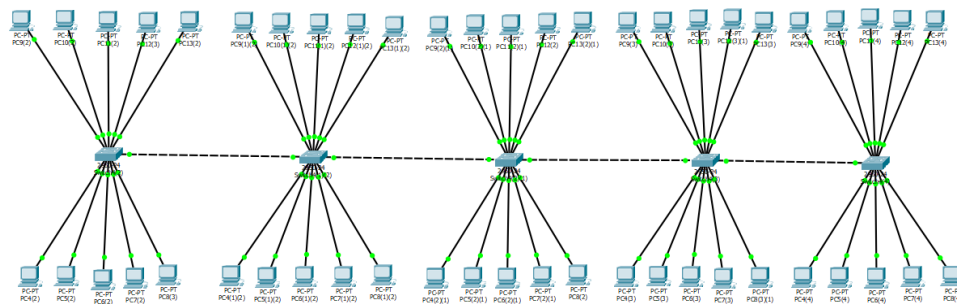


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Praktikum Jaringan Komputer Tugas Modul 3

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. 202.155.19.98
5. 202.155.19.130

Pengisian IP Address :

The image displays two screenshots of the Packet Tracer configuration interface for two PCs, PC0 and PC10. Both screenshots show the 'Config' tab with the 'IP Configuration' window open.

PC0 Configuration:

- IP Configuration:** 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:** Static IPv6 Address: (empty), Link Local Address: FE80::201:42FF:FE6A:2A0D, IPv6 Gateway: (empty), IPv6 DNS Server: (empty).

PC10 Configuration:

- IP Configuration:** 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:** Static IPv6 Address: (empty), Link Local Address: FE80::201:C7FF:FE9D:B899, IPv6 Gateway: (empty), IPv6 DNS Server: (empty).

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:

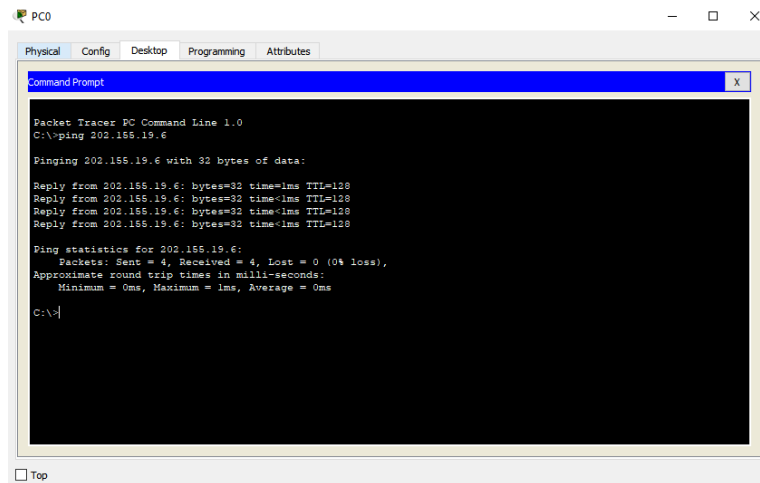
IPv6 DNS Server:

Top

e. Implementasikan menggunakan simulator.

f. Lakukan tes koneksi antara komputer-komputer yang ada.

1. Ping dari PC 1 ke PC di divisi 1



```
Packet Tracer PC Command Line 1.0
C:\>ping 202.155.19.6

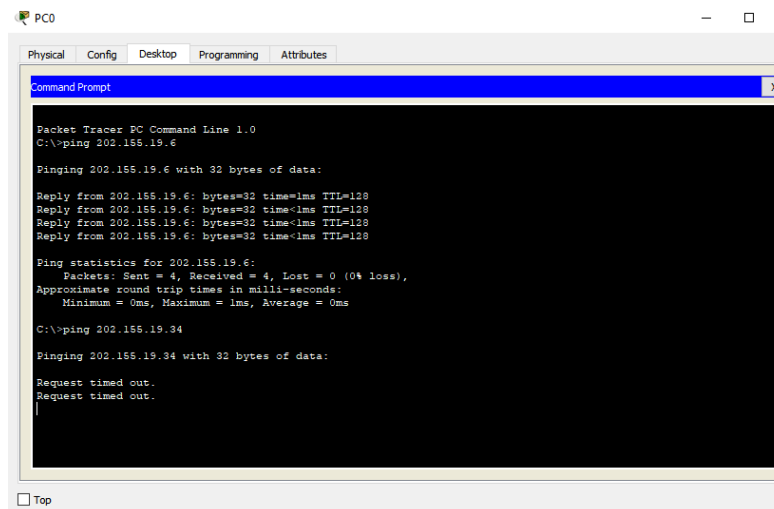
Pinging 202.155.19.6 with 32 bytes of data:
Reply from 202.155.19.6: bytes=32 time=1ms TTL=128
Reply from 202.155.19.6: bytes=32 time=1ms TTL=128
Reply from 202.155.19.6: bytes=32 time=1ms TTL=128
Reply from 202.155.19.6: bytes=32 time=1ms TTL=128

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



```
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.
|
```

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