

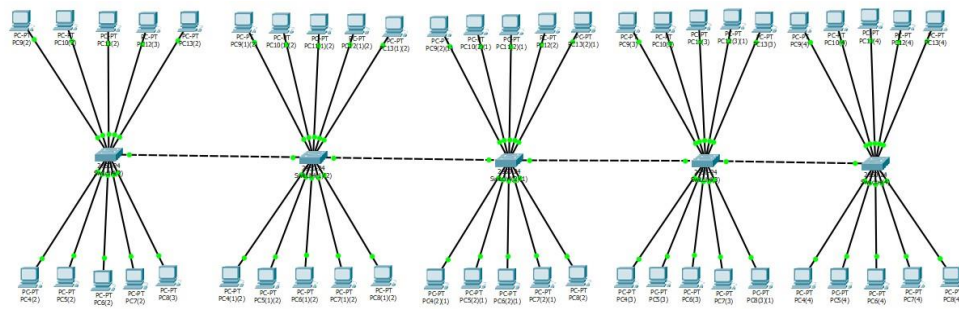
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Modul 3

Tugas :

1. Diketahui sebuah supermarket akan memasang sebuah jaringan komputer yang menggunakan network ID 202.155.19.0 dengan subnet mask default 255.255.255.0. supermarket tersebut mempunyai 5 divisi dan masing-masing divisi dapat berisi hingga 25 komputer.
2. Tugas anda adalah :
 - a. Buatlah desain jaringan tersebut dengan Packet Tracker.
 - b. Gunakan switch seri generic dan gunakan juga 10 unit PC.



- c. Tentukan subnet mask yang harus digunakan pada semua komputer tersebut.

Kita membutuhkan 5 divisi (subnet), maka nilai X dari rumus subnet didapatkan nilai $X = 3$. jadi terdapat 3 bit 1 dalam subnet mask. Karena dalam satu blok terdapat 8 bit maka didapatkan $Y = 5$. jadi terdapat 5 bit 0, sehingga didapatkan :

11111111.11111111.11111111.11100000

255 . 255 . 255 . 224

- d. Tentukan subnet address yang terbentuk

$256 - 224 = 32$ IP Address

1. 202.155.19.0
2. 202.155.19.32
3. 202.155.19.64
4. 202.155.19.96
5. 202.155.19.128

Pengisian IP Address :

PC0

Physical Config Desktop Programming Attributes

IP Configuration

☐ DHCP ☒ Static

IP Address: 202.155.19.1

Subnet Mask: 255.255.255.224

Default Gateway: 0.0.0.0

DNS Server: 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80::201:42FF:FE6A:2A0D

IPv6 Gateway:

IPv6 DNS Server:

Top

PC10

Physical Config Desktop Programming Attributes

IP Configuration

☐ DHCP ☒ Static

IP Address: 202.155.19.33

Subnet Mask: 255.255.255.224

Default Gateway: 0.0.0.0

DNS Server: 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80::201:C7FF:FE9D:B899

IPv6 Gateway:

IPv6 DNS Server:

Top

PC15

Physical Config Desktop Programming Attributes

IP Configuration

IP Configuration

☐ DHCP ☒ Static

IP Address 202.155.19.66

Subnet Mask 255.255.255.224

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::260:3EFF:FEA5:A83E

IPv6 Gateway

IPv6 DNS Server

Top

PC30

Physical Config Desktop Programming Attributes

IP Configuration

IP Configuration

☐ DHCP ☒ Static

IP Address 202.155.19.100

Subnet Mask 255.255.255.224

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::2E0:F7FF:FEC2:5012

IPv6 Gateway

IPv6 DNS Server

Top

PC40

Physical Config Desktop Programming Attributes

IP Configuration

IP Configuration

☐ DHCP ☒ Static

IP Address 202.155.19.131

Subnet Mask 255.255.255.224

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

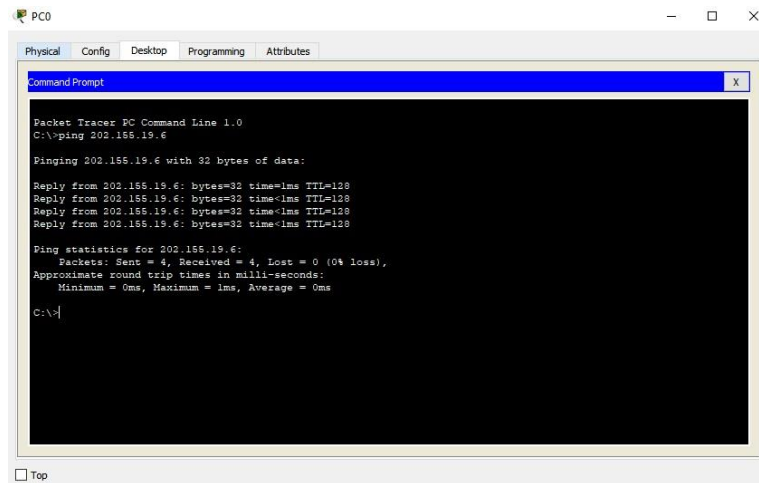
Link Local Address FE80::210:11FF:FE7D:5BE

IPv6 Gateway

IPv6 DNS Server

Top

- e. Implementasikan menggunakan simulator.
- f. Lakukan tes koneksi antara komputer-komputer yang ada.
 - 1) Ping dari PC 1 ke PC di divisi 1



```
PC0
Physical Config Desktop Programming Attributes
Command Prompt
Packet Tracer PC Command Line 1.0
C:\>ping 202.155.19.6

Pinging 202.155.19.6 with 32 bytes of data:

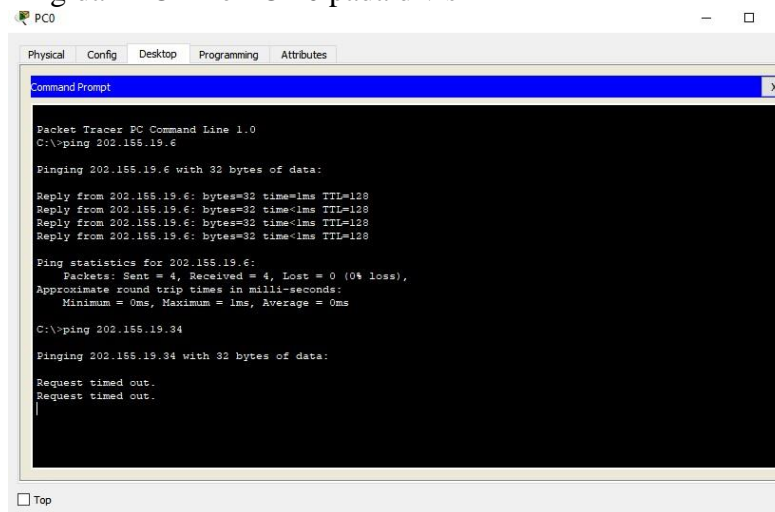
Reply from 202.155.19.6: bytes=32 time<1ms TTL=128
Reply from 202.155.19.6: bytes=32 time<1ms TTL=128
Reply from 202.155.19.6: bytes=32 time<1ms TTL=128
Reply from 202.155.19.6: bytes=32 time<1ms TTL=128

Ping statistics for 202.155.19.6:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```

Terhubung, PC memberikan respon.

- 2) Ping dari PC 1 ke PC 10 pada divisi 2



```
PC0
Physical Config Desktop Programming Attributes
Command Prompt
Packet Tracer PC Command Line 1.0
C:\>ping 202.155.19.6

Pinging 202.155.19.6 with 32 bytes of data:

Reply from 202.155.19.6: bytes=32 time<1ms TTL=128
Reply from 202.155.19.6: bytes=32 time<1ms TTL=128
Reply from 202.155.19.6: bytes=32 time<1ms TTL=128
Reply from 202.155.19.6: bytes=32 time<1ms TTL=128

Ping statistics for 202.155.19.6:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>ping 202.155.19.34

Pinging 202.155.19.34 with 32 bytes of data:

Request timed out.
Request timed out.

C:\>
```

Tidak terhubung, dan memunculkan ‘Request Time Out’, karena divisi 1 dan divisi 2 berbeda subnet address-nya.