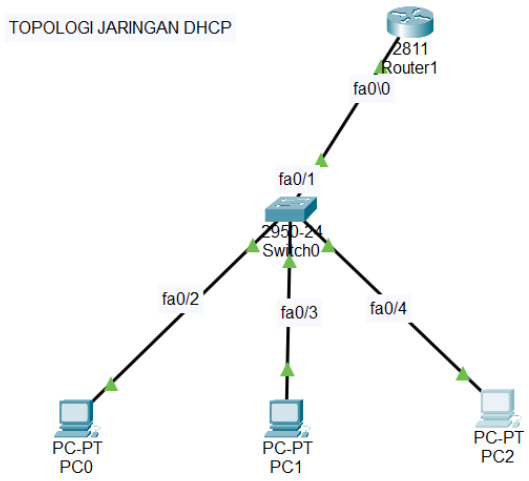
Nama : **Nadyah Dinanti**

Nim : **090102823227040**

Kelas : **MI3A**

Mk : **Pratikum Jaringan Komputer**



1. Buat Topologi Seperti Gambar diatas
2. Pasang Kabel Copper Straight dari PC ke Switch terhubung
3. Setelah itu, kita menyalakan switch daya dan tunggu beberapa menit, router akan menyala.

```
System Bootstrap, Version 12.1(3r)T2, RELEASE SOFTWARE (fc1)
Copyright (c) 2000 by cisco Systems, Inc.
cisco 2811 (MPC860) processor (revision 0x200) with 60416K/5120K bytes of memory

Readonly ROMMON initialized

program load complete, entry point: 0x8000f000, size: 0xc940
program load complete, entry point: 0x8000f000, size: 0xc940

program load complete, entry point: 0x8000f000, size: 0x3ed1338
Self decompressing the image :
######################################################################## [OK]
```

4. Setelah looding router selesai, kita lanjutkan konfigurasinya.

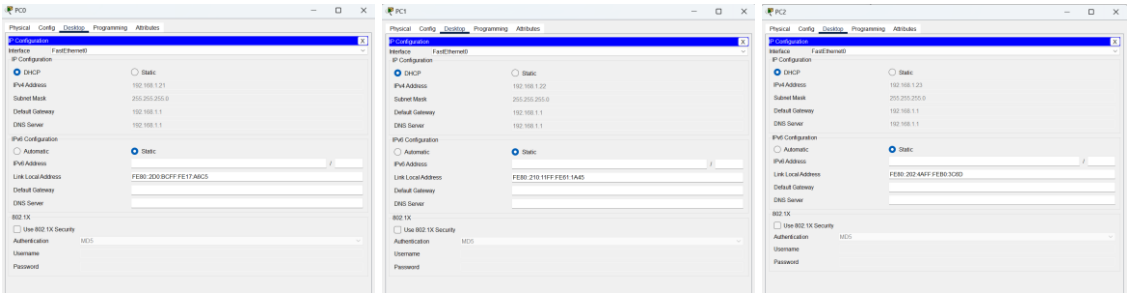
```
ROUTER_DHCP>enable
ROUTER_DHCP#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
ROUTER_DHCP(config)#hostname 09010282327040_DHCP
09010282327040_DHCP(config)#int fa0/0
09010282327040_DHCP(config-if)#ip add 192.168.1.1 255.255.255.0
09010282327040_DHCP(config-if)#no shutdown

09010282327040_DHCP(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

09010282327040_DHCP(config-if)#exit
09010282327040_DHCP(config)#ip dhcp pool LAB
09010282327040_DHCP(dhcp-config)#network 192.168.1.0 255.255.255.0
09010282327040_DHCP(dhcp-config)#default-router 192.168.1.1
09010282327040_DHCP(dhcp-config)#dns-server 192.168.1.1
09010282327040_DHCP(dhcp-config)#ip dhcp excluded-address 192.168.1.1
09010282327040_DHCP(config)#ip dhcp excluded-address 192.168.1.2
09010282327040_DHCP(config)#ip dhcp excluded-address 192.168.1.2 192.168.1.20
09010282327040_DHCP(config)#exit
09010282327040_DHCP#
%SYS-5-CONFIG_I: Configured from console by console
```

5. Setelah itu lakukan konfigurasi pada PC

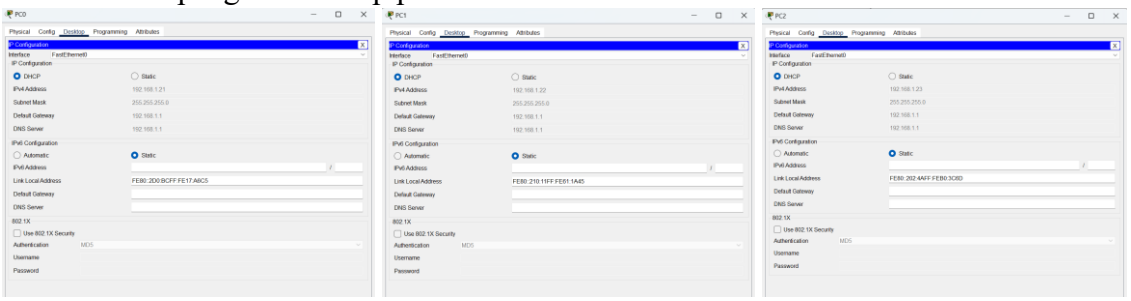


6. Melihat daftar IP dari Client

```
09010282327040_DHCP#sh ip dhcp binding
IP address       Client-ID/              Lease expiration        Type
                 Hardware address
192.168.1.21     00D0.BC17.A6C5          --                      Automatic
192.168.1.22     0010.1161.1A45          --                      Automatic
192.168.1.23     0002.4AB0.3C6D          --                      Automatic
09010282327040_DHCP#
```

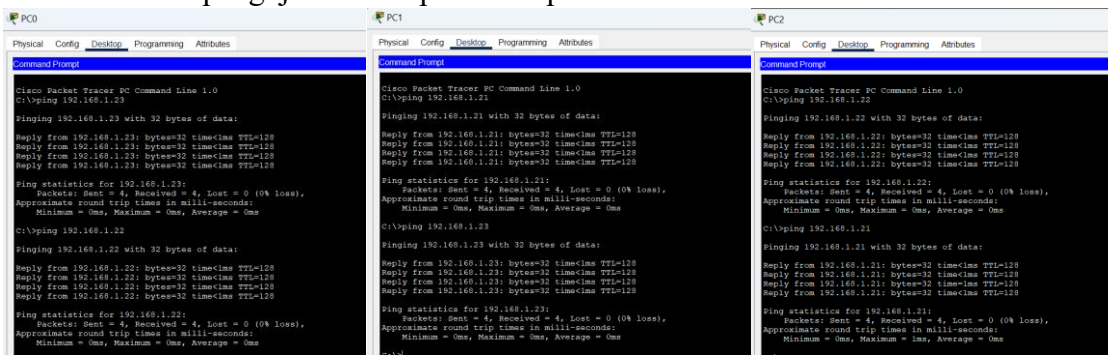
No	IP Address	MAC Address	Lease Expiration	Type
1	192.168.1.21	00D0.BC17.A6C5	-	Automatic
2	192.168.1.22	0010.1161.1A45	-	Automatic
3	192.168.1.23	0002.4AB0.3C6D	-	Automatic

7. Melakukan pengalamatan ip pada Client/PC



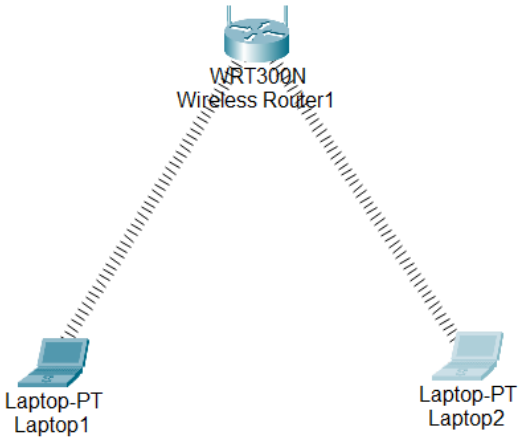
No	Client	IP Address	Netmask	Gateway	DNS
1	PC1	192.168.1.21	255.255.255.0	192.168.1.1	192.168.1.1
2	PC2	192.168.1.22	255.255.255.0	192.168.1.1	192.168.1.1
3	PC3	192.168.1.23	255.255.255.0	192.168.1.1	192.168.1.1

8. Melakukan pengujian PING pada setiap PC

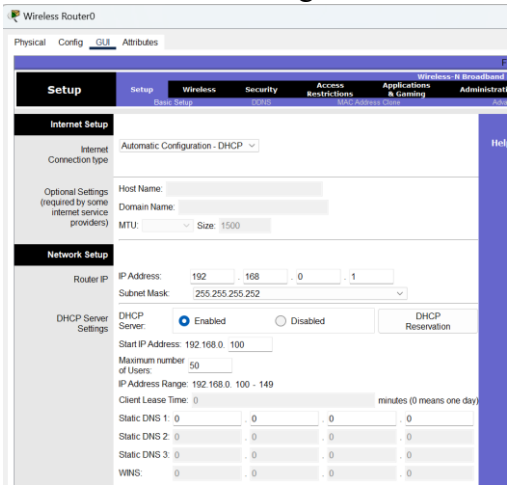


No	Sumber	Hasil	Tujuan	Hasil
		Ya/Tidak		Ya/Tidak
1	PC0	Ya	PC1	Ya
		Ya	PC2	Ya
2	PC1	Ya	PC0	Ya
		Ya	PC2	Ya
3	PC2	Ya	PC0	Ya
		Ya	PC1	Ya

LATIHAN

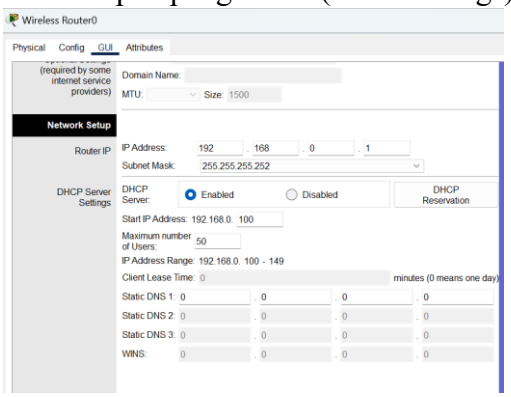


1. Buat Topologi Seperti Gambar diatas **(note*: Gantilah device Laptop menjadi laptop pada topologi diatas dan harus terhubung secara wireless)**
2. Konfigurasi Access Point
   - Untuk mengkonfigurasi access point, klik Wireless Router yang sudah dipasang.
   - Pilih tab/menu GUI
   - Masukkan IP Address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

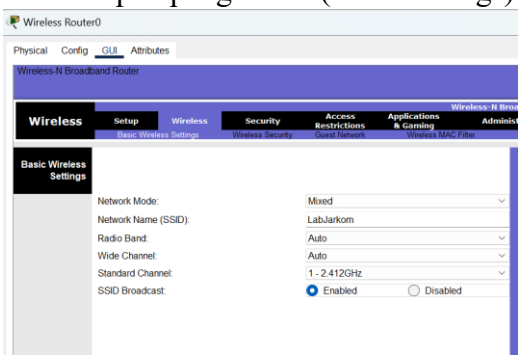


   - Aktifkan DHCP Server, menjadi Enabled

- 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)

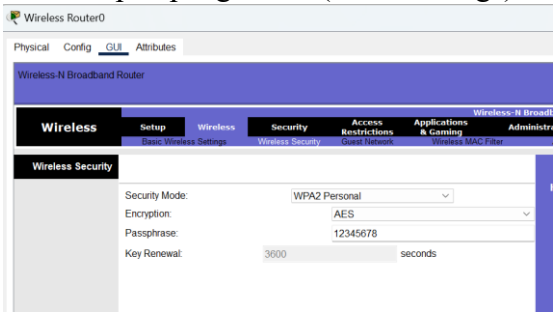


- Pilih tab/menu Wireless -> Basic Wireless Settings
- Buatlah nama SSID dengan LabJarkom
- Lalu simpan pengaturan (Save Settings)



Konfigurasi SSID pada Access Point

- 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)



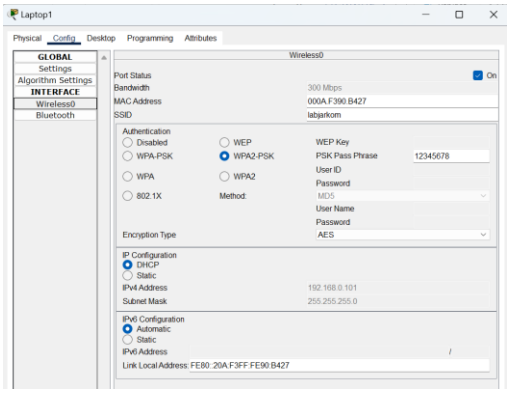
Konfigurasi Password pada Access Point

3. Konfigurasi Client

Konfigurasi Laptop1

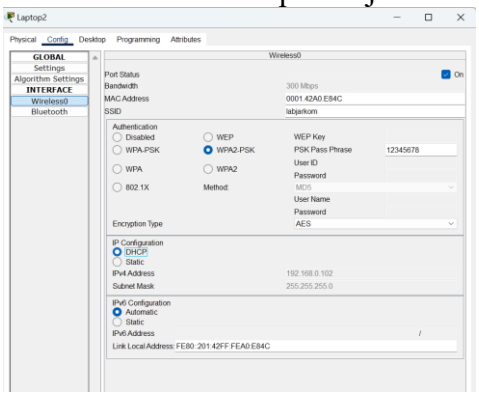
- Konfigurasi Laptop pada tab Config

- SSID = LabJarkom
- Authentication = WPA2-PSK
- Pass Phrase = 12345678
- Pada IP Configuration memakai DHCP
- Nomor IP akan ditampilkan jika PC Laptop terhubung dan DCHP Server aktif



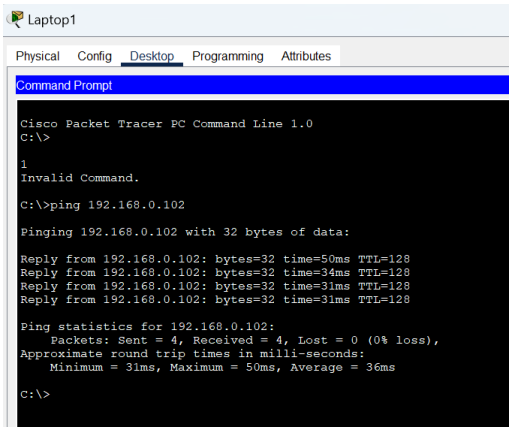
Konfigurasi Laptop2

- Konfigurasi Laptop pada tab Config
- SSID = LabJarkom
- Authentication = WPA2-PSK
- Pass Phrase = 12345678
- IP menggunakan DHCP
- Nomor IP akan ditampilkan jika PC Laptop terhubung dan DCHP Server aktif



4. Pengujian PING

- DiLaptop, pilih tab/menu Desktop -> Command Prompt
- Jalankan perintah Ping ke IP Access Point 192.168.0.1
- Ping IP Laptop1 Ke Laptop2



- Lakukan juga pada Laptop2 Ke Laptop1