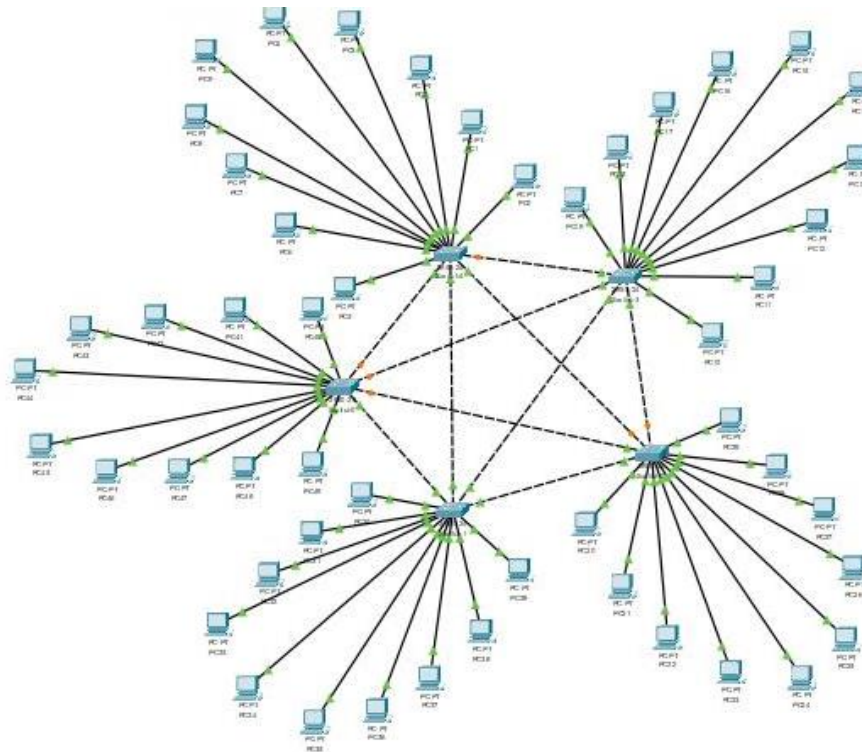


LAPORAN PRAKTIKUM JARINGAN KOMPUTER

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NIM : L200170025
Modul : 2
Kelas : A

Tugas Modul 2: Desain Jaringan (5 Divisi)



Menentukan Subnet Mask dan Subnet Address

IP Address : 202.155.19.0/27

11111111 11111111 11111111 11100000

Subnet Mask : 255.255.255.224

1. Jumlah Subnet : $2^x = 2^3 = 8$
2. Jumlah Host / Subnet : $2^y - 2 = 2^5 - 2 = 32 - 2 = 30$
3. Block Subnet : $256 - 224 = 32$
4. Tabel Subnet

Network	202.155.19.0	202.155.19.32	202.155.19.64	202.155.19.96	202.155.19.128	202.155.19.160	202.155.19.192	202.155.19.224
Host Min	202.155.19.1	202.155.19.33	202.155.19.65	202.155.19.97	202.155.19.129	202.155.19.161	202.155.19.193	202.155.19.225
Host Max	202.155.19.30	202.155.19.62	202.155.19.94	202.155.19.126	202.155.19.158	202.155.19.190	202.155.19.222	202.155.19.254
Broadcast	202.155.19.31	202.155.19.63	202.155.19.95	202.155.19.127	202.155.19.159	202.155.19.191	202.155.19.223	202.155.19.255

Keterangan Tabel :

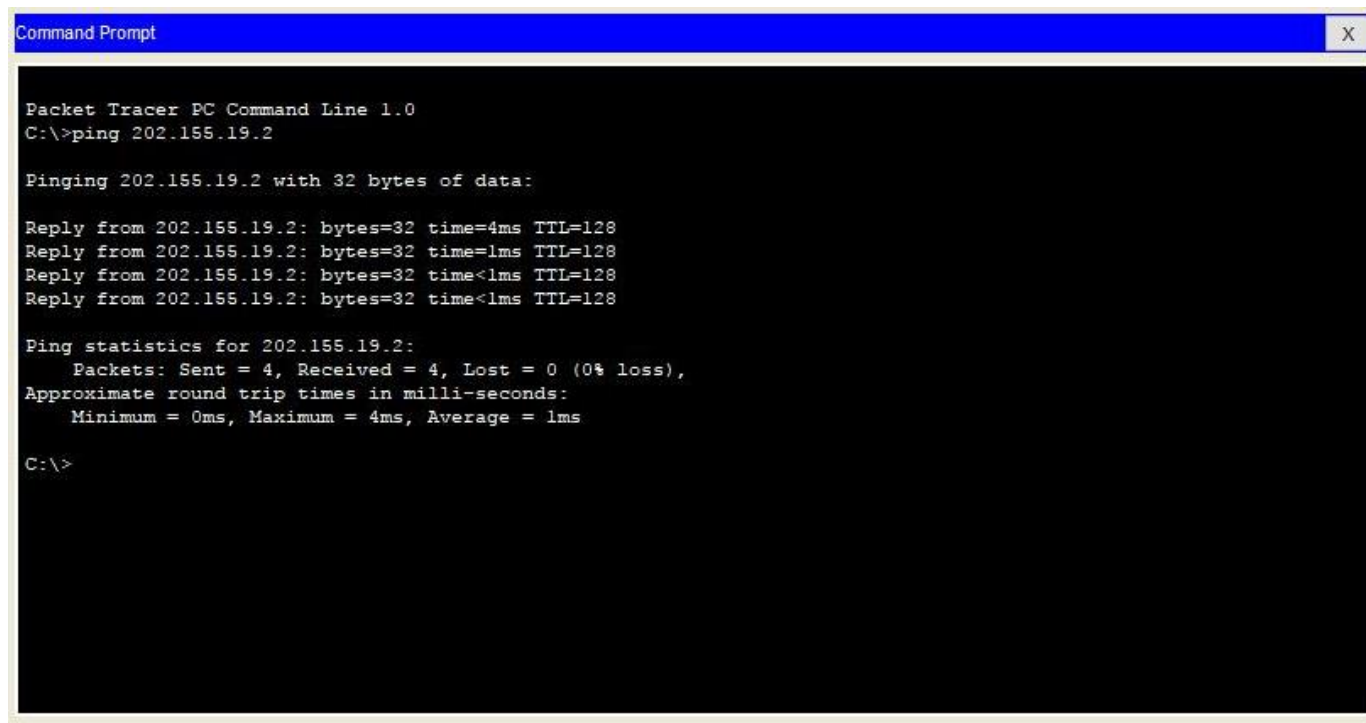
1. Tabel terdiri dari 8 Subnetting.
2. Hanya ada 7 Subnet yang bisa digunakan.
3. Subnet yang terakhir / yang di block hitam tidak bisa digunakan.
4. Setiap Subnetting tersedia 30 IP Address untuk user.

- PC1 = 202.155.19.1
- PC2 = 202.155.19.2
- PC3 = 202.155.19.33
- PC4 = 202.155.19.34
- PC5 = 202.155.19.65
- PC6 = 202.155.19.66
- PC7 = 202.155.19.97
- PC8 = 202.155.19.98
- PC9 = 202.155.19.129
- PC10 = 202.155.19.130

Melakukan tes antar komputer

1. Tes antar computer di dalam satu switch

Melakukan ping dari PC dengan IP Address 202.155.19.1 ke PC dengan IP Address 202.155.19.2 hasilnya berjalan dengan normal.



```
Command Prompt
X

Packet Tracer PC Command Line 1.0
C:\>ping 202.155.19.2

Pinging 202.155.19.2 with 32 bytes of data:

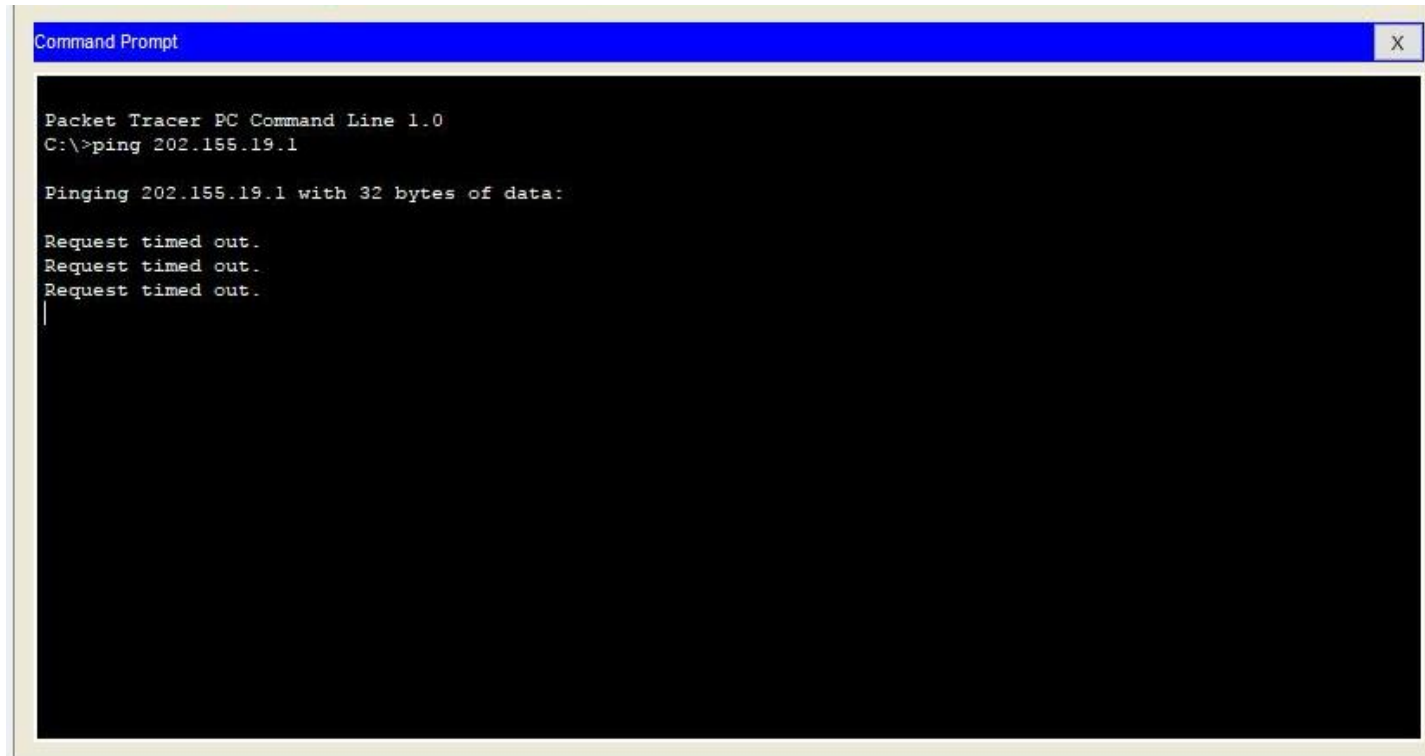
Reply from 202.155.19.2: bytes=32 time=4ms TTL=128
Reply from 202.155.19.2: bytes=32 time=1ms TTL=128
Reply from 202.155.19.2: bytes=32 time<1ms TTL=128
Reply from 202.155.19.2: bytes=32 time<1ms TTL=128

Ping statistics for 202.155.19.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 4ms, Average = 1ms

C:\>
```

2. Tes antar computer yang ada di switch satu dengan computer yang ada di switch lain

Melakukan ping dari PC dengan IP Address 202.155.19.33 ke PC dengan IP Address 202.155.19.1 hasilnya timed out, karena beda subnettinya.

A screenshot of a Windows Command Prompt window. The title bar is blue and says "Command Prompt" with a close button on the right. The background is black with white text. The text inside the window reads: "Packet Tracer PC Command Line 1.0", "C:\>ping 202.155.19.1", "Pinging 202.155.19.1 with 32 bytes of data:", "Request timed out.", "Request timed out.", "Request timed out.", and a cursor line at the bottom.

```
Command Prompt
X

Packet Tracer PC Command Line 1.0
C:\>ping 202.155.19.1

Pinging 202.155.19.1 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
|
```