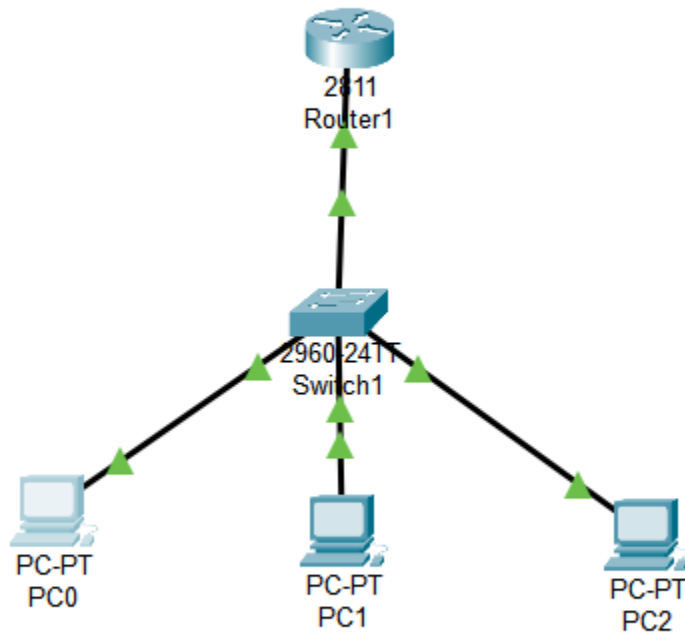


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Laporan Praktikum Jaringan Komputer



1. Melihat Daftar IP dari Client

No	IP Address	MAC Address	Lease Expiration	Type
1	192.168.1.22	00D0.BA82.7B7E	-	Automatic
2	192.168.1.21	000A.41CD.D3CE	-	Automatic
3	192.168.1.23	00D0.D3A8.AA4D	-	Automatic

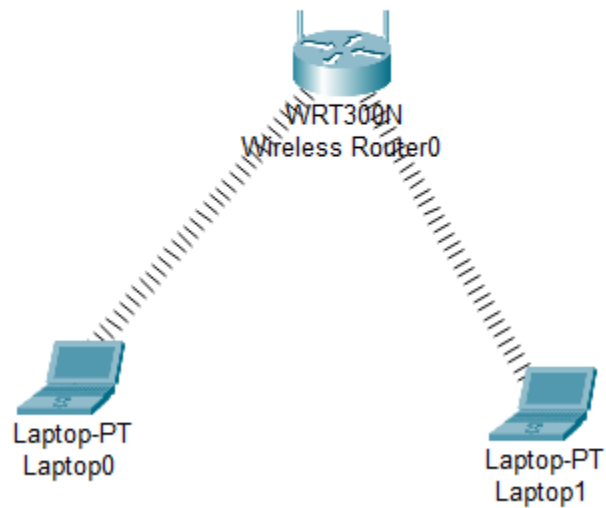
2. IP Pada Client / PC

No	Client	IP Address	Netmask	Gateway	DNS
1	PC0	192.168.1.22	255.255.255.0	192.168.1.1	192.168.1.1
2	PC1	192.168.1.21	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. Daftar IP Client

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

1. Topologi Jaringan 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)

IP Address: 192 . 168 . 0 . 1

Subnet Mask: 255.255.255.0

DHCP Server: ☒ Enabled ☐ 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)

Network Mode:	Mixed
Network Name (SSID):	LabJarkom
Radio Band:	Auto
Wide Channel:	Auto
Standard Channel:	1 - 2.412GHz
SSID Broadcast:	<input checked="" type="radio"/> Enabled <input type="radio"/> 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)

Security Mode:	WPA2 Personal
Encryption:	AES
Passphrase:	12345678
Key Renewal:	3600 seconds

3. Konfigurasi Client Konfigurasi Laptop PC0

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

GLOBAL Settings Algorithm Settings INTERFACE Wireless0 Bluetooth	Wireless0	
	Port Status	<input checked="" type="checkbox"/> On
	Bandwidth	300 Mbps
	MAC Address	000B.BE73.B408
	SSID	LabJarkom
	Authentication <input type="radio"/> Disabled <input type="radio"/> WEP WEP Key <input type="radio"/> WPA-PSK <input checked="" type="radio"/> WPA2-PSK PSK Pass Phrase <input type="text" value="12345678"/> <input type="radio"/> WPA <input type="radio"/> WPA2 User ID <input type="radio"/> 802.1X Method: MD5 Password User Name Password Encryption Type AES	
	IP Configuration <input checked="" type="radio"/> DHCP <input type="radio"/> Static IPv4 Address 192.168.0.100 Subnet Mask 255.255.255.0	

Konfigurasi Laptop PC1

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

GLOBAL Settings Algorithm Settings INTERFACE Wireless0 Bluetooth	Wireless0	
	Port Status	<input checked="" type="checkbox"/> On
	Bandwidth	300 Mbps
	MAC Address	0001.963A.ECDB
	SSID	LabJarkom
	Authentication <input type="radio"/> Disabled <input type="radio"/> WEP WEP Key <input type="radio"/> WPA-PSK <input checked="" type="radio"/> WPA2-PSK PSK Pass Phrase <input type="text" value="12345678"/> <input type="radio"/> WPA <input type="radio"/> WPA2 User ID <input type="radio"/> 802.1X Method: MD5 Password User Name Password Encryption Type AES	
	IP Configuration <input checked="" type="radio"/> DHCP <input type="radio"/> Static IPv4 Address 192.168.0.102 Subnet Mask 255.255.255.0	

4. Pengujian PING

- Di Laptop, pilih tab/menu Desktop -> Command Prompt
- Jalankan perintah Ping ke IP Access Point 192.168.0.1
- Ping IP Laptop PC0 Ke Laptop PC1
- Lakukan juga pada Laptop PC1 ke LaptopPC0

```
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=18ms TTL=255
Reply from 192.168.0.1: bytes=32 time=14ms TTL=255
Reply from 192.168.0.1: bytes=32 time=15ms TTL=255
Reply from 192.168.0.1: bytes=32 time=22ms 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 = 14ms, Maximum = 22ms, Average = 17ms

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=10ms TTL=255
Reply from 192.168.0.1: bytes=32 time=14ms TTL=255
Reply from 192.168.0.1: bytes=32 time=8ms TTL=255
Reply from 192.168.0.1: bytes=32 time=13ms 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 = 8ms, Maximum = 14ms, Average = 11ms

C:\>|
```

```
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=15ms TTL=255
Reply from 192.168.0.1: bytes=32 time=15ms TTL=255
Reply from 192.168.0.1: bytes=32 time=13ms TTL=255
Reply from 192.168.0.1: bytes=32 time=16ms 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 = 13ms, Maximum = 16ms, Average = 14ms

C:\>ping 192.168.0.100

Pinging 192.168.0.100 with 32 bytes of data:

Reply from 192.168.0.100: bytes=32 time=30ms TTL=128
Reply from 192.168.0.100: bytes=32 time=15ms TTL=128
Reply from 192.168.0.100: bytes=32 time=11ms TTL=128
Reply from 192.168.0.100: bytes=32 time=18ms TTL=128

Ping statistics for 192.168.0.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 11ms, Maximum = 30ms, Average = 18ms

C:\>ping 192.168.0.102

Pinging 192.168.0.102 with 32 bytes of data:

Reply from 192.168.0.102: bytes=32 time=1ms TTL=128
Reply from 192.168.0.102: bytes=32 time=11ms TTL=128
Reply from 192.168.0.102: bytes=32 time<1ms TTL=128
Reply from 192.168.0.102: bytes=32 time=5ms TTL=128

Ping statistics for 192.168.0.102:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 11ms, Average = 4ms
```