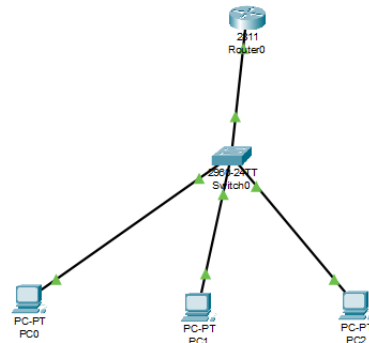


NAMA : ADES FITRIYA KHARISMA

NIM : 09010282327023

KELAS : MI3A

A. Laporan Pratikum



Gambar 6.1 Topologi jaringan

Melihat Daftar IP dari Client

```
ROUTER_DHCP#sh ip dhcp binding
```

```
09010282327023_router_dhcp#sh ip dhcp binding
```

IP address	Client-ID/ Hardware address	Lease expiration	Type
192.168.1.21	0060.70D2.2941	--	Automatic
192.168.1.22	00D0.FF0A.51D6	--	Automatic
192.168.1.23	00E0.A3D3.D492	--	Automatic

```
09010282327023_router_dhcp#
```

No	IP address	MAC Address	Lease Expiration	Type
1	192.168.1.21	0060.70D2.2941	--	Automatic
2	192.168.1.22	00D0.FF0A.51D6	--	Automatic
3	192.168.1.23	00E0.A3D3.D492	--	Automatic

1. 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

2. Lakukan pengujian PING pada setiap PC

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

```
PC0
Physical Config Desktop Programming Attributes
Command Prompt
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=2ms TTL=128
Reply from 192.168.1.21: bytes=32 time=13ms TTL=128
Reply from 192.168.1.21: bytes=32 time=14ms 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 = 14ms, Average = 7ms

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

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=19ms 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 = 19ms, Average = 4ms
```

```
PC1
Physical Config Desktop Programming Attributes
Command Prompt
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=10ms TTL=128
Reply from 192.168.1.22: bytes=32 time=17ms TTL=128
Reply from 192.168.1.22: bytes=32 time=15ms TTL=128
Reply from 192.168.1.22: bytes=32 time=18ms 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 = 10ms, Maximum = 18ms, Average = 15ms

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 = 1ms, Average = 0ms

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 = 1ms, Average = 0ms

C:\>
```

```
PC2
Physical Config Desktop Programming Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
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=10ms TTL=128
Reply from 192.168.1.23: bytes=32 time=15ms TTL=128
Reply from 192.168.1.23: bytes=32 time=13ms TTL=128
Reply from 192.168.1.23: bytes=32 time=15ms 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 = 10ms, Maximum = 15ms, Average = 13ms

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 = 1ms, Average = 0ms

C:\>PING 192.168.1.22

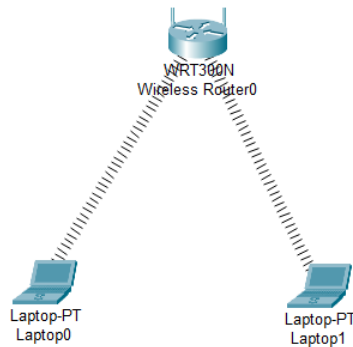
Pinging 192.168.1.22 with 32 bytes of data:

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 = 1ms, Average = 0ms

C:\>
```

B. TUGAS PRATIUM



1. Konfigurasi Access Point

Wireless Router0

Physical Config **GUI** Attributes

Firmware

Setup Setup Wireless Security Access Restrictions Applications & Gaming Administration

Basic Setup DNS MAC Address Clone Advanced Router

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: ☒ Enabled ☐ Disabled

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

Static DNS 2: 0 0 0

Static DNS 3: 0 0 0

WINS: 0 0 0

Help...

2. Menu Wireless -> Basic Wireless Settings

Firmware Version: v0.93.3

Wireless Setup Wireless Security Access Restrictions Applications & Gaming Administration Status

Basic Wireless Settings Wireless Security Guest Network Wireless MAC Filter Advanced Wireless Settings

Basic Wireless Settings

Network Mode: Mixed

Network Name (SSID): LabJarkom

Radio Band: Auto

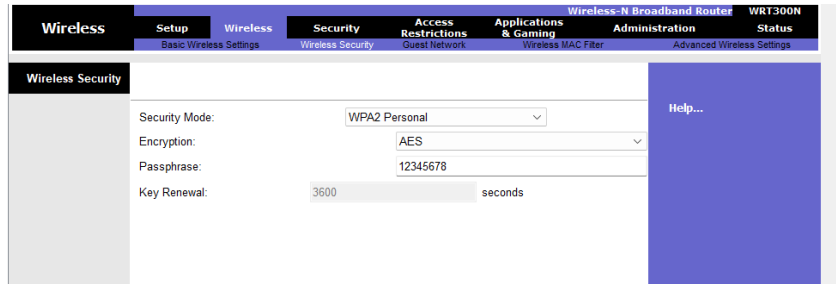
Wide Channel: Auto

Standard Channel: 1 - 2.412GHz

SSID Broadcast: ☒ Enabled ☐ Disabled

Help...

3. Menu Wireless -> Wireless Security



4. Memasukan Konfigurasi Client

Konfigurasi Laptop 0 dan Laptop 1

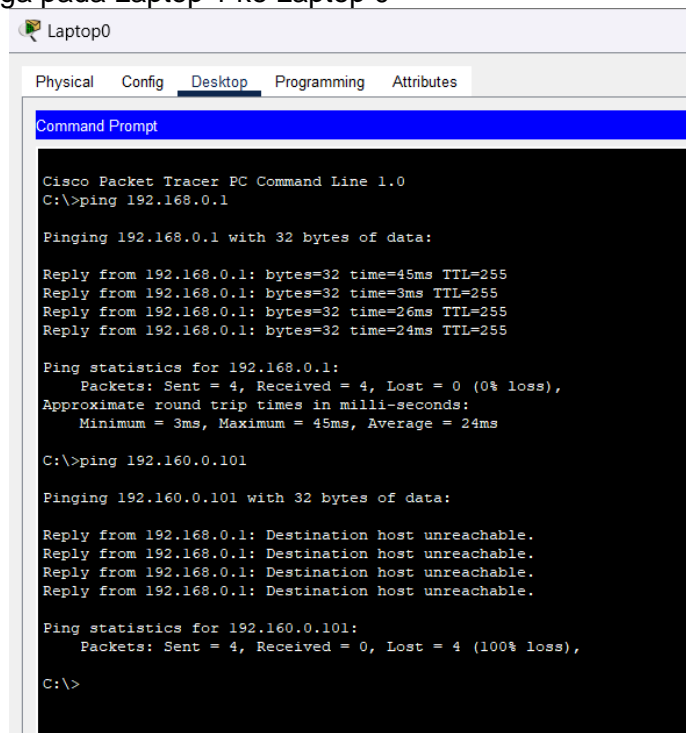
- Konfigurasi Laptop 0 pada tab Config
- SSID = LabJarkom
- Authentication = WPA2-PSK
- Pass Phrase = 12345678
- Pada IP Configuration memakai DHCP

No	Client	IP address	Netmask	Gateway
1	Laptop 0	192.168.0.102	255.255.255.0	192.168.0.1
2	Laptop 1	192.168.0.100	255.255.255.0	192.168.0.1

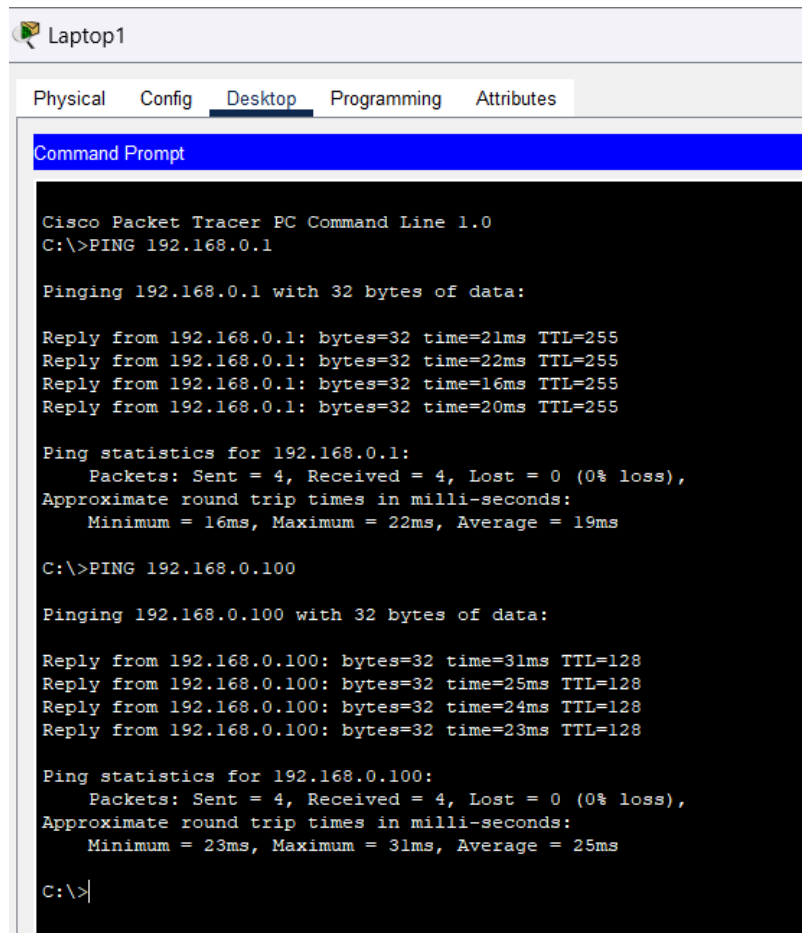
5. Pengujian PING

Di Laptop-PT, pilih tab/menu Desktop -> Command Prompt

- Jalankan perintah Ping ke IP Access Point 192.168.0.1
- Ping IP Laptop 0 Ke Laptop 1
- Lakukan juga pada Laptop 1 ke Laptop 0



Gambar Hasil pengujian PING pada Laptop 0



The screenshot shows the 'Desktop' tab of a Cisco Packet Tracer laptop named 'Laptop1'. A Command Prompt window is open, displaying the results of two PING tests. The first test is directed at 192.168.0.1, showing four successful replies with varying round-trip times (21ms, 22ms, 16ms, 20ms) and a TTL of 255. The second test is directed at 192.168.0.100, showing four successful replies with round-trip times of 31ms, 25ms, 24ms, and 23ms, and a TTL of 128. Both tests show 0% packet loss.

```
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=21ms TTL=255
Reply from 192.168.0.1: bytes=32 time=22ms TTL=255
Reply from 192.168.0.1: bytes=32 time=16ms TTL=255
Reply from 192.168.0.1: bytes=32 time=20ms 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 = 16ms, Maximum = 22ms, Average = 19ms

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=31ms TTL=128
Reply from 192.168.0.100: bytes=32 time=25ms TTL=128
Reply from 192.168.0.100: bytes=32 time=24ms TTL=128
Reply from 192.168.0.100: bytes=32 time=23ms 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 = 23ms, Maximum = 31ms, Average = 25ms

C:\>|
```

Gambar Hasil pengujian PING pada Laptop 1