

PRAKTIKUM JARINGAN KOMPUTER
PROGRES 2 UAS (UJIAN AKHIR SEMESTER)

Dosen Pengampu:

Johan Ericka W.P,M.Kom



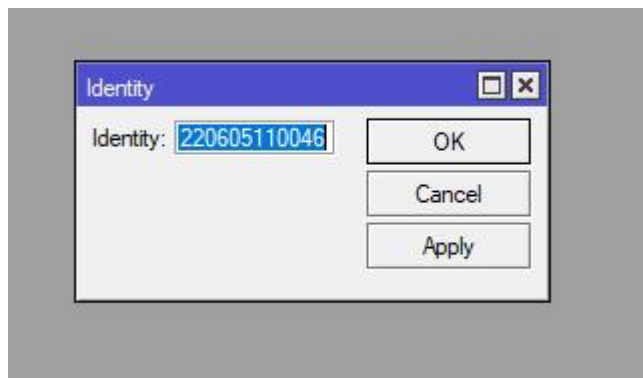
Disusun Oleh :

Azizatul Munawarah (220905110046)

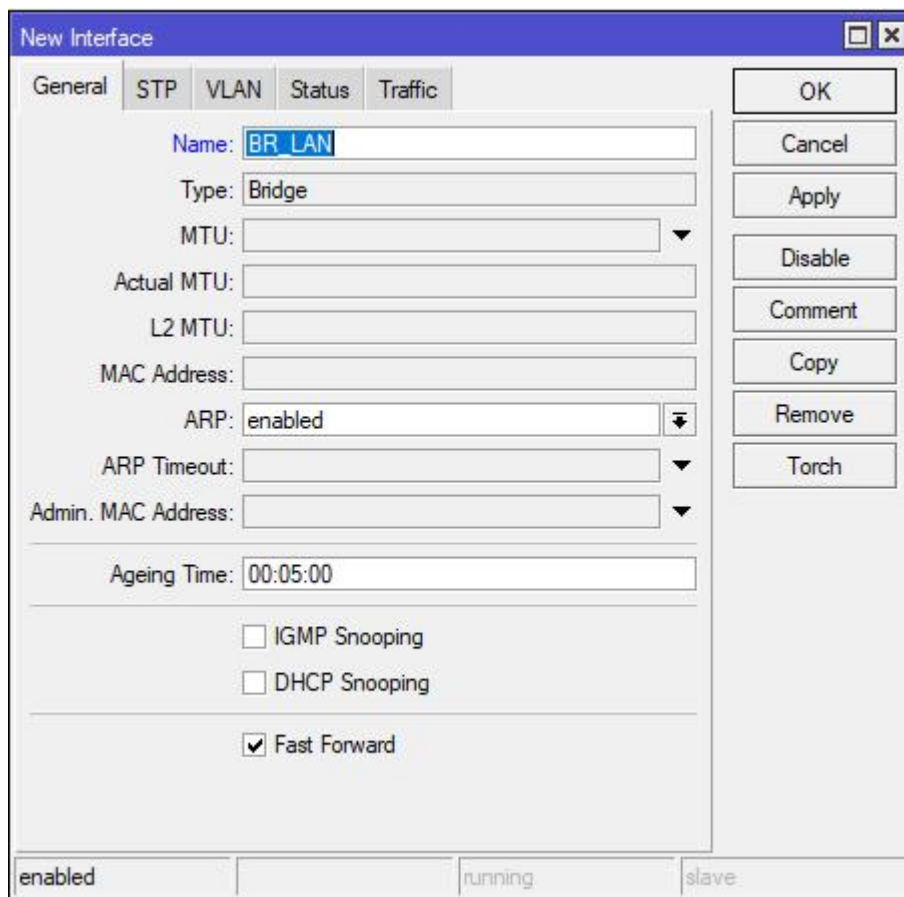
JURUSAN TEKNIK INFORMATIKA
FAKULTAS SAINS DAN TEKNOLOGI
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2024

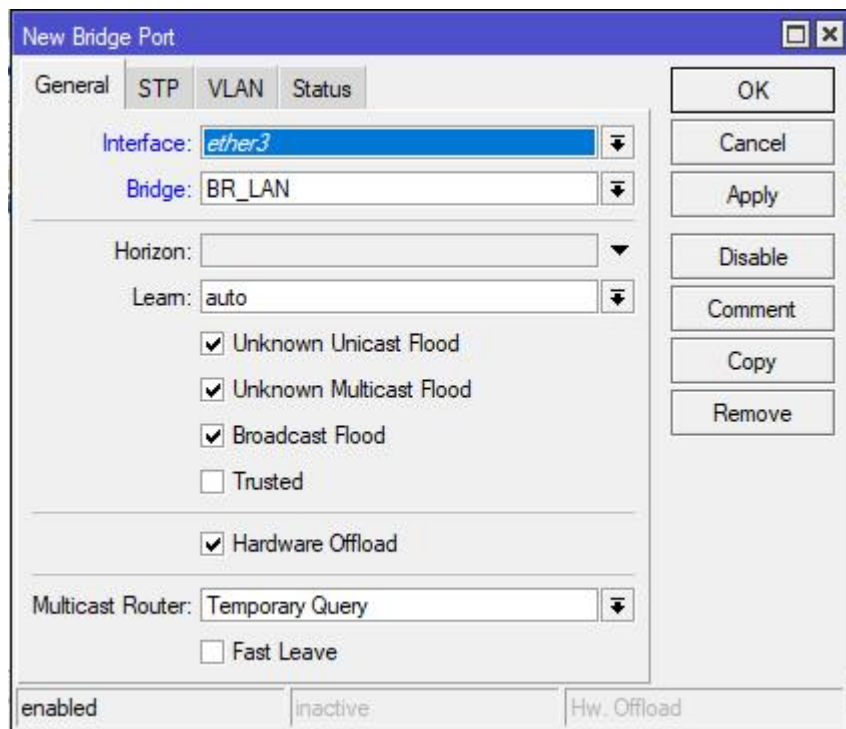
Langkah-langkah setting konfigurasi komputer client :

1. Ubah nama dengan NIM , dengan cara klik system -> identity lalu ubah nama dan klik OK.

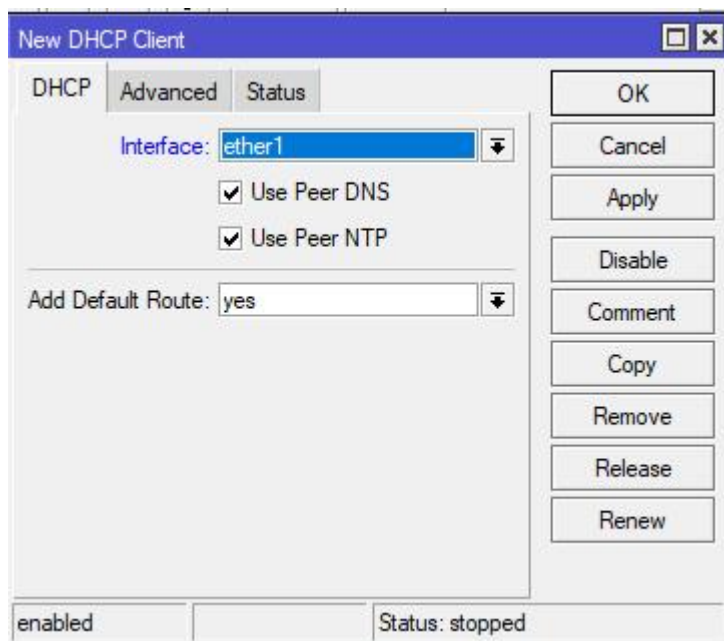


2. Menkonfigurasi Bridge

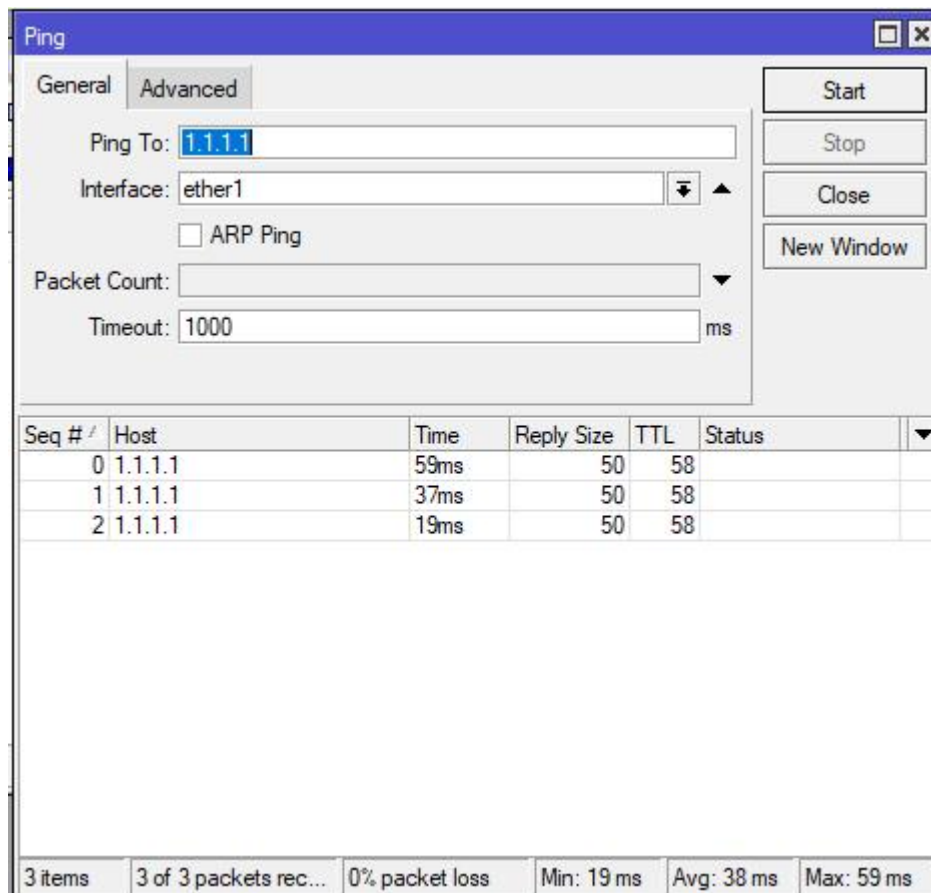




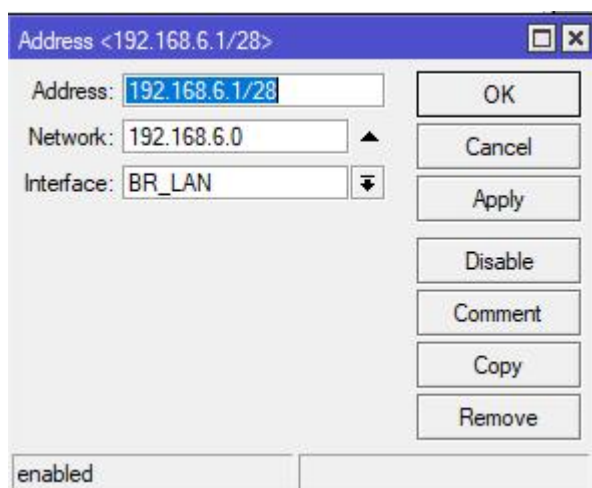
3. Setting DHCP Client. Pertama klik pada menu IP-> DHCP Client-> +. Pastikan konfigurasi seperti dibawah ini :



4. Tes koneksi internet dari mikrotik dengan cara klik menu Tools->Ping->start. Dan pastikan mendapat Reply dari 1.1.1.1 .



5. Setting DHCP Server .Untuk IP Address nya diubah sesuai NIM saya terakhir 6 .
Lalu CIRD nya diubah 6+2 jadi /28. Klik menu IP->Addresses->+ lalu masukkan IP Address kelas C dan sesuai NIM . seperti dibawah ini :



6. Maka addres list akan tampil 2 subnet ether1 dan BR_LAN.

Address List				
<div> + - ✓ ✗ 📄 🔍 <input type="text" value="Find"/> </div>				
	Address	Network	Interface	
	192.168.6.1/28	192.168.6.0	BR_LAN	
D	192.168.99.16...	192.168.99.0	ether1	

7. Klik IP->DHCP Server->DHCP Setup lalu seterusnya klik next seperti dibawah ini :

DHCP Setup

Select network for DHCP addresses

DHCP Address Space: 192.168.6.0/28

Back Next Cancel

DHCP Setup

Select interface to run DHCP server on

DHCP Server Interface: BR_LAN

Back Next Cancel

DHCP Setup

Select gateway for given network

Gateway for DHCP Network: 192.168.6.1

Back Next Cancel

DHCP Setup

Select pool of ip addresses given out by DHCP server

Addresses to Give Out: 192.168.6.2-192.168.6.14

Back Next Cancel

DHCP Setup

Select DNS servers

DNS Servers: 192.168.99.1

Back Next Cancel

8. Pada leases akan tampil komputer yang mendapatkan IP Address dari mikrotik.

	Address	MAC Address	Client ID	Server	Active Address	Active MA
D	192.168.6.14	80:E8:2C:59:B8:BB	1:80:e8:2c:59:b8:bb	dhcp1	192.168.6.14	80:E8:2C:59:

9. Lalu buka Command Prompt (cmd) dan ketik ping ke mikrotik (gateway) pastikan mendapatkan hasil reply from gateway.

```
C:\Users\hp>ping 192.168.6.1

Pinging 192.168.6.1 with 32 bytes of data:
Reply from 192.168.6.1: bytes=32 time<1ms TTL=64
Reply from 192.168.6.1: bytes=32 time<1ms TTL=64
Reply from 192.168.6.1: bytes=32 time<1ms TTL=64
Reply from 192.168.6.1: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.6.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\hp>
```

10. Komputer client tidak dapat PING ke mikrotik .

11. IP->Firewall->NAT->+

12. Konfigurasi :

Chain = srcnat

Action = masquerade

New NAT Rule

General Advanced Extra Action ...

Chain: **srcnat**

Src. Address:

Dst. Address:

Protocol:

Src. Port:

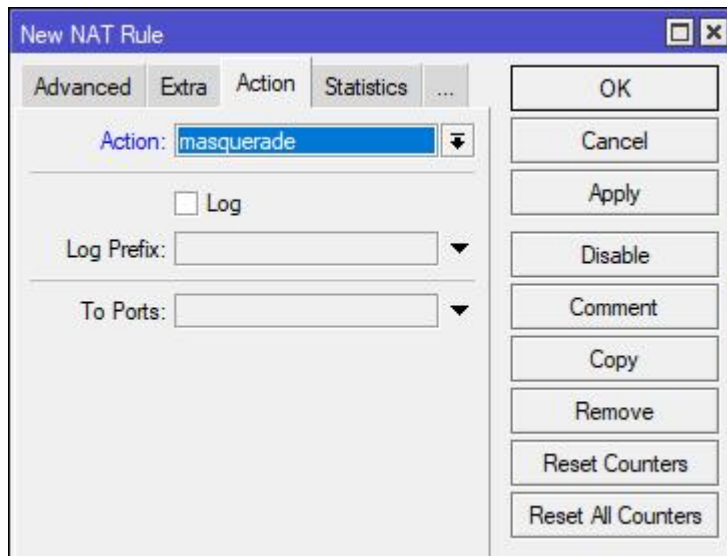
Dst. Port:

Any. Port:

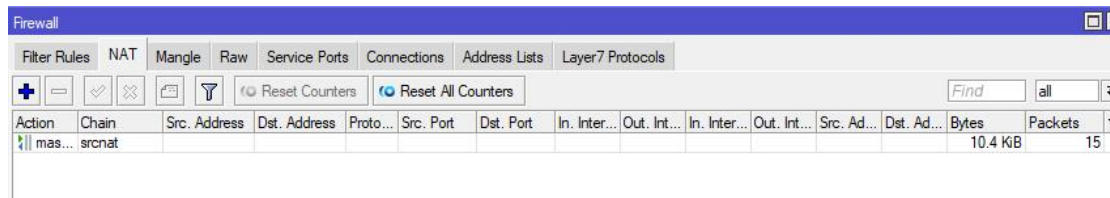
In. Interface:

Out. Interface:

OK Cancel Apply Disable Comment Copy Remove Reset Counters Reset All Counters



13. Akan tampil rule baru di firewall->NAT



14. Lalu di check koneksi internet dengan ping elearning.uin-malang.ac.id pastikan mendapatkan reply from

```
C:\Users\hp>ping elearning.uin-malang.ac.id

Pinging elearning.uin-malang.ac.id [103.17.76.12] with 32 bytes of data:
Reply from 103.17.76.12: bytes=32 time=3ms TTL=59
Reply from 103.17.76.12: bytes=32 time=29ms TTL=59
Reply from 103.17.76.12: bytes=32 time=8ms TTL=59
Reply from 103.17.76.12: bytes=32 time=3ms TTL=59

Ping statistics for 103.17.76.12:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 3ms, Maximum = 29ms, Average = 10ms

C:\Users\hp>
```

15. Membuat firewall untul block paket ICMP

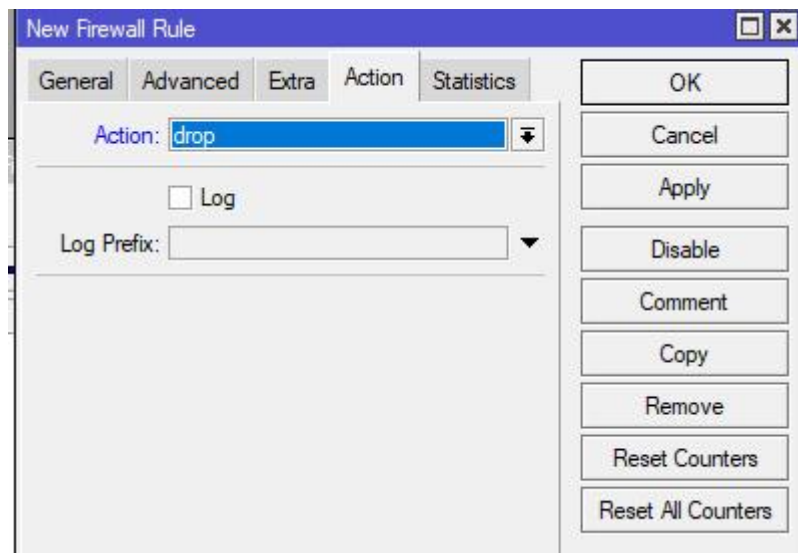
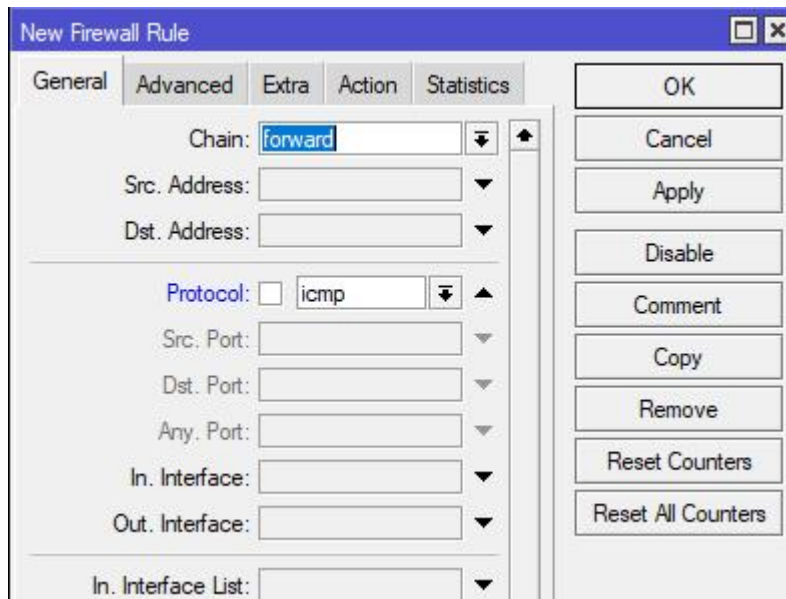
Klik menu ip->firewall->filter rules->+

Konfigurasi firewall

Chain=forward

Protocol=icmp

Action=drop



16. Ping lagi ke elearning maka hasilnya akan timed out

```
C:\Users\hp>ping elearning.uin-malang.ac.id

Pinging elearning.uin-malang.ac.id [103.17.76.12] with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 103.17.76.12:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\Users\hp>
```

17. Komputer client dapat mengakses internet dengan batasan bandwidth 1Mbps/1Mbps (up/down) setelah login.

Hotspot Setup

DNS name of local hotspot server

DNS Name:

Back Next Cancel

Hotspot Setup

Create local HotSpot user

Name of Local HotSpot User:

Password for the User:

Back Next Cancel

18. Ubah rate Limit nya menjadi 1M/1M:

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:

OK Cancel Apply Copy Remove

New Hotspot User

General Limits Statistics

Server: all

Name: Azizatul

Password:

Address:

MAC Address:

Profile: Aziza

Routes:

Email:

OK

Cancel

Apply

Disable

Comment

Copy

Remove

Reset Counters

Reset All Counters

enabled

19. Login menggunakan users seperti dibawah ini

Hi, Azizatul!

IP address	192.168.6.14
Bytes up / down	43.1 KiB / 75.8 KiB
Connected	2s
Status refresh	1m

Log out