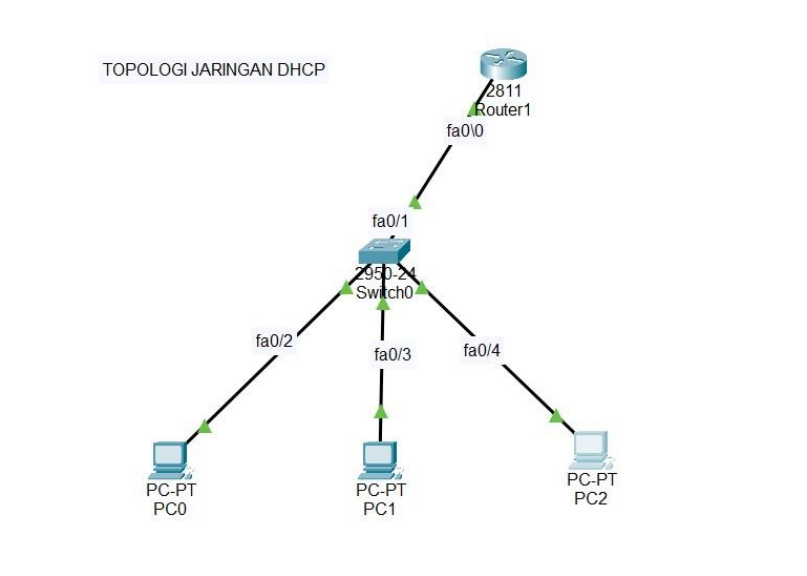
NAMA : MUHAMMAD TRI NUGROHO

NIM : 09010282327029

KELAS : MI3A



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.

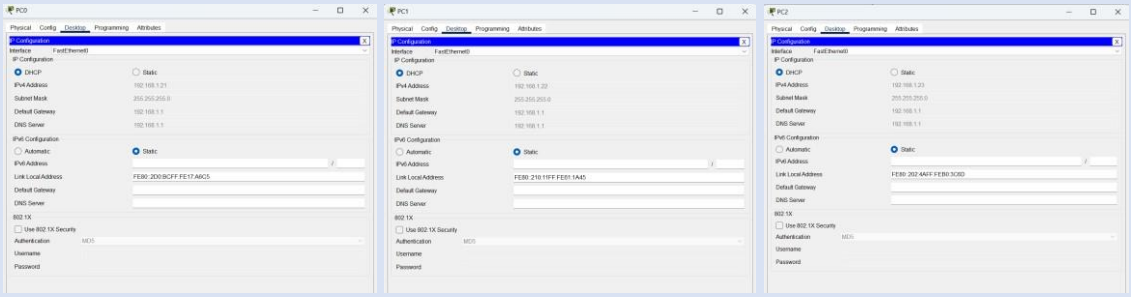
```
ROUTER_DHCP>enable
ROUTER_DHCP#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
ROUTER_DHCP(config)#hostname 09010282327040_DHCP
09010282327040_DHCP(config)#int fa0/0
09010282327040_DHCP(config-if)#ip add 192.168.1.1 255.255.255.0
09010282327040_DHCP(config-if)#no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

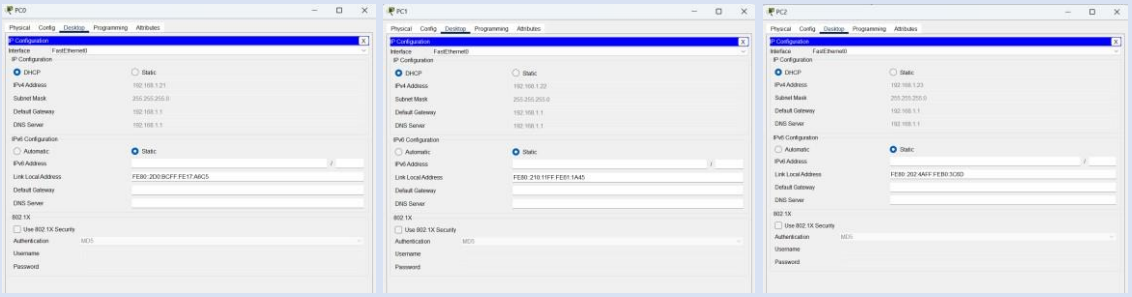


6. Melihat daftar IP dari Client

```
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#
```

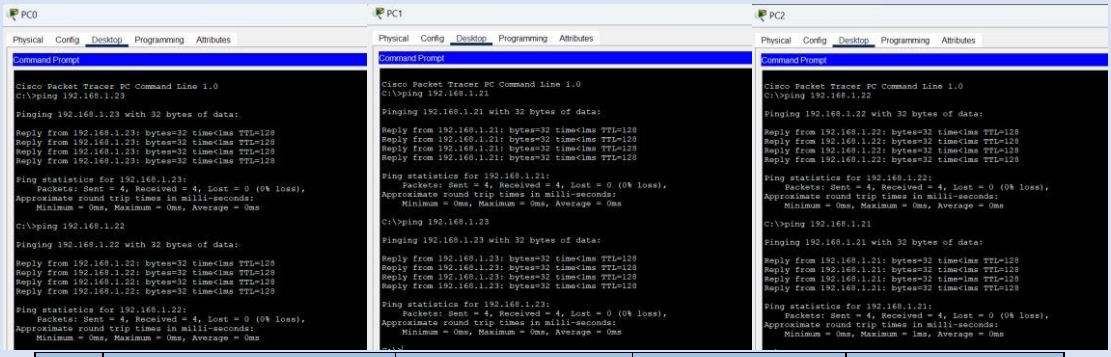
No	IP Address	MAC Address	Lease Expiration	Type
1	192.168.1.21	00D0.BC17.A6C5	-	Automatic
2	192.168.1.22	0010.1161.1A45	-	Automatic
3	192.168.1.23	0002.4AB0.3C6D	-	Automatic

7. Melakukan pengalamatan ip pada Client/PC



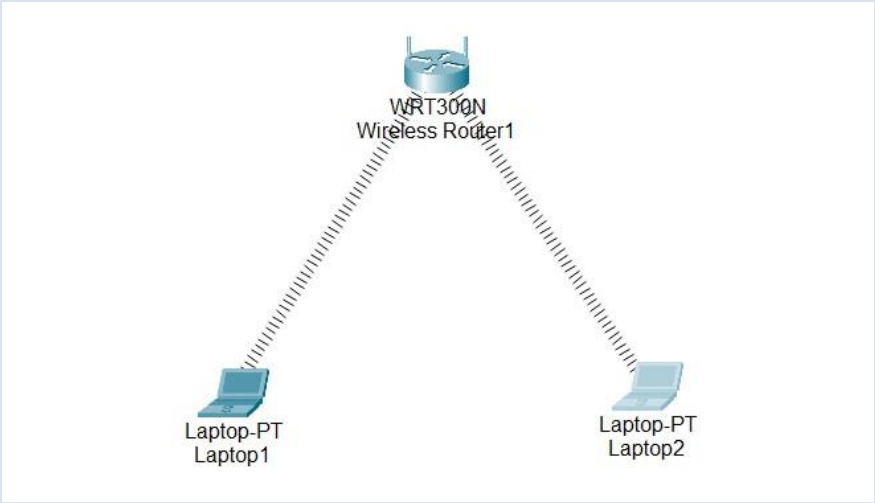
No	Client	IP Address	Netmask	Gateway	DNS
1	PC1	192.168.1.21	255.255.255.0	192.168.1.1	192.168.1.1
2	PC2	192.168.1.22	255.255.255.0	192.168.1.1	192.168.1.1
3	PC3	192.168.1.23	255.255.255.0	192.168.1.1	192.168.1.1

8. Melakukan pengujian PING pada setiap PC

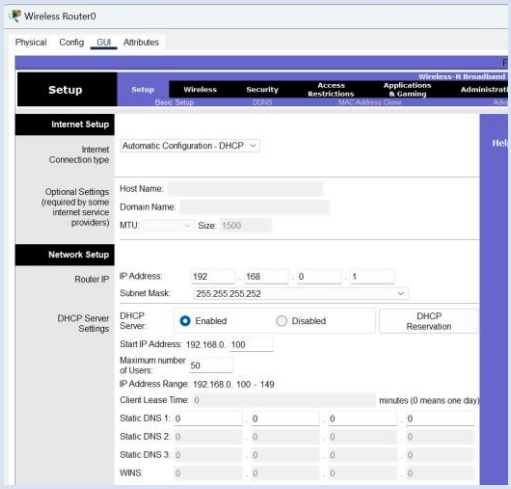


No	Sumber	Hasil	Tujuan	Hasil
		Ya/Tidak		Ya/Tidak
1	PC0	Ya	PC1	Ya
		Ya	PC2	Ya
2	PC1	Ya	PC0	Ya
		Ya	PC2	Ya
3	PC2	Ya	PC0	Ya
		Ya	PC1	Ya

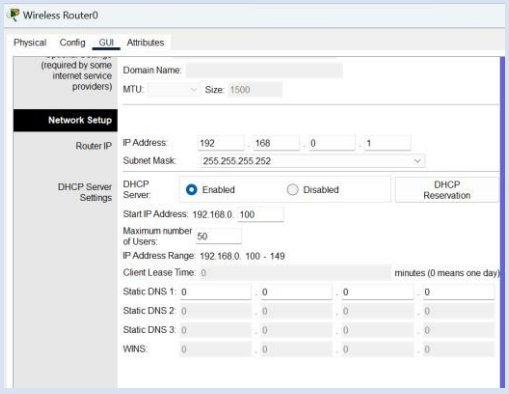
LATIHAN



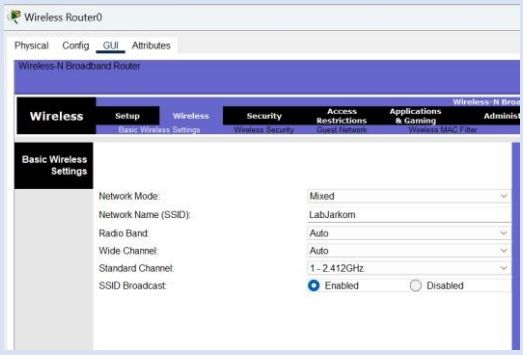
1. Buat Topologi Seperti Gambar diatas **(note*: Gantilah device Laptop menjadi laptop pada topologi diatas dan harus terhubung secara wireless)**
2. Konfigurasi Access Point
   - Untuk mengkonfigurasi access point, klik Wireless Router yang sudah dipasang.
   - Pilih tab/menu GUI
   - Masukkan IP Address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



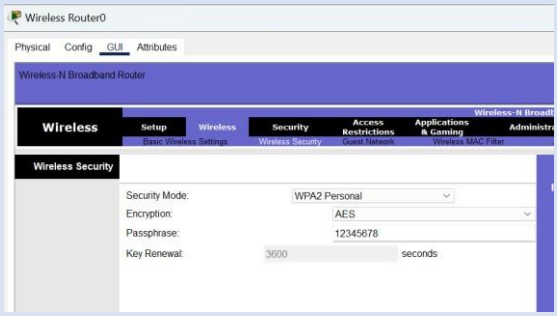
- Pilih tab/menu Wireless -> Basic Wireless Settings
- Buatlah nama SSID dengan LabJarkom
- Lalu simpan pengaturan (Save Settings)



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)

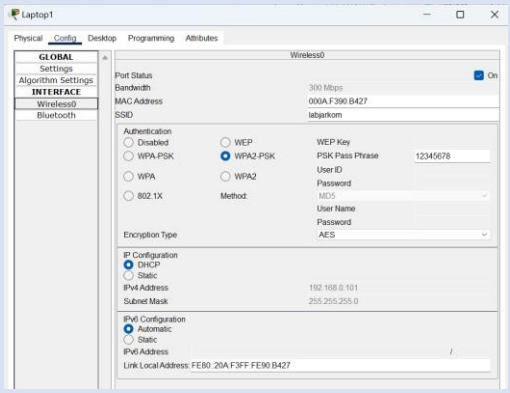


Konfigurasi Password pada Access Point

3. Konfigurasi Client

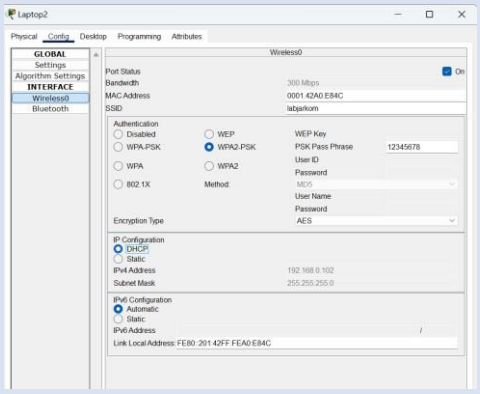
Konfigurasi Laptop1

- 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



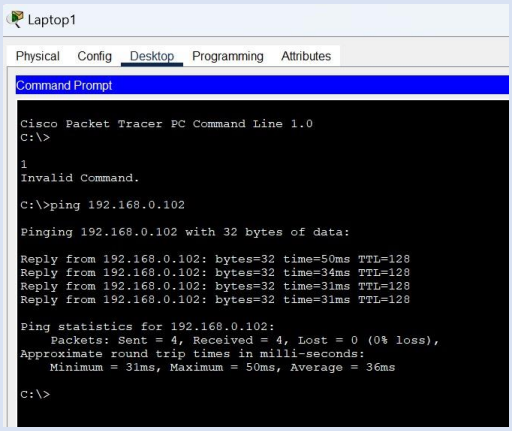
Konfigurasi Laptop2

- 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