Jaringan Komputer

Identifikasi Hardware Jaringan

SIB 2A

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PROGRAM STUDI SISTEM INFORMASI BISNIS JURUSAN TEKNOLOGI INFORMASI

POLITEKNIK NEGERI MALANG

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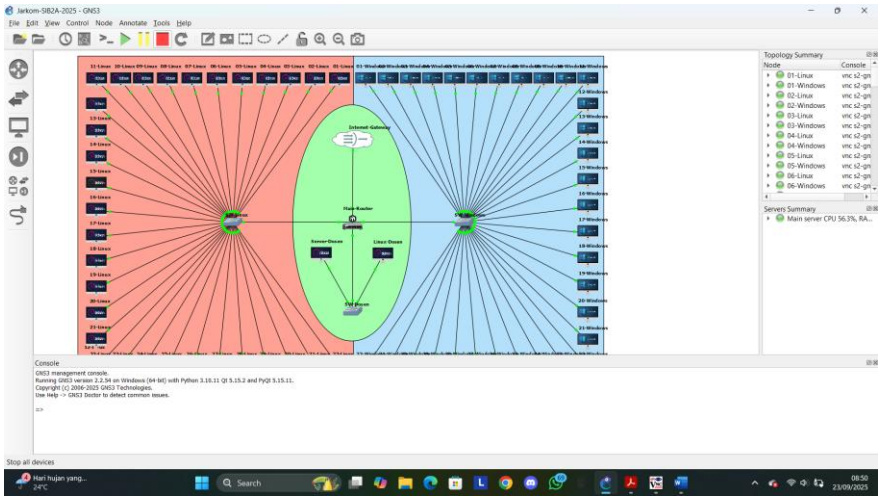
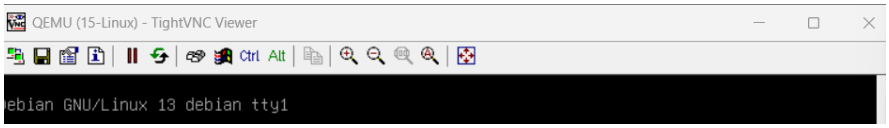
PERSIAPAN PRAKTIKUM

1. Login ke gns3 dan masuk ke localhost polinema dengan port 80



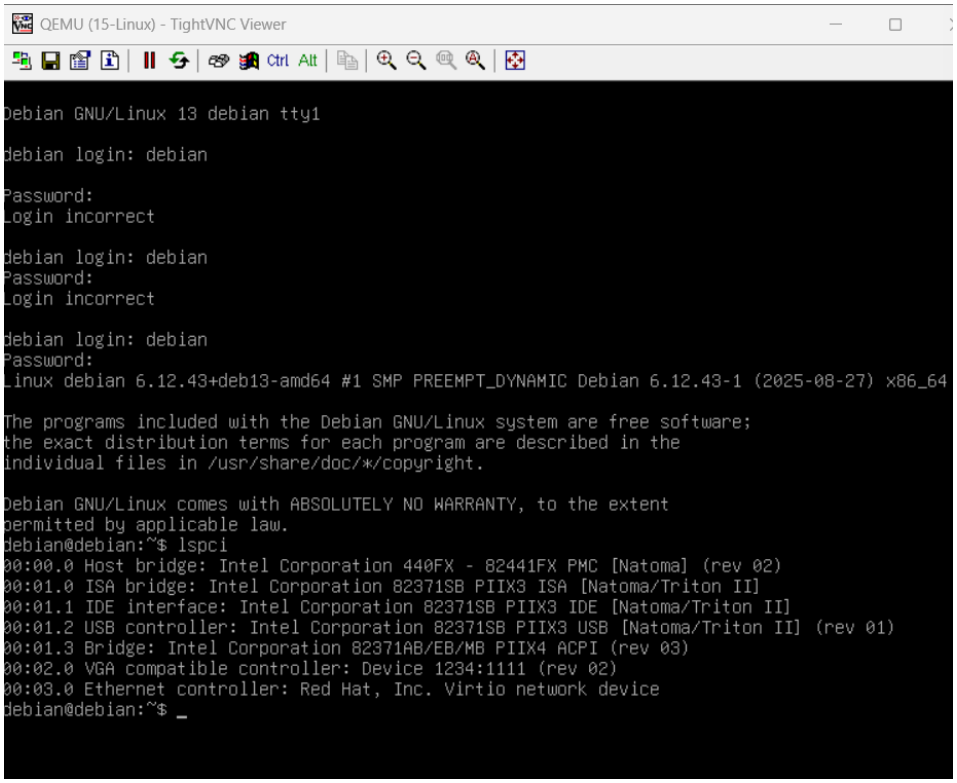
2. Lalu start 15, karna absen saya 15 dan klik 2x



A. Identifikasi Perangkat Keras Jaringan

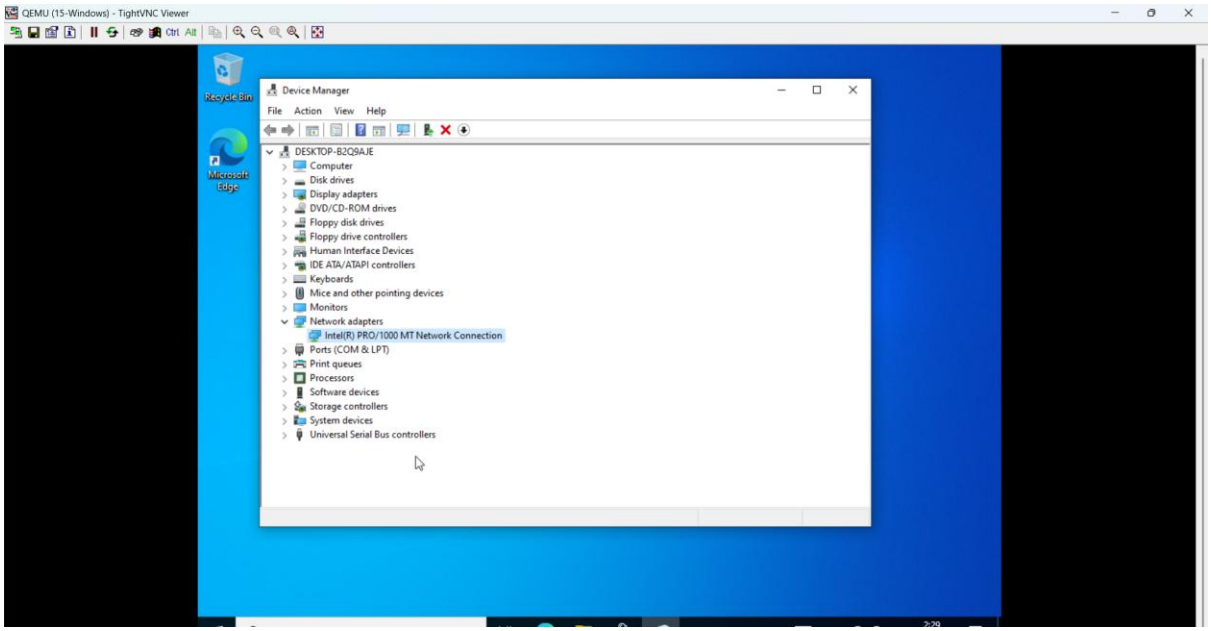
a) Identifikasi Pada Sistem Operasi Linux

1. Login Debian lalu jalankan printah lspci



b) Identifikasi Pada Sistem Operasi Windows

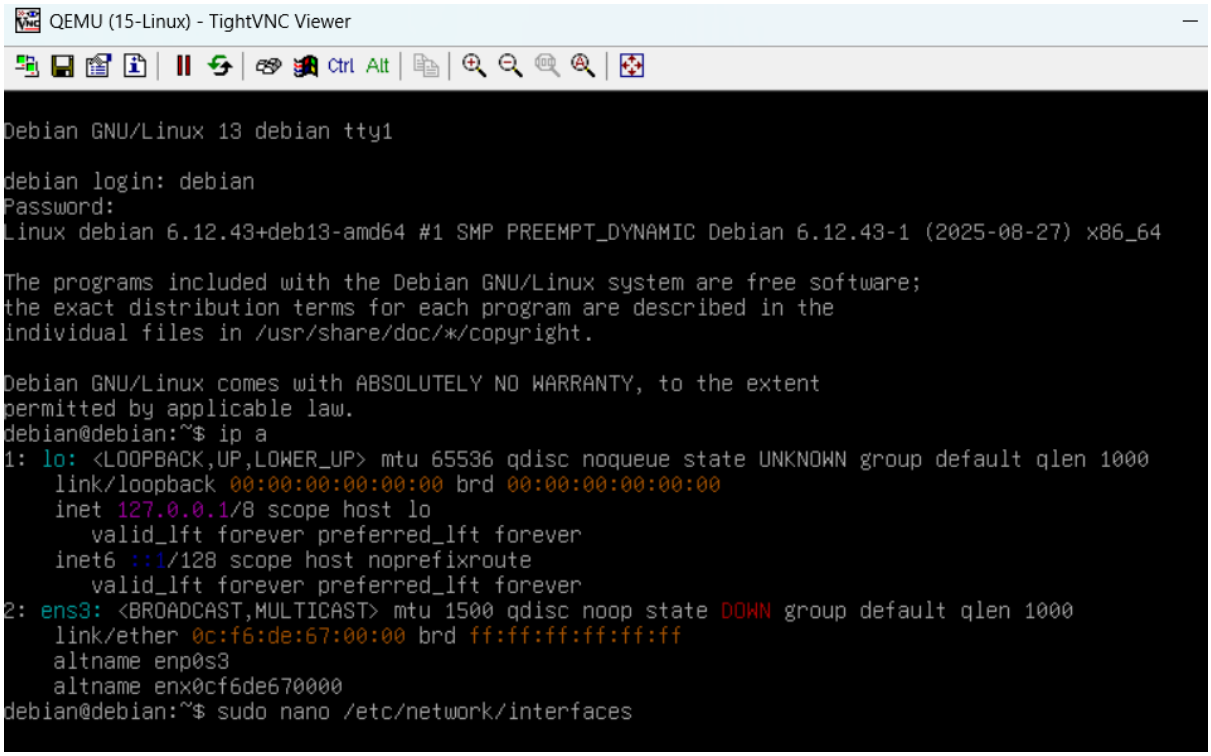
1. Melihat NIC pada network adapter



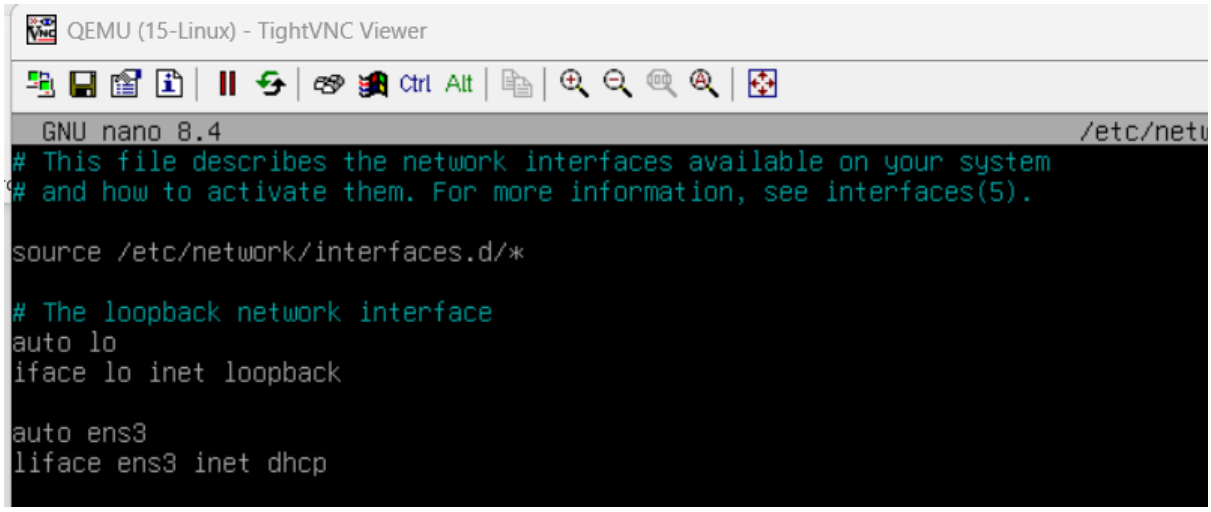
Pengaturan Alamat IP Secara Dinamis

a) Pengaturan Pada Sistem Operasi Linux

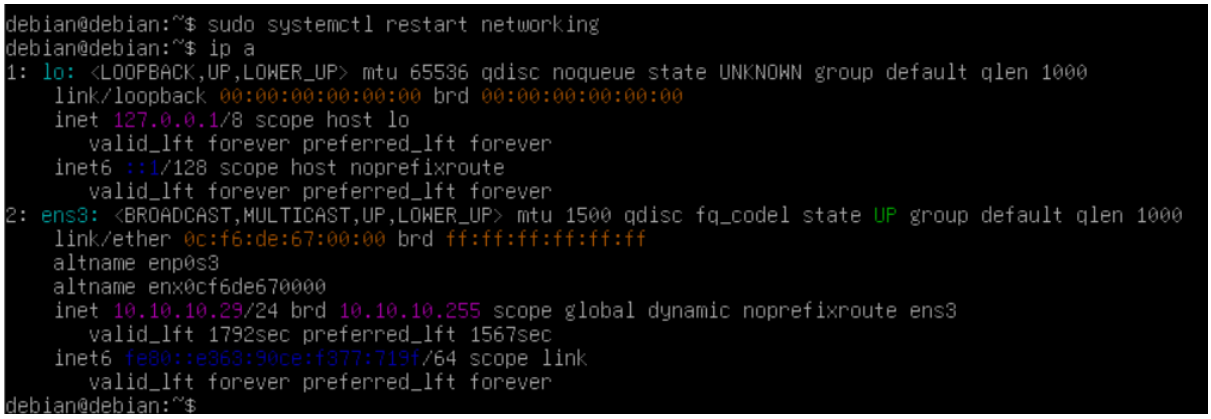
1. Mengecek IP pada linux



2. Menjalankan editor teks nano

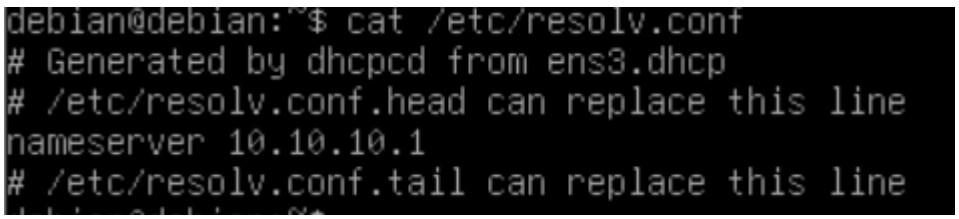


3. Mengecek ulang ip



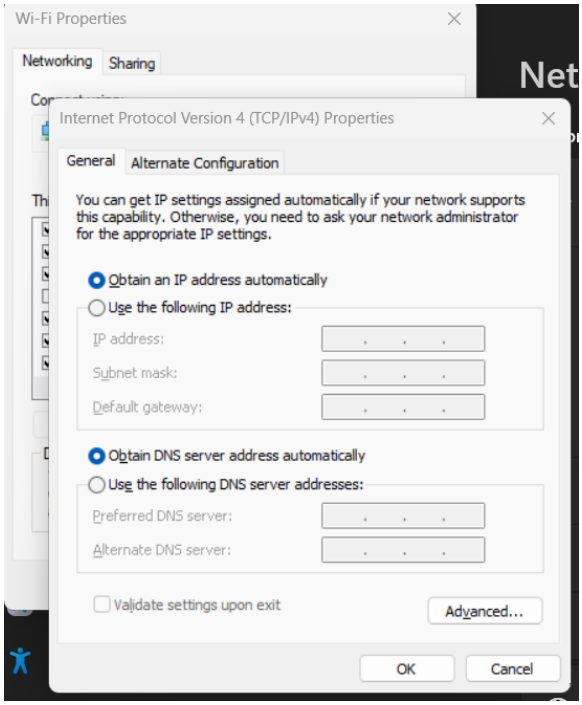
4. Mengecek ip route

5. Melihat isi dari resolv.conf

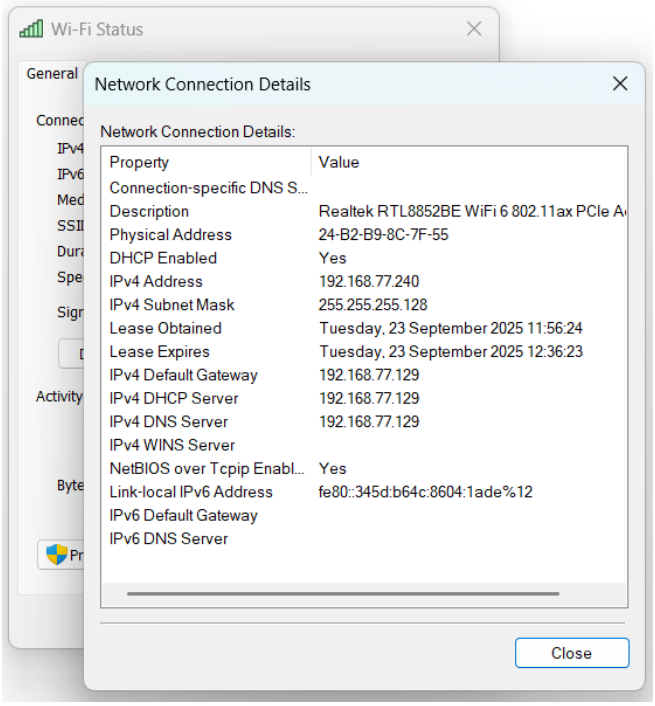


b) Pengaturan Pada Sistem Operasi Windows

1. “Internet Protocol (TCP/IP) Properties” pilih tab “General” dan pilih opsi “Obtain an IP address automatically” untuk mendapatkan pengaturan alamat IP dan Gateway secara otomatis



2. menekan tombol “Details”. Maka akan muncul alamat DNS dan detail pengaturan yang diterapkan pada komputer windows



C. Pengaturan Alamat IP Secara Statis

a) Pengaturan Pada Sistem Operasi Linux

1. Membuka isi file interface

```
debian@debian:~$ cat /etc/resolv.conf
# Generated by dhcpcd from ens3.dhcp
# /etc/resolv.conf.head can replace this line
nameserver 10.10.10.1
# /etc/resolv.conf.tail can replace this line
debian@debian:~$ sudo nano /etc/network/interfaces
[sudo] password for debian:
```

2. Menambahkan Alamat Alamat

```
source /etc/network/interfaces.d/*

# The loopback network interface
auto lo
iface lo inet loopback

auto ens3
iface ens3 inet static
        address 10.10.10.25
        netmask 255.255.255.0
        gateway 10.10.10.1
```

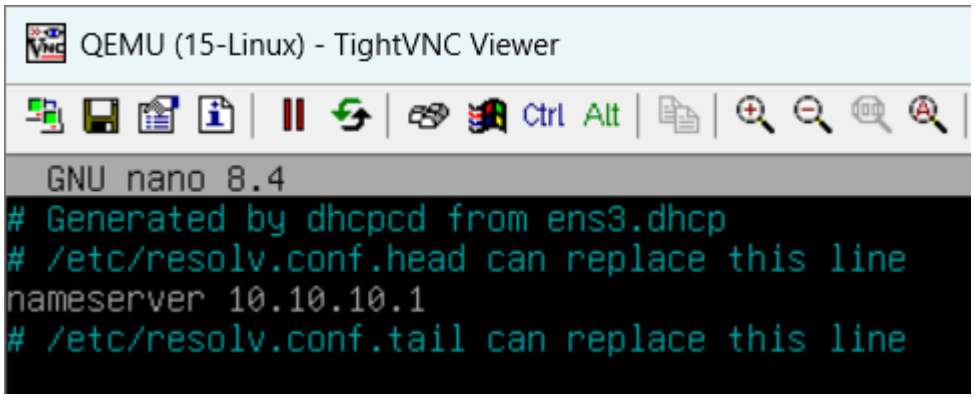
3. Lalu mengecek ip a Kembali untuk ngecek apakah sudah di konfigurasi

```
debian@debian:~$ sudo systemctl restart networking
debian@debian:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host noprefixroute
       valid_lft forever preferred_lft forever
2: ens3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 0c:f6:de:67:00:00 brd ff:ff:ff:ff:ff:ff
    altname enp0s3
    altname enx0cf6de670000
    inet 10.10.10.25/24 brd 10.10.10.255 scope global ens3
       valid_lft forever preferred_lft forever
debian@debian:~$
```

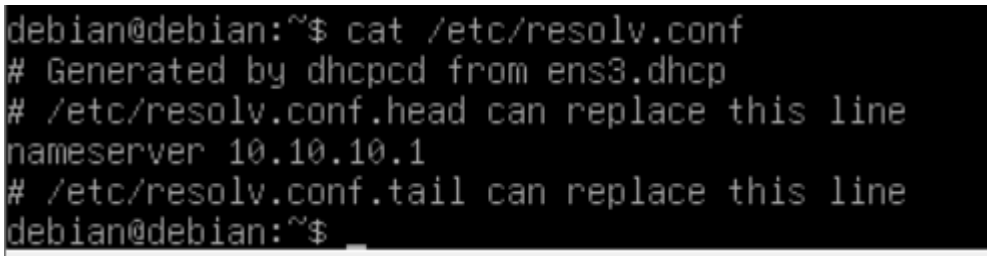
4. Mengecek ip route

```
default via 10.10.10.1 dev ens3 onlink
10.10.10.0/24 dev ens3 proto kernel scope link src 10.10.10.25
debian@debian:~$
```

5. Membuka teks nano resolv.conf dan mengubah seperti no 2

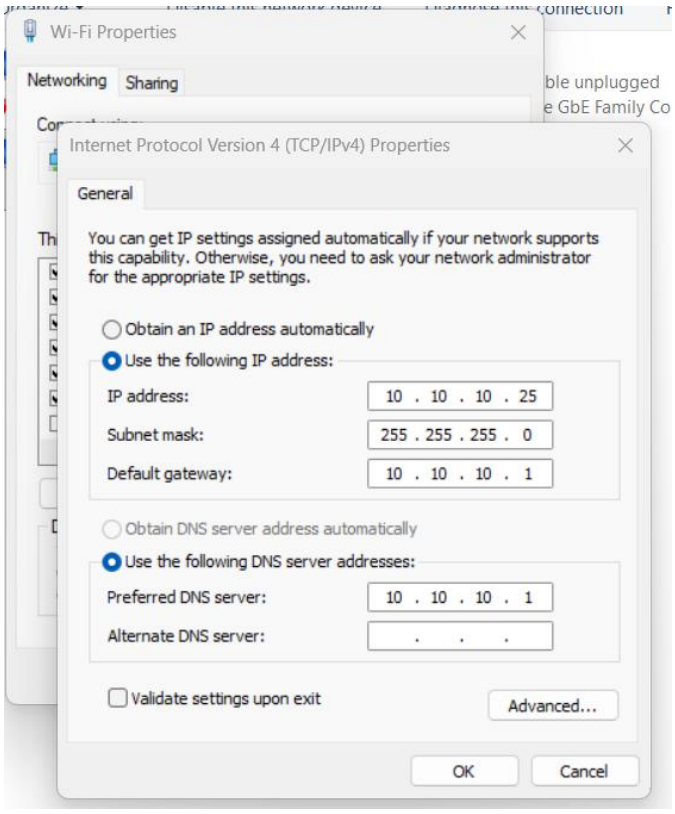


6. melakukan pengecekan ulang



b) Pengaturan Pada Sistem Operasi Windows

1. Mengubah ip pada windows



2. Mengecek pada jendela local area connection status