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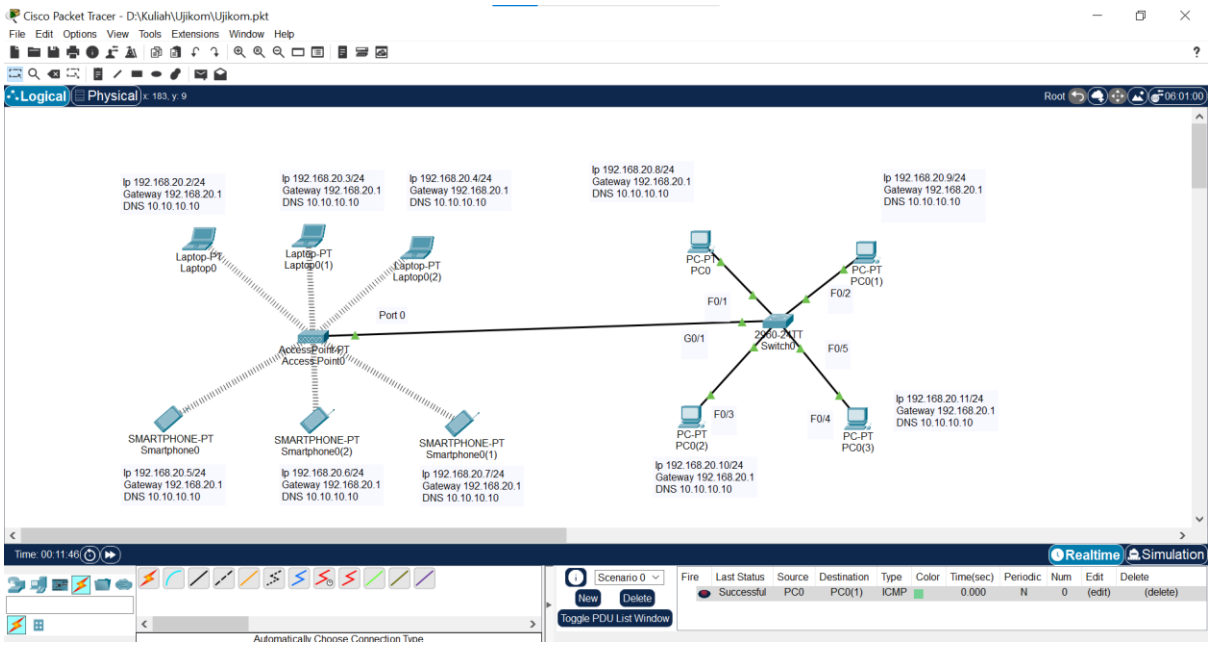
UJIKOM NETWORK ADMINISTRATOR

LAPORAN UJIKOM TUGAS 1

Step by step Instalation Network

1. Creat Topology Network



Berikut topology untuk network yang akan kita bangun. Pada topology ini kita menggunakan beberapa device diantaranya :

- Swithch Manage : 1 Unit

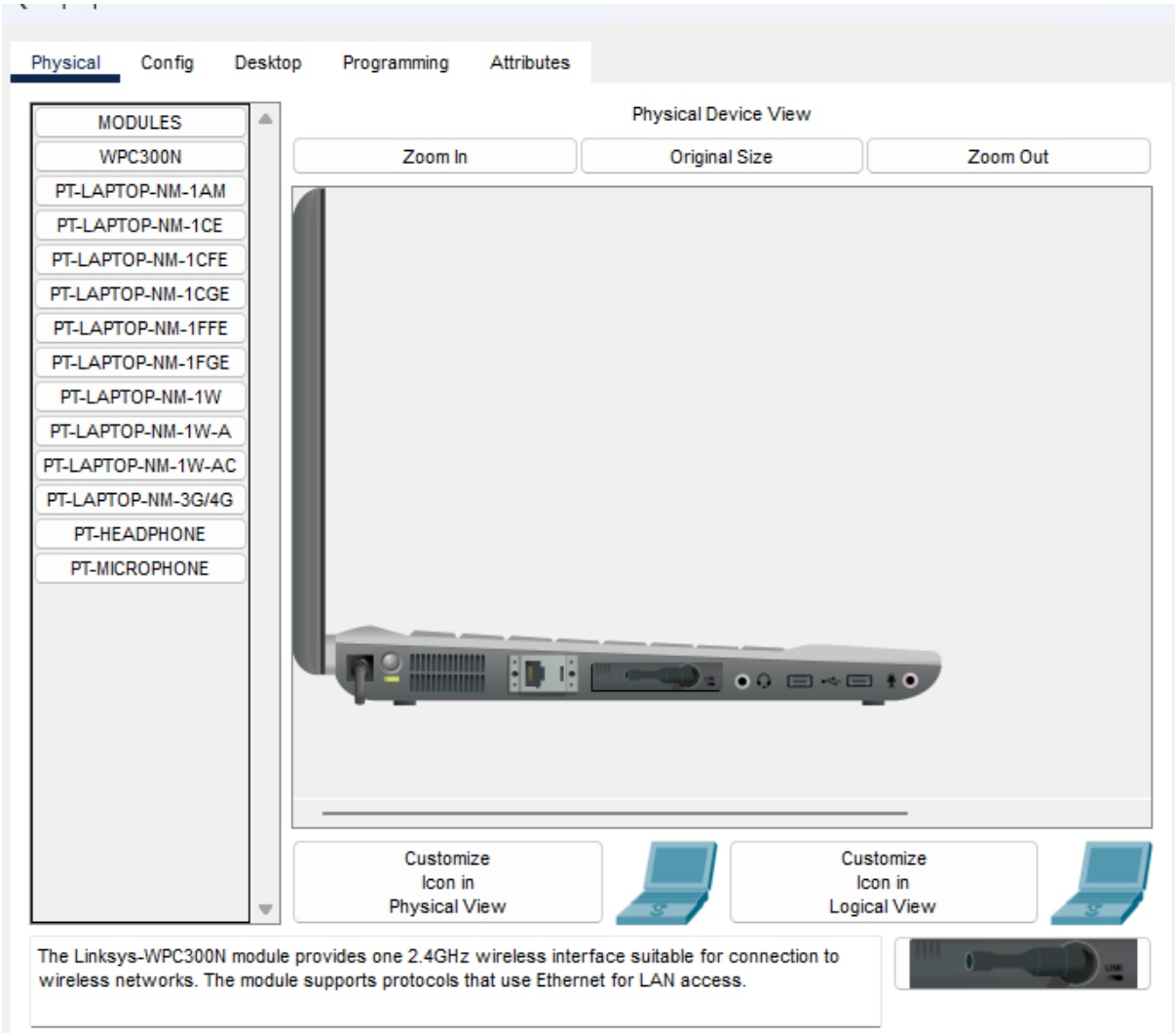
- PC/Komputer : 4 Unit

- Smarthphone : 3 Unit

- Laptop : 3 Unit

- Accesspoint : 1 Unit

2. Configuration Device



- Configuration Laptop Device

Langkah setup pertama yang perlu di perhatikan di laptop yaitu :

- Matikan Power Laptop

- Kemudian Ganti Konektor LAN dengan Konektor Wireless

- Koneksikan ke Wireless/Accesspoint yang tersedia dengan

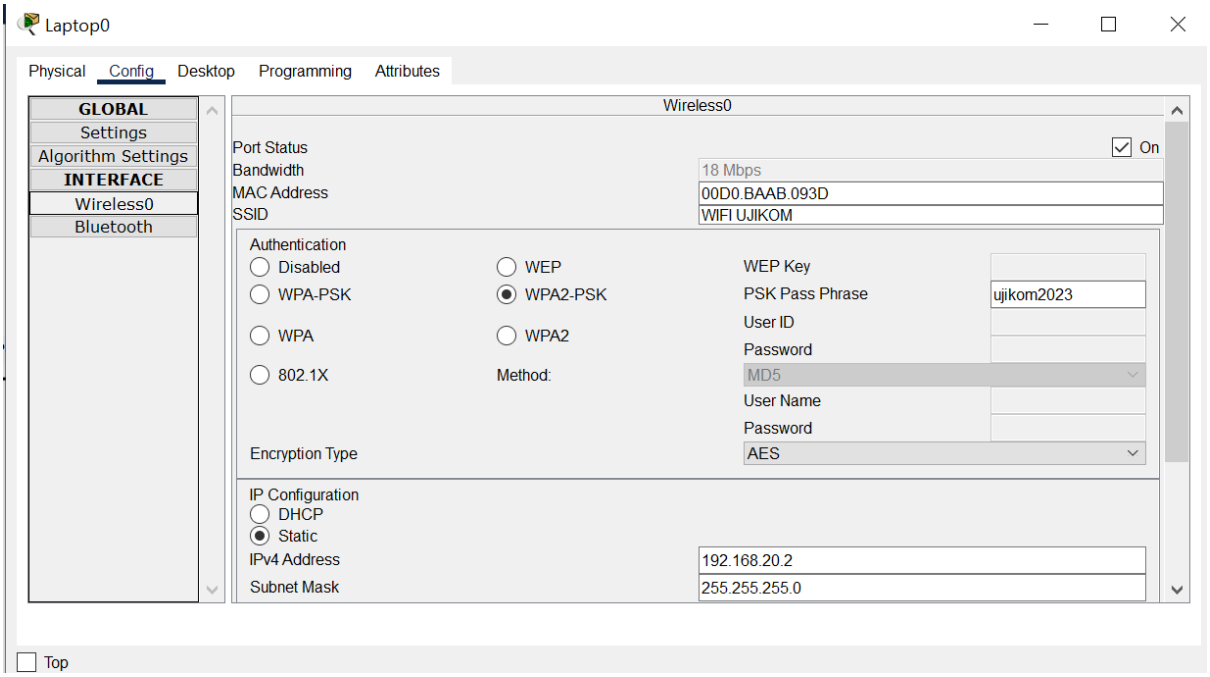
SSID : WIFI UJIKOM

Pass : ujikom2023

- Setup IP Address Pada Laptop0 : 192.168.20.2/24

- Setup IP Address Pada Laptop0 : 192.168.20.3/24

- Setup IP Address Pada Laptop0 : 192.168.20.4/24



- Configuration PC/Komputer Device

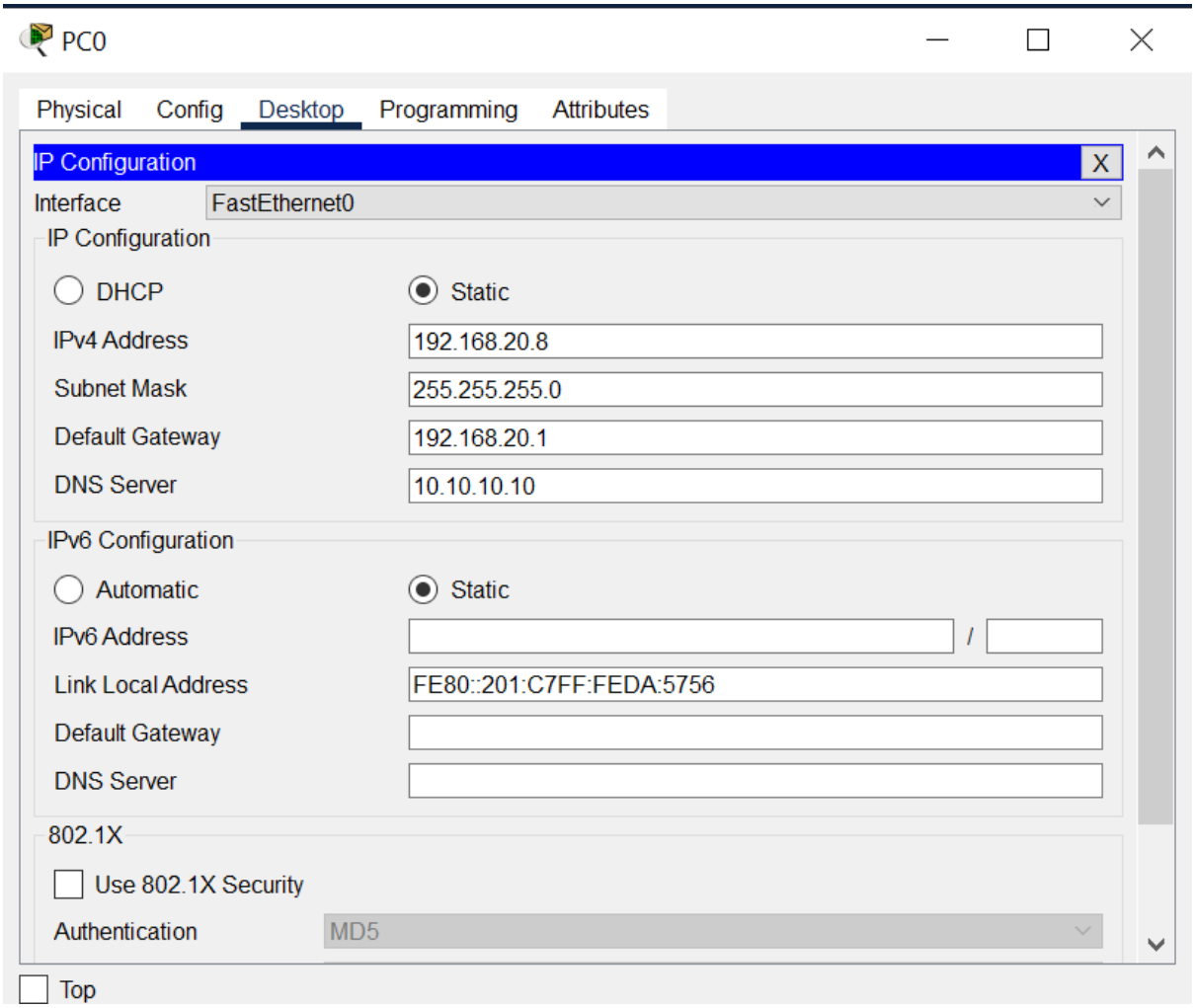
Langkah setup pertama yang perlu di lakukan di Komputer yaitu :

- Setup IP address Pada PC0 : 192.168.20.8/24

- Setup IP address Pada PC1 : 192.168.20.9/24

- Setup IP address Pada PC2 : 192.168.20.10/24

- Setup IP address Pada PC3 : 192.168.20.11/24



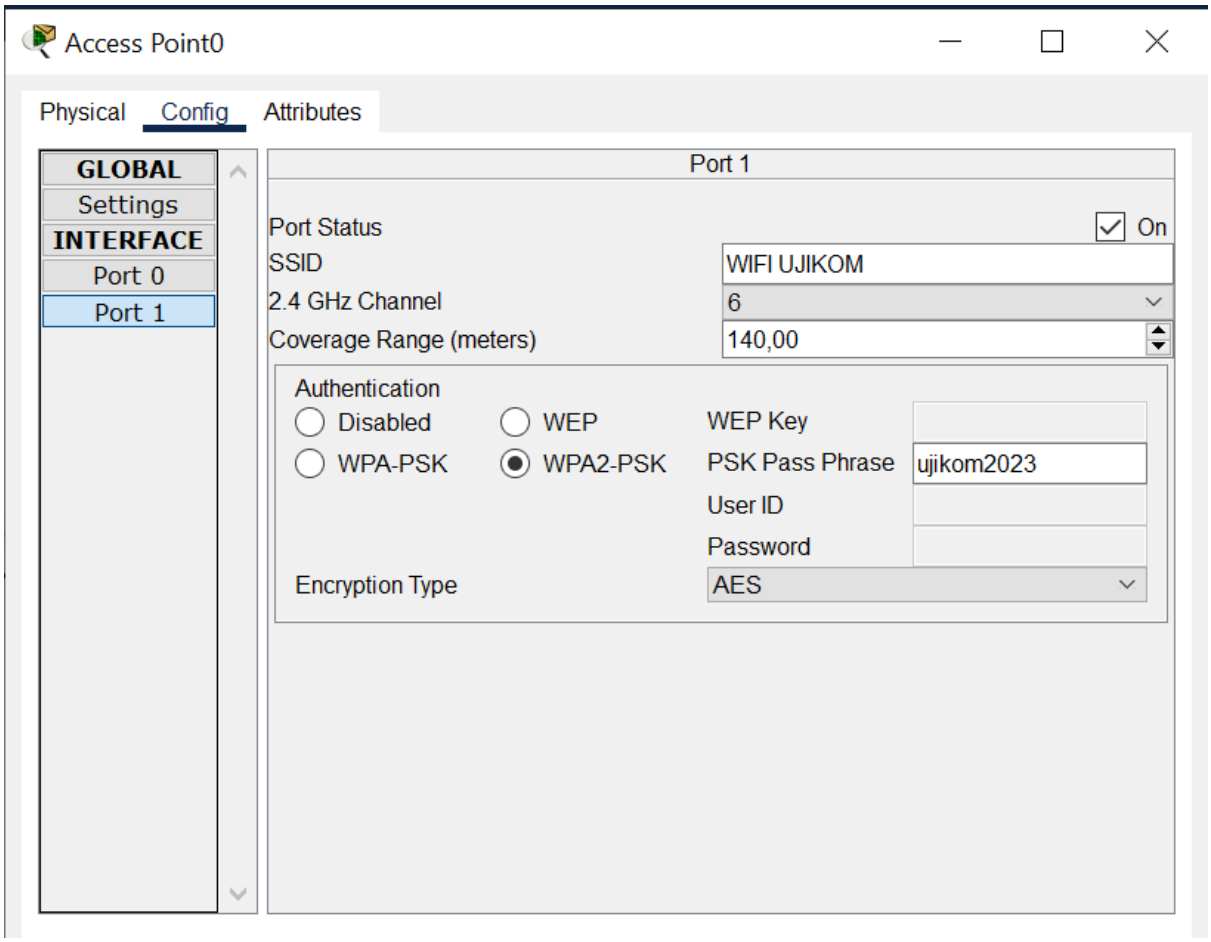
- Configuration Accesspoint device

Langkah setup pertama yang perlu di perhatikan di Accesspoint yaitu :

- Setup

SSID : WIFI UJIKOM

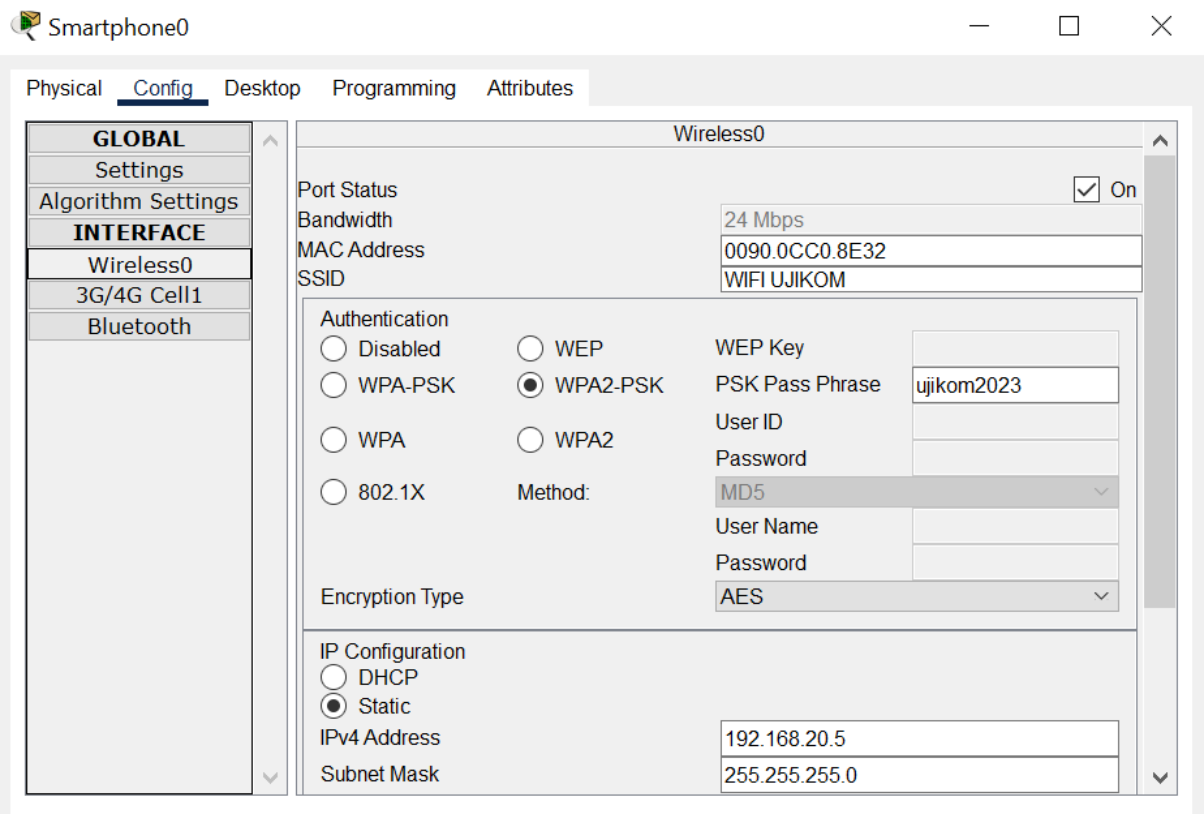
Pass : ujikom2023



- Configuration Smarthphone device

Langkah setup pertama yang di perhatikan di Smarthpone yaitu :

- Koneksikan ke wireless atau SSID yang sudah di setup SSID : WIFI UJIKOM, Password : ujikom2023

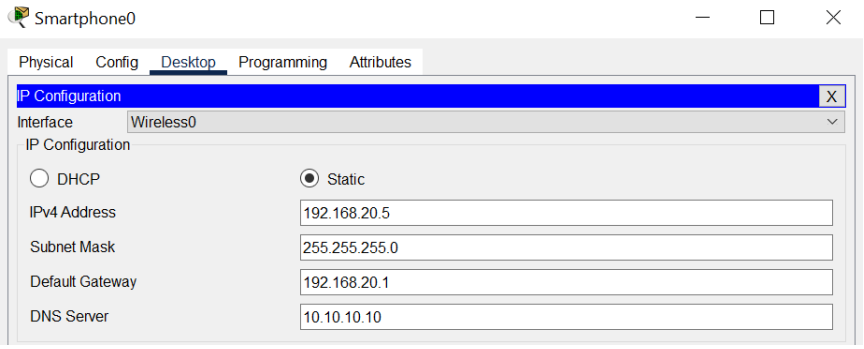


- Setup IP Address Static pada ke 3 handphone tersebut

IP Address HP0 : 192.168.20.5/24

IP Address HP1 : 192.168.20.6/24

IP Address HP2 : 192.168.20.7/24



- Configuration Switch device

- Add Mac Filtering pada setiap interface sesuai dengan mac terhubung

```
Switch>
Switch>enable
Switch#
Switch#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#interface FastEthernet0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport port-security
Switch(config-if)#switchport port-security mac-address sticky
Switch(config-if)#switchport port-security mac-address 0001.C7DA.5756
Found duplicate mac-address 0001.c7da.5756.
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/1
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport port-security
Switch(config-if)#switchport port-security mac-address sticky
Switch(config-if)#switchport port-security mac-address 000D.BD73.A741
Found duplicate mac-address 000d.bd73.a741.
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/2
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/3
Switch(config-if)#switchport mode access
Switch(config-if)#switchport port-security
Switch(config-if)#switchport port-security mac-address sticky
Switch(config-if)#switchport port-security mac-address 00D0.587D.6B80
Found duplicate mac-address 00d0.587d.6b80.
Switch(config-if)#
```

Hasil:

```
Switch#show mac-address-table
          Mac Address Table
-------------------------------------------

Vlan    Mac Address       Type        Ports
----    -----------       --------    -----

   1    0001.c7da.5756    STATIC      Fa0/1
   1    000d.bd73.a741    STATIC      Fa0/2
   1    00d0.587d.6b80    STATIC      Fa0/3
Switch#
```

3. Testing Hasil Configuration

- Test Ping dari PC0

PC0 ke PC1

Result :

```
C:\>ping 192.168.20.9

Pinging 192.168.20.9 with 32 bytes of data:

Reply from 192.168.20.9: bytes=32 time<1ms TTL=128
Reply from 192.168.20.9: bytes=32 time<1ms TTL=128
Reply from 192.168.20.9: bytes=32 time<1ms TTL=128
Reply from 192.168.20.9: bytes=32 time<1ms TTL=128
```

PC0 ke Smarthphone0

Result :

```
C:\>ping 192.168.20.2

Pinging 192.168.20.2 with 32 bytes of data:

Reply from 192.168.20.2: bytes=32 time=6ms TTL=128
Reply from 192.168.20.2: bytes=32 time=8ms TTL=128
Reply from 192.168.20.2: bytes=32 time=5ms TTL=128
Reply from 192.168.20.2: bytes=32 time=6ms TTL=128
```

PC0 ke Laptop0

Result :

```
C:\>ping 192.168.20.5

Pinging 192.168.20.5 with 32 bytes of data:

Reply from 192.168.20.5: bytes=32 time=2ms TTL=128
Reply from 192.168.20.5: bytes=32 time=23ms TTL=128
Reply from 192.168.20.5: bytes=32 time=38ms TTL=128
Reply from 192.168.20.5: bytes=32 time=30ms TTL=128
```

RESULT FINISH