

Internet dan Aplikasinya
TUGAS 5 : Antar Network



Oleh :

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Praktikum Internet dan Aplikasinya

TUGAS 5: Membuat Koneksi Antar Jaringan

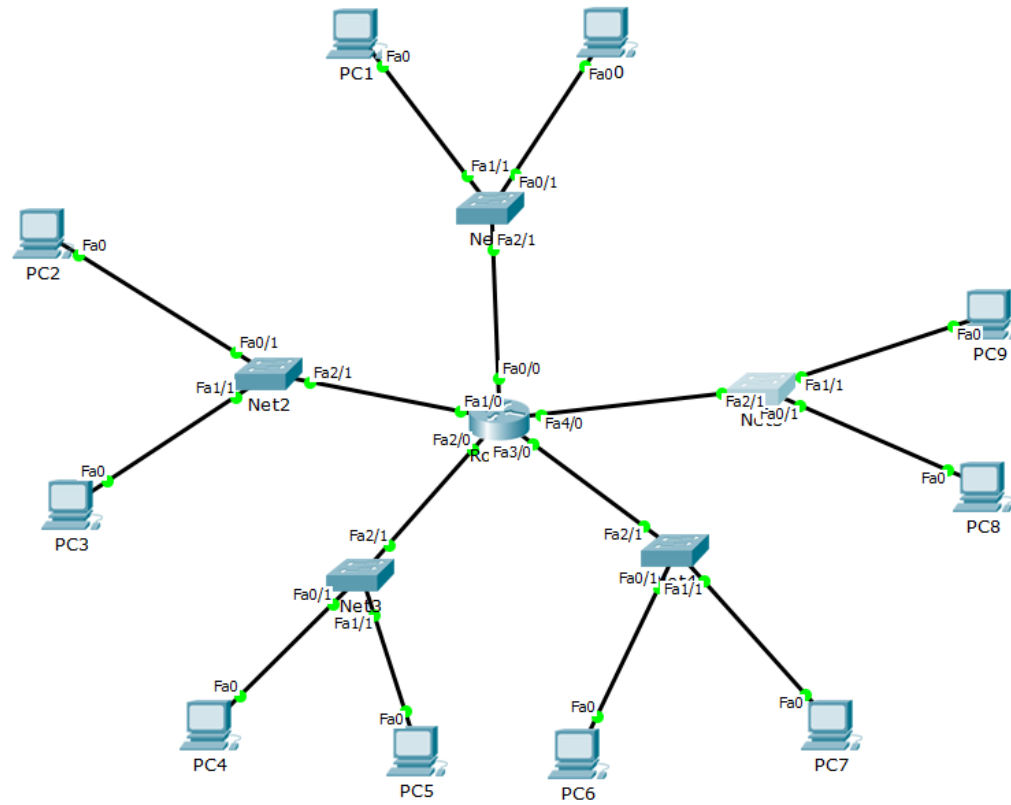
Tujuan

Mahasiswa dapat mensetup Komputer agar bisa terkoneksi dengan jaringan yang lebih luas (lewat default gateway). Pada modul ini juga mulai diterapkan IP Address dengan prefiks / masking yang lebih beragam.

Lengkapi Tabel Berikut

No	Network No.	Prefiks	Masking	Broadcast	IP Eff.	IP Router	PC ke 1	PC ke 2
1	172.16.105.0	/ 25	255.255.255.128	172.16.105.127	126	172.16.105.126	172.16.105.1	172.16.105.2
2	172.17.105.128	/ 26	255.255.255.192	172.17.105.191	62	172.17.105.190	172.17.105.129	172.17.105.130
3	172.18.105.48	/ 28	255.255.255.240	172.18.105.63	14	172.18.105.62	172.18.105.49	172.18.105.50
4	172.19.105.64	/ 26	255.255.255.192	172.19.105.127	62	172.19.105.126	172.19.105.65	172.19.105.66
5	172.20. 105.16	/ 28	255.255.255.240	172.20.105.31	14	172.20.105.30	172.20.105.17	172.20.105.18
6*)	172.21.1.0	/ 24	255.255.255.0	172.21.1.255	254	172.21.1.254	172.21.1.1	172.21.1.253

A. Screenshot Topologi



B. Screenshot Langkah Langkah (Konfigurasi IP semua device)

FastEthernet0/0	
Port Status	<input checked="" type="checkbox"/> On
Bandwidth	<input checked="" type="radio"/> 100 Mbps <input type="radio"/> 10 Mbps <input checked="" type="checkbox"/> Auto
Duplex	<input type="radio"/> Half Duplex <input checked="" type="radio"/> Full Duplex <input checked="" type="checkbox"/> Auto
MAC Address	00E0.B067.9E73
IP Configuration	
IP Address	172.16.105.126
Subnet Mask	255.255.255.128

- PC0

IP Configuration	
IP Configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IP Address	172.16.105.1
Subnet Mask	255.255.255.128
Default Gateway	172.16.105.126
DNS Server	

- PC1

IP Configuration	
IP Configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IP Address	172.16.105.2
Subnet Mask	255.255.255.128
Default Gateway	172.16.105.126
DNS Server	

FastEthernet1/0	
Port Status	<input checked="" type="checkbox"/> On
Bandwidth	<input checked="" type="radio"/> 100 Mbps <input type="radio"/> 10 Mbps <input checked="" type="checkbox"/> Auto
Duplex	<input type="radio"/> Half Duplex <input checked="" type="radio"/> Full Duplex <input checked="" type="checkbox"/> Auto
MAC Address	00E0.8FEB.10A7
IP Configuration	
IP Address	172.17.105.190
Subnet Mask	255.255.255.192

- **PC2**

IP Configuration	
IP Configuration	
<input type="radio"/> DHCP <input checked="" type="radio"/> Static	
IP Address	172.17.105.129
Subnet Mask	255.255.255.192
Default Gateway	172.17.105.190
DNS Server	

- **PC3**

IP Configuration	
IP Configuration	
<input type="radio"/> DHCP <input checked="" type="radio"/> Static	
IP Address	172.17.105.130
Subnet Mask	255.255.255.192
Default Gateway	172.17.105.190
DNS Server	

FastEthernet2/0	
Port Status	<input checked="" type="checkbox"/> On
Bandwidth	<input checked="" type="radio"/> 100 Mbps <input type="radio"/> 10 Mbps <input checked="" type="checkbox"/> Auto
Duplex	<input type="radio"/> Half Duplex <input checked="" type="radio"/> Full Duplex <input checked="" type="checkbox"/> Auto
MAC Address	0090.21CE.C1D6
IP Configuration	
IP Address	172.18.105.62
Subnet Mask	255.255.255.240

- **PC4**

IP Configuration	
IP Configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IP Address	172.18.105.49
Subnet Mask	255.255.255.240
Default Gateway	172.18.105.62
DNS Server	

- **PC5**

IP Configuration	
IP Configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IP Address	172.18.105.50
Subnet Mask	255.255.255.240
Default Gateway	172.18.105.62
DNS Server	

FastEthernet3/0	
Port Status	<input checked="" type="checkbox"/> On
Bandwidth	<input checked="" type="radio"/> 100 Mbps <input type="radio"/> 10 Mbps <input checked="" type="checkbox"/> Auto
Duplex	<input type="radio"/> Half Duplex <input checked="" type="radio"/> Full Duplex <input checked="" type="checkbox"/> Auto
MAC Address	0001.43C6.C265
IP Configuration	
IP Address	172.19.105.126
Subnet Mask	255.255.255.192

- PC6

IP Configuration	
IP Configuration	
<input type="radio"/> DHCP <input checked="" type="radio"/> Static	
IP Address	172.19.105.65
Subnet Mask	255.255.255.192
Default Gateway	172.19.105.126
DNS Server	

- PC7

IP Configuration	
IP Configuration	
<input type="radio"/> DHCP <input checked="" type="radio"/> Static	
IP Address	172.19.105.66
Subnet Mask	255.255.255.192
Default Gateway	172.19.105.126
DNS Server	

FastEthernet4/0	
Port Status	<input checked="" type="checkbox"/> On
Bandwidth	<input checked="" type="radio"/> 100 Mbps <input type="radio"/> 10 Mbps <input checked="" type="checkbox"/> Auto
Duplex	<input type="radio"/> Half Duplex <input checked="" type="radio"/> Full Duplex <input checked="" type="checkbox"/> Auto
MAC Address	00E0.B0C0.4369
IP Configuration	
IP Address	172.20.105.30
Subnet Mask	255.255.255.240

- PC8

IP Configuration	
IP Configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IP Address	172.20.105.17
Subnet Mask	255.255.255.240
Default Gateway	172.20.105.30
DNS Server	

- PC9

IP Configuration	
IP Configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IP Address	172.20.105.18
Subnet Mask	255.255.255.240
Default Gateway	172.20.105.30
DNS Server	

C. Screenshot ping PC1 ke seluruh PC

- PC0 KE PC1

```
PC>ping 172.16.105.2

Pinging 172.16.105.2 with 32 bytes of data:

Reply from 172.16.105.2: bytes=32 time=0ms TTL=128
Reply from 172.16.105.2: bytes=32 time=0ms TTL=128
Reply from 172.16.105.2: bytes=32 time=0ms TTL=128
Reply from 172.16.105.2: bytes=32 time=1ms TTL=128

Ping statistics for 172.16.105.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

- PC0 KE PC2

```
PC>ping 172.17.105.129

Pinging 172.17.105.129 with 32 bytes of data:

Reply from 172.17.105.129: bytes=32 time=0ms TTL=127
Reply from 172.17.105.129: bytes=32 time=0ms TTL=127
Reply from 172.17.105.129: bytes=32 time=0ms TTL=127
Reply from 172.17.105.129: bytes=32 time=0ms TTL=127

Ping statistics for 172.17.105.129:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

- PC0 KE PC3

```
PC>ping 172.17.105.130

Pinging 172.17.105.130 with 32 bytes of data:

Reply from 172.17.105.130: bytes=32 time=0ms TTL=127
Reply from 172.17.105.130: bytes=32 time=1ms TTL=127
Reply from 172.17.105.130: bytes=32 time=0ms TTL=127
Reply from 172.17.105.130: bytes=32 time=2ms TTL=127

Ping statistics for 172.17.105.130:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 2ms, Average = 0ms
```

- **PC0 KE PC4**

```
PC>ping 172.18.105.49

Pinging 172.18.105.49 with 32 bytes of data:

Reply from 172.18.105.49: bytes=32 time=1ms TTL=127
Reply from 172.18.105.49: bytes=32 time=0ms TTL=127
Reply from 172.18.105.49: bytes=32 time=0ms TTL=127
Reply from 172.18.105.49: bytes=32 time=0ms TTL=127

Ping statistics for 172.18.105.49:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

- **PC0 KE PC5**

```
PC>ping 172.18.105.50

Pinging 172.18.105.50 with 32 bytes of data:

Reply from 172.18.105.50: bytes=32 time=1ms TTL=127
Reply from 172.18.105.50: bytes=32 time=0ms TTL=127
Reply from 172.18.105.50: bytes=32 time=0ms TTL=127
Reply from 172.18.105.50: bytes=32 time=0ms TTL=127

Ping statistics for 172.18.105.50:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

- **PC0 KE PC6**

```
PC>ping 172.19.105.65

Pinging 172.19.105.65 with 32 bytes of data:

Reply from 172.19.105.65: bytes=32 time=1ms TTL=127
Reply from 172.19.105.65: bytes=32 time=0ms TTL=127
Reply from 172.19.105.65: bytes=32 time=0ms TTL=127
Reply from 172.19.105.65: bytes=32 time=0ms TTL=127

Ping statistics for 172.19.105.65:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

- **PC0 KE PC7**

```
PC>ping 172.19.105.66

Pinging 172.19.105.66 with 32 bytes of data:

Reply from 172.19.105.66: bytes=32 time=0ms TTL=127
Reply from 172.19.105.66: bytes=32 time=0ms TTL=127
Reply from 172.19.105.66: bytes=32 time=5ms TTL=127
Reply from 172.19.105.66: bytes=32 time=0ms TTL=127

Ping statistics for 172.19.105.66:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 5ms, Average = 1ms
```

- **PC0 KE PC8**

```
PC>ping 172.20.105.17

Pinging 172.20.105.17 with 32 bytes of data:

Reply from 172.20.105.17: bytes=32 time=0ms TTL=127
Reply from 172.20.105.17: bytes=32 time=0ms TTL=127
Reply from 172.20.105.17: bytes=32 time=0ms TTL=127
Reply from 172.20.105.17: bytes=32 time=0ms TTL=127

Ping statistics for 172.20.105.17:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

- **PC0 KE PC9**

```
PC>ping 172.20.105.18

Pinging 172.20.105.18 with 32 bytes of data:

Reply from 172.20.105.18: bytes=32 time=1ms TTL=127
Reply from 172.20.105.18: bytes=32 time=0ms TTL=127
Reply from 172.20.105.18: bytes=32 time=0ms TTL=127
Reply from 172.20.105.18: bytes=32 time=0ms TTL=127

Ping statistics for 172.20.105.18:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```