

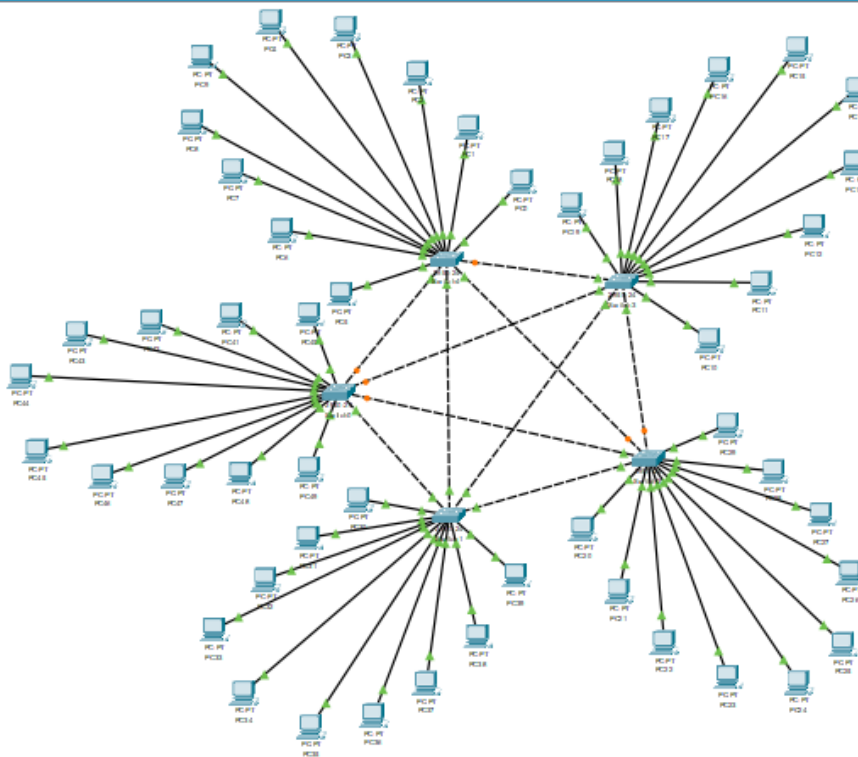
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NIM : L200170019

Modul : 1

Kelas : A

Tugas Modul : 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.

PC0 = 202.155.19.1

PC1 = 202.155.19.2

PC2 = 202.155.19.33

PC3 = 202.155.19.34

PC11 = 202.155.19.65

PC10 = 202.155.19.66

PC6 = 202.155.19.97

PC7 = 202.155.19.98

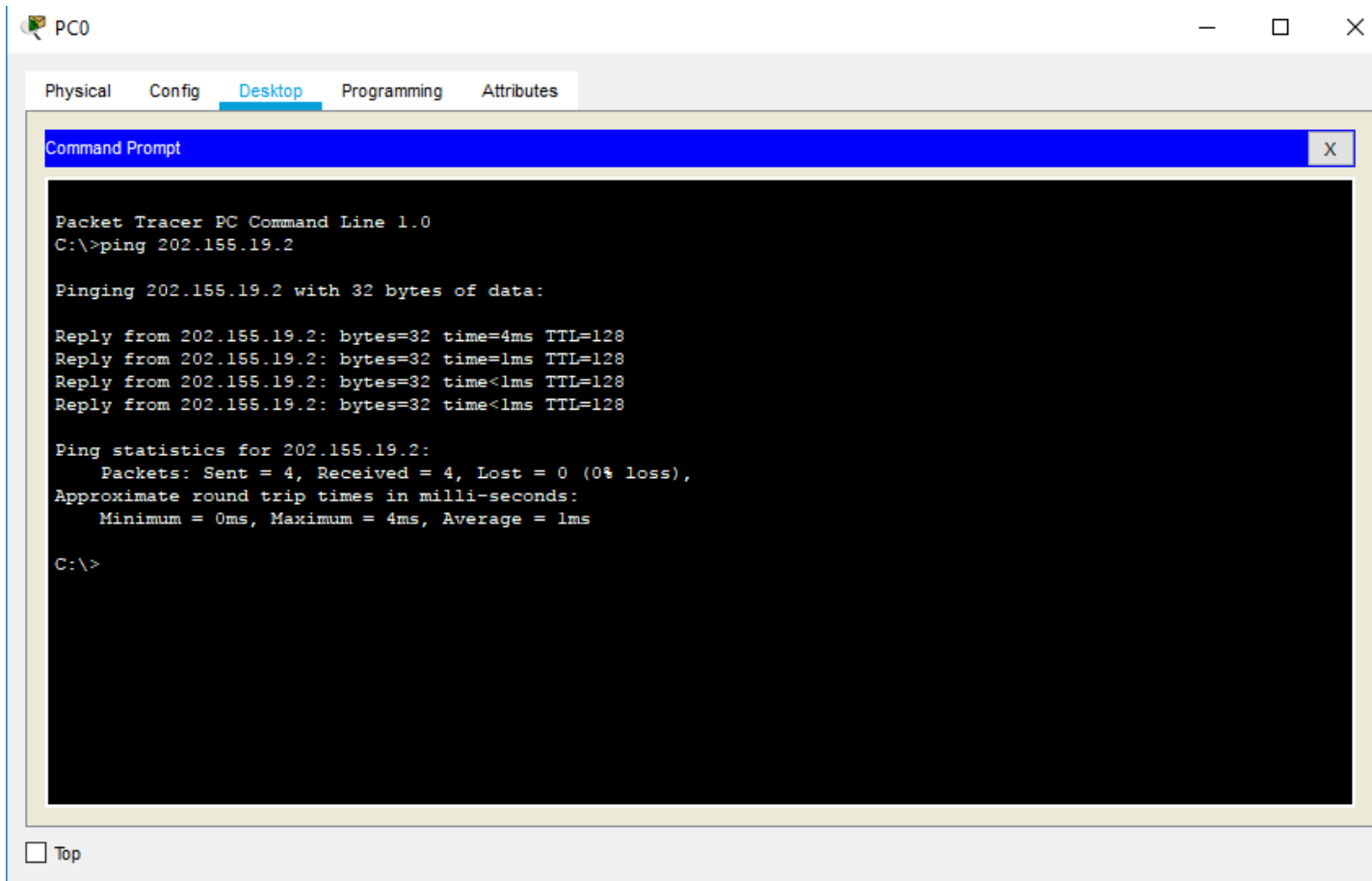
PC8 = 202.155.19.129

PC9 = 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.



The screenshot shows a Packet Tracer PC Command Line window for PC0. The window has tabs for Physical, Config, Desktop, Programming, and Attributes, with Desktop selected. The Command Prompt shows the following text:

```
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

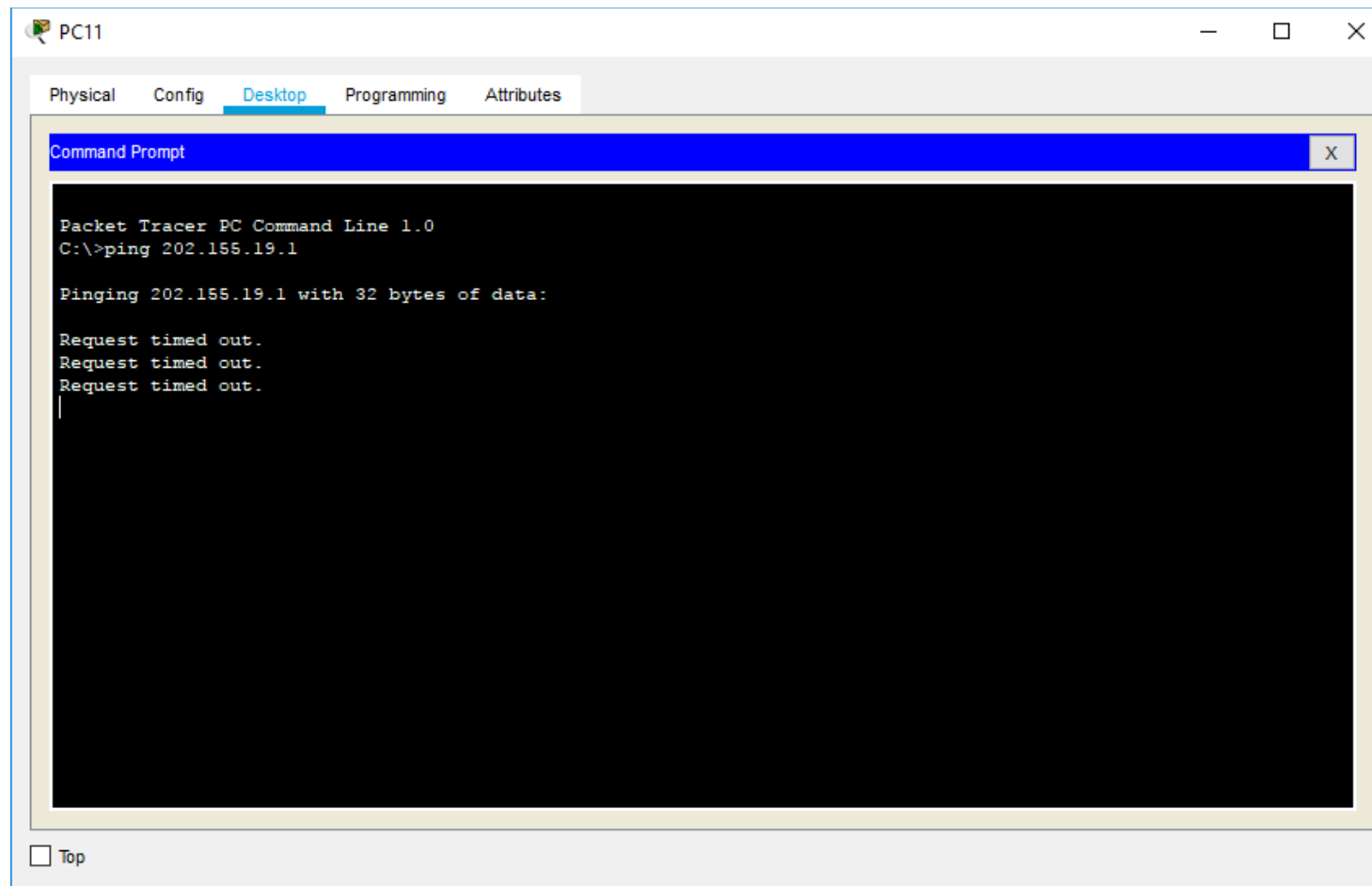
Ping statistics for 202.155.19.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 4ms, Average = 1ms

C:\>
```

At the bottom left of the window, there is a checkbox labeled "Top" which is currently unchecked.

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.



The screenshot shows a Packet Tracer PC Command Line window for PC11. The window has tabs for Physical, Config, Desktop (selected), Programming, and Attributes. The Desktop tab contains a Command Prompt window with the following text:

```
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.
|
```

At the bottom left of the window, there is a checkbox labeled "Top".