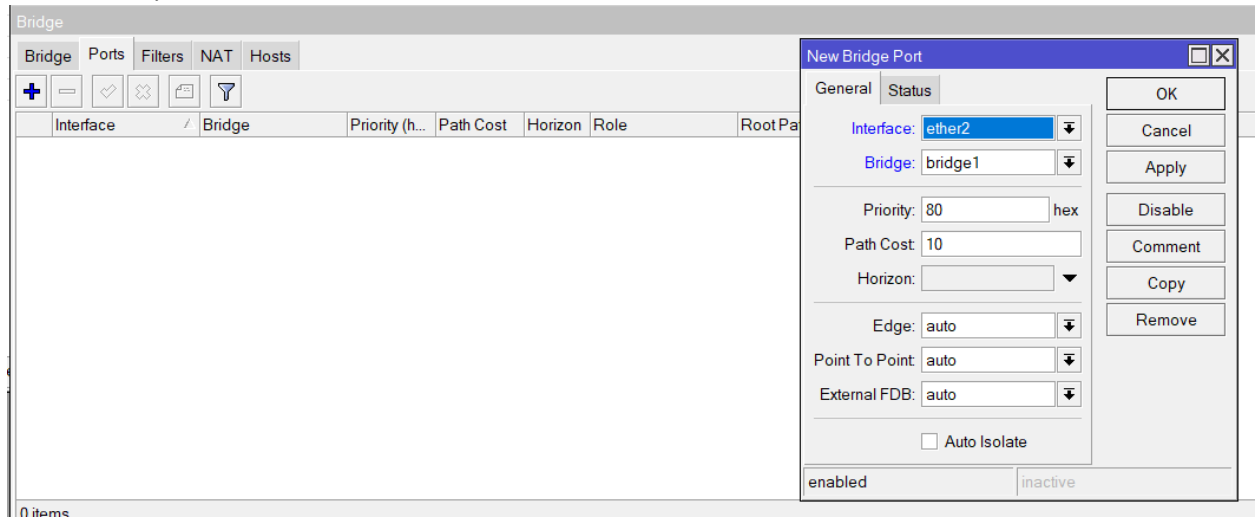


8. Tambahkan sebuah bridge yang terhubung dengan ethernet 2 – 4

admin@08:00:27:04:7F:1B (Arya) - WinBox (64bit) v6.36 on x86 (x86)



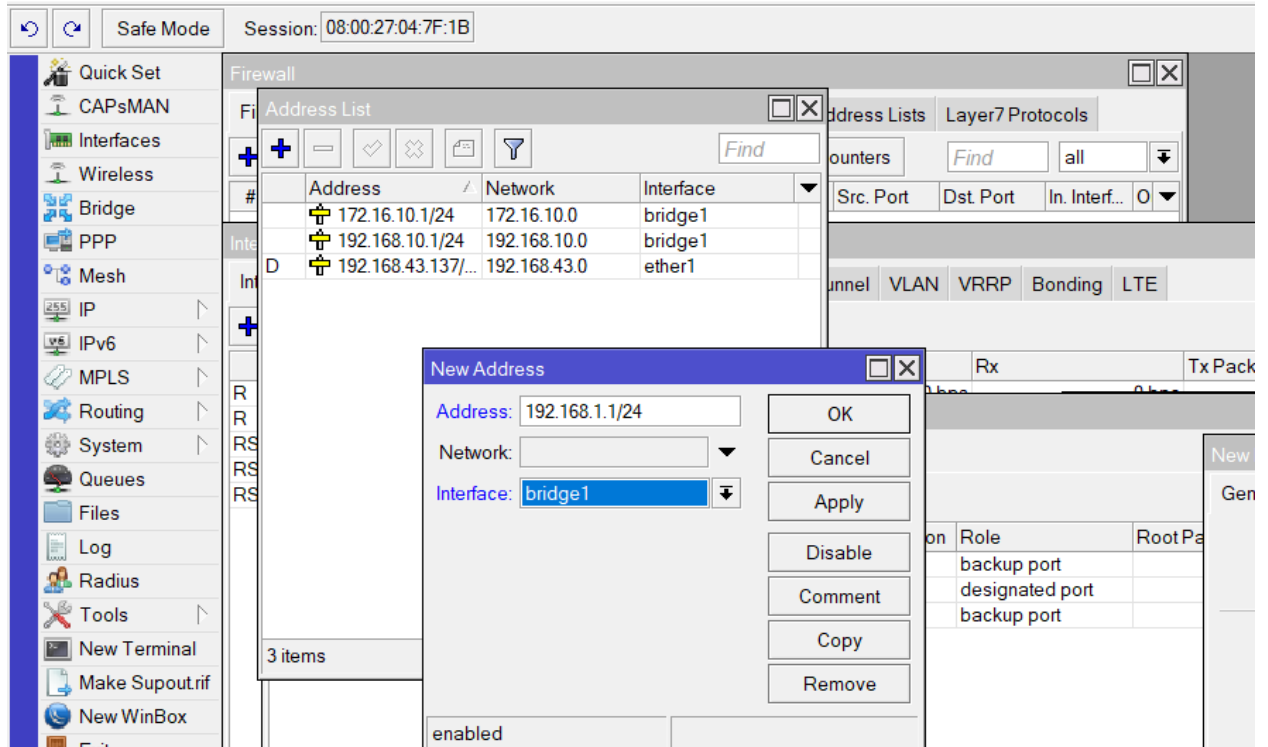
9. Tambahkan port ether 2 , ether 3 dan ether 4



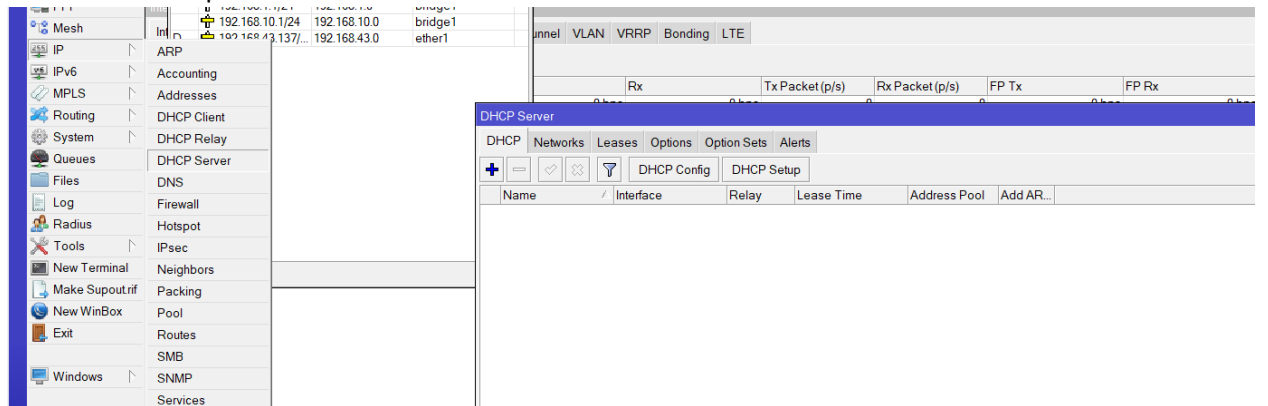
10. Tambahkan 3 ip sesuai dengan topologi dimana ip 172.16.10.1 akan digunakan untuk dhcp server.

admin@08:00:27:04:7F:1B (Arya) - WinBox (64bit) v6.36 on x86 (x86)

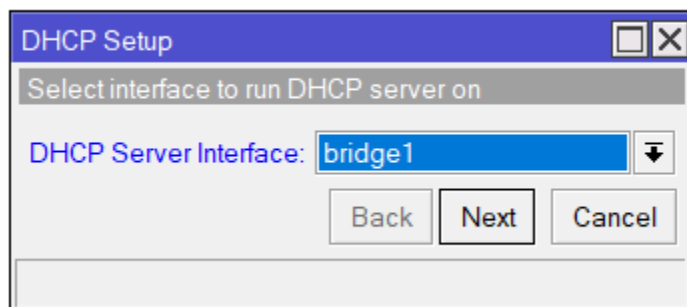
Session Settings Dashboard



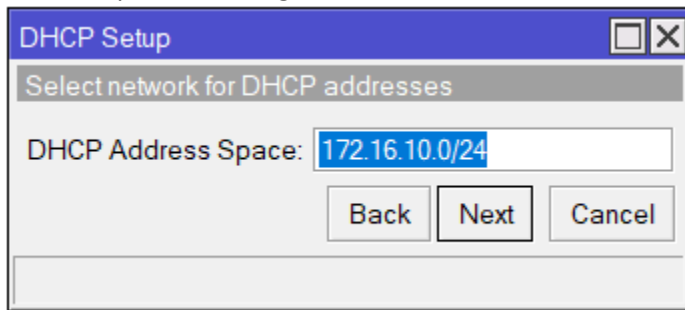
11. Buat sebuah dhcp IP->DHCP Server -> DHCP Server



12. Pilih Interface bridge 1

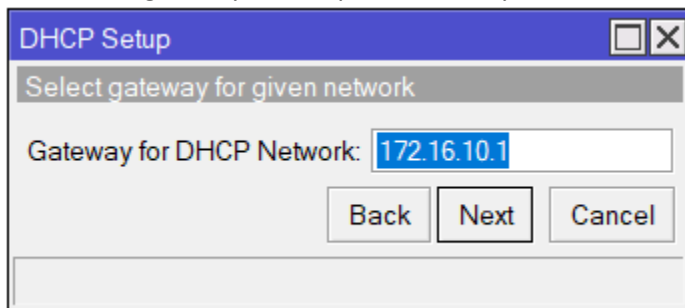


13. Gunakan ip tadi akan digunakan



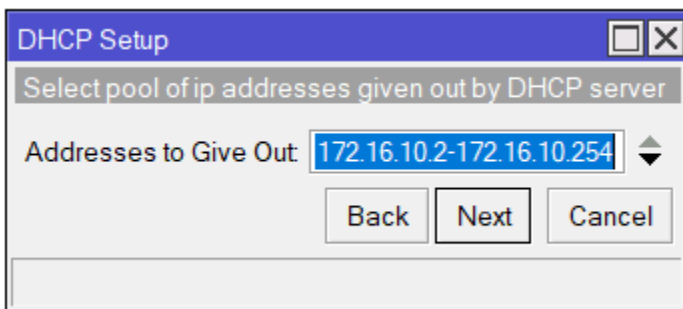
The screenshot shows the 'DHCP Setup' dialog box with the title bar 'DHCP Setup'. The main area is titled 'Select network for DHCP addresses'. Below this, the 'DHCP Address Space' is set to '172.16.10.0/24'. At the bottom, there are three buttons: 'Back', 'Next', and 'Cancel'.

14. Tambahkan gateway sesuai ip sebelumnya



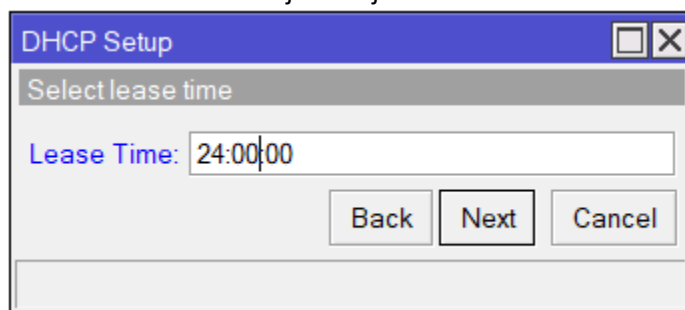
The screenshot shows the 'DHCP Setup' dialog box with the title bar 'DHCP Setup'. The main area is titled 'Select gateway for given network'. Below this, the 'Gateway for DHCP Network' is set to '172.16.10.1'. At the bottom, there are three buttons: 'Back', 'Next', and 'Cancel'.

15. Atur Pool atau panjang ip yang akan dikeluarkan dari dhcp server



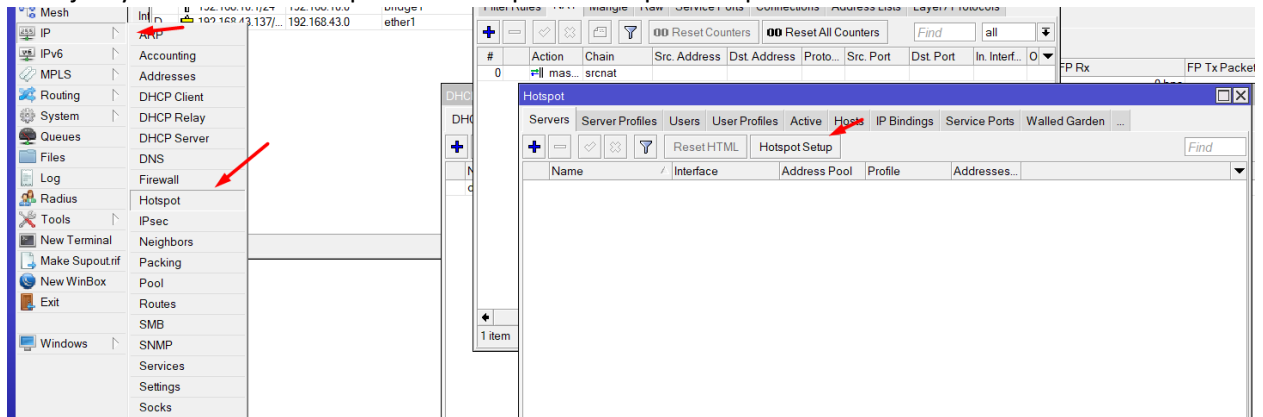
The screenshot shows the 'DHCP Setup' dialog box with the title bar 'DHCP Setup'. The main area is titled 'Select pool of ip addresses given out by DHCP server'. Below this, the 'Addresses to Give Out' is set to '172.16.10.2-172.16.10.254'. At the bottom, there are three buttons: 'Back', 'Next', and 'Cancel'.

16. Leases time diubah menjadi 24 jam

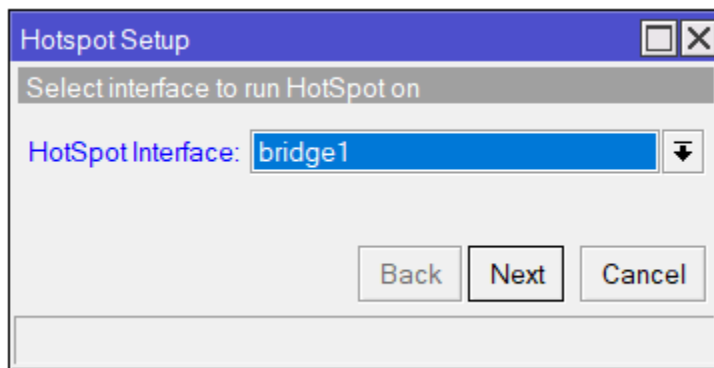


The screenshot shows the 'DHCP Setup' dialog box with the title bar 'DHCP Setup'. The main area is titled 'Select lease time'. Below this, the 'Lease Time' is set to '24:00:00'. At the bottom, there are three buttons: 'Back', 'Next', and 'Cancel'.

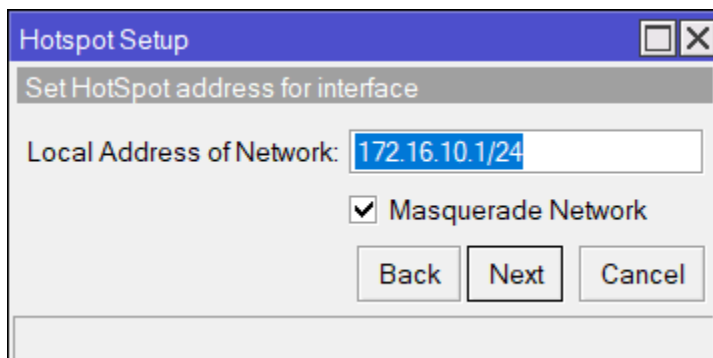
17. Selanjutnya tambahkan Hotspot IP -> Hotspot -> Hotspot Setup



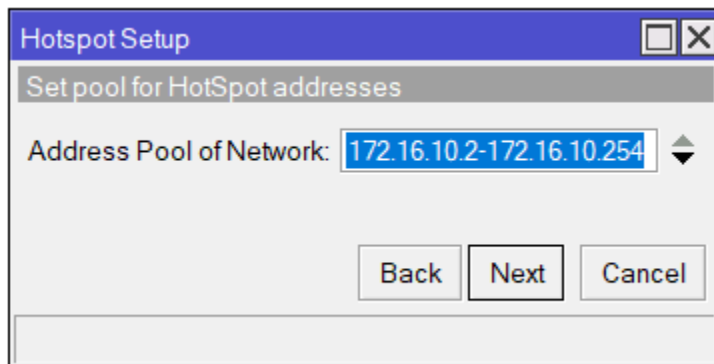
18. Pilih Interface



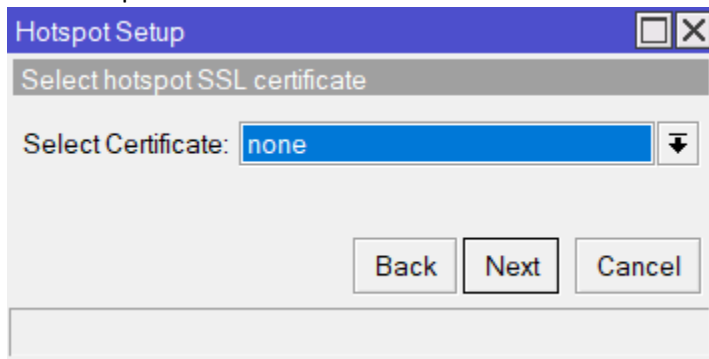
19. Masukkan IP



20. Tambahkan Pool yang akan ditambahkan ke Hotspot



21. Sertifikat pilih none



Hotspot Setup

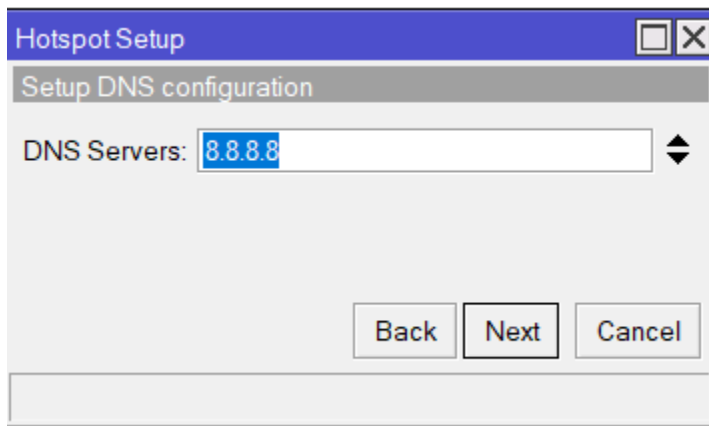
Select hotspot SSL certificate

Select Certificate: none

Back Next Cancel

This screenshot shows the 'Hotspot Setup' dialog box with the 'Select hotspot SSL certificate' section. The 'Select Certificate' dropdown menu is set to 'none'. At the bottom, there are three buttons: 'Back', 'Next', and 'Cancel'.

22. Tambahkan dns Server



Hotspot Setup

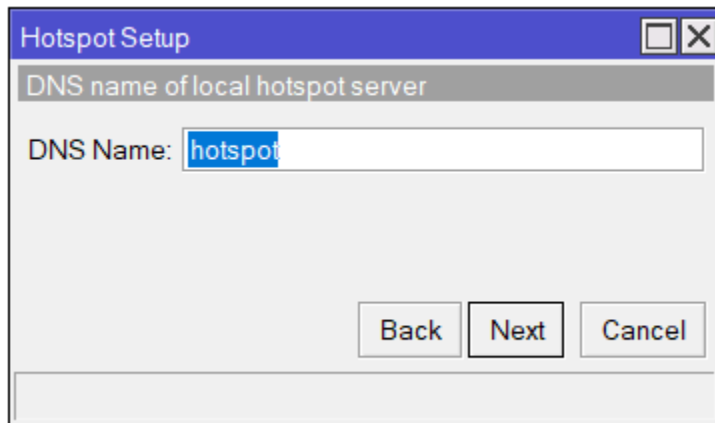
Setup DNS configuration

DNS Servers: 8.8.8.8

Back Next Cancel

This screenshot shows the 'Hotspot Setup' dialog box with the 'Setup DNS configuration' section. The 'DNS Servers' text field contains the IP address '8.8.8.8'. At the bottom, there are three buttons: 'Back', 'Next', and 'Cancel'.

23. Tambahkan DNS Name



Hotspot Setup

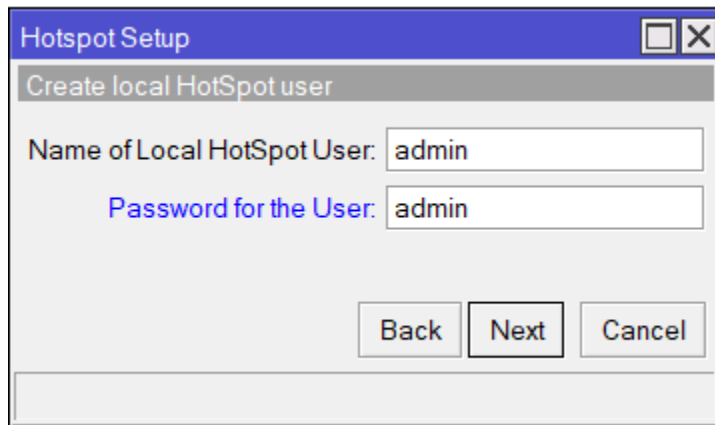
DNS name of local hotspot server

DNS Name: hotspot

Back Next Cancel

This screenshot shows the 'Hotspot Setup' dialog box with the 'DNS name of local hotspot server' section. The 'DNS Name' text field contains the name 'hotspot'. At the bottom, there are three buttons: 'Back', 'Next', and 'Cancel'.

24. Tambahkan user yang akan digunakan Login



The image shows a Windows-style dialog box titled "Hotspot Setup". It has a blue title bar with a minimize button and a close button. Below the title bar is a grey header area with the text "Create local HotSpot user". The main area is white and contains two text input fields. The first field is labeled "Name of Local HotSpot User:" and contains the text "admin". The second field is labeled "Password for the User:" in blue text and also contains the text "admin". At the bottom right of the dialog box are three buttons: "Back", "Next", and "Cancel". The "Next" button is highlighted with a black border.

Hotspot Setup

Create local HotSpot user

Name of Local HotSpot User: admin

Password for the User: admin

Back Next Cancel

25. Mengatur kecepatan bandwidth dapat dilakukan dari ip -> hotspot -> user profile kemudian pilih client yang ingin diatur. Tambahkan pada rate limit untuk mengatur kecepatan.

Hotspot User Profile <default>

General Queue Advertise Scripts

Name: default

Address Pool: none

Session Timeout:

Idle Timeout: none

Keepalive Timeout: 00:02:00

Status Autorefresh: 00:01:00

Shared Users: 1

Rate Limit (rx/tx): 1M/M

☒ 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

OK Cancel Apply Copy Remove

default

Selanjutnya dapat dilakukan penghubungan computer sesuai dengan topologi dimana computer pada ruangan 1 terhubung dengan switch kemudian diteruskan ke router mikrotik. Dan bisa dilakukan setting ip static 192.168.1.0 kemudian pada ruangan dua terhubung ke switch dan dikonfigurasi ip static 192.168.10.0.7

Untuk Membypass hotspot dapat dilakukan ip -> hotspot -> ip binding -> add kemudian tambahkan ip dan ubah type menjadi bypassed.

New Hotspot IP Binding

MAC Address:

▼

Address:

192.168.10.2

▲

To Address:

▼

Server:

all

▼

Type:

bypassed

▼

OK

Cancel

Apply

Disable

Comment

Copy

Remove

enabled