

LAPORAN PRAKTIKUM JARINGAN KOMPUTER

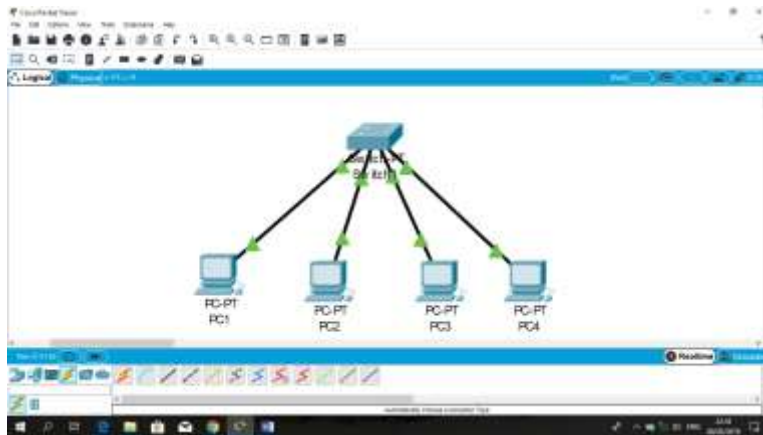
MODUL 3

NAMA : Sugiyo

NIM : L200170002

KELAS : A

LATIHAN :



IP address :

1. PC1 = 201.222.5.1
2. PC2 = 201.222.5.2
3. PC3 = 201.222.5.9
4. PC4 = 201.222.5.10

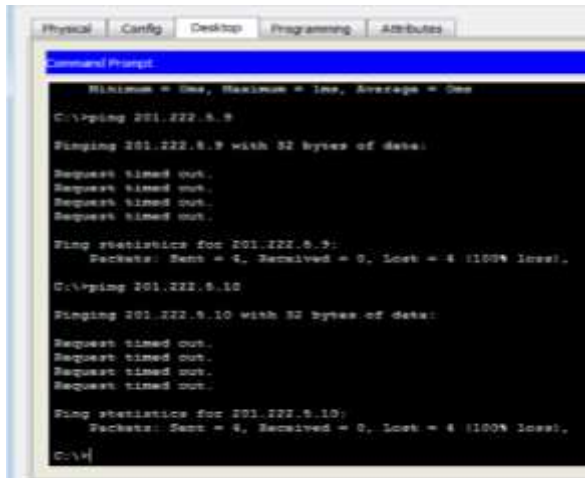
```
Physical Config Desktop Programming Attributes
Command Prompt
Minimum = 1ms, Maximum = 1ms, Average = 1ms
C:\>ping 201.222.5.2
Pinging 201.222.5.2 with 32 bytes of data:
Reply from 201.222.5.2: bytes=32 time=1ms TTL=128
Reply from 201.222.5.2: bytes=32 time=1ms TTL=128
Reply from 201.222.5.2: bytes=32 time=1ms TTL=128
Reply from 201.222.5.2: bytes=32 time=1ms TTL=128
Ping statistics for 201.222.5.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milliseconds:
        Minimum = 0ms, Maximum = 1ms, Average = 1ms
C:\>ping 201.222.5.9
Pinging 201.222.5.9 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 201.222.5.9:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>ping 201.222.5.10
Pinging 201.222.5.10 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 201.222.5.10:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>
```

KETERANGAN :

Untuk mengetahui apakah setiap pc tersambung yaitu dengan mengeceknya seperti ping pada gambar diatas.

Pada gambar di atas pc1 dengan pc2 muncul pesan replay artinya computer tujuan memberi respon terhadap pesan yang dikirim, sehingga kedua PC saling terhubung dan dapat diakses.

Pc1 dengan pc3, pc1 dengan pc4 muncul pesan request timed out yang artinya computer server tidak merespon permintaan koneksi dari client. Tidak berada pada subnet address yang sama.



```
Physical Config Desktop Programming Attributes
Command Prompt
Minimum = One, Maximum = One, Average = One
C:\>ping 201.222.5.9
Pinging 201.222.5.9 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 201.222.5.9:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

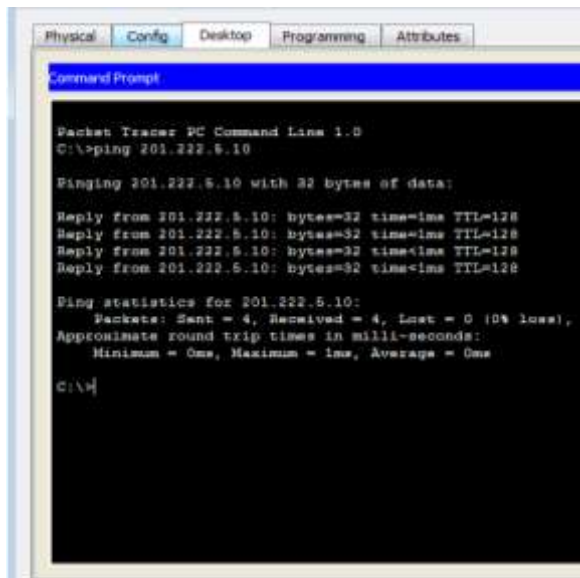
C:\>ping 201.222.5.10
Pinging 201.222.5.10 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 201.222.5.10:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```

KETERANGAN :

Pc2 dengan pc3, pc2 dengan pc4 muncul pesan request timed out artinya computer server tidak dapat merespon permintaan koneksi dari client karena tidak berada pada subnet address yang sama.



```
Physical Config Desktop Programming Attributes
Command Prompt
Packet Tracer PC Command Line 1.0
C:\>ping 201.222.5.10
Pinging 201.222.5.10 with 32 bytes of data:
Reply from 201.222.5.10: bytes=32 time=1ms TTL=128
Reply from 201.222.5.10: bytes=32 time=1ms TTL=128
Reply from 201.222.5.10: bytes=32 time=1ms TTL=128
Reply from 201.222.5.10: bytes=32 time=1ms TTL=128

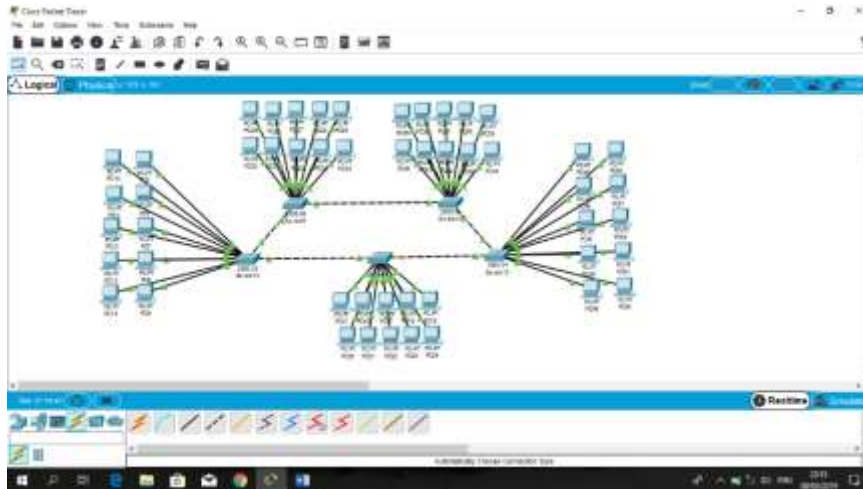
Ping statistics for 201.222.5.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = One, Maximum = One, Average = One

C:\>
```

KETERANGAN :

Pc3 dengan pc4 muncul pesan (replay) artinya computer tujuan, memberi respon terhadap pesan yang dikirim, sehingga kedua PC saling terhubung dan dapat diakses.

TUGAS :



Menentukan Subnet Mask dan Subnet Address

IP Address : 202.155.19.0/27

subnetmask :

255.255.255.0

11111111 11111111 11111111 00000000

11111111 11111111 11111111 11100000

Subnet Mask : 255.255.255.224

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

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

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 dengan IP Address 202.155.19.1 ke IP

Address 202.155.19.2 hasilnya ?

- berjalan dengan baik.

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

Pinging 202.155.19.1 with 32 bytes of data:

Reply from 202.155.19.1: bytes=32 time=4ms TTL=128
Reply from 202.155.19.1: bytes=32 time=4ms TTL=128
Reply from 202.155.19.1: bytes=32 time=4ms TTL=128
Reply from 202.155.19.1: bytes=32 time=4ms TTL=128

Ping statistics for 202.155.19.1:
    Packets: Sent = 4, Received = 4, Loss = 0 (0% loss),
    Approximate round trip times in milliseconds:
        Minimum = 3ms, Maximum = 4ms, Average = 4ms

C:\>
```

2. Tes antar computer yang ada di switch satu dengan computer yang ada di switch lain ?
- Melakukan ping IP Address 202.155.19.33 ke IP Address 202.155.19.1 hasilnya ? Gagal / Time Out, karena beda subnettanya.

```
Packet Tracer PC Command Line 1.0
C:\>ping 202.155.19.33

Pinging 202.155.19.33 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.

C:\>
```