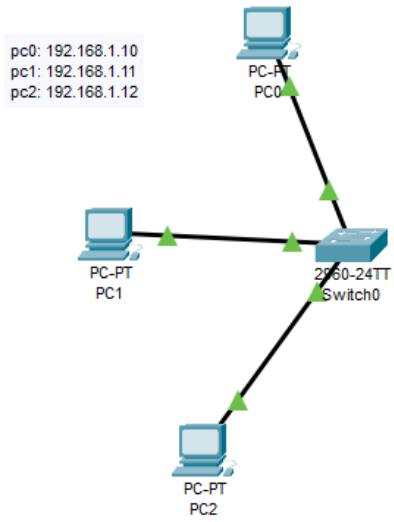
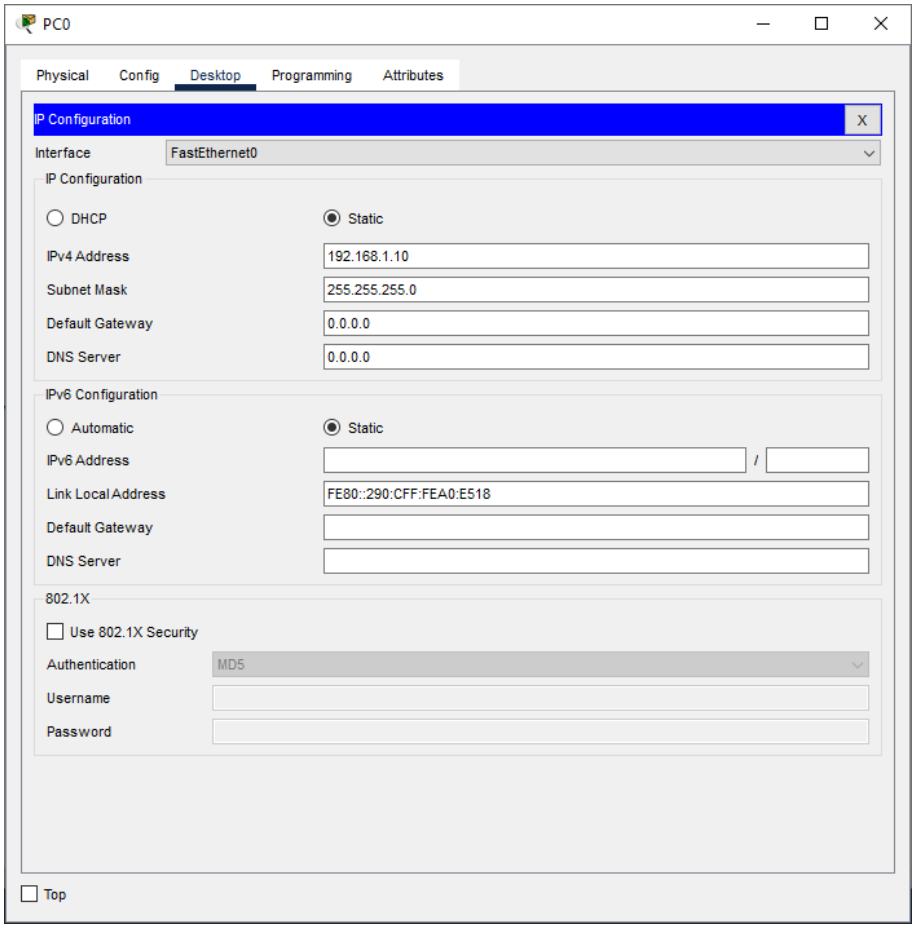
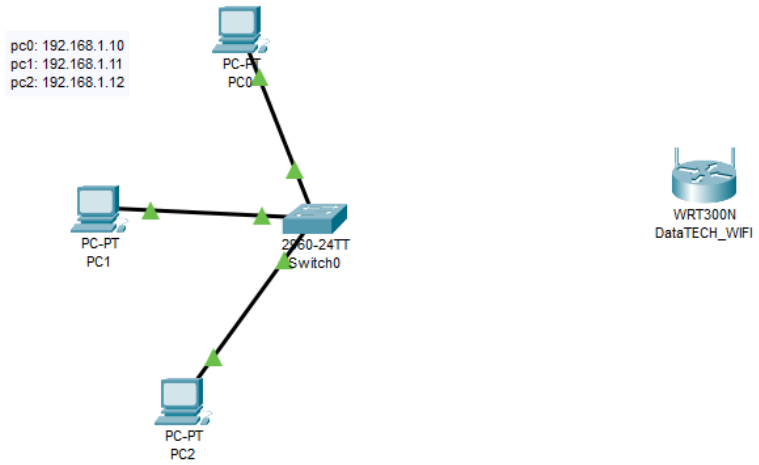
Laboratorio 15

En el laboratorio usando packet tracer realizaremos las siguientes conexiones: Ethernet, Wifi, Fibra Óptica y Bluetooth

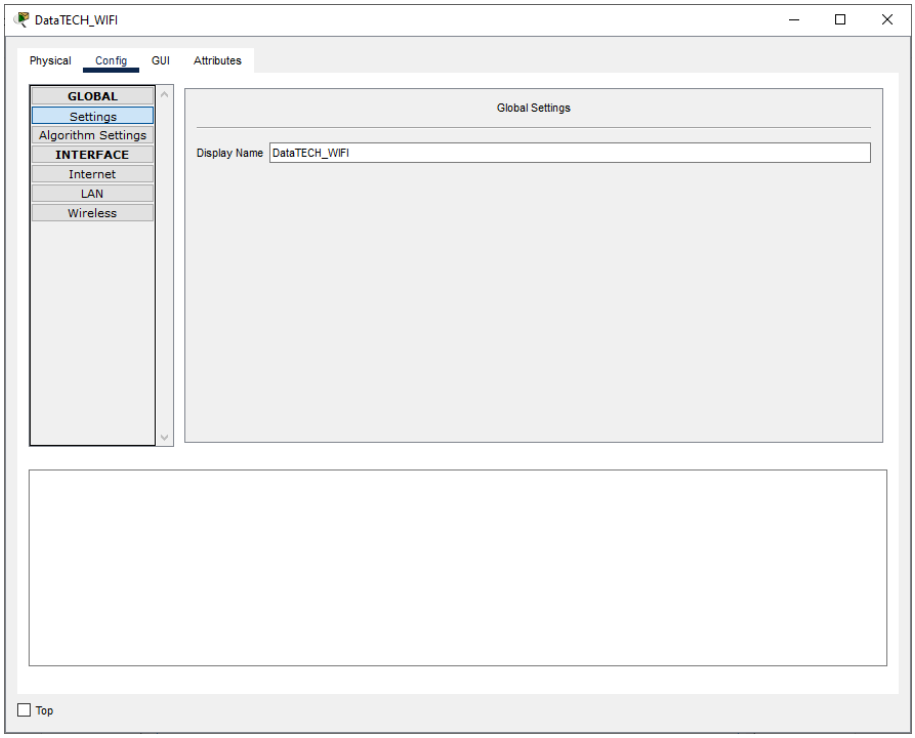


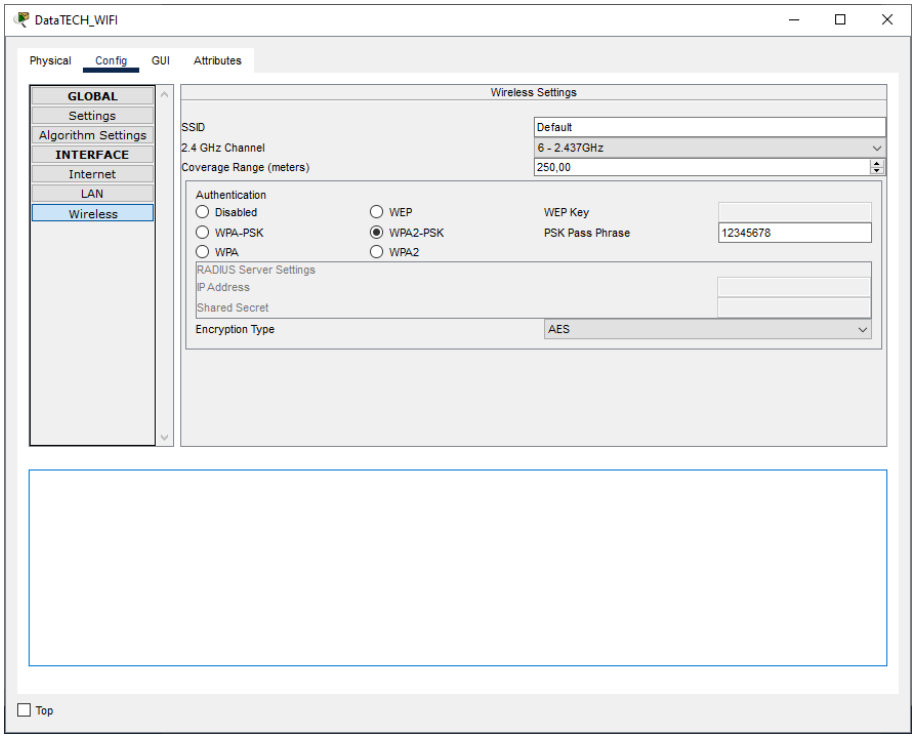


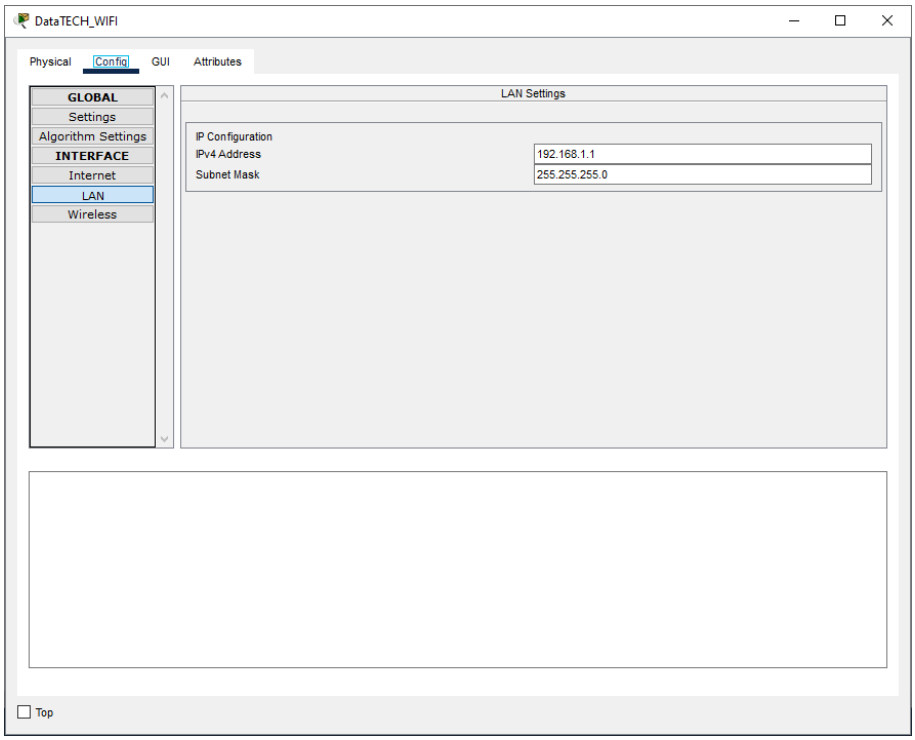
```
C:\>ping 192.168.1.11

Pinging 192.168.1.11 with 32 bytes of data:

Reply from 192.168.1.11: bytes=32 time<1ms TTL=128
Reply from 192.168.1.11: bytes=32 time=7ms TTL=128
Reply from 192.168.1.11: bytes=32 time<1ms TTL=128
Reply from 192.168.1.11: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.11:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 7ms, Average = 1ms
```

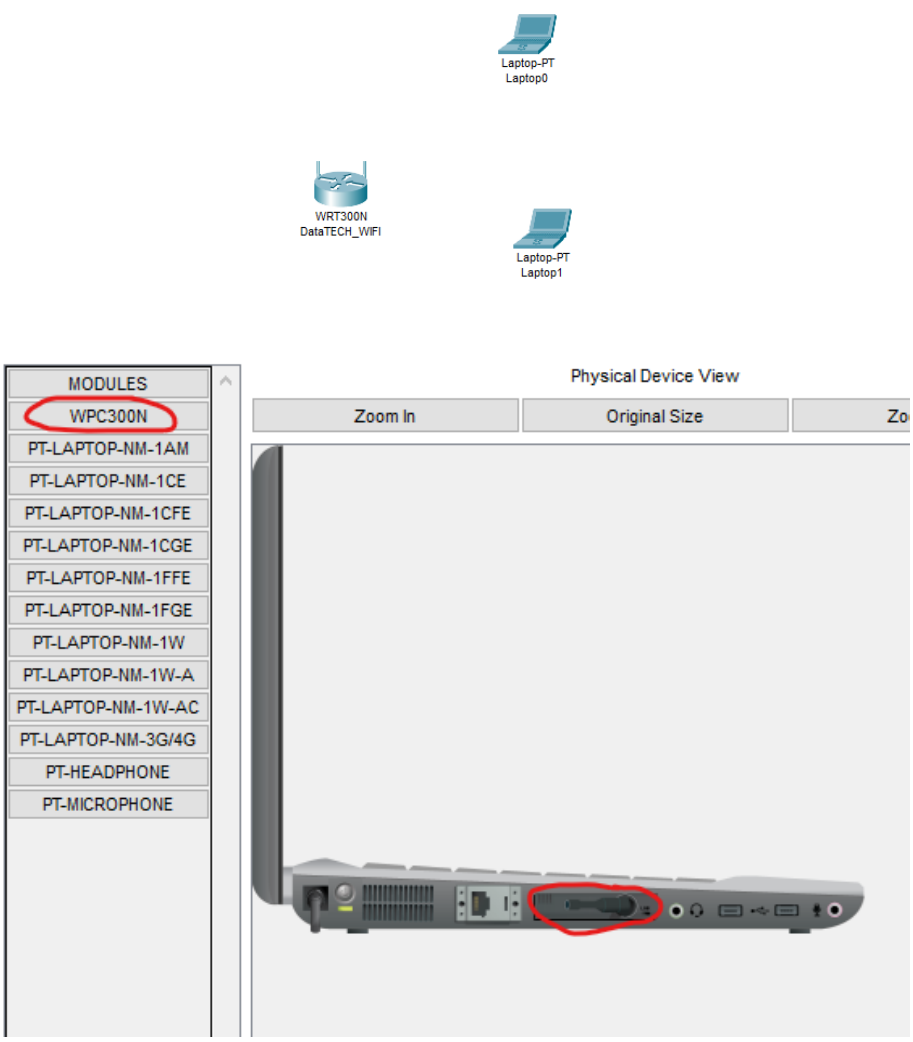


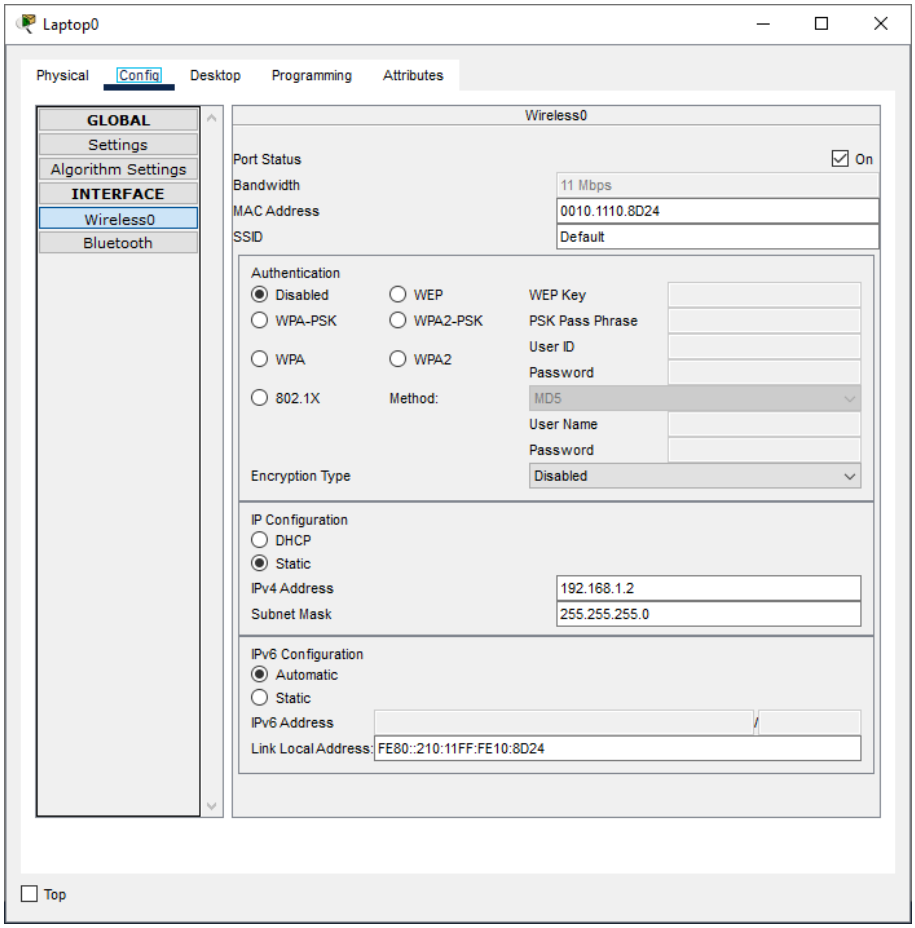
Ahora realizaremos conexiones usando WIFI:

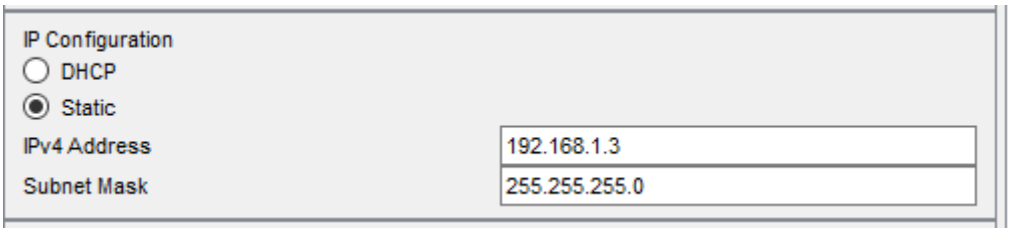



DataTECH_WIFI
Physical
Config
GUI
Attributes
GLOBAL
Settings
Algorithm Settings
INTERFACE
Internet
LAN
Wireless
Wireless Settings
SSID
Default
2.4 GHz Channel
6 - 2.437GHz
Coverage Range (meters)
250,00
Authentication
Disabled
WEP
WEP Key
WPA-PSK
WPA2-PSK
PSK Pass Phrase
12345678
WPA
WPA2
RADIUS Server Settings
IP Address
Shared Secret
Encryption Type
AES
Top

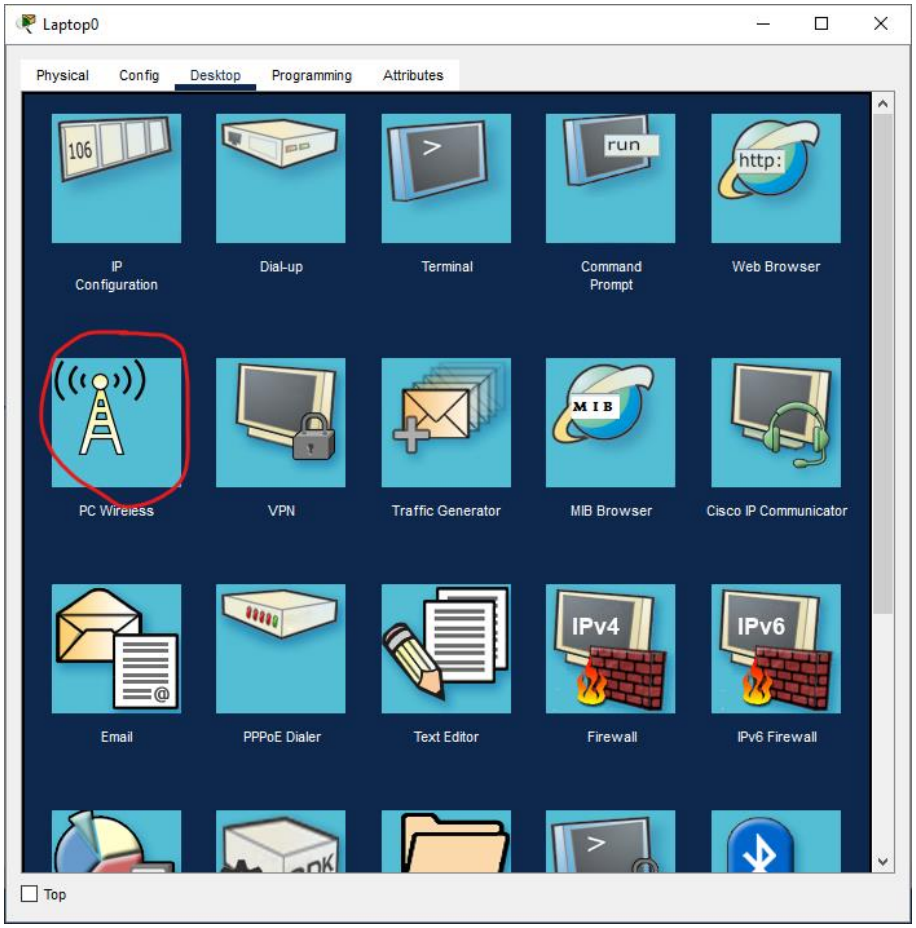

DataTECH_WIFI
Physical
Config
GUI
Attributes
GLOBAL
Settings
Algorithm Settings
INTERFACE
Internet
LAN
Wireless
LAN Settings
IP Configuration
IPv4 Address
192.168.1.1
Subnet Mask
255.255.255.0
Top

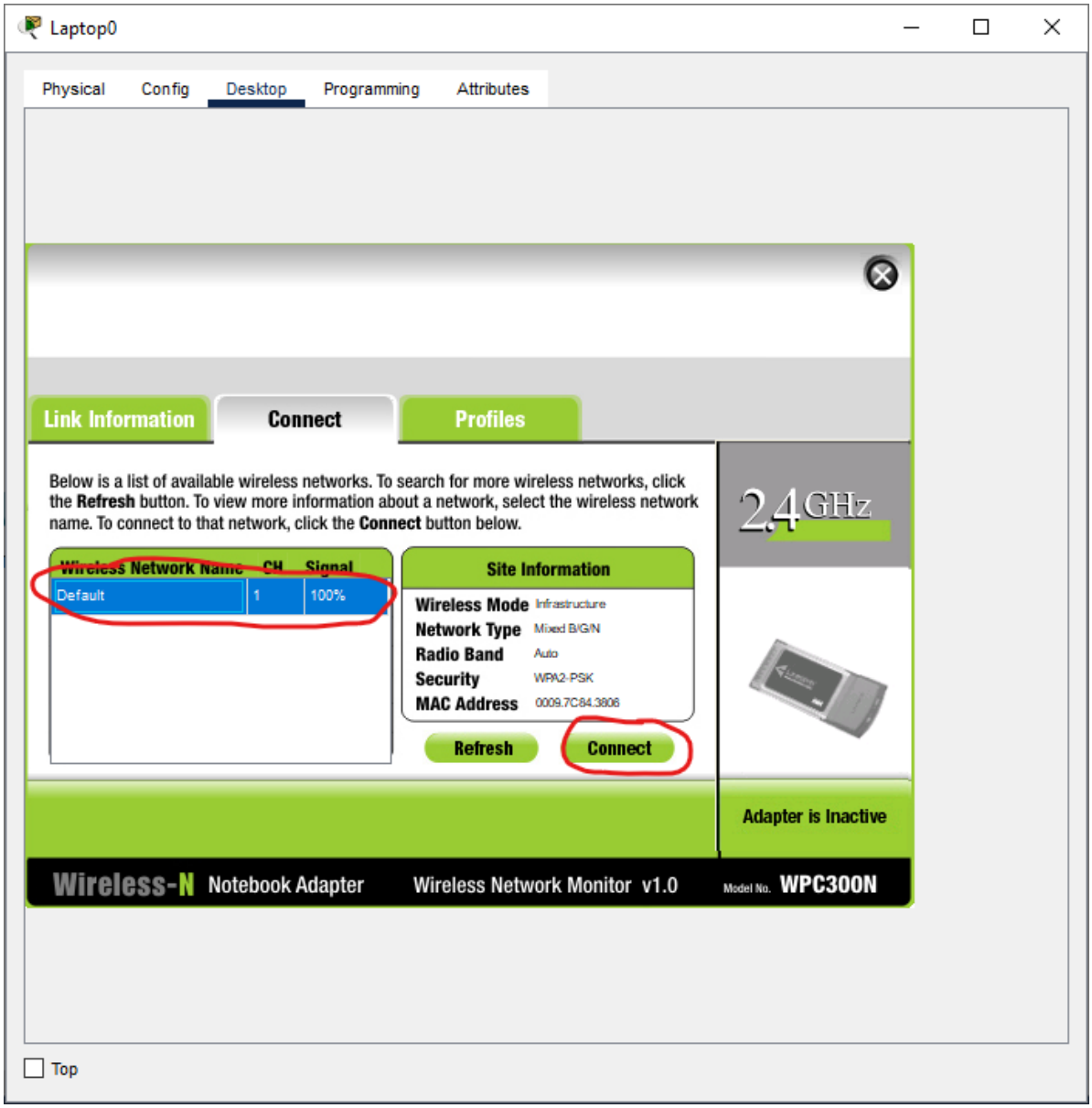

Laptop-PT
Laptop0
WRT300N
DataTECH_WIFI
Laptop-PT
Laptop1
MODULES
WPC300N
PT-LAPTOP-NM-1AM
PT-LAPTOP-NM-1CE
PT-LAPTOP-NM-1CFE
PT-LAPTOP-NM-1CGE
PT-LAPTOP-NM-1FFE
PT-LAPTOP-NM-1FGE
PT-LAPTOP-NM-1W
PT-LAPTOP-NM-1W-A
PT-LAPTOP-NM-1W-AC
PT-LAPTOP-NM-3G/4G
PT-HEADPHONE
PT-MICROPHONE
Physical Device View
Zoom In
Original Size
Zo

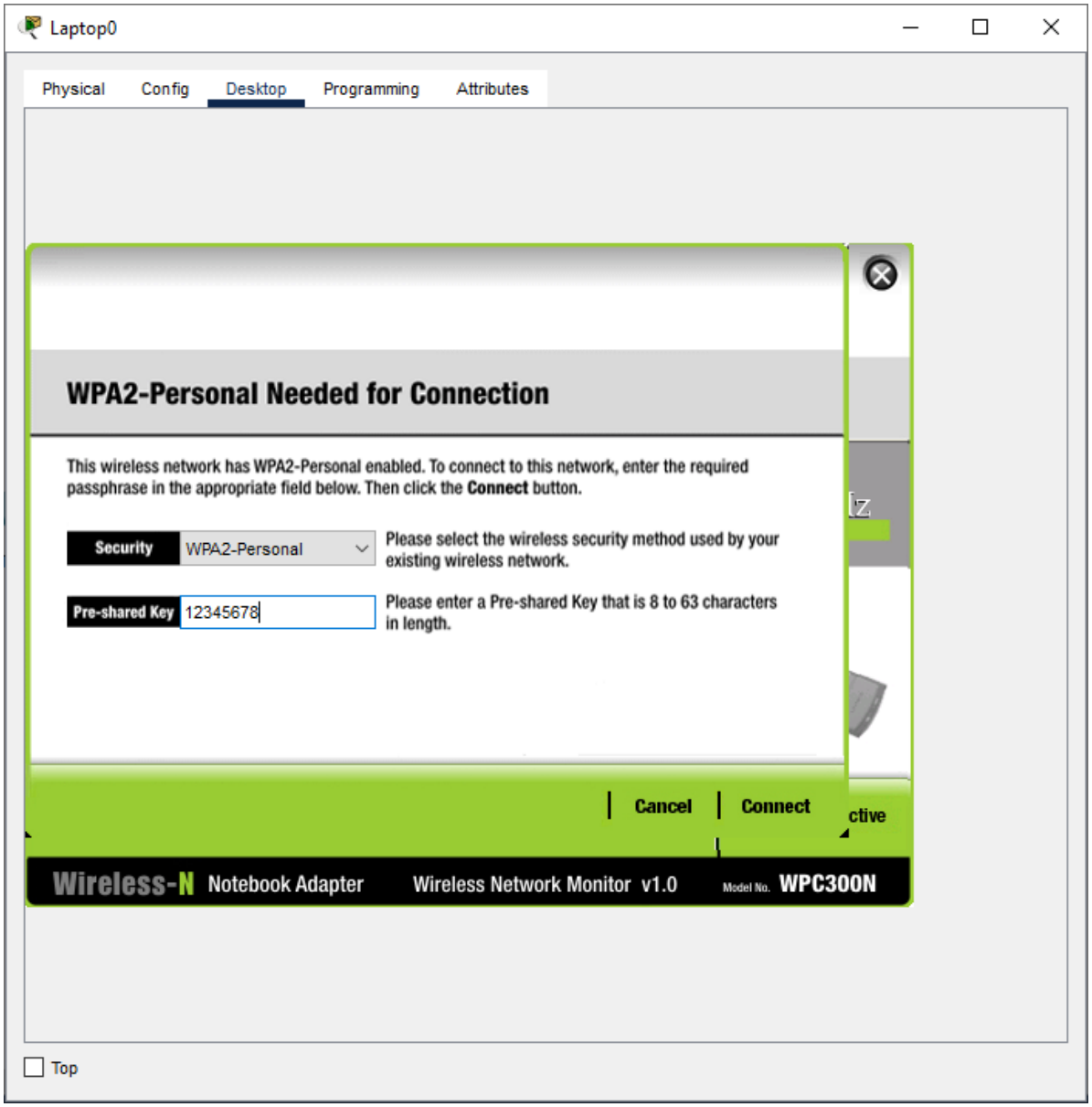




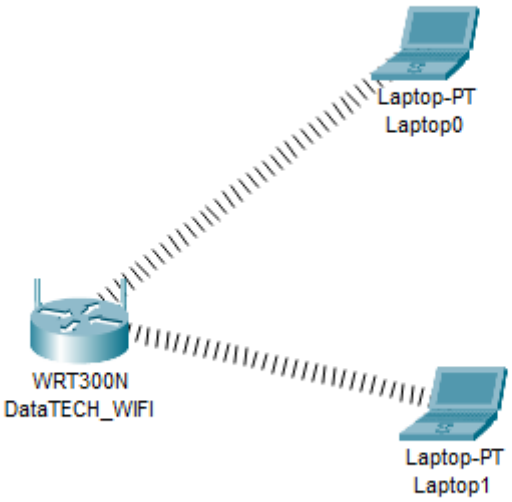
Ahora se conectará la laptop a la conexión inalámbrica.


Laptop0
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Dial-up
Terminal
Command Prompt
Web Browser
PC Wireless
VPN
Traffic Generator
MIB Browser
Cisco IP Communicator
Email
PPPoE Dialer
Text Editor
Firewall
IPv6 Firewall
Top

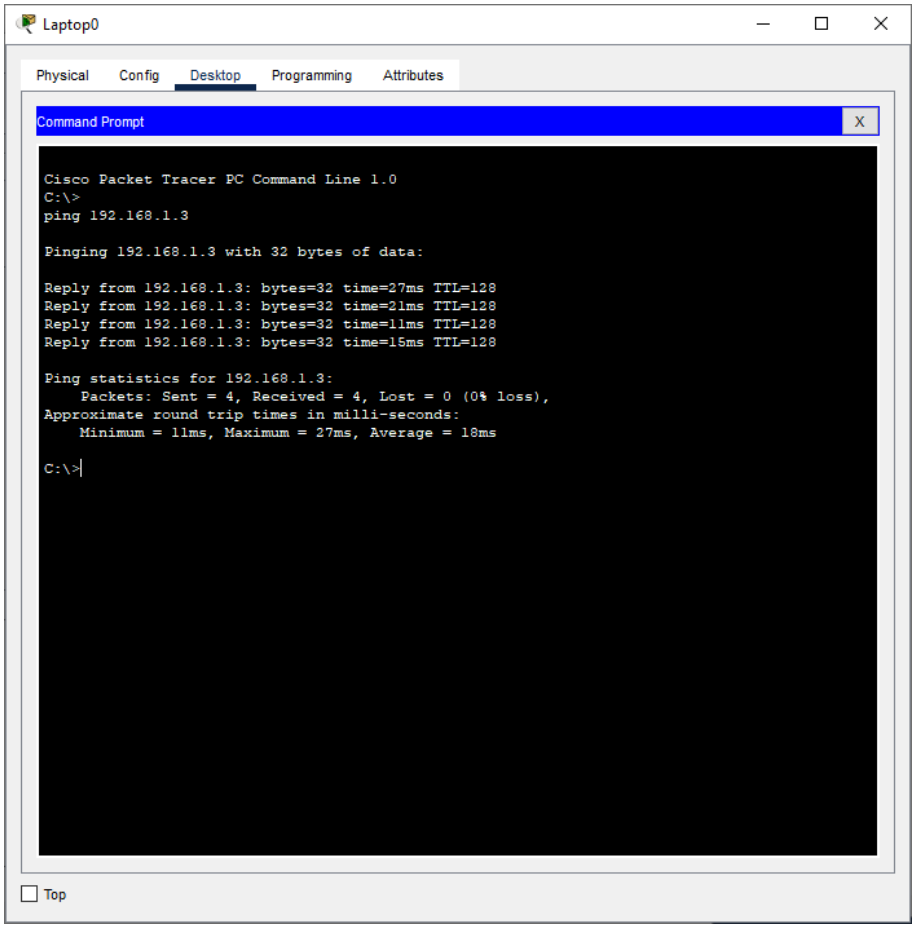

Laptop0
Physical
Config
Desktop
Programming
Attributes
Link Information
Connect
Profiles
Below is a list of available wireless networks. To search for more wireless networks, click the Refresh button. To view more information about a network, select the wireless network name. To connect to that network, click the Connect button below.
Wireless Network Name
CH
Signal
Default
1
100%
Site Information
Wireless Mode
Infrastructure
Network Type
Mixed B/G/N
Radio Band
Auto
Security
WPA2-PSK
MAC Address
0009.7C84.3806
Refresh
Connect
2.4GHz
Adapter is Inactive
Wireless-N
Notebook Adapter
Wireless Network Monitor v1.0
Model No.
WPC300N
Top



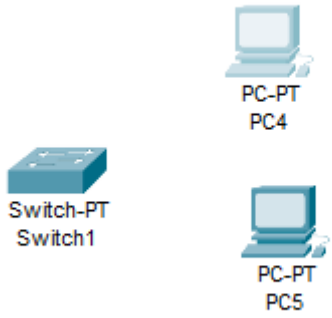
Luego se repite el proceso con el otro laptop, nos quedaría el siguiente resultado.

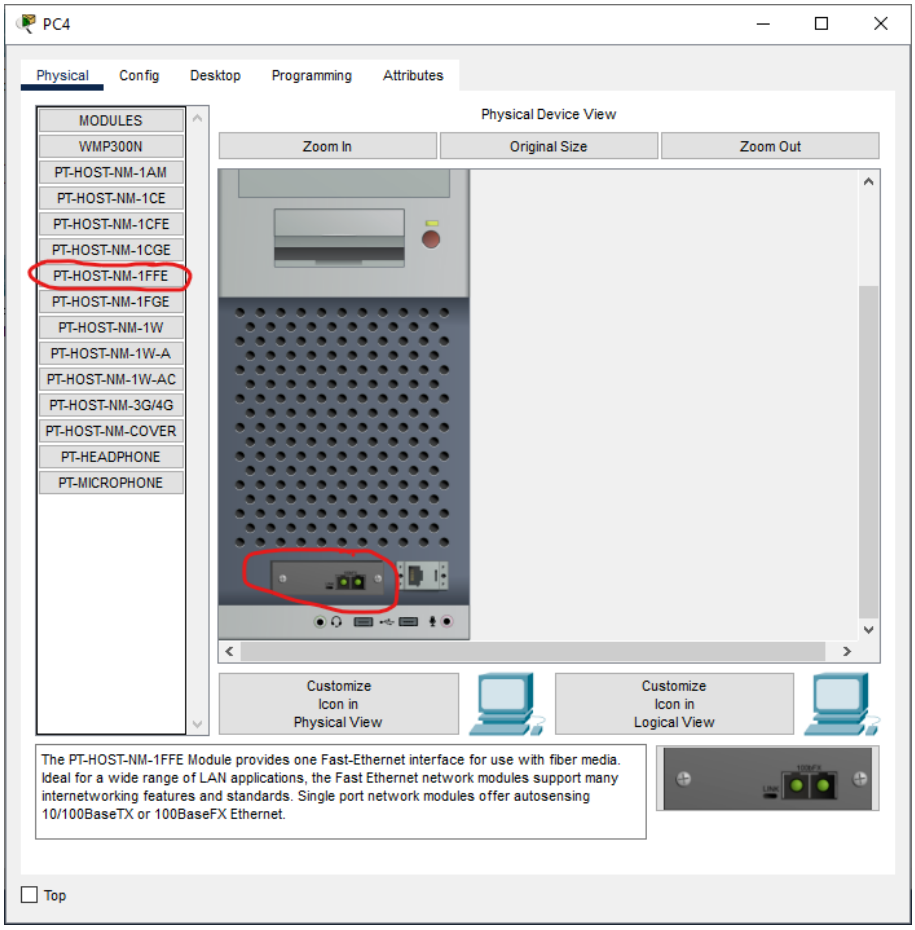


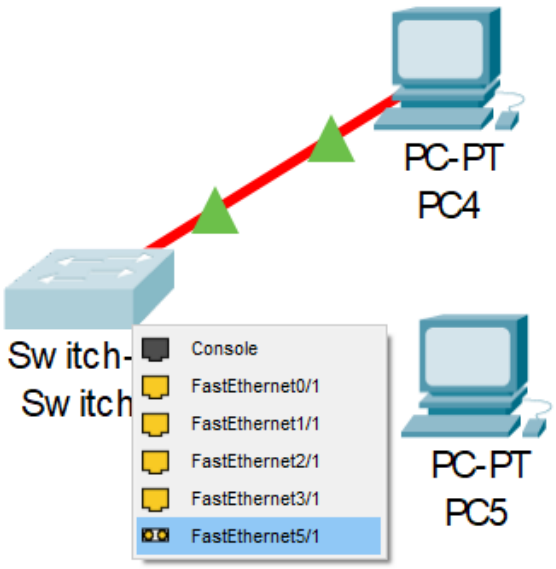
Revisamos que están conectados a la red usando el comando ping en el Command Promp de la laptop

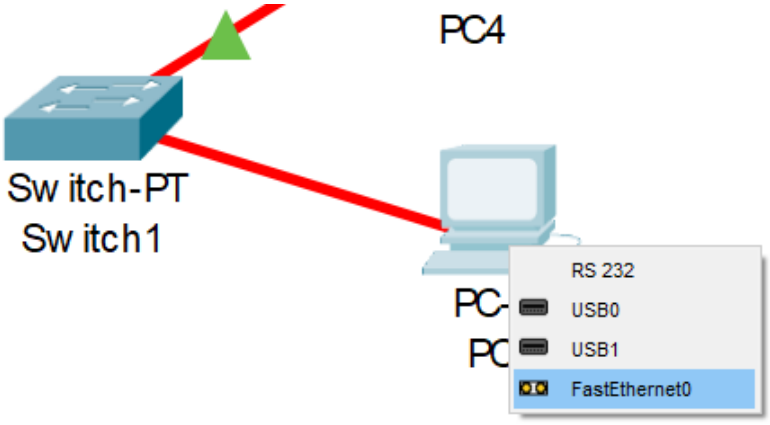


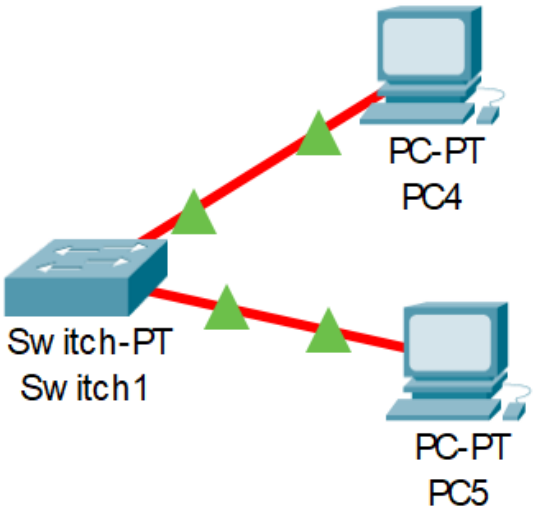
Después de terminar de configurar el router y las laptops, creamos un Switch y 2 computadores para realizar conexiones usando fibra óptica.



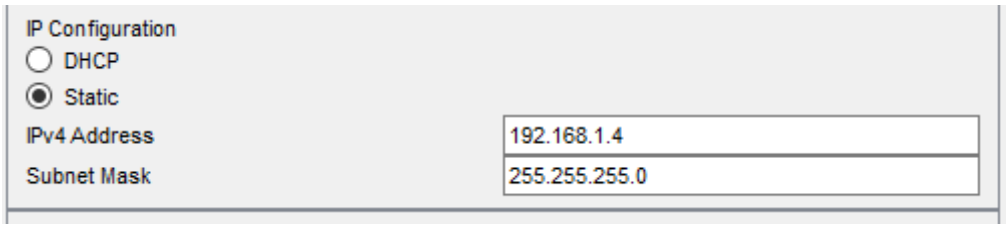


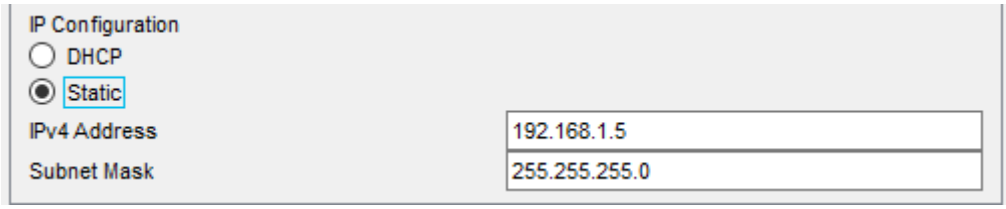

PC-PT
PC4
Sw itch-
Sw itch
Console
FastEthernet0/1
FastEthernet1/1
FastEthernet2/1
FastEthernet3/1
FastEthernet5/1
PC-PT
PC5

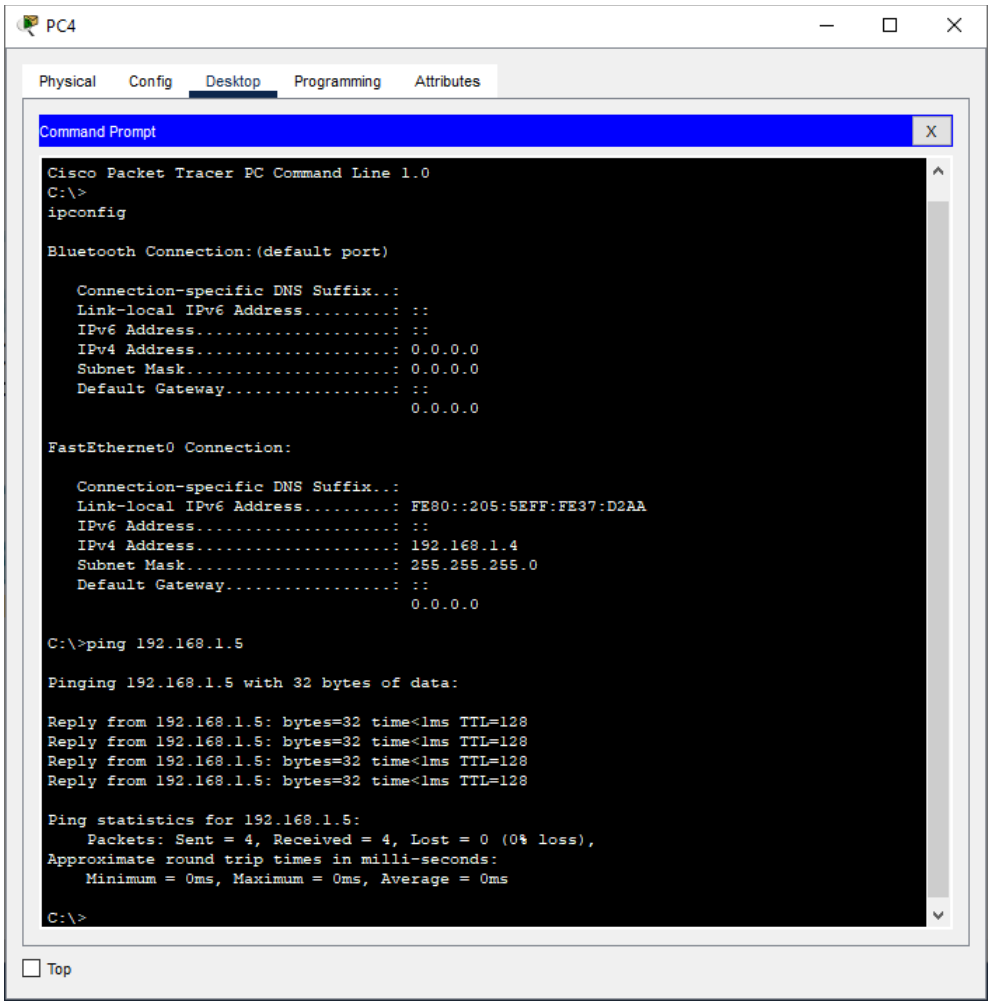




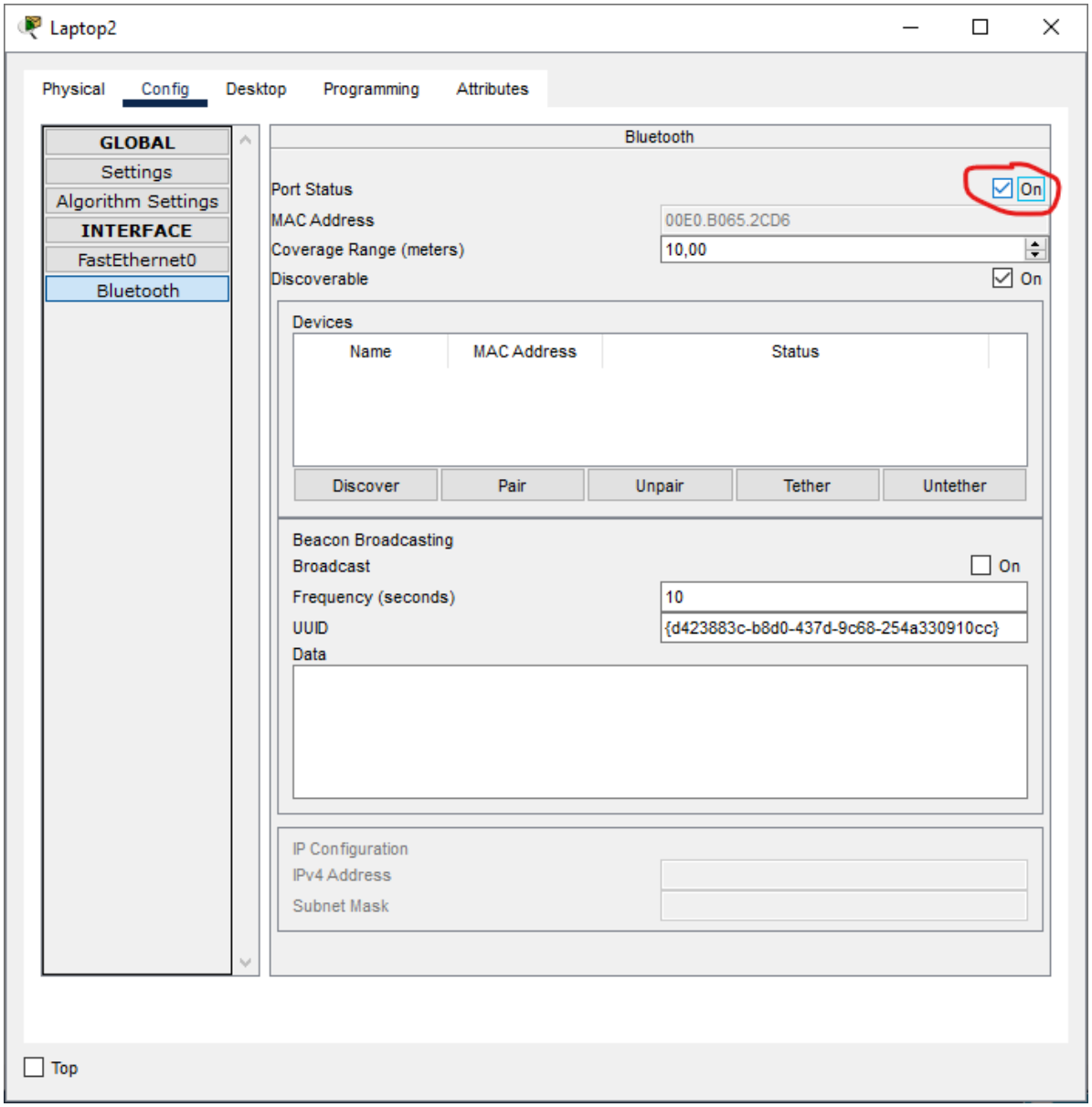
PC4: 192.168.1.4
PC5: 192.168.1.5

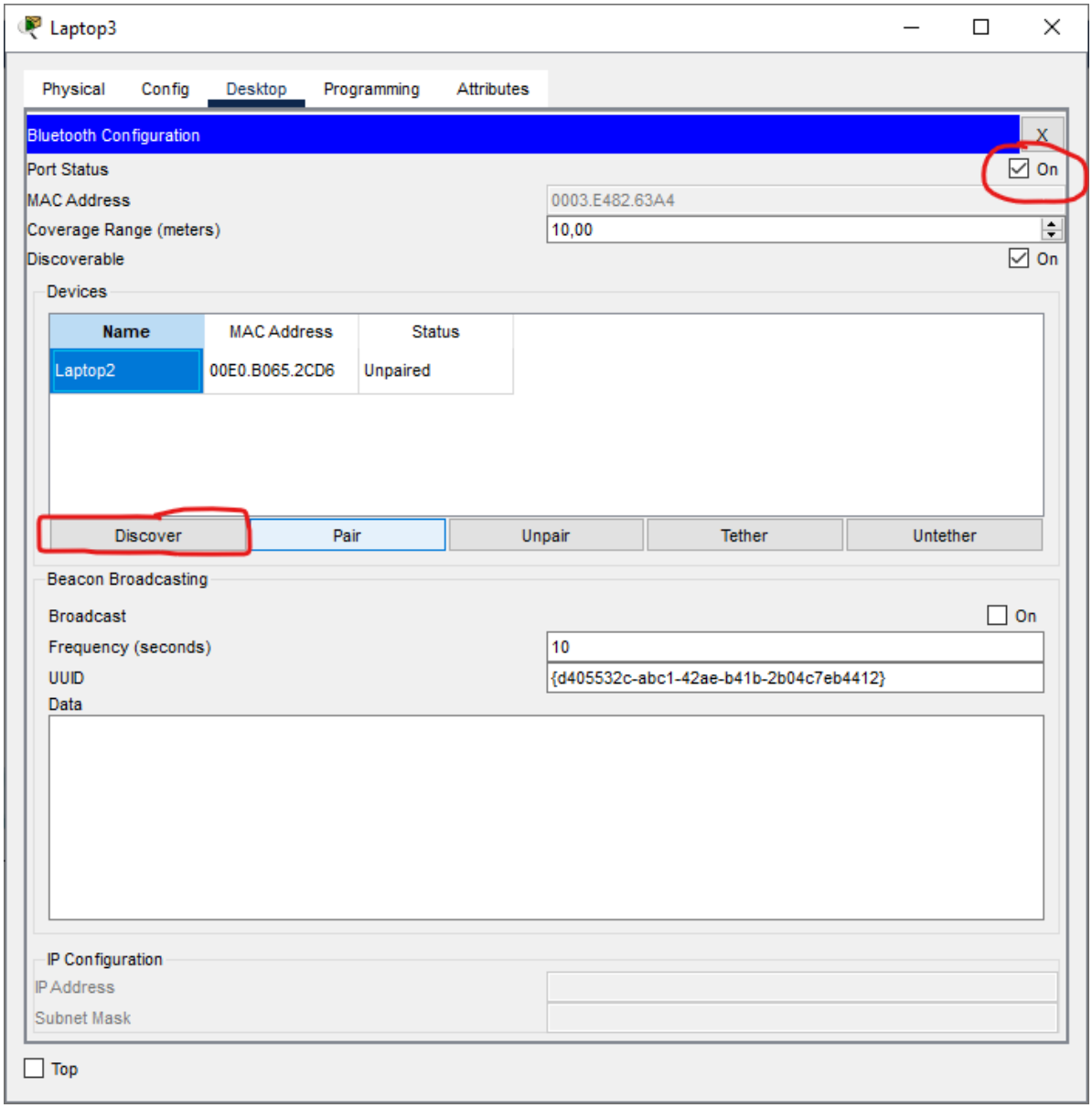


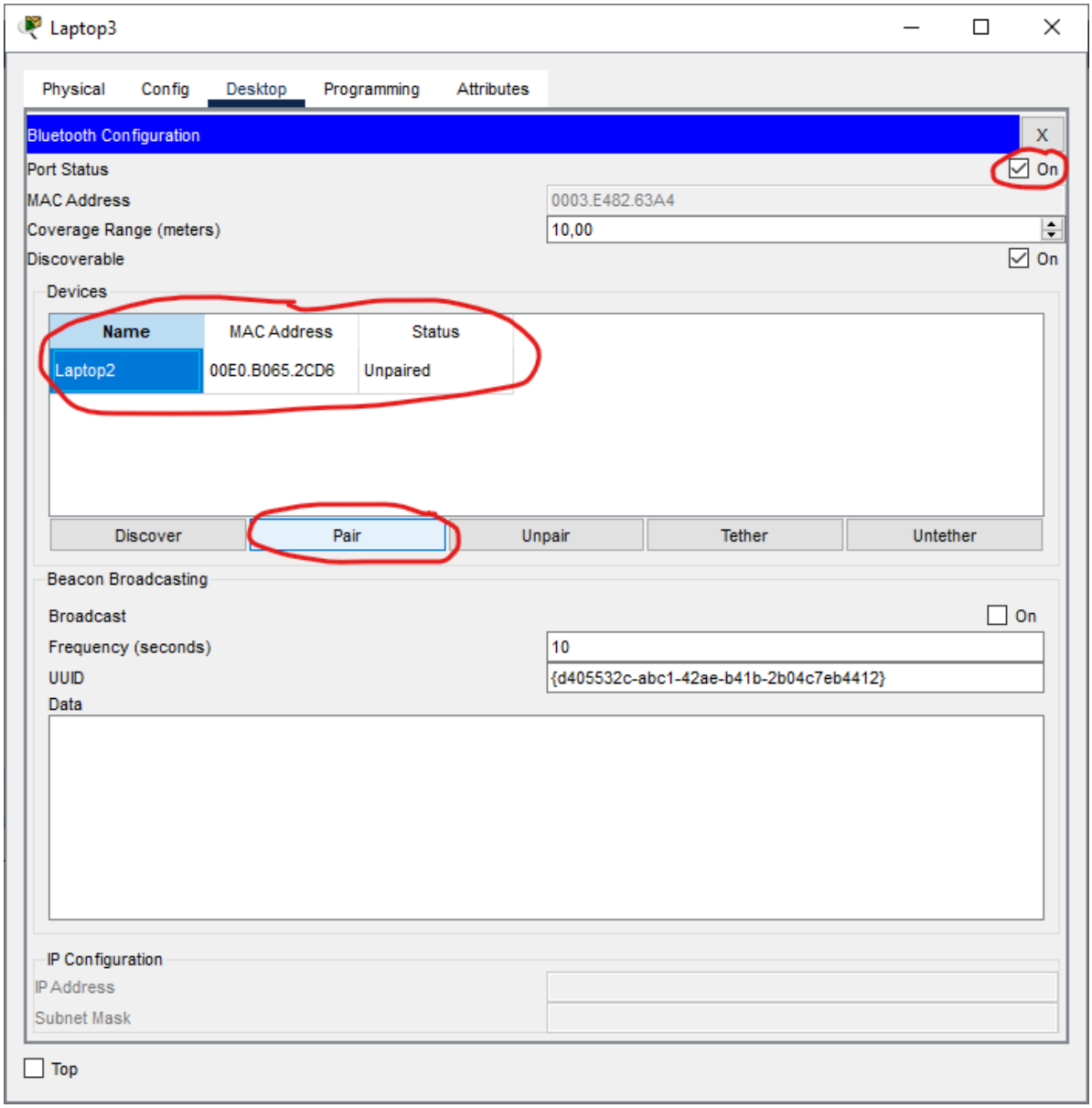


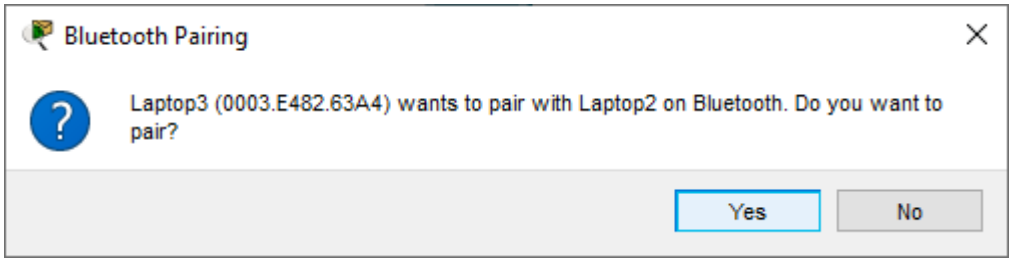


Ahora se realizarán unas conexiones por Bluetooth

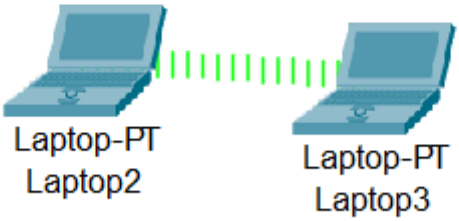

Laptop2
Physical
Config
Desktop
Programming
Attributes
GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth
Bluetooth
Port Status
On
MAC Address
00E0.B065.2CD6
Coverage Range (meters)
10,00
Discoverable
On
Devices
Name
MAC Address
Status
Discover
Pair
Unpair
Tether
Untether
Beacon Broadcasting
Broadcast
On
Frequency (seconds)
10
UUID
{d423883c-b8d0-437d-9c68-254a330910cc}
Data
IP Configuration
IPv4 Address
Subnet Mask
Top


Laptop3
Physical
Config
Desktop
Programming
Attributes
Bluetooth Configuration
X
Port Status
On
MAC Address
0003.E482.63A4
Coverage Range (meters)
10,00
Discoverable
On
Devices
Name
MAC Address
Status
Laptop2
00E0.B065.2CD6
Unpaired
Discover
Pair
Unpair
Tether
Untether
Beacon Broadcasting
Broadcast
On
Frequency (seconds)
10
UUID
{d405532c-abc1-42ae-b41b-2b04c7eb4412}
Data
IP Configuration
IP Address
Subnet Mask
Top


Laptop3
Physical
Config
Desktop
Programming
Attributes
Bluetooth Configuration
X
Port Status
On
MAC Address
0003.E482.63A4
Coverage Range (meters)
10,00
Discoverable
On
Devices
Name
MAC Address
Status
Laptop2
00E0.B065.2CD6
Unpaired
Discover
Pair
Unpair
Tether
Untether
Beacon Broadcasting
Broadcast
On
Frequency (seconds)
10
UUID
{d405532c-abc1-42ae-b41b-2b04c7eb4412}
Data
IP Configuration
IP Address
Subnet Mask
Top


Bluetooth Pairing
Laptop3 (0003.E482.63A4) wants to pair with Laptop2 on Bluetooth. Do you want to pair?
Yes
No

Bluetooth



Resultado