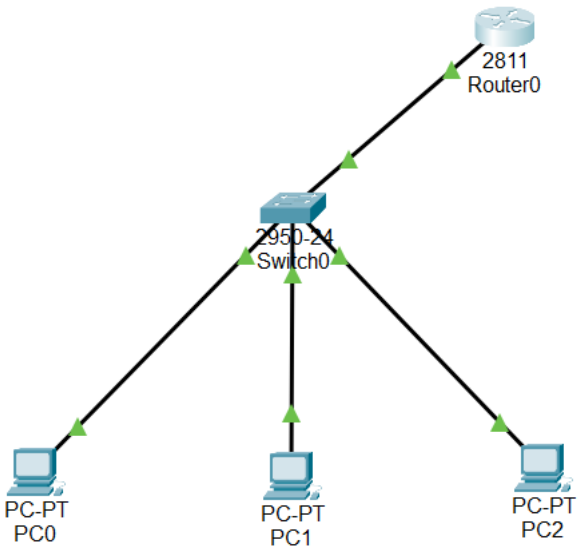
Nama : M Rayhan Naufal Putra

NIM : 09010282327037

Kelas : MI 3A

LAPORAN PRAKTIKUM JARKOM

DHCP



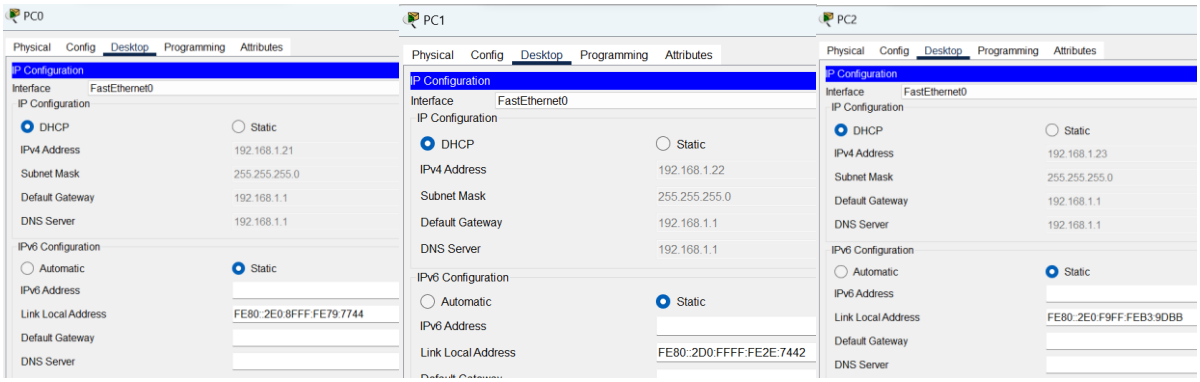

```
Router>enable
Router#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#hostname ROUTER_09010282327037
ROUTER_09010282327037(config)#int fa0/0
ROUTER_09010282327037(config-if)#ip add 192.168.1.1 255.255.255.0
ROUTER_09010282327037(config-if)#no shutdown

ROUTER_09010282327037(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

ROUTER_09010282327037(config-if)#exit
ROUTER_09010282327037(config)#ip dhcp pool LAB
ROUTER_09010282327037(dhcp-config)#network 192.168.1.0 255.255.255.0
ROUTER_09010282327037(dhcp-config)#default-router 192.168.1.1
ROUTER_09010282327037(dhcp-config)#dns-server 192.168.1.1
ROUTER_09010282327037(dhcp-config)#ip dhcp excluded-address 192.168.1.1
ROUTER_09010282327037(config)#ip dhcp excluded-address 192.168.1.2 192.168.1.20
ROUTER_09010282327037(config)#
```

1. Setelah itu Melihat daftar IP dari Client

```
ROUTER_09010282327037#sh ip dhcp binding
IP address       Client-ID/              Lease expiration        Type
                 Hardware address
192.168.1.23     00E0.F9B3.9DBB          --                      Automatic
192.168.1.21     00E0.8F79.7744          --                      Automatic
192.168.1.22     00D0.FF2E.7442          --                      Automatic
```

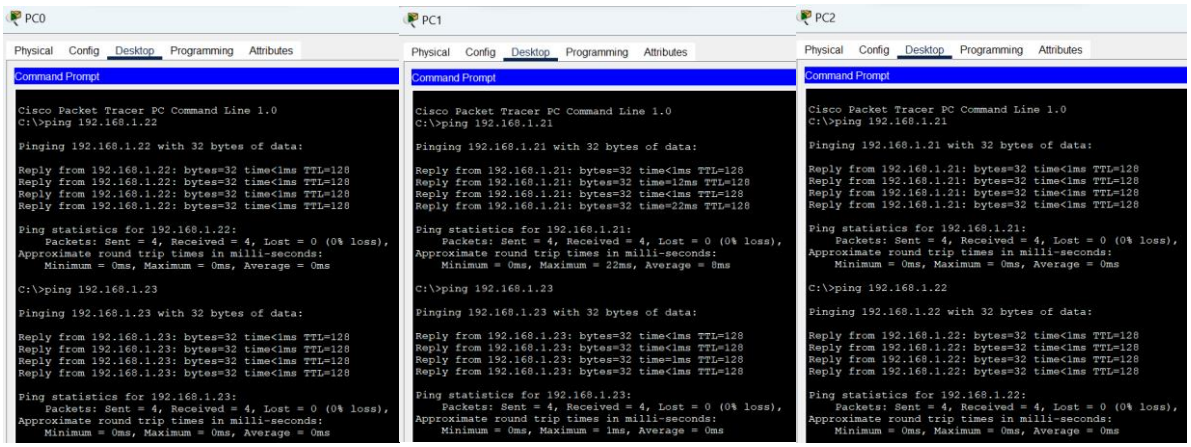
No.	IP address	MAC address	Lease expiration	Type
1.	192.168.1.21	00E0.8F79.7744	-	Automatic
2.	192.168.1.22	00D0.FF2E.7442	-	Automatic
3.	192.168.1.23	00E0.F9B3.9DBB	-	Automatic

2. Setelah itu lakukan pengalamatan ip pada Client/PC



No.	Client	IP address	Netmask	Gateway	DNS
1.	PC0	192.168.1.21	255.255.255.0	192.168.1.1	192.168.1.1
2.	PC1	192.168.1.22	255.255.255.0	192.168.1.1	192.168.1.1
3.	PC2	192.168.1.23	255.255.255.0	192.168.1.1	192.168.1.1

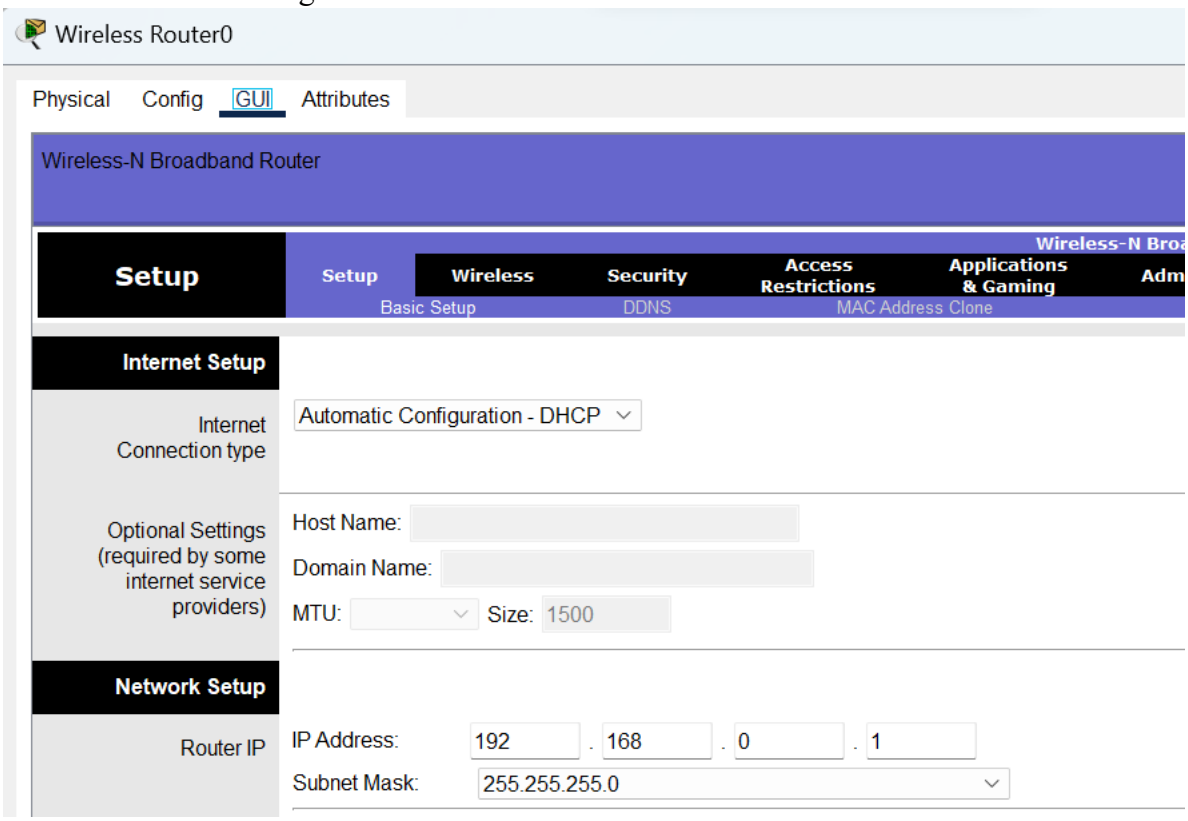
3. Lakukan pengujian PING pada setiap PC



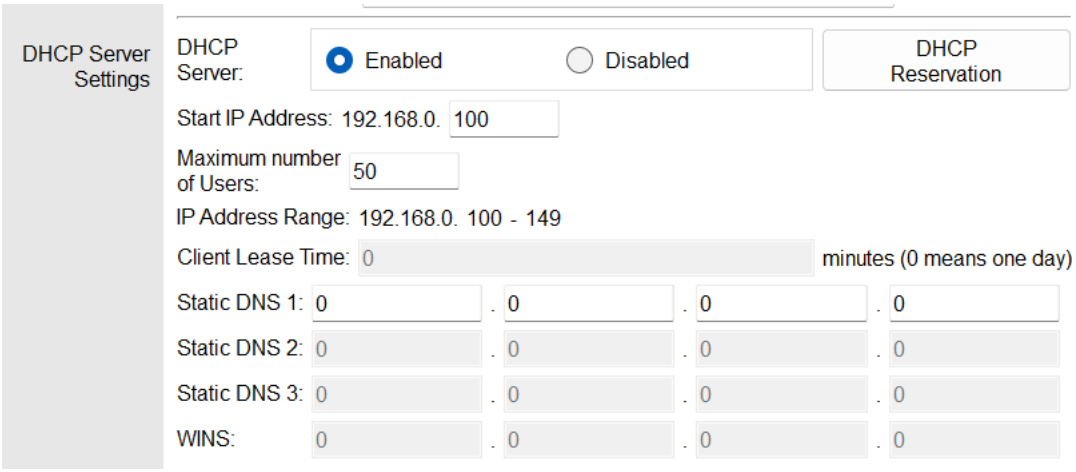
No.	Sumber	Hasil	Tujuan	Hasil
		Ya/Tidak		Ya/Tidak
1.	PC0	Ya	PC1	Ya
		Ya	PC2	Ya
2.	PC1	Ya	PC0	Ya
		Ya	PC2	Ya
3.	PC2	Ya	PC0	Ya
		Ya	PC1	Ya

WIRELESS (LATIHAN)

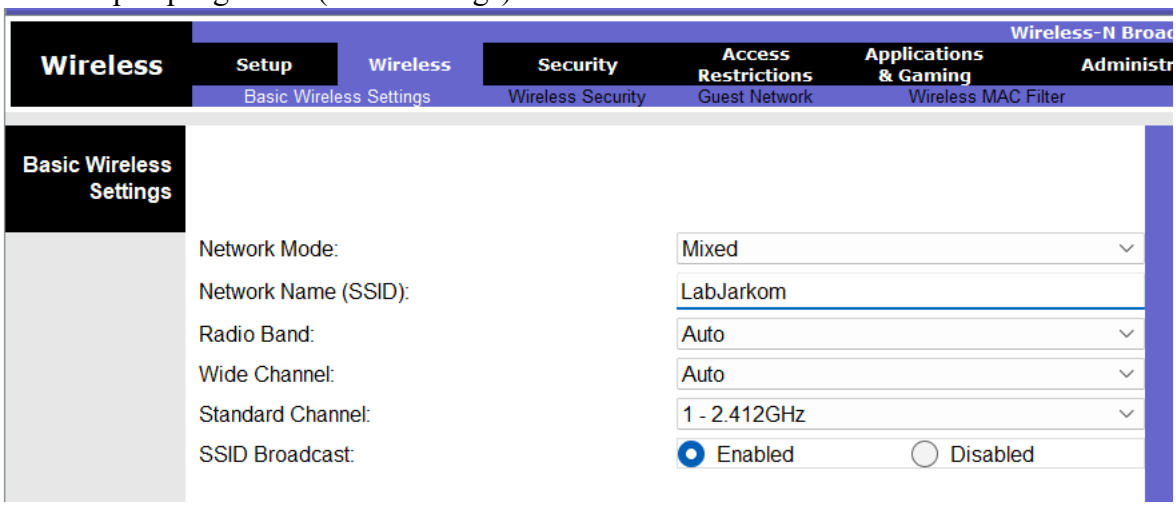
1. Buat Topologi Seperti Gambar diatas (note*: Gantilah device tablet menjadi laptop pada topologi diatas dan harus terhubung secara wireless)
2. Konfigurasi Access Point
    - Untuk mengkonfigurasi access point, klik Wireless Router yang sudah dipasang.
    - Pilih tab/menu GUI
    - Masukkan IP Address dengan 192.168.0.1
    - Serta Subnet Mask dengan 255.255.255.0



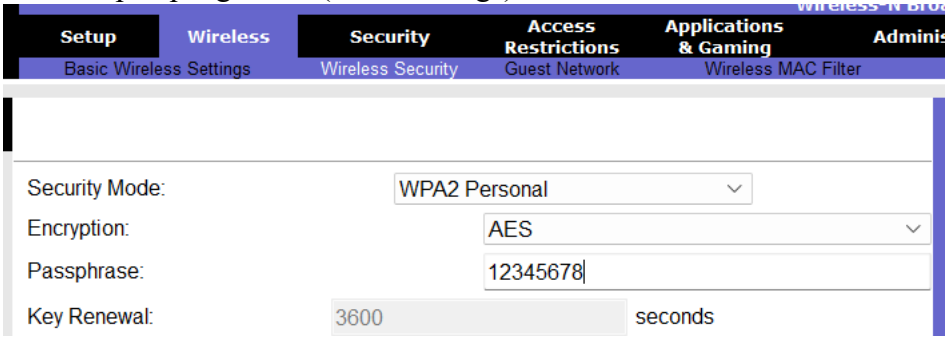
    - Aktifkan DHCP Server, menjadi Enabled
    - Mulai IP Address, dan IP DHCP dimulai dari 192.168.0.100
    - Maximum number of Users (jumlah maksimum dari IP DHCP)
    - Lalu simpan pengaturan (Save Settings)



- Pilih tab/menu Wireless -> Basic Wireless Settings
- Buatlah nama SSID dengan LabJarkom
- Lalu simpan pengaturan (Save Settings)



- Tekan tab/menu Wireless -> Wireless Security
- Lalu pada Security Mode akan menggunakan WPA2 Personal
- Dengan Encryption AES
- Serta Passphrase 12345678
- Lalu simpan pengaturan (Save Settings)

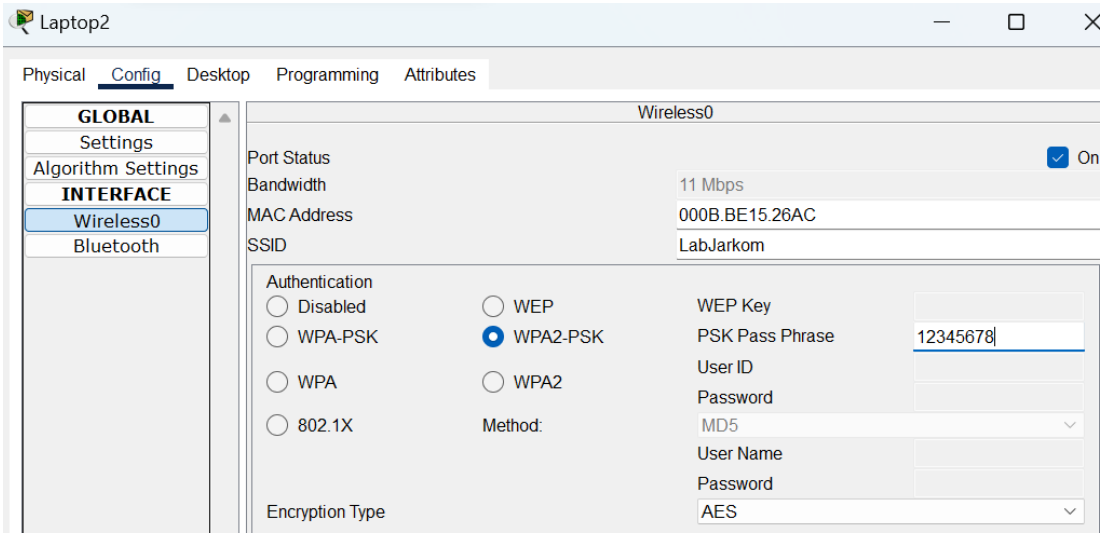


3. Konfigurasi Client

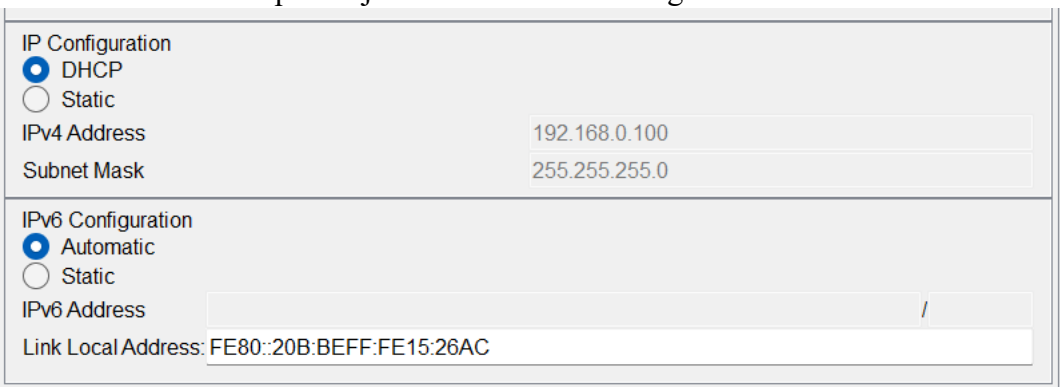
Konfigurasi Tablet PC0

- Konfigurasi Tablet PC pada tab Config
- SSID = LabJarkom
- Authentication = WPA2-PSK

- Pass Phrase = 12345678

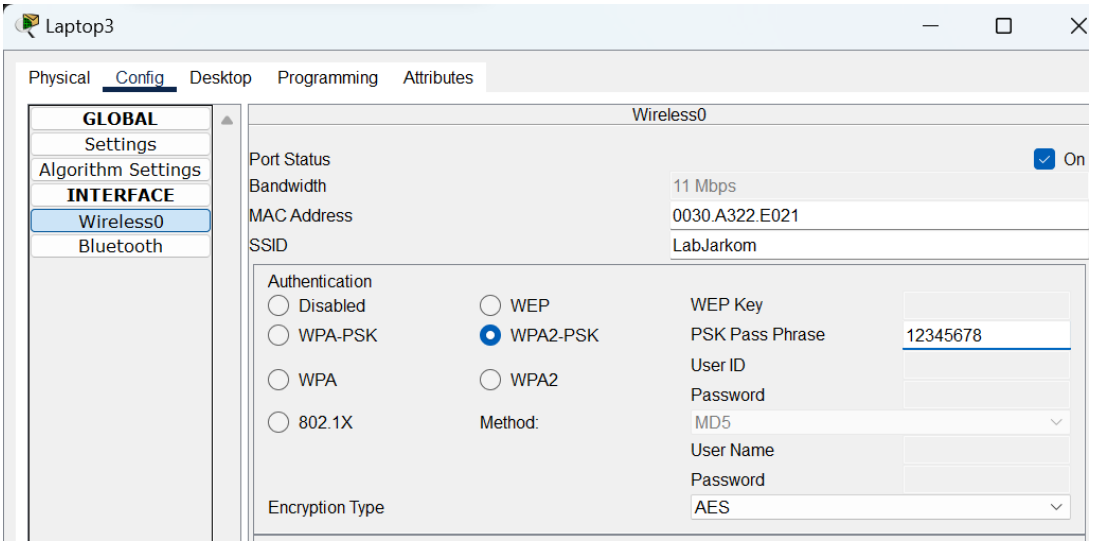


- Pada IP Configuration memakai DHCP
- Nomor IP akan ditampilkan jika PC Tablet terhubung dan DCHP Server aktif



Konfigurasi Tablet PC1

- Konfigurasi Tablet PC pada tab Config
- SSID = LabJarkom
- Authentication = WPA2-PSK
- Pass Phrase = 12345678



- IP menggunakan DHCP

- Nomor IP akan ditampilkan jika PC Tablet terhubung dan DCHP Server aktif

4. Pengujian PING
    - Di PC Tablet, pilih tab/menu Desktop -> Command Prompt
    - Jalankan perintah Ping ke IP Access Point 192.168.0.1
    - Ping IP PC TabletPC0 Ke PC TabletPC1
    - Lakukan juga pada PC TabletPC1 ke PC TabletPC0