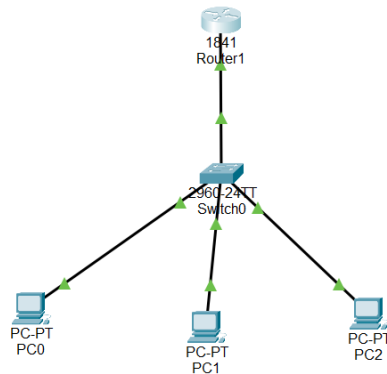


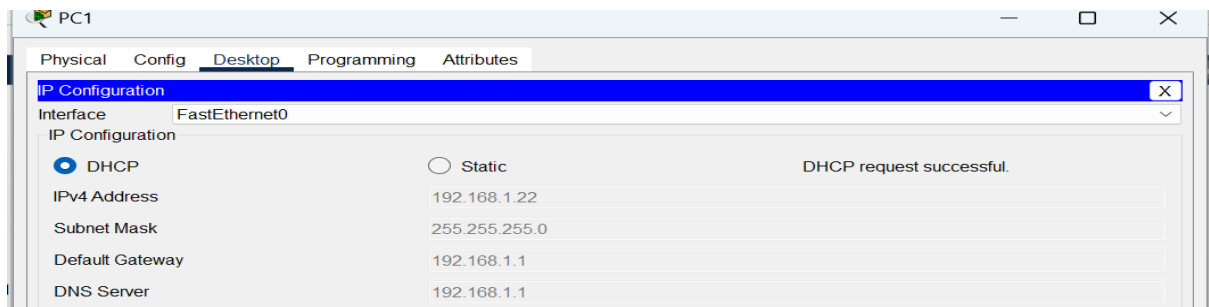
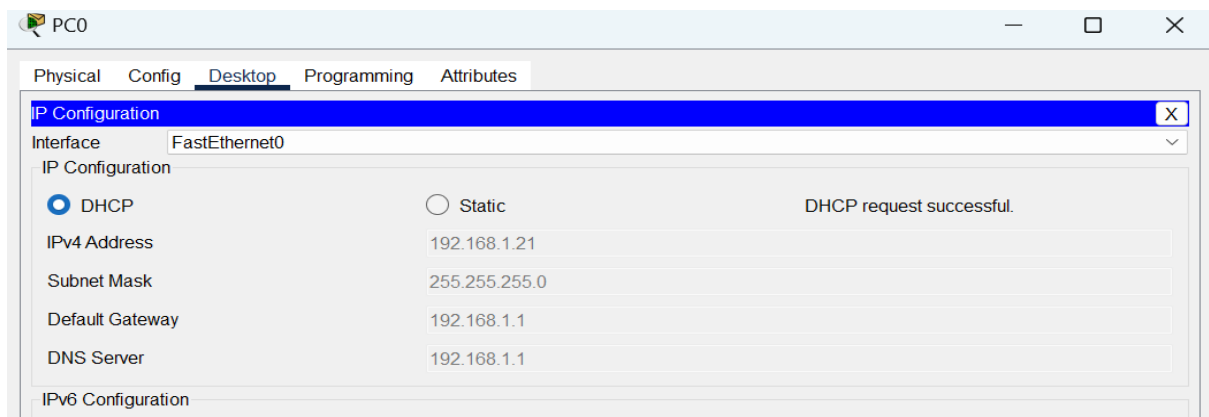
NAMA : DE AMUTIA HUJENI
 NIM : 09010182327001
 KELAS : MI3A
 MATKUL : PRAKTIKUM JARINGAN KOMPUTER

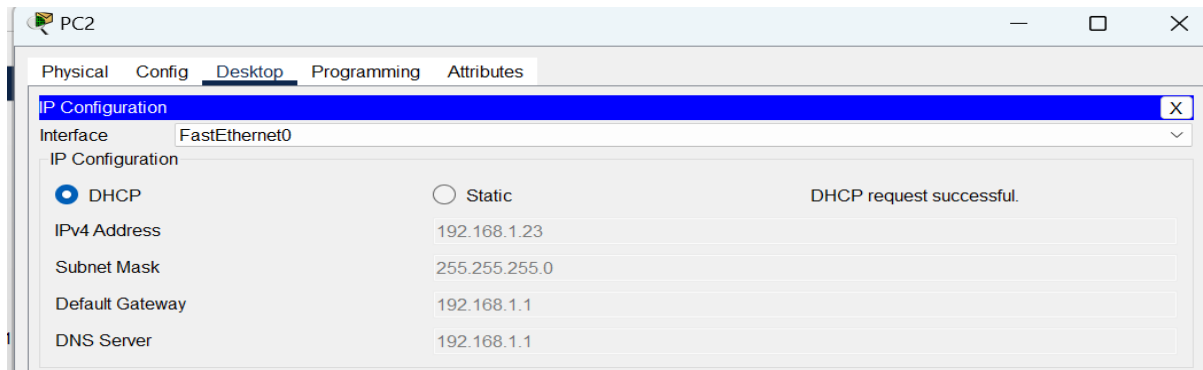


```

ROUTER_DHCP>en
ROUTER_DHCP#sh ip dhcp binding
IP address      Client-ID/      Lease expiration      Type
                Hardware address
192.168.1.21    0010.1185.7B4D  --                    Automatic
192.168.1.22    0004.9A11.45DD  --                    Automatic
192.168.1.23    0001.97D6.AE3A  --                    Automatic
ROUTER_DHCP#
  
```

NO	IP ADDRESS	MAC ADDRESS	LEASE EXPIRATION	TTYPE
1	192.168.1.21	0010.1185.7B4D	-	Automatic
2	192.168.1.22	0004.9A11.45DD	-	Automatic
3	192.168.1.23	0001.97D6.AE3A	-	Automatic





NO	CLIENT	IP ADDRESS	NETMASK	GATEWAY	DNS
1	PC 0	192.168.1.21	255.255.255.0	192.168.1.1	192.168.1.1
2	PC 1	192.168.1.22	255.255.255.0	192.168.1.1	192.168.1.1
3	PC 2	192.168.1.23	255.255.255.0	192.168.1.1	192.168.1.1

PC 0 KE PC 1

```

Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.22

Pinging 192.168.1.22 with 32 bytes of data:

Reply from 192.168.1.22: bytes=32 time<1ms TTL=128
Reply from 192.168.1.22: bytes=32 time<1ms TTL=128
Reply from 192.168.1.22: bytes=32 time<1ms TTL=128
Reply from 192.168.1.22: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.22:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

```

PC 0 KE 2

```

C:\>ping 192.168.1.23

Pinging 192.168.1.23 with 32 bytes of data:

Reply from 192.168.1.23: bytes=32 time<1ms TTL=128
Reply from 192.168.1.23: bytes=32 time<1ms TTL=128
Reply from 192.168.1.23: bytes=32 time<1ms TTL=128
Reply from 192.168.1.23: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.23:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

```

PC 1 KE PC 0

```
C:\>ping 192.168.1.21

Pinging 192.168.1.21 with 32 bytes of data:

Reply from 192.168.1.21: bytes=32 time<1ms TTL=128
Reply from 192.168.1.21: bytes=32 time<1ms TTL=128
Reply from 192.168.1.21: bytes=32 time<1ms TTL=128
Reply from 192.168.1.21: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.21:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

PC 1 KE PC 2

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.1681.23
Ping request could not find host 192.1681.23. Please check the name and try again.
C:\>ping 192.168.1.23

Pinging 192.168.1.23 with 32 bytes of data:

Reply from 192.168.1.23: bytes=32 time<1ms TTL=128
Reply from 192.168.1.23: bytes=32 time<1ms TTL=128
Reply from 192.168.1.23: bytes=32 time<1ms TTL=128
Reply from 192.168.1.23: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.23:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

PC 2 KE PC 0

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.21

Pinging 192.168.1.21 with 32 bytes of data:

Reply from 192.168.1.21: bytes=32 time<1ms TTL=128
Reply from 192.168.1.21: bytes=32 time<1ms TTL=128
Reply from 192.168.1.21: bytes=32 time<1ms TTL=128
Reply from 192.168.1.21: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.21:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

PC 2 KE PC 1

```
C:\>ping 192.168.1.22

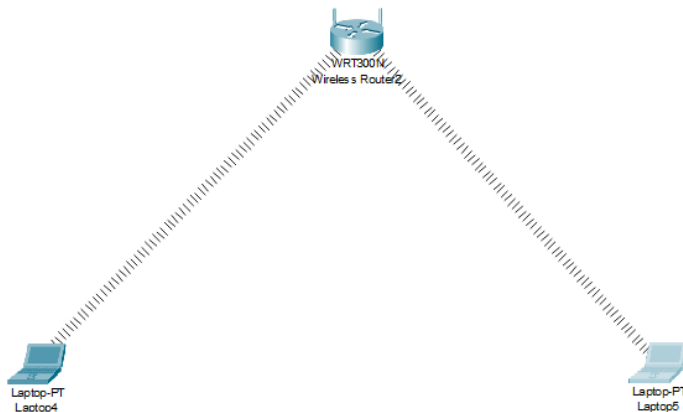
Pinging 192.168.1.22 with 32 bytes of data:

Reply from 192.168.1.22: bytes=32 time<1ms TTL=128
Reply from 192.168.1.22: bytes=32 time<1ms TTL=128
Reply from 192.168.1.22: bytes=32 time<1ms TTL=128
Reply from 192.168.1.22: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.22:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

NO	SUMBER	HASIL	TUJUAN	HASIL
		YA/TIDAK		YA/TIDAK
1	PC 0	YA	PC 1	YA
		YA	PC 2	YA
2	PC 1	YA	PC 0	YA
		YA	PC 2	YA
3	PC2	YA	PC 0	YA
		YA	PC 1	YA

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

Setup		Setup	Wireless	Security	Access Restrictions	Applications & Gaming	Admin	
		Basic Setup	DDNS	Wireless-N Bro				
		MAC Address Clone						
Internet Setup								
Internet Connection type	Automatic Configuration - DHCP							
Optional Settings (required by some internet service providers)	Host Name:							
	Domain Name:							
	MTU:		Size:	1500				
Network Setup								
Router IP	IP Address:	192	.	168	.	0	.	1
	Subnet Mask:	255.255.255.0						
DHCP Server Settings	DHCP Server:	<input checked="" type="radio"/> Enabled		<input type="radio"/> Disabled		DHCP Reservation		
	Start IP Address:	192.168.0. 100						
	Maximum number of Users:	50						
	IP Address Range:	192.168.0. 100 - 149						
	Client Lease Time:	0 minutes (0 means one day)						
	Static DNS 1:	0	.	0	.	0	.	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)

DHCP Server Settings	DHCP Server:	<input checked="" type="radio"/> Enabled		<input type="radio"/> Disabled		DHCP Reservation		
	Start IP Address:	192.168.0. 100						
	Maximum number of Users:	50						
	IP Address Range:	192.168.0. 100 - 149						
	Client Lease Time:	0 minutes (0 means one day)						
	Static DNS 1:	0	.	0	.	0	.	0
	Static DNS 2:	0	.	0	.	0	.	0
	Static DNS 3:	0	.	0	.	0	.	0
WINS:	0	.	0	.	0	.	0	

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

Wireless Setup Wireless Security Access Restrictions Applications & Gaming Admin

Basic Wireless Settings Wireless Security Guest Network Wireless MAC Filter

Basic Wireless Settings

Network Mode: Mixed

Network Name (SSID): Labjarkom

Radio Band: Auto

Wide Channel: Auto

Standard Channel: 1 - 2.412GHz

SSID Broadcast: ☒ Enabled ☐ Disabled

- 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)

Wireless Setup Wireless Security Access Restrictions Applications & Gaming Admin

Basic Wireless Settings Wireless Security Guest Network Wireless MAC Filter

Wireless Security

Security Mode: WPA2 Personal

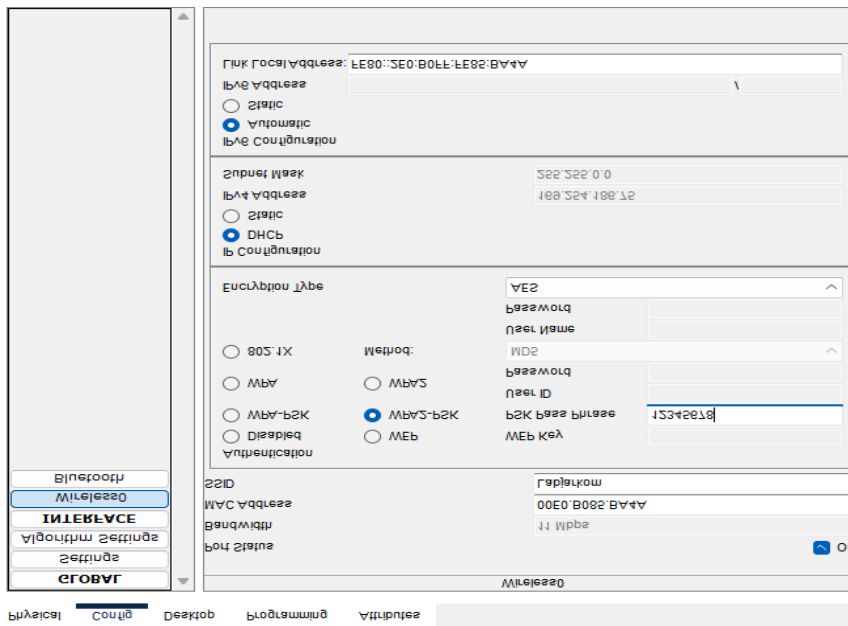
Encryption: AES

Passphrase: 12345678

Key Renewal: 3600 seconds

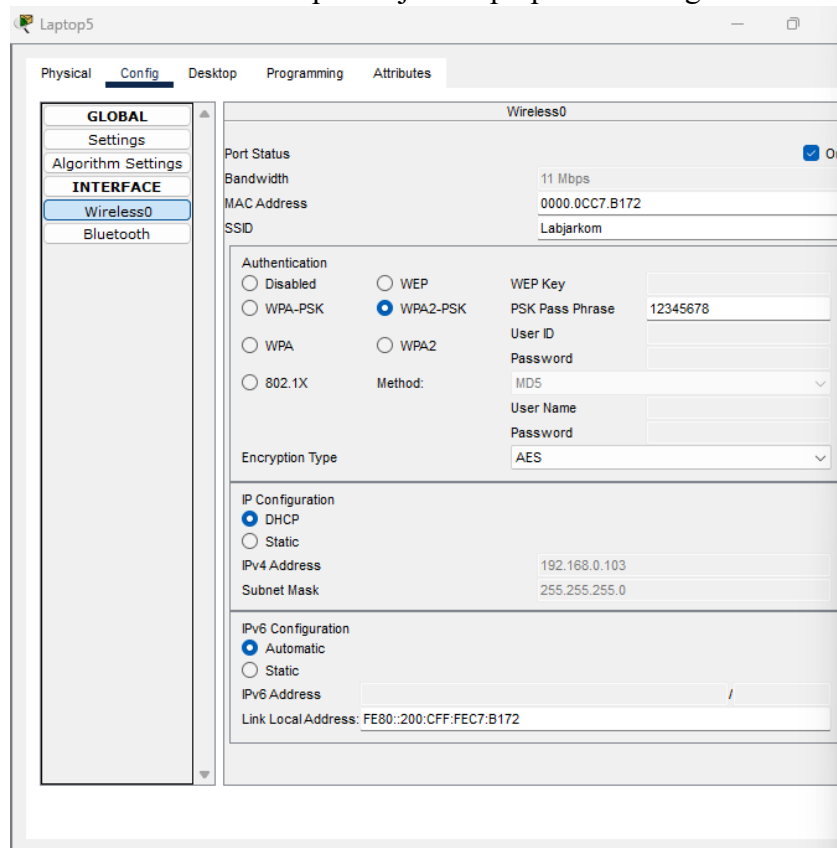
3. Konfigurasi Client Konfigurasi LAPTOP 4

- Konfigurasi Laptop4 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



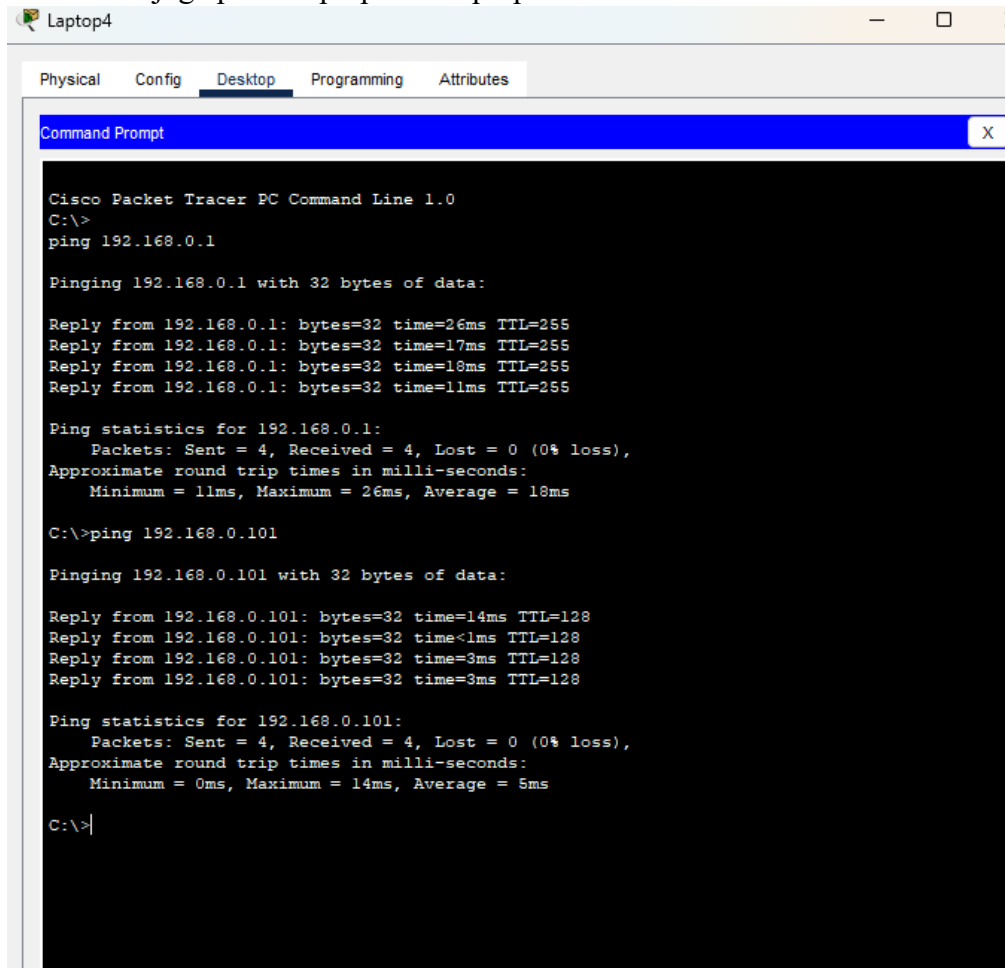
Konfigurasi LAPTOP5

- Konfigurasi Laptop5 pada tab Config
- SSID = LabJarkom
- Authentication = WPA2-PSK
- Pass Phrase = 12345678
- IP menggunakan DHCP
- Nomor IP akan ditampilkan jika Laptop5 terhubung dan DHCP Server aktif



4. Pengujian PING

- Di Laptop, pilih tab/menu Desktop -> Command Prompt
- Jalankan perintah Ping ke IP Access Point 192.168.0.1
- Ping IP Laptop4 Ke Laptop5
- Lakukan juga pada Laptop5 ke Laptop4



```
Cisco Packet Tracer PC Command Line 1.0
C:\>
ping 192.168.0.1

Pinging 192.168.0.1 with 32 bytes of data:

Reply from 192.168.0.1: bytes=32 time=26ms TTL=255
Reply from 192.168.0.1: bytes=32 time=17ms TTL=255
Reply from 192.168.0.1: bytes=32 time=18ms TTL=255
Reply from 192.168.0.1: bytes=32 time=11ms TTL=255

Ping statistics for 192.168.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 11ms, Maximum = 26ms, Average = 18ms

C:\>ping 192.168.0.101

Pinging 192.168.0.101 with 32 bytes of data:

Reply from 192.168.0.101: bytes=32 time=14ms TTL=128
Reply from 192.168.0.101: bytes=32 time<1ms TTL=128
Reply from 192.168.0.101: bytes=32 time=3ms TTL=128
Reply from 192.168.0.101: bytes=32 time=3ms TTL=128

Ping statistics for 192.168.0.101:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 14ms, Average = 5ms

C:\>|
```