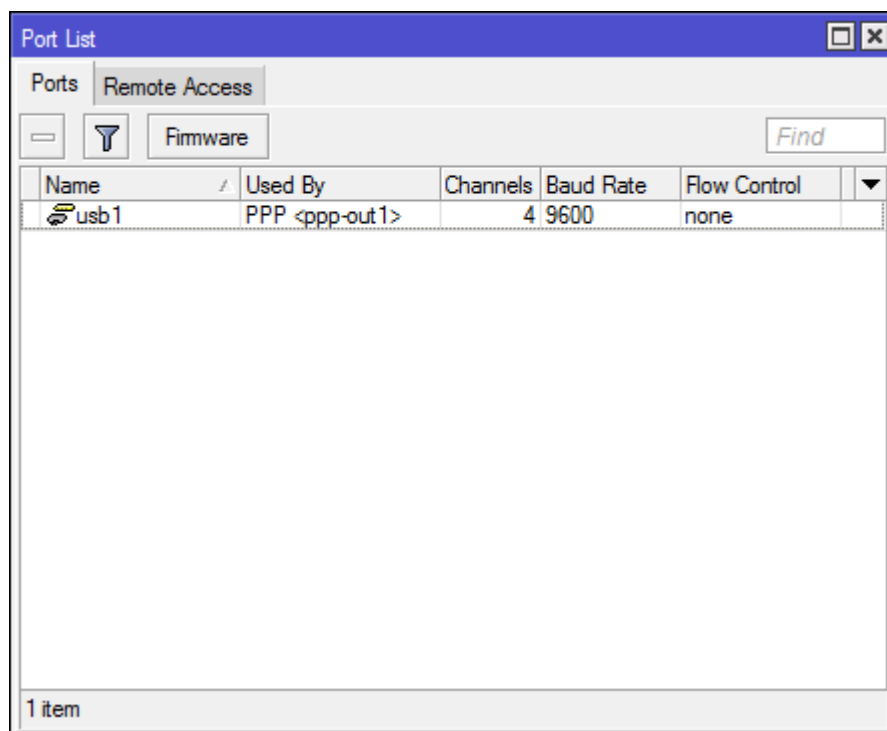


## LAMPIRAN

### Lampiran 1 : Konfigurasi

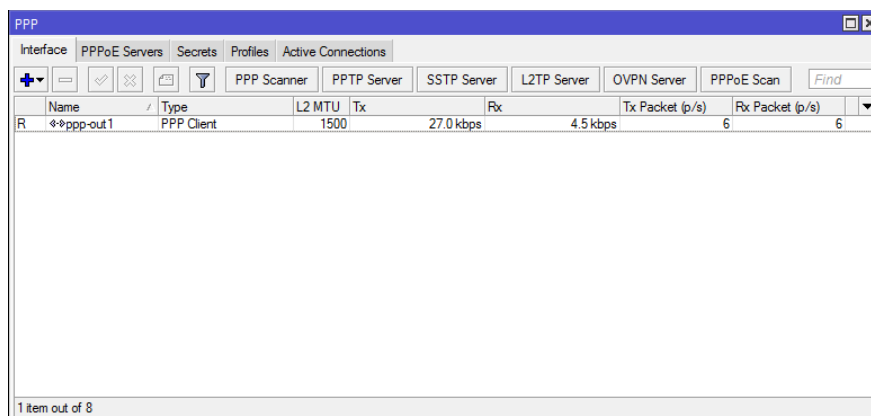
#### Setting Mikrotik

- a. Pastikan usb terdeteksi oleh port list mikrotik



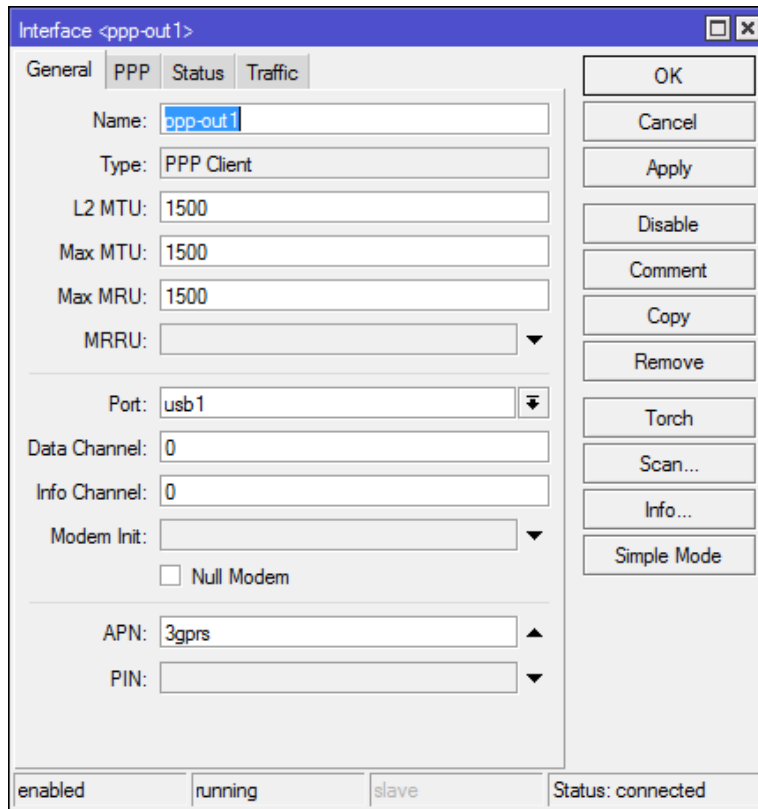
Konfigurasi Mikrotik

- b. Setting Interface untuk PPP (point to point protocol).



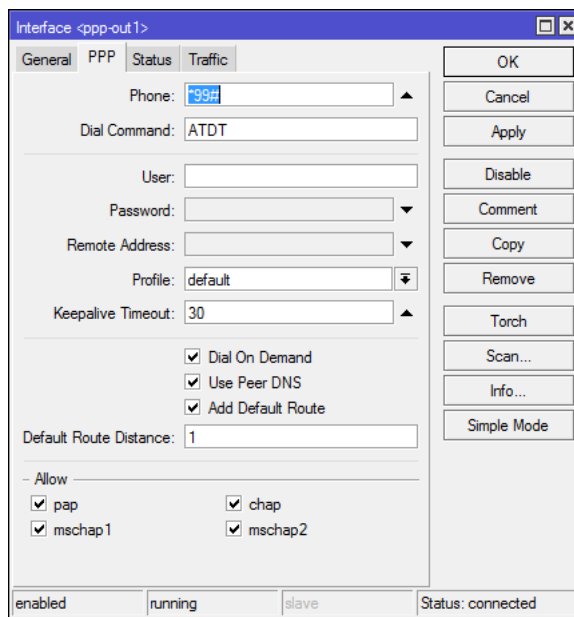
Setting interface PPP

c. Setting interface PPP out untuk modem



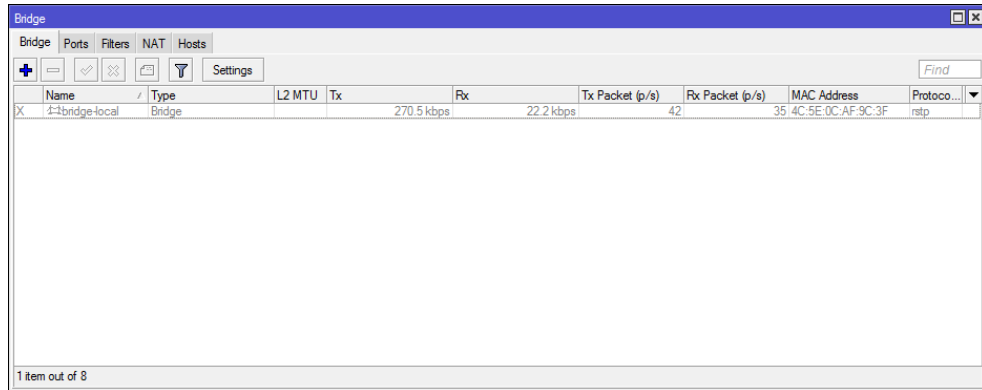
Setting PPP Out

d. Setting modem



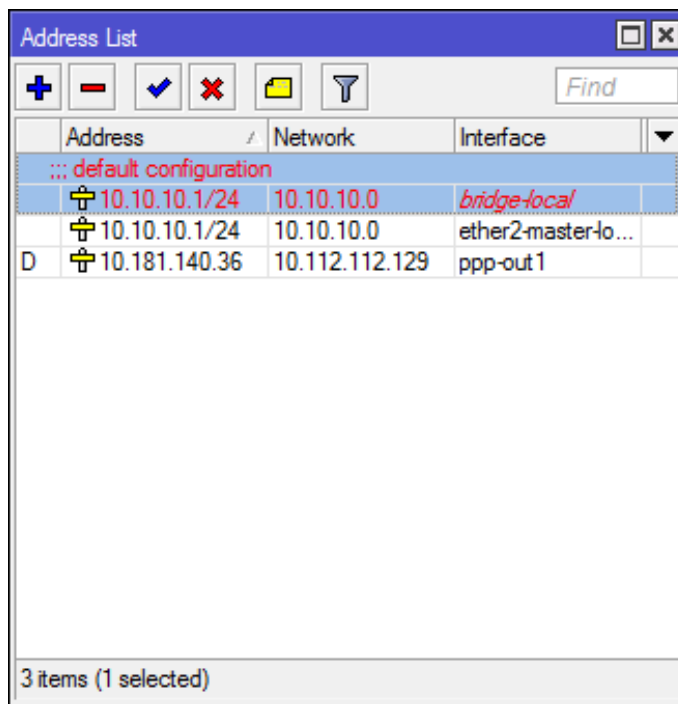
Gambar 5-0-1 Setting Modem ISP

Matikan bridge pada mikrotik



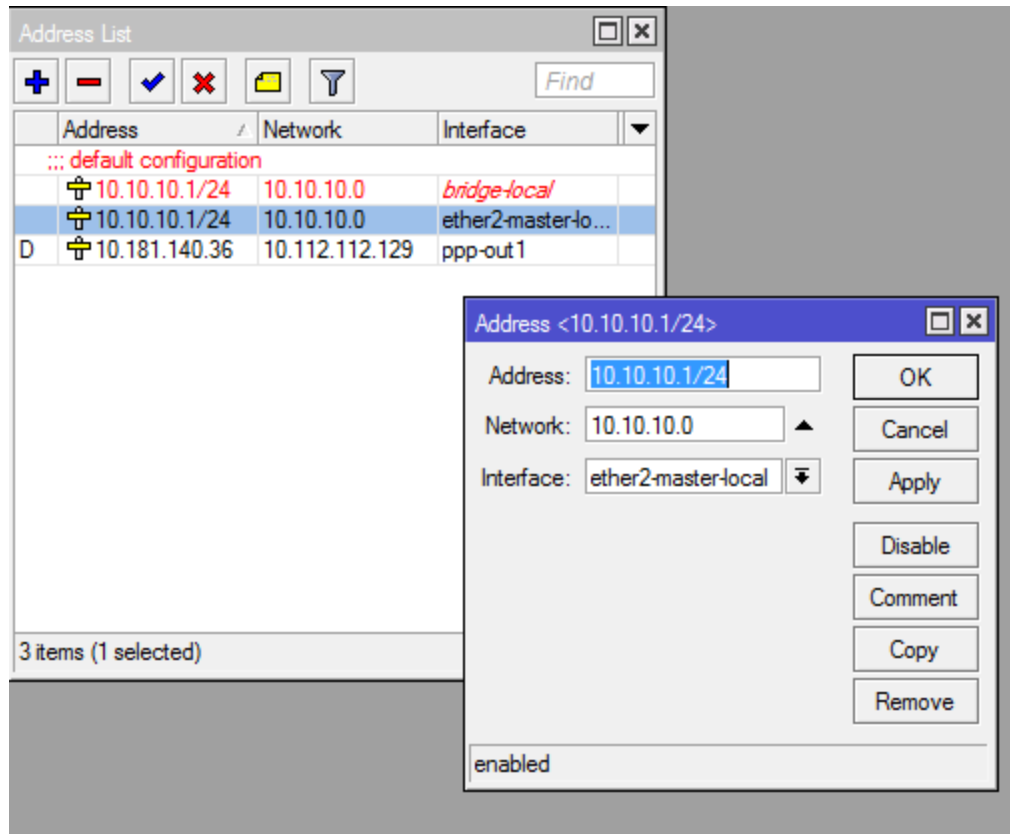
Setting bridge

e. Setting Interface untuk koneksi WAN Pfsense

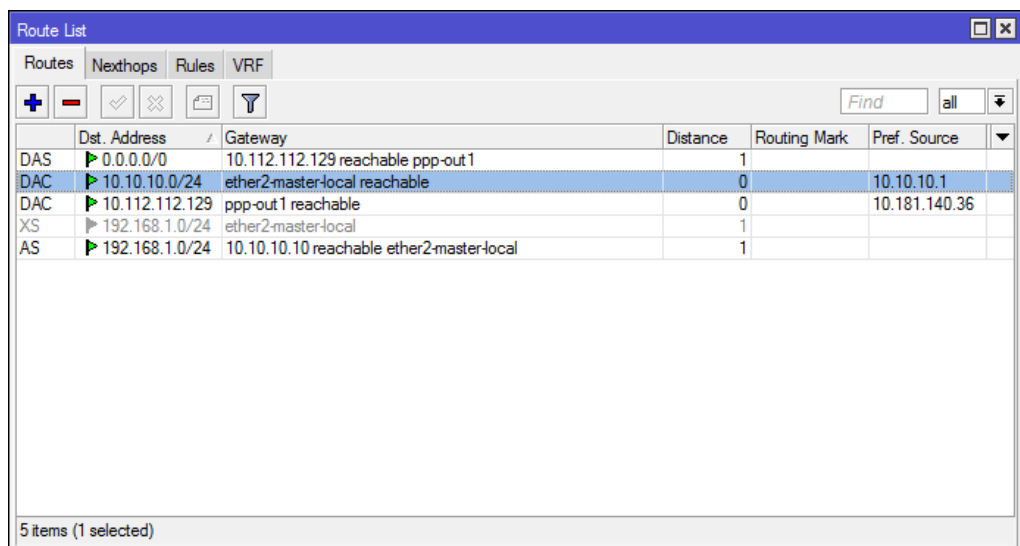


Setting Interface WAN Pfsense

a. Membuat koneksi untuk WAN

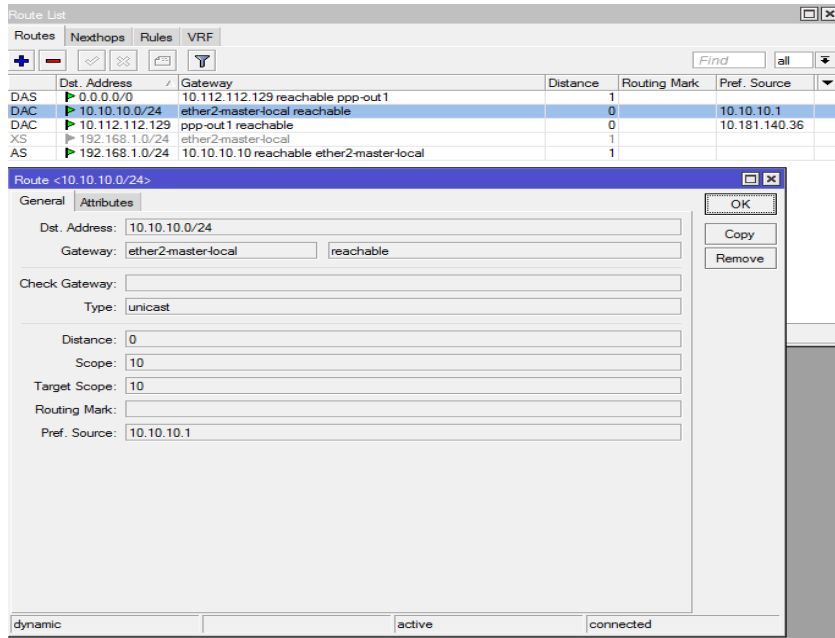


b. Konfigurasi routing di menu route list



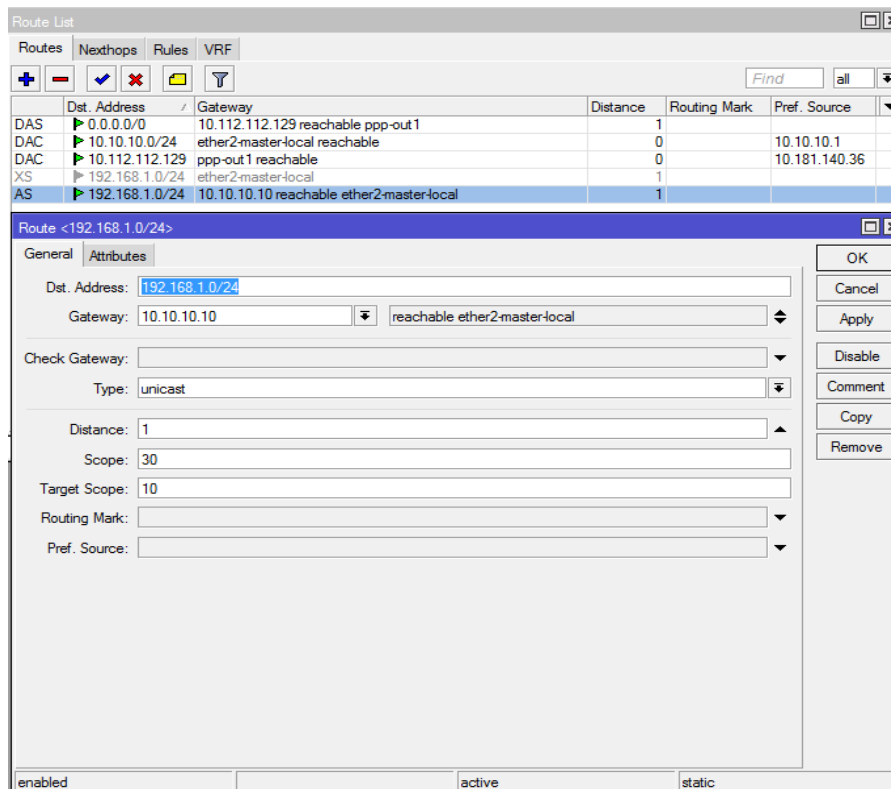
Konfigurasi Routing

c. Setting rute untuk koneksi WAN



Setting Route untuk WAN

d. Setting rute untuk koneksi LAN



Setting Route untuk LAN

## Lampiran 2 : Tes ping

Pengecekan koneksi dengan ping

Ping dari PC LAN (192.168.1.5)

```
Terminal
..          Move up one level
/command   Use command at the base level
[admin@MikroTik] > ping 10.10.10.1
  SEQ HOST                SIZE TTL TIME  STATUS
  0 10.10.10.1           Mikrotik GW          56 64 0ms
  1 10.10.10.1           56 64 0ms
  2 10.10.10.1           56 64 0ms
  3 10.10.10.1           56 64 0ms
  4 10.10.10.1           56 64 0ms
  5 10.10.10.1           56 64 0ms
  sent=6 received=6 packet-loss=0% min-rtt=0ms avg-rtt=0ms max-rtt=0ms

[admin@MikroTik] > ping 10.10.10.10
  SEQ HOST                SIZE TTL TIME  STATUS
  0 10.10.10.10          WAN Pfsense          56 64 0ms
  1 10.10.10.10          56 64 0ms
  2 10.10.10.10          56 64 0ms
  3 10.10.10.10          56 64 0ms
  4 10.10.10.10          56 64 0ms
  5 10.10.10.10          56 64 0ms
  6 10.10.10.10          56 64 0ms
  sent=7 received=7 packet-loss=0% min-rtt=0ms avg-rtt=0ms max-rtt=0ms

[admin@MikroTik] >
```

### Test Ping

Ping dari mikrotik ke client dan LAN Pfsense (10.10.10.1)

```
Terminal
/          Move up to base level
..        Move up one level
/command  Use command at the base level
[admin@MikroTik] > ping 192.168.1.1
  SEQ HOST                SIZE TTL TIME  STATUS
  0 192.168.1.1          IP GW LAN            56 64 0ms
  1 192.168.1.1          56 64 0ms
  2 192.168.1.1          56 64 0ms
  3 192.168.1.1          56 64 0ms
  4 192.168.1.1          56 64 0ms
  5 192.168.1.1          56 64 0ms
  sent=6 received=6 packet-loss=0% min-rtt=0ms avg-rtt=0ms max-rtt=0ms

[admin@MikroTik] > ping 192.168.1.5
  SEQ HOST                SIZE TTL TIME  STATUS
  0 192.168.1.5          IP LAN Client        56 127 0ms
  1 192.168.1.5          56 127 0ms
  2 192.168.1.5          56 127 0ms
  3 192.168.1.5          56 127 0ms
  4 192.168.1.5          56 127 0ms
  5 192.168.1.5          56 127 0ms
  sent=6 received=6 packet-loss=0% min-rtt=0ms avg-rtt=0ms max-rtt=0ms

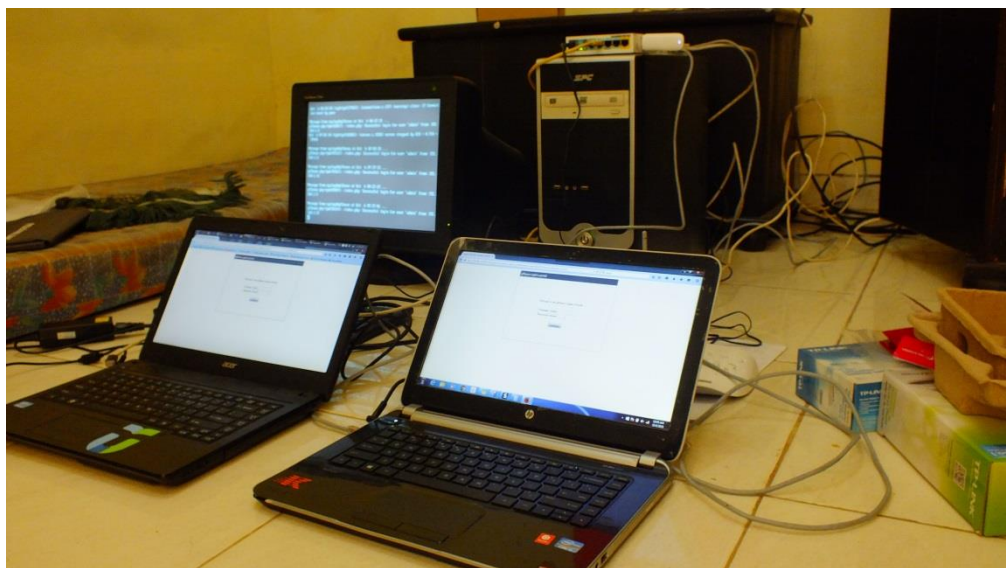
[admin@MikroTik] >
```

### Test Ping

### Lampiran 3 : Dokumentasi Selama Pengerjaan



Proses Pengujian Sistem yang telah dibangun



Proses Pengujian Captive Portal