

## KONFIGURASI ROUTER

Untuk mengkonfigurasi router menggunakan linux debian versi 5.0, ikuti langkah langkah dari gambar berikut:

1. Ketikkan perintah berikut

```
2tkj1-17:~# pico /etc/network/interfaces
```

2. Kemudian tambahkan tulisan dibawah ini :

```
# The secondary network interface
auto eth1
iface eth1 inet static
    address 172.16.1.1
    netmask 255.255.255.192
    network 172.16.1.0
    broadcast 172.16.1.63
```

3. Sehingga menjadi seperti ini :

```
# The primary network interface
allow-hotplug eth0
iface eth0 inet static
    address 192.168.4.17
    netmask 255.255.255.192
    network 192.168.4.0
    broadcast 192.168.4.63
    gateway 192.168.4.62
    # dns-* options are implemented by the resolvconf package, if installed
    dns-nameservers 192.168.1.62
    dns-search antoksmkn1.sch.id

# The secondary network interface
auto eth1
iface eth1 inet static
    address 172.16.1.1
    netmask 255.255.255.192
    network 172.16.1.0
    broadcast 172.16.1.63
```

4. Kemudian restart networknya.

5. Restart komp.

6. Ketikkan perintah di bawah ini.

```
2tkj1-17:~# /etc/init.d/networking restart
Reconfiguring network interfaces...done.
2tkj1-17:~#
```

```
2tkj1-17:~# reboot
```

```
2tkj1-17:~# ifconfig | less
2tkj1-17:~#
```

7. Jika Nampak eth0 dan eth1, maka konfigurasi anda sudah benar

```
eth0      Link encap:Ethernet  HWaddr 00:b0:4e:39:12:cd
          inet addr:192.168.4.17  Bcast:192.168.4.63  Mask:255.255.255.192
          UP BROADCAST MULTICAST  MTU:1500  Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:0 (0.0 B)  TX bytes:0 (0.0 B)
          Interrupt:17 Base address:0xe800

eth1      Link encap:Ethernet  HWaddr 00:1d:92:32:b8:69
          inet addr:172.16.1.1  Bcast:172.16.1.63  Mask:255.255.255.192
          inet6 addr: fe80::21d:92ff:fe32:b869/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:153 errors:0 dropped:0 overruns:0 frame:0
          TX packets:75 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:17154 (16.7 KiB)  TX bytes:11434 (11.1 KiB)
          Interrupt:23 Base address:0xc800

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:16436  Metric:1
          RX packets:24 errors:0 dropped:0 overruns:0 frame:0
          TX packets:24 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:1716 (1.6 KiB)  TX bytes:1716 (1.6 KiB)
```

8. Lalu pastikan settingan IP address di Windows anda seperti ini:

Use the following IP address:

IP address:	172 . 16 . 1 . 2
Subnet mask:	255 . 255 . 255 . 192
Default gateway:	172 . 16 . 1 . 1

Obtain DNS server address automatically

Use the following DNS server addresses:

Preferred DNS server:	172 . 16 . 1 . 1
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9. Lalu kita cek koneksi dari server ke DNS atas.

```
2tkj1-17:~# ping 192.168.1.62
PING 192.168.1.62 (192.168.1.62) 56(84) bytes of data:
64 bytes from 192.168.1.62: icmp_seq=1 ttl=64 time=0.212 ms
64 bytes from 192.168.1.62: icmp_seq=2 ttl=64 time=0.163 ms
64 bytes from 192.168.1.62: icmp_seq=3 ttl=64 time=0.164 ms
^C
--- 192.168.1.62 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 1998ms
rtt min/avg/max/mdev = 0.163/0.179/0.212/0.027 ms
```

10. Kita cek koneksi dari windows ke server (IP Lokal)

```
C:\Documents and Settings\wisnu>ping 172.16.1.2
Pinging 172.16.1.2 with 32 bytes of data:
Reply from 172.16.1.2: bytes=32 time<1ms TTL=128
Reply from 172.16.1.2: bytes=32 time<1ms TTL=128
Reply from 172.16.1.2: bytes=32 time<1ms TTL=128
Ping statistics for 172.16.1.2:
    Packets: Sent = 3, Received = 3, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

11. Ketikkan perintah di samping kanan ini.

```
2tkj1-17:~# pico /etc/sysctl.conf
```

12. Lalu carilah baris yang seperti ini :

```
# Uncomment the next line to enable packet forwarding for IPv4
#net.ipv4.ip_forward=1
```

13. Lalu hilangkan tanda “#” agar menjadi seperti ini:

```
net.ipv4.ip_forward=1
```

14. Lalu ketikkan perintah dibawah ini.

```
2tkj1-17:~# iptables -t nat -A POSTROUTING -o eth0 -j MASQUERADE
```

15. Ketikkan perintah di samping kanan ini.

```
2tkj1-17:~# iptables -t nat -n -L
```

16. Jika pada layar anda muncul seperti ini, maka konfigurasi anda sudah benar. Namun jika tidak ada kata “MASQUERADE all – 0.0.0.0/0 0.0.0.0/0” Maka sebelumnya, pasti ada perintah yang salah anda masukkan.,

```
2tkj1-17:~# iptables -t nat -n -L
Chain PREROUTING (policy ACCEPT)
target prot opt source destination

Chain POSTROUTING (policy ACCEPT)
target prot opt source destination
MASQUERADE all -- 0.0.0.0/0 0.0.0.0/0

Chain OUTPUT (policy ACCEPT)
target prot opt source destination
```

17. Ketikkan perintah di samping kanan ini.

```
2tkj1-17:~# iptables-save > /etc/network/iptables.conf
```

18. Kemudian ketikkan perintah dibawah ini.

```
2tkj1-17:~# echo "iptables-restore < /etc/network/iptables.conf" >> /etc/network/if-up.d/iptables
```

19. Ketikkan perintah di samping kanan ini.

```
2tkj1-17:~# pico /etc/network/if-up.d/iptables
```

20. Anda akan melihat tulisan ini:

```
iptables-restore < /etc/network/iptables.conf
```

21. Lalu tambahkan kata "#!/bin/sh" diatasnya.

```
#!/bin/sh
iptables-restore < /etc/network/iptables.conf
```

22. Ketikkan perintah di samping kanan ini.

```
2tkj1-17:~# chmod +x /etc/network/if-up.d/iptables
```

23. Jika sudah, kemudian Restart komputernya.

```
2tkj1-17:~# reboot
```

24. Kemudian kita cek,apakah sudah berhasil,  
Ketikkan perintah di samping kanan ini.

```
2tkj1-17:~# iptables -t nat -n -L
```

25. Jika muncul tampilan disamping, maka  
Konfigurasi router anda sudah berhasil.

```
2tkj1-17:~# iptables -t nat -n -L
Chain PREROUTING (policy ACCEPT)
target    prot opt source                destination

Chain POSTROUTING (policy ACCEPT)
target    prot opt source                destination
MASQUERADE all  --  0.0.0.0/0             0.0.0.0/0

Chain OUTPUT (policy ACCEPT)
target    prot opt source                destination
```