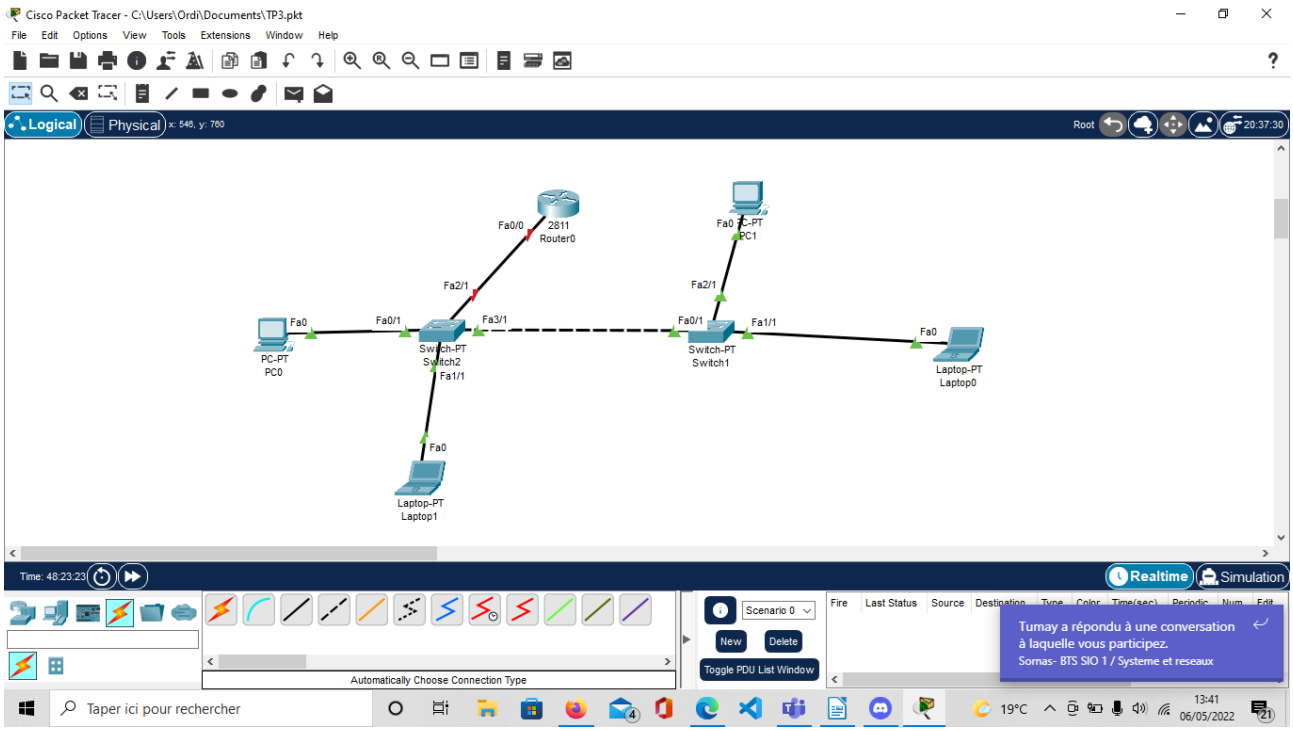
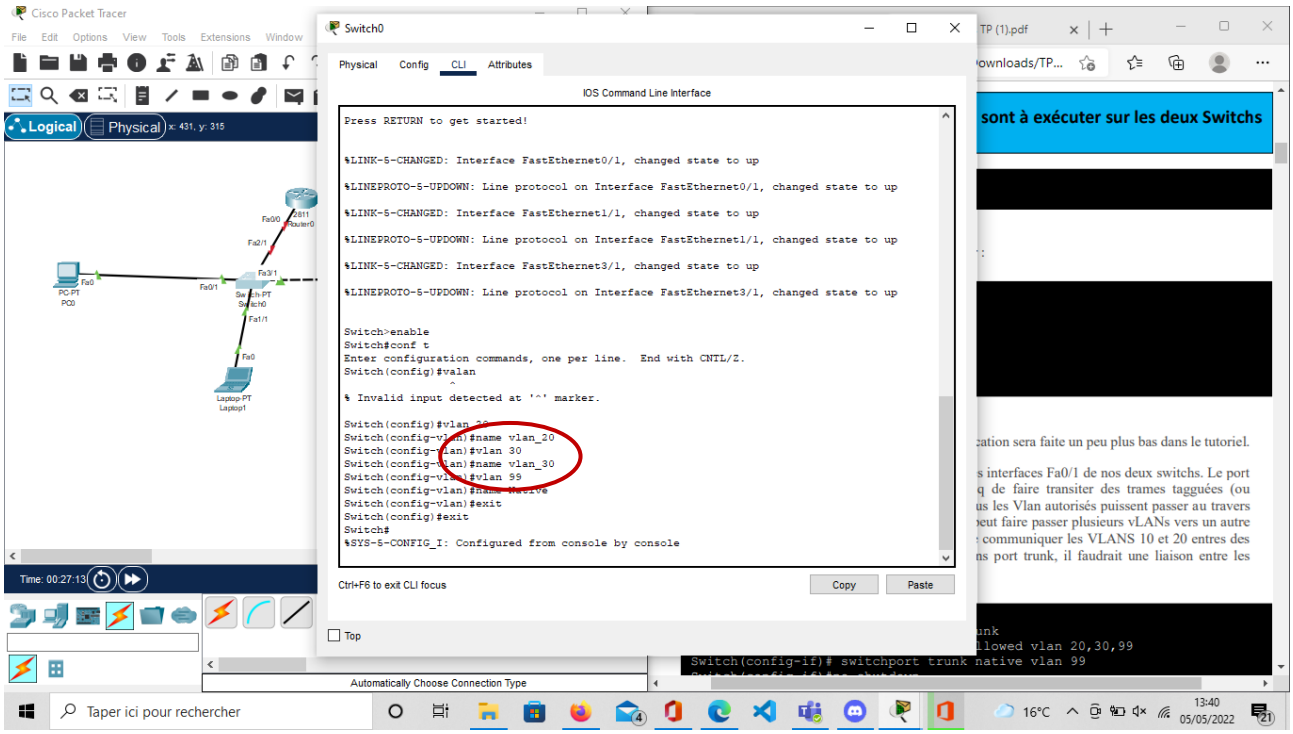
JORDY MORGAN EXPOSER
Partie 1 :

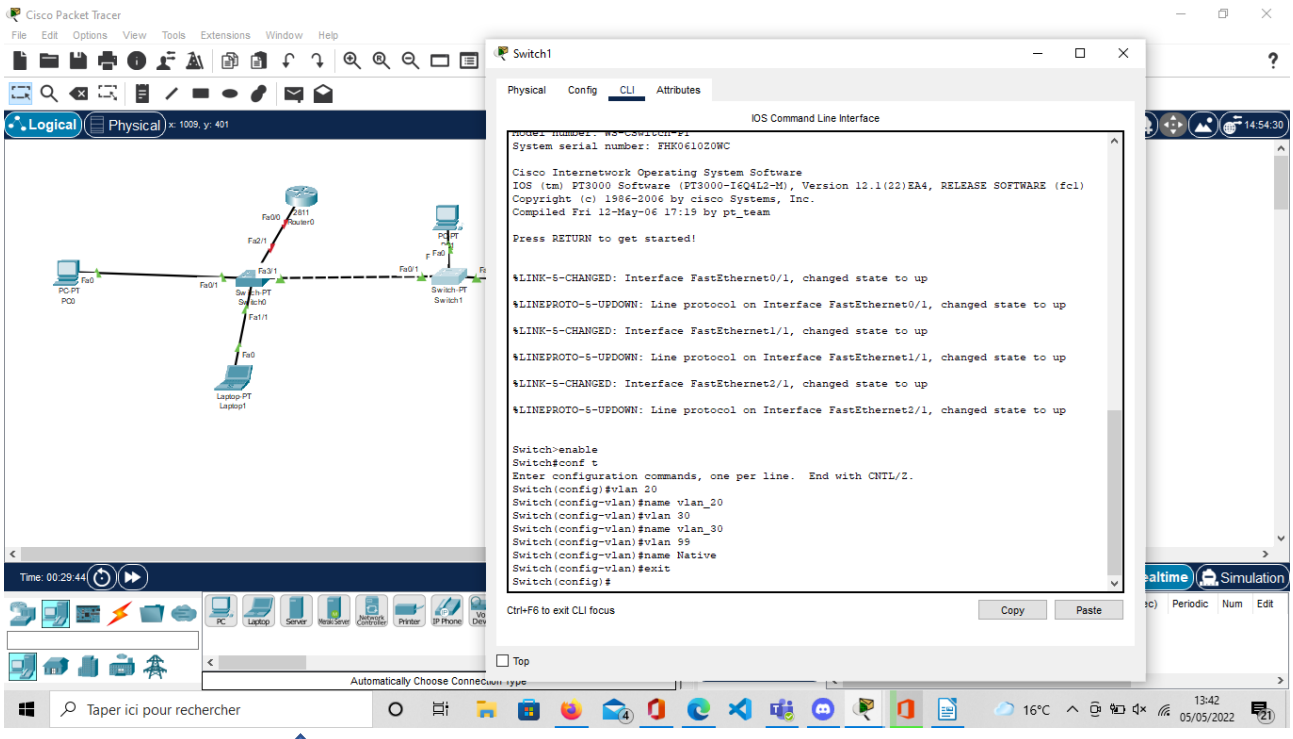
Donc tout d'abord nous avons reproduit le schéma ci-dessous :



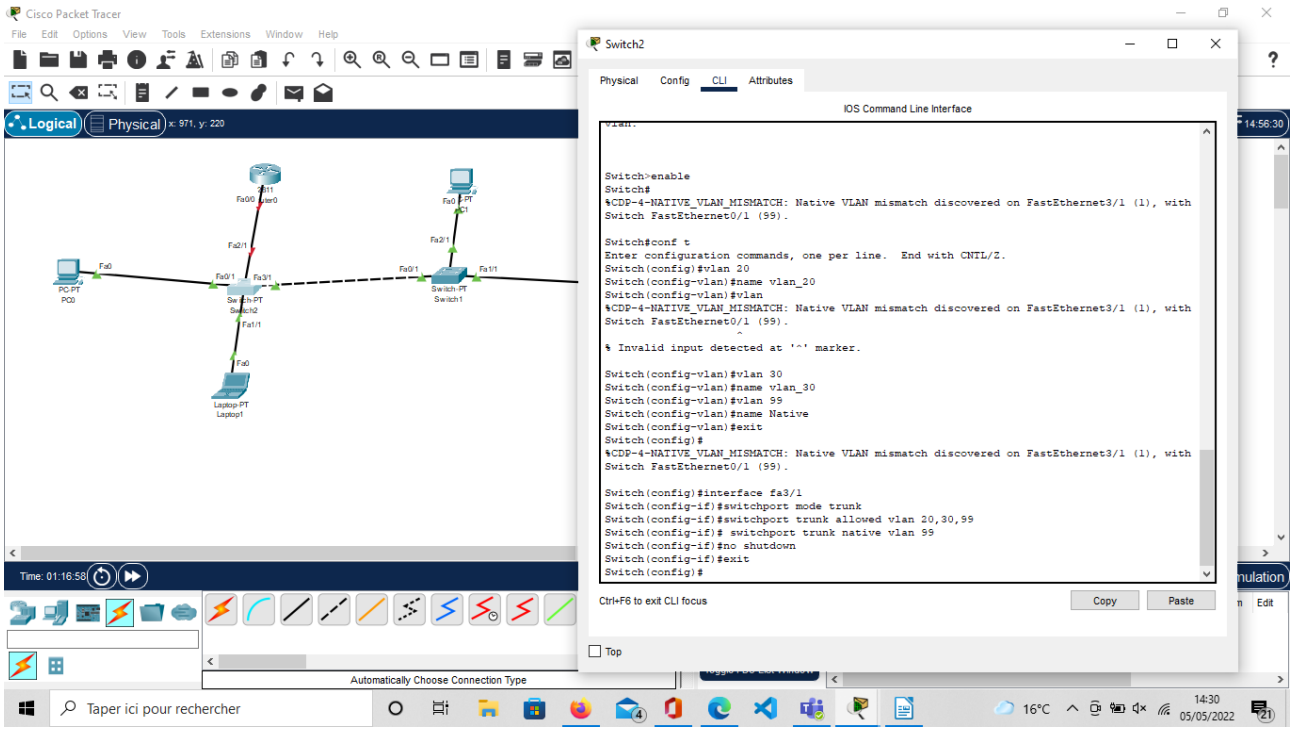
Pour chaque switch nous avons créée des Vlan :

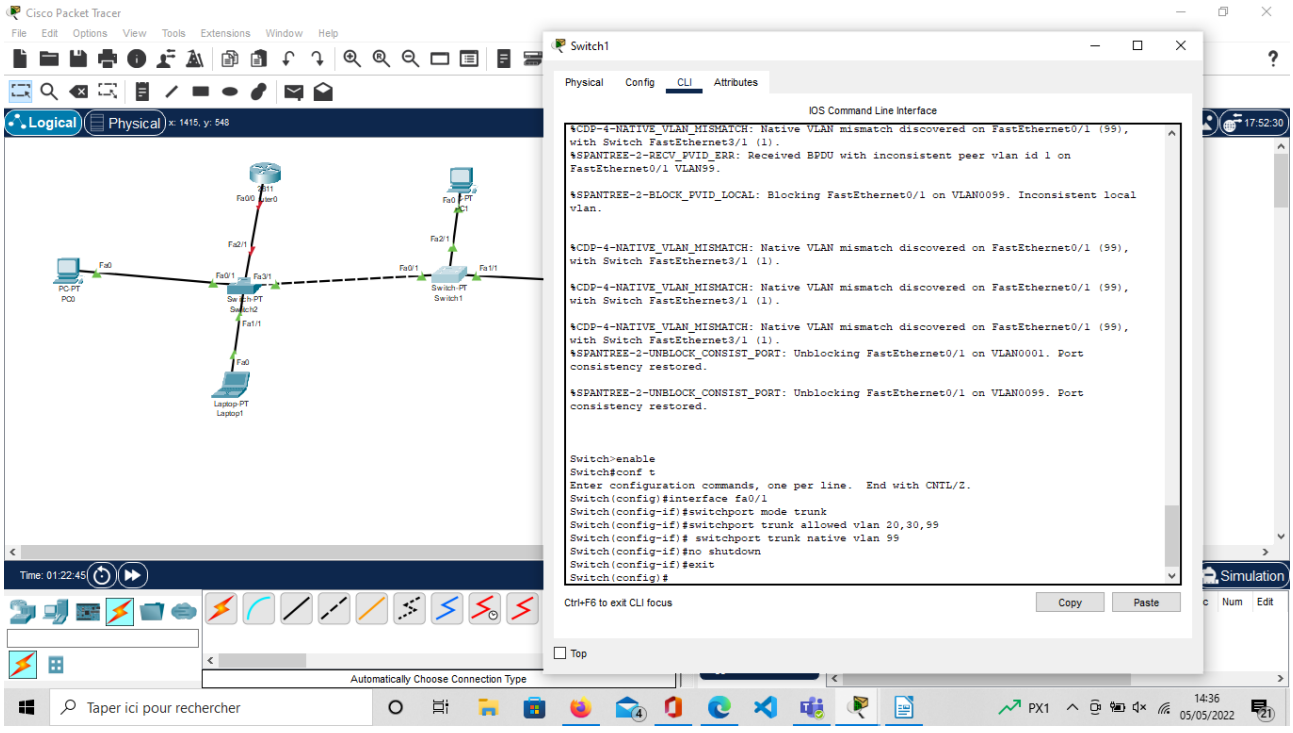
- Vlan 20
- Vlan 30
- Native 99

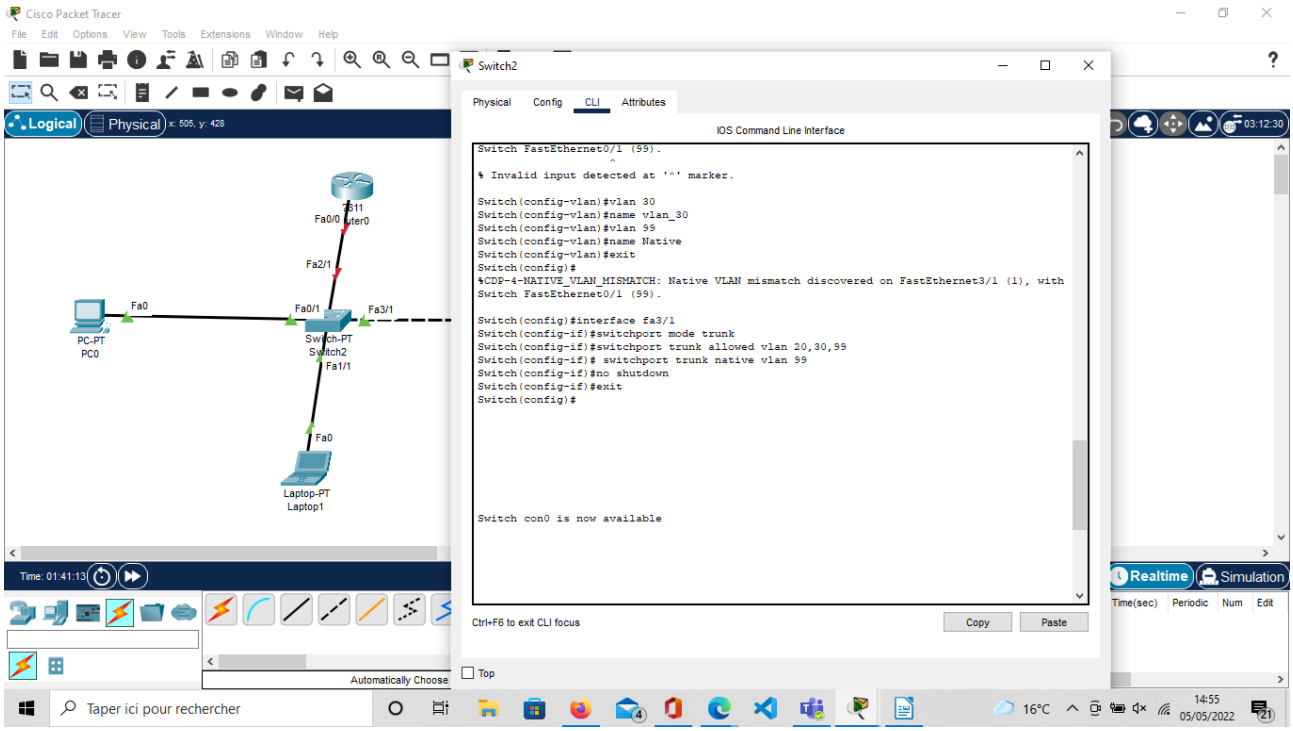


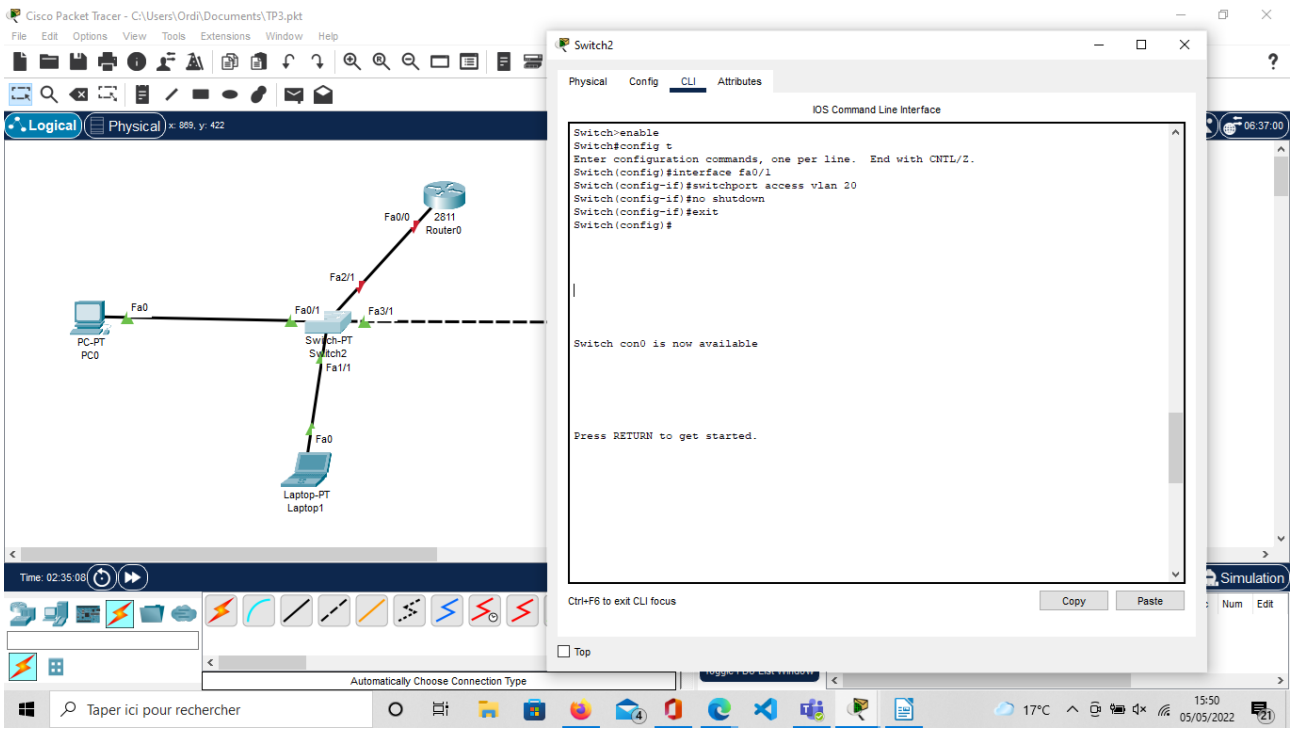


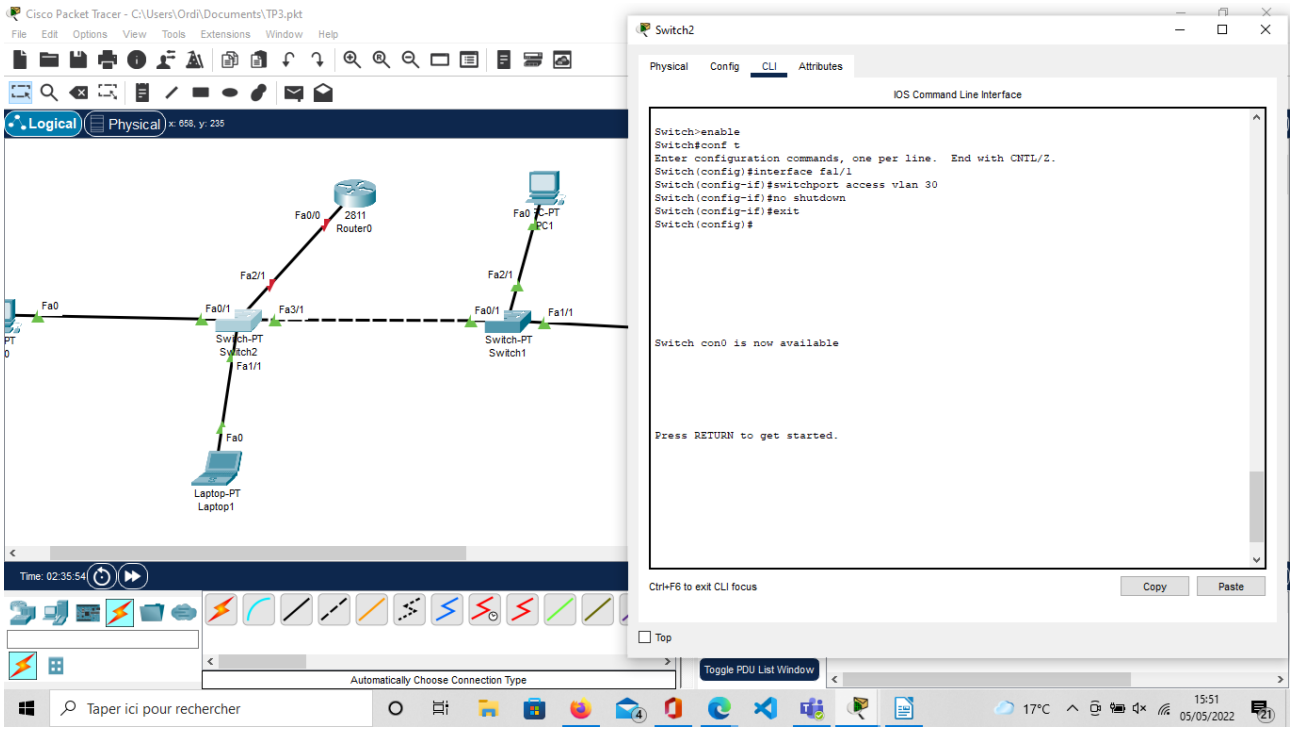
Ensuite nous avons relier (ouvert le flux) entres les deux interfaces des switches
Afin qu'il puisse communiquer.

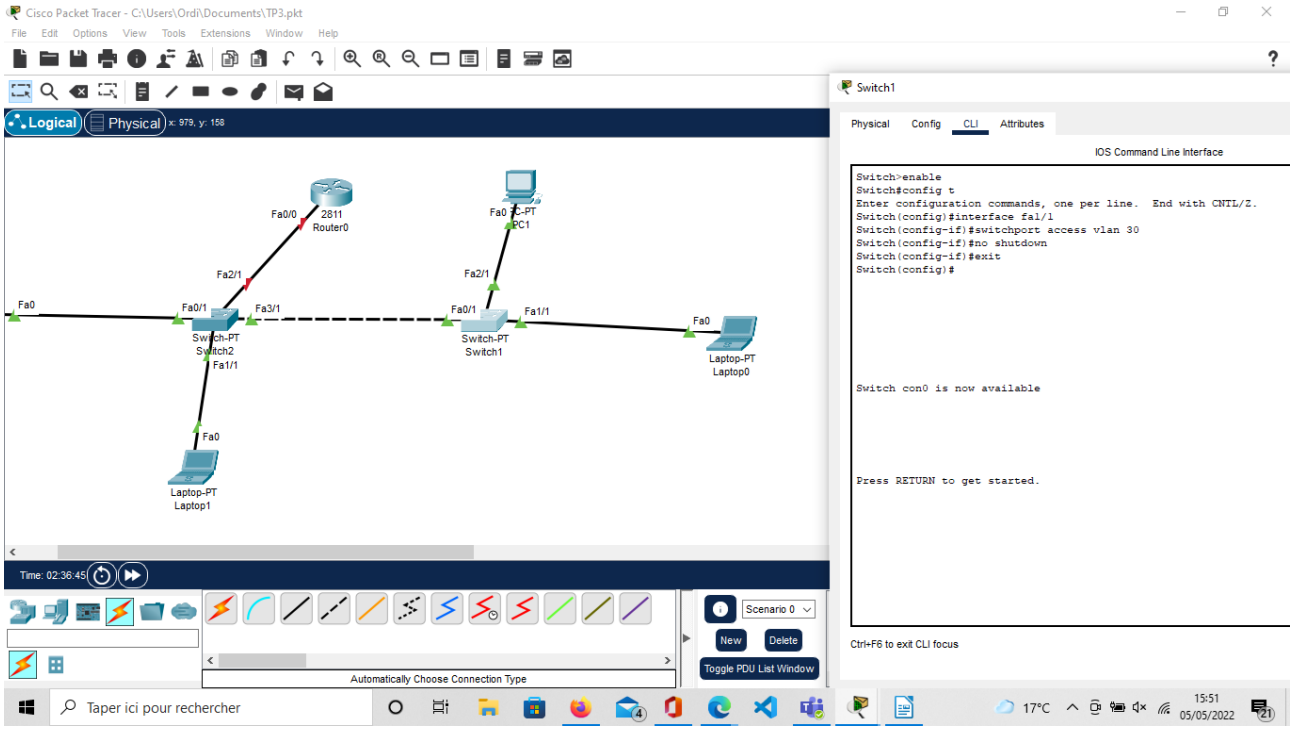

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 971, y: 220
Switch2
Physical Config CLI Attributes
IOS Command Line Interface
Switch>enable
Switch#
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on FastEthernet3/1 (1), with Switch FastEthernet0/1 (99).
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#vlan 20
Switch(config-vlan)#name vlan_20
Switch(config-vlan)#vlan
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on FastEthernet3/1 (1), with Switch FastEthernet0/1 (99).
% Invalid input detected at '^' marker.
Switch(config-vlan)#vlan 30
Switch(config-vlan)#name vlan_30
Switch(config-vlan)#vlan 99
Switch(config-vlan)#name Native
Switch(config-vlan)#exit
Switch(config)#
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on FastEthernet3/1 (1), with Switch FastEthernet0/1 (99).
Switch(config)#interface fa3/1
Switch(config-if)#switchport mode trunk
Switch(config-if)#switchport trunk allowed vlan 20,30,99
Switch(config-if)# switchport trunk native vlan 99
Switch(config-if)#no shutdown
Switch(config-if)#exit
Switch(config)#
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Time: 01:16:58
Automatically Choose Connection Type
Taper ici pour rechercher
16°C
14:30
05/05/2022

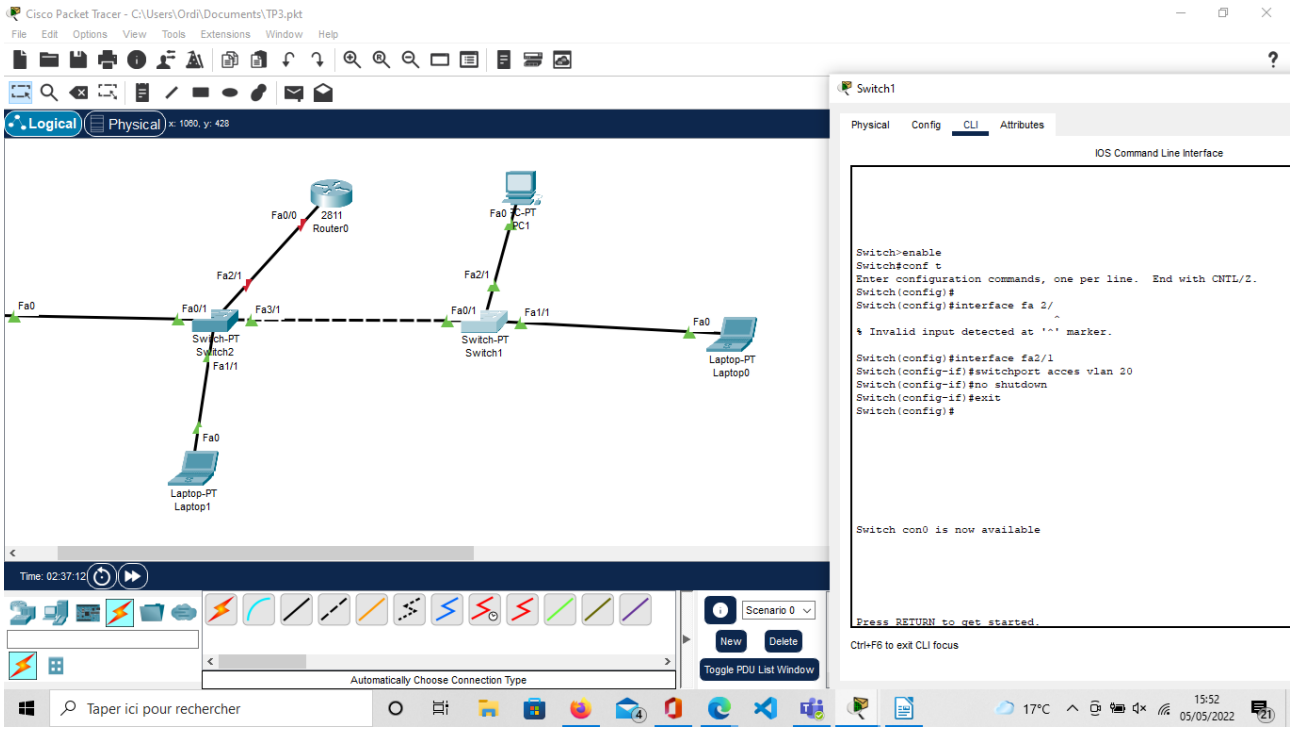

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 1415, y: 548
Switch1
Physical Config CLI Attributes
IOS Command Line Interface
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on FastEthernet0/1 (99), with Switch FastEthernet3/1 (1).
%SPANTREE-2-RECV_PVID_ERR: Received BPDU with inconsistent peer vlan id 1 on FastEthernet0/1 VLAN99.
%SPANTREE-2-BLOCK_PVID_LOCAL: Blocking FastEthernet0/1 on VLAN0099. Inconsistent local vlan.
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on FastEthernet0/1 (99), with Switch FastEthernet3/1 (1).
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on FastEthernet0/1 (99), with Switch FastEthernet3/1 (1).
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on FastEthernet0/1 (99), with Switch FastEthernet3/1 (1).
%SPANTREE-2-UNBLOCK_CONSIST_PORT: Unblocking FastEthernet0/1 on VLAN0001. Port consistency restored.
%SPANTREE-2-UNBLOCK_CONSIST_PORT: Unblocking FastEthernet0/1 on VLAN0099. Port consistency restored.
Switch>enable
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface fa0/1
Switch(config-if)#switchport mode trunk
Switch(config-if)#switchport trunk allowed vlan 20,30,99
Switch(config-if)# switchport trunk native vlan 99
Switch(config-if)#no shutdown
Switch(config-if)#exit
Switch(config)#
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Time: 01:22:45
Automatically Choose Connection Type
Taper ici pour rechercher
PX1
14:36
05/05/2022

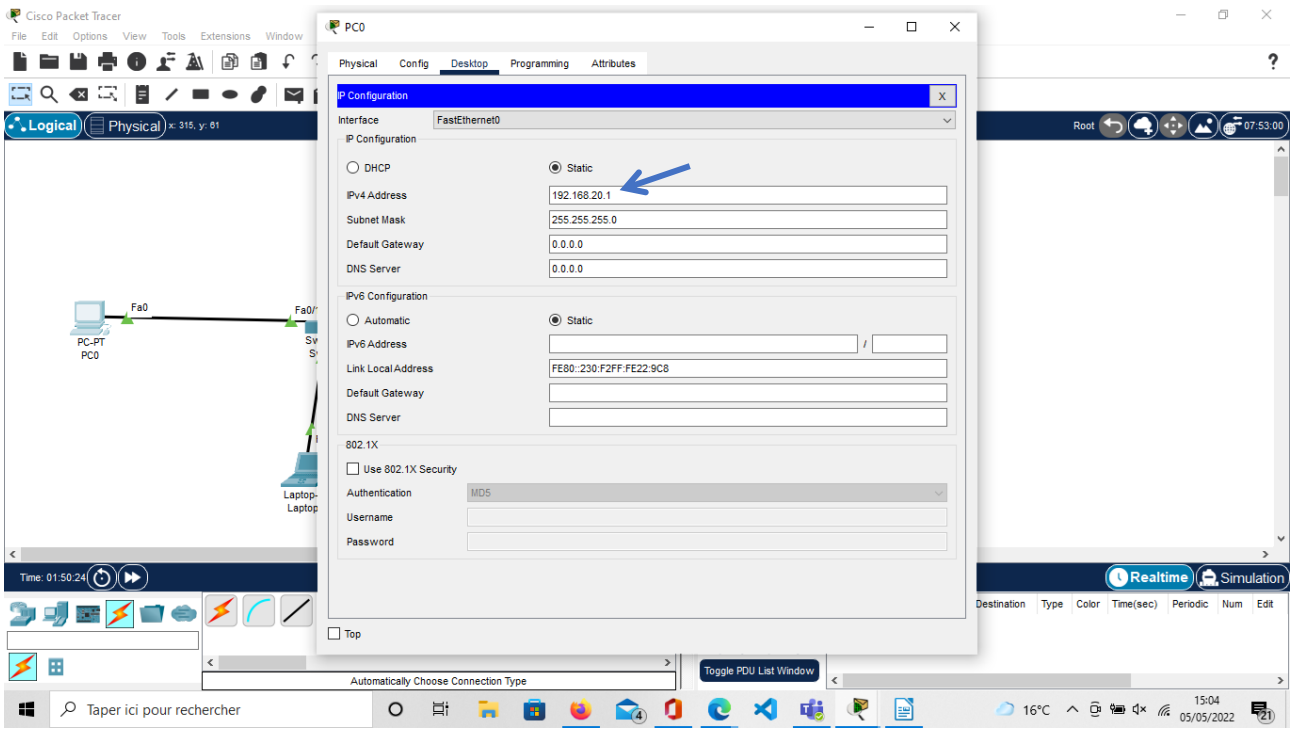

Switch2
Physical
Config
CLI
Attributes
IOS Command Line Interface
Switch FastEthernet0/1 (99).
^
% Invalid input detected at '^' marker.
Switch(config-vlan)#vlan 30
Switch(config-vlan)#name vlan_30
Switch(config-vlan)#vlan 99
Switch(config-vlan)#name Native
Switch(config-vlan)#exit
Switch(config)#
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on FastEthernet3/1 (1), with
Switch FastEthernet0/1 (99).
Switch(config)#interface fa3/1
Switch(config-if)#switchport mode trunk
Switch(config-if)#switchport trunk allowed vlan 20,30,99
Switch(config-if)# switchport trunk native vlan 99
Switch(config-if)#no shutdown
Switch(config-if)#exit
Switch(config)#
Switch con0 is now available
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Fa0/0
Fa2/1
Fa0
Fa0/1
Fa3/1
PC-PT
PC0
Switch-PT
Switch2
Fa1/1
Fa0
Laptop-PT
Laptop1
Time: 01:41:13
Realtime
Simulation
Taper ici pour rechercher
16°C
14:55
05/05/2022


Switch2
Physical
Config
CLI
Attributes
IOS Command Line Interface
Switch>enable
Switch#config t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface fa0/1
Switch(config-if)#switchport access vlan 20
Switch(config-if)#no shutdown
Switch(config-if)#exit
Switch(config)#
Switch con0 is now available
Press RETURN to get started.
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Fa0/0
Fa2/1
Fa0
Fa0/1
Fa3/1
PC-PT
PC0
Switch-PT
Switch2
Fa1/1
Fa0
Laptop-PT
Laptop1
Time: 02:35:08
Simulation
Automatically Choose Connection Type
Taper ici pour rechercher
17°C
15:50
05/05/2022

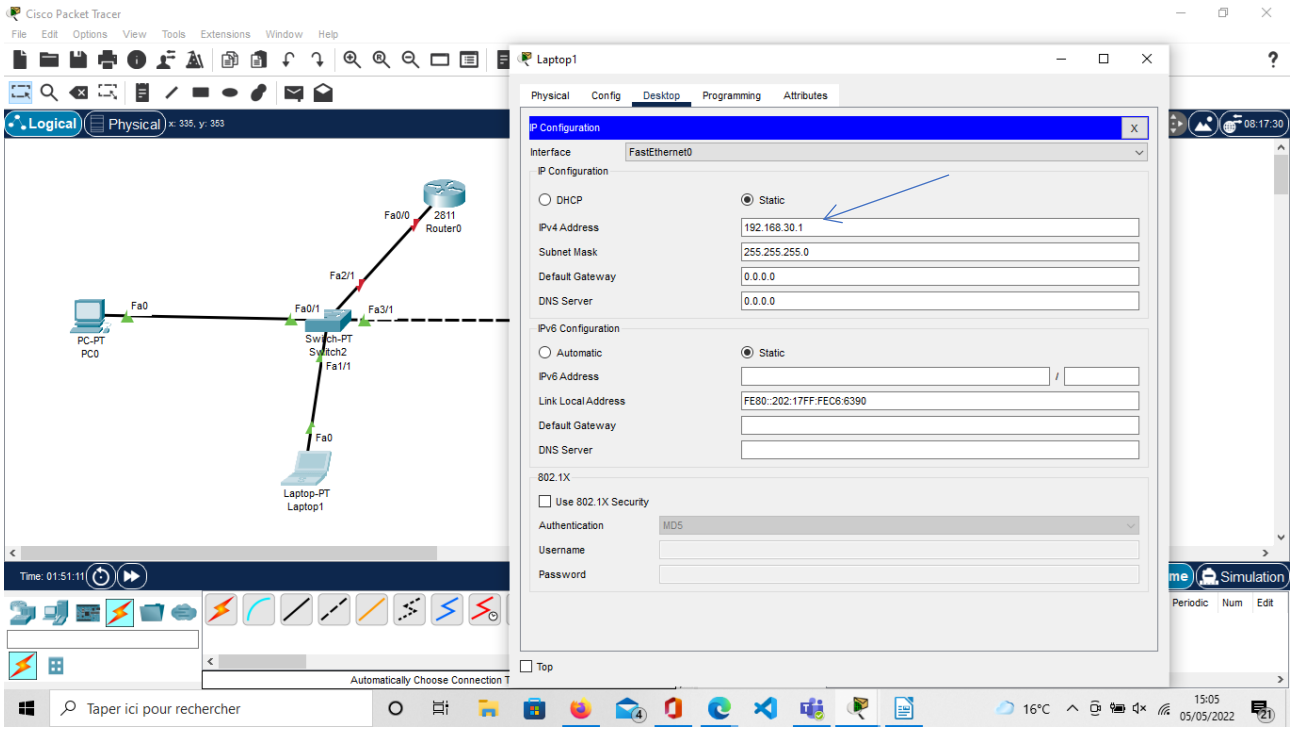

Cisco Packet Tracer - C:\Users\Ordi\Documents\TP3.pkt
File Edit Options View Tools Extensions Window Help
Logical Physical x: 658, y: 235
2811 Router0
Fa0/0
Fa0 PC-PT PC1
Fa2/1
Fa2/1
Fa0
Fa0/1
Fa3/1
Fa0/1
Fa1/1
Switch-PT Switch2
Switch-PT Switch1
Fa1/1
Fa0
Laptop-PT Laptop1
Time: 02:35:54
Automatically Choose Connection Type
Toggle PDU List Window
Switch2
Physical Config CLI Attributes
IOS Command Line Interface
Switch>enable
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface fa1/1
Switch(config-if)#switchport access vlan 30
Switch(config-if)#no shutdown
Switch(config-if)#exit
Switch(config)#
Switch con0 is now available
Press RETURN to get started.
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Taper ici pour rechercher
17°C
15:51
05/05/2022

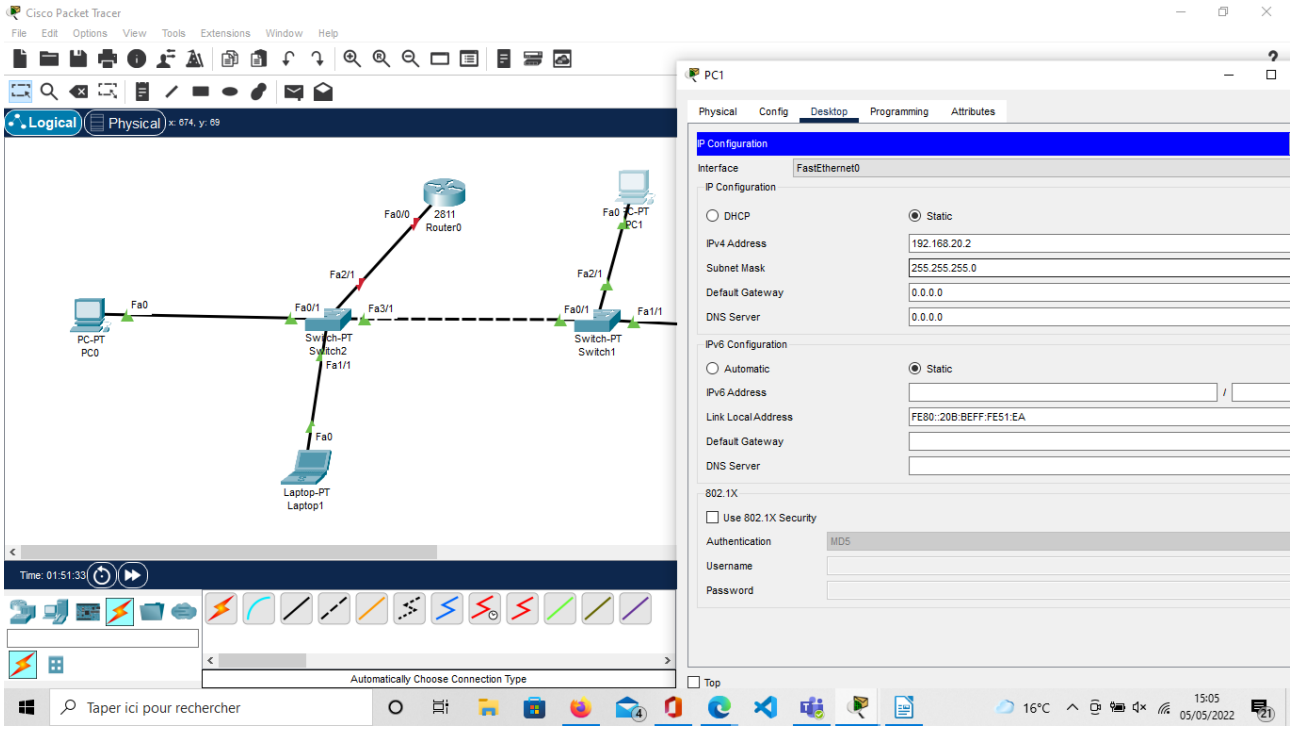

Cisco Packet Tracer - C:\Users\Ordi\Documents\TP3.pkt
File Edit Options View Tools Extensions Window Help
Logical Physical x: 979, y: 158
2811 Router0
Fa0/0
Fa0 PC-PT PC1
Fa2/1
Fa2/1
Fa0
Fa0/1
Fa3/1
Fa0/1
Fa1/1
Fa0
Switch-PT Switch2
Switch-PT Switch1
Fa1/1
Laptop-PT Laptop0
Fa0
Laptop-PT Laptop1
Time: 02:36:45
Automatically Choose Connection Type
Scenario 0
New
Delete
Toggle PDU List Window
Switch1
Physical Config CLI Attributes
IOS Command Line Interface
Switch>enable
Switch#config t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface fa1/1
Switch(config-if)#switchport access vlan 30
Switch(config-if)#no shutdown
Switch(config-if)#exit
Switch(config)#
Switch con0 is now available
Press RETURN to get started.
Ctrl+F6 to exit CLI focus
Taper ici pour rechercher
17°C
15:51
05/05/2022

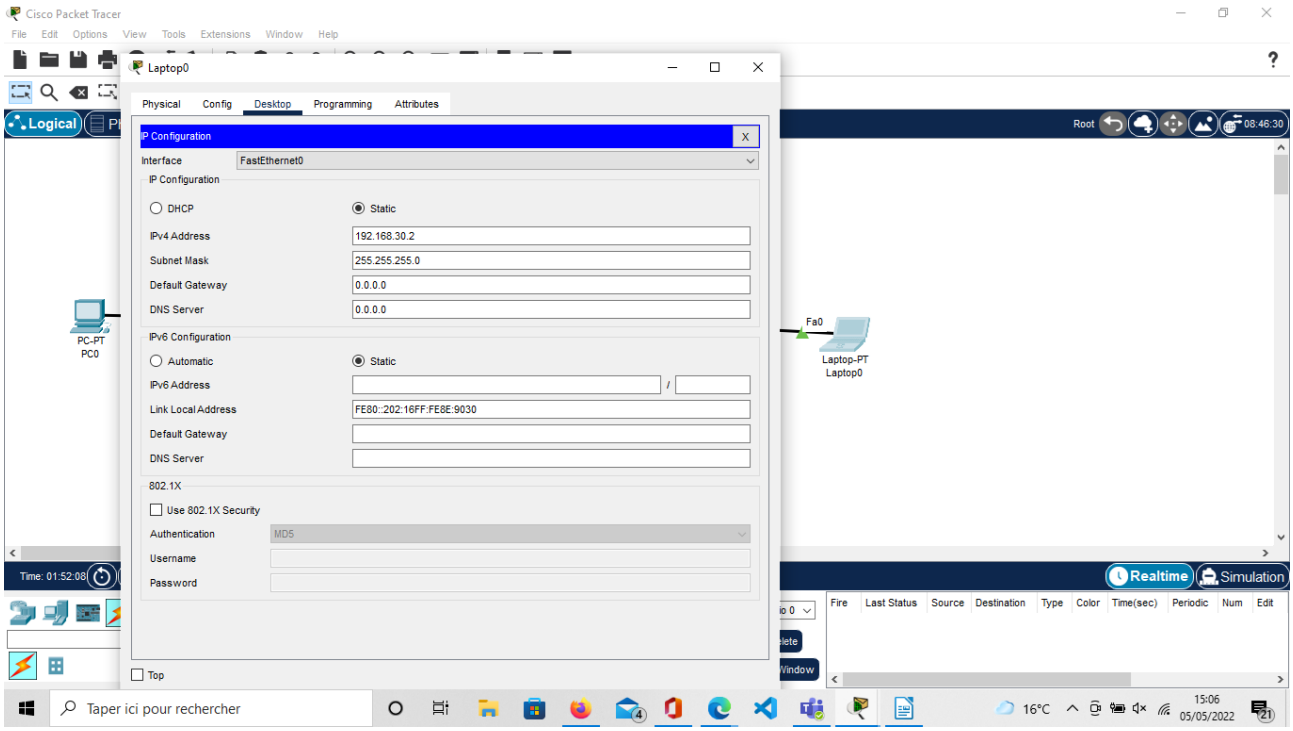


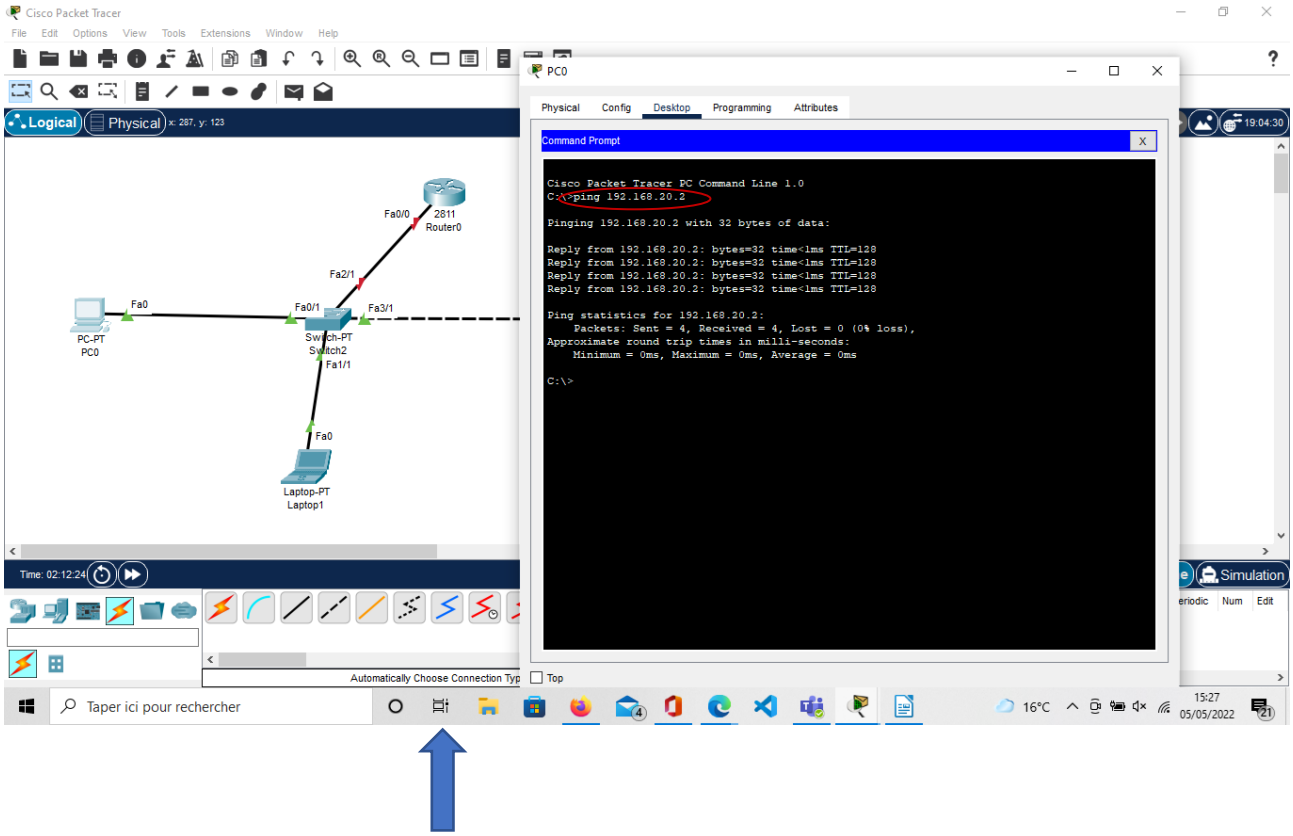


Pour chaque appareil on a créé des adresse IP par rapport au Vlan qu'il leurs a été attribuer
Vlan 20 l'adresse IP est 192.168.20.1
Vlan 30 l'adresse IP est 192.168.30.1

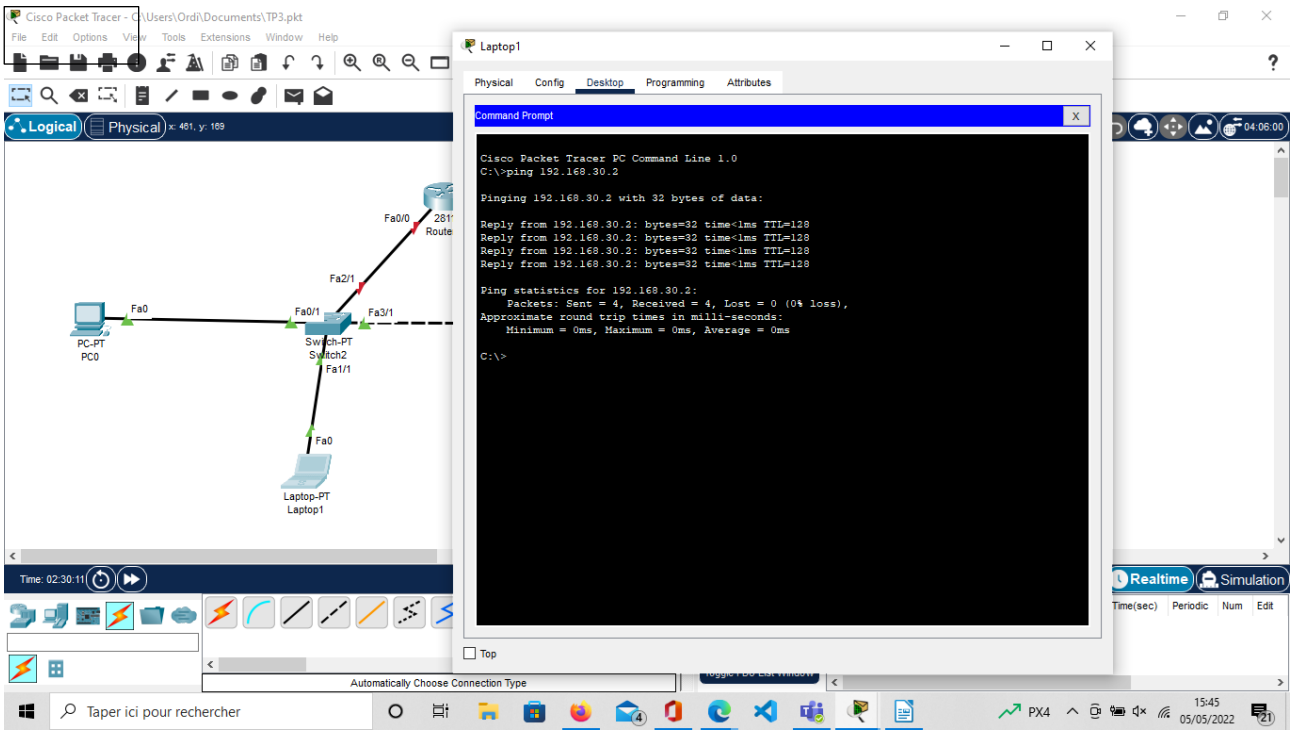

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 335, y: 353
Laptop1
Physical Config Desktop Programming Attributes
IP Configuration
Interface FastEthernet0
IP Configuration
DHCP Static
IPv4 Address 192.168.30.1
Subnet Mask 255.255.255.0
Default Gateway 0.0.0.0
DNS Server 0.0.0.0
IPv6 Configuration
Automatic Static
IPv6 Address
Link Local Address FE80::202:17FF:FEC6:6390
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Top
Fa0/0 2811 Router0
Fa2/1
Fa0 PC-PT PC0
Fa0/1 Fa3/1 Switch-PT Switch2
Fa1/1
Fa0 Laptop-PT Laptop1
Time: 01:51:11
Automatically Choose Connection T
Simulation
Periodic Num Edit
Taper ici pour rechercher
16°C
15:05
05/05/2022


Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 674, y: 69
PC1
Physical Config Desktop Programming Attributes
IP Configuration
Interface FastEthernet0
IP Configuration
DHCP Static
IPv4 Address 192.168.20.2
Subnet Mask 255.255.255.0
Default Gateway 0.0.0.0
DNS Server 0.0.0.0
IPv6 Configuration
Automatic Static
IPv6 Address
Link Local Address FE80::20B:BEFF:FE51:EA
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Top
Fa0/0 2811 Router0
Fa0 PC-PT PC1
Fa2/1
Fa0 PC-PT PC0
Fa0/1 Fa3/1 Switch-PT Switch2
Fa1/1
Fa0/1 Fa1/1 Switch-PT Switch1
Fa0 Laptop-PT Laptop1
Time: 01:51:33
Automatically Choose Connection Type
Taper ici pour rechercher
16°C
15:05
05/05/2022



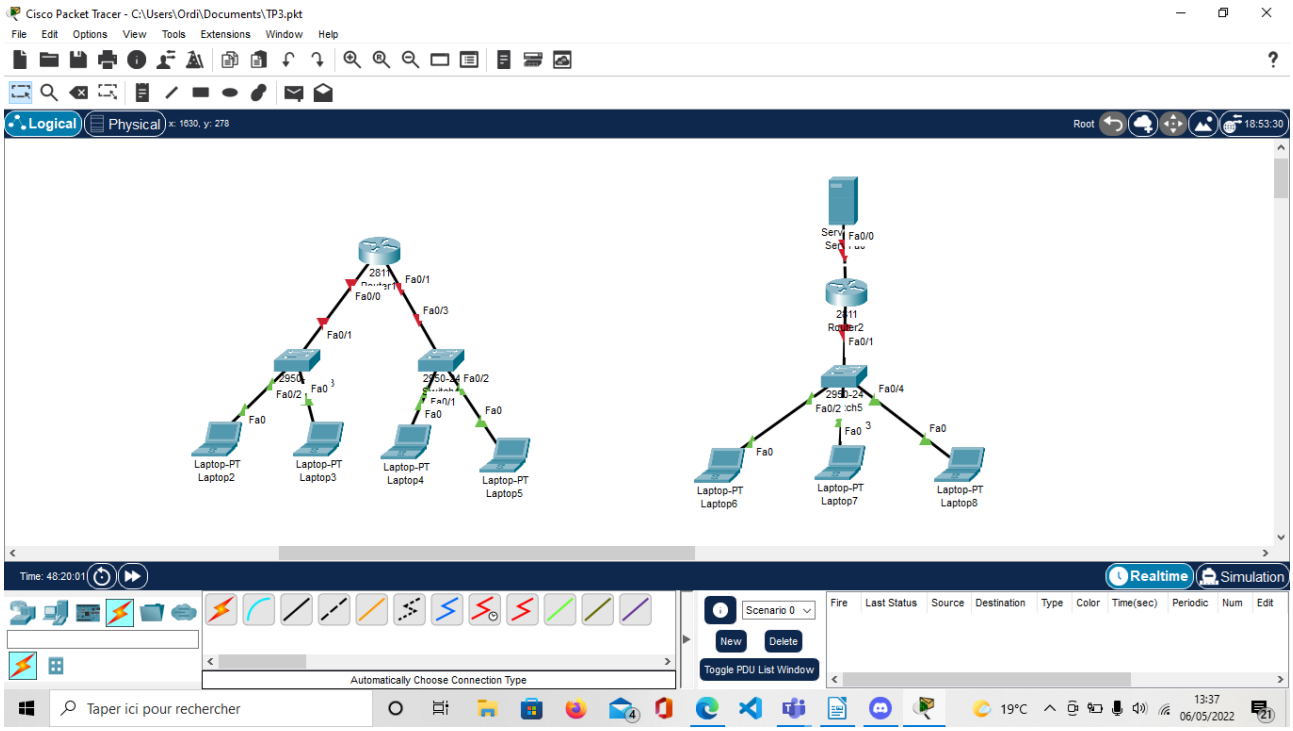


Ensuite nous avons tester de localiser deux appareils qui provienne de deux switches différents qui ont le même Vlan grâce à la commande PING
L'opération de localisation a été un succès

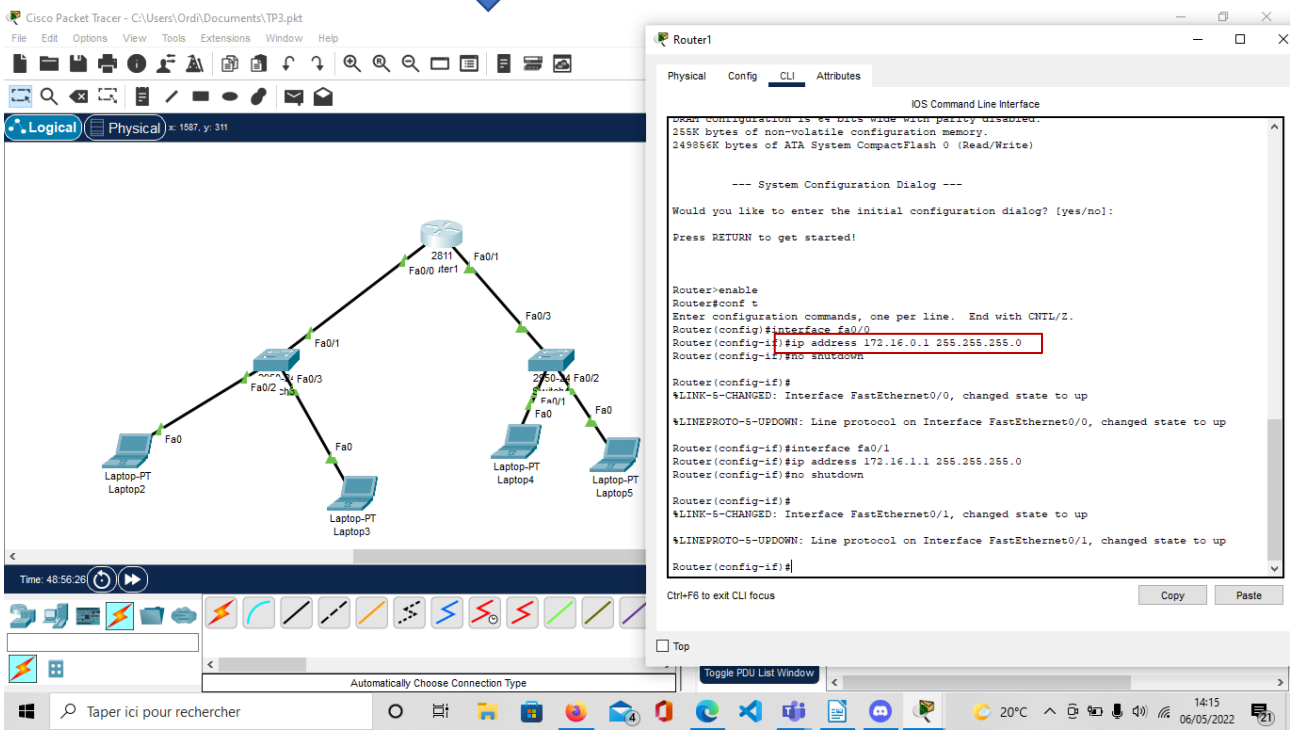


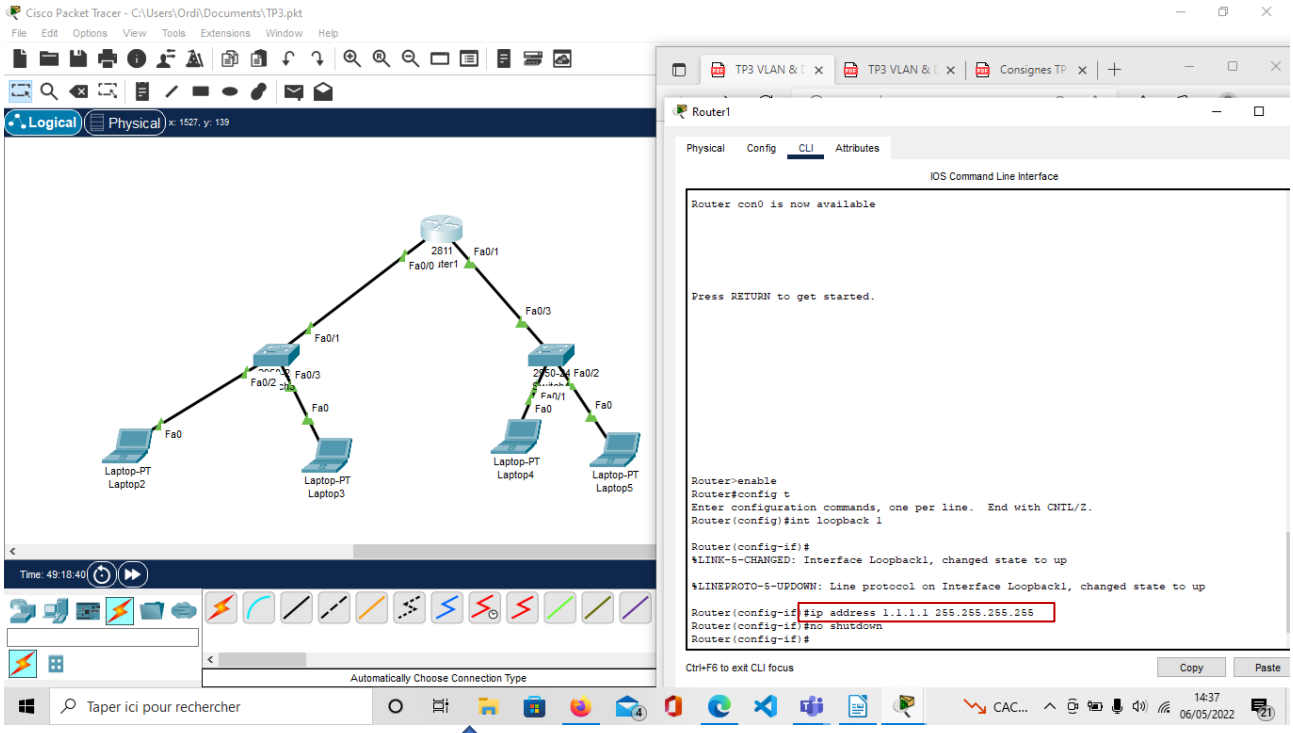
PARTIE 2

Pour la 2 partie nous avons reproduit le schéma ci-dessous :



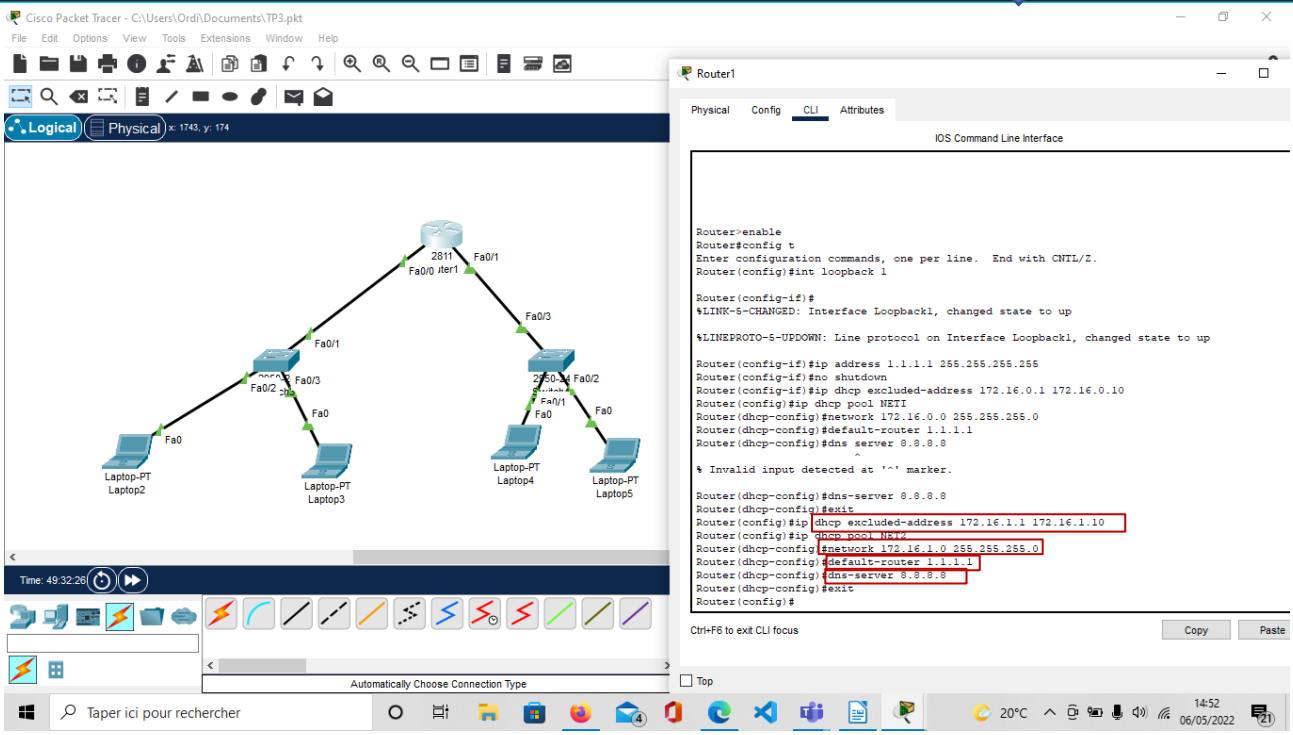
Sur chaque switch on adresser une adresse IP à l'aide du routeur

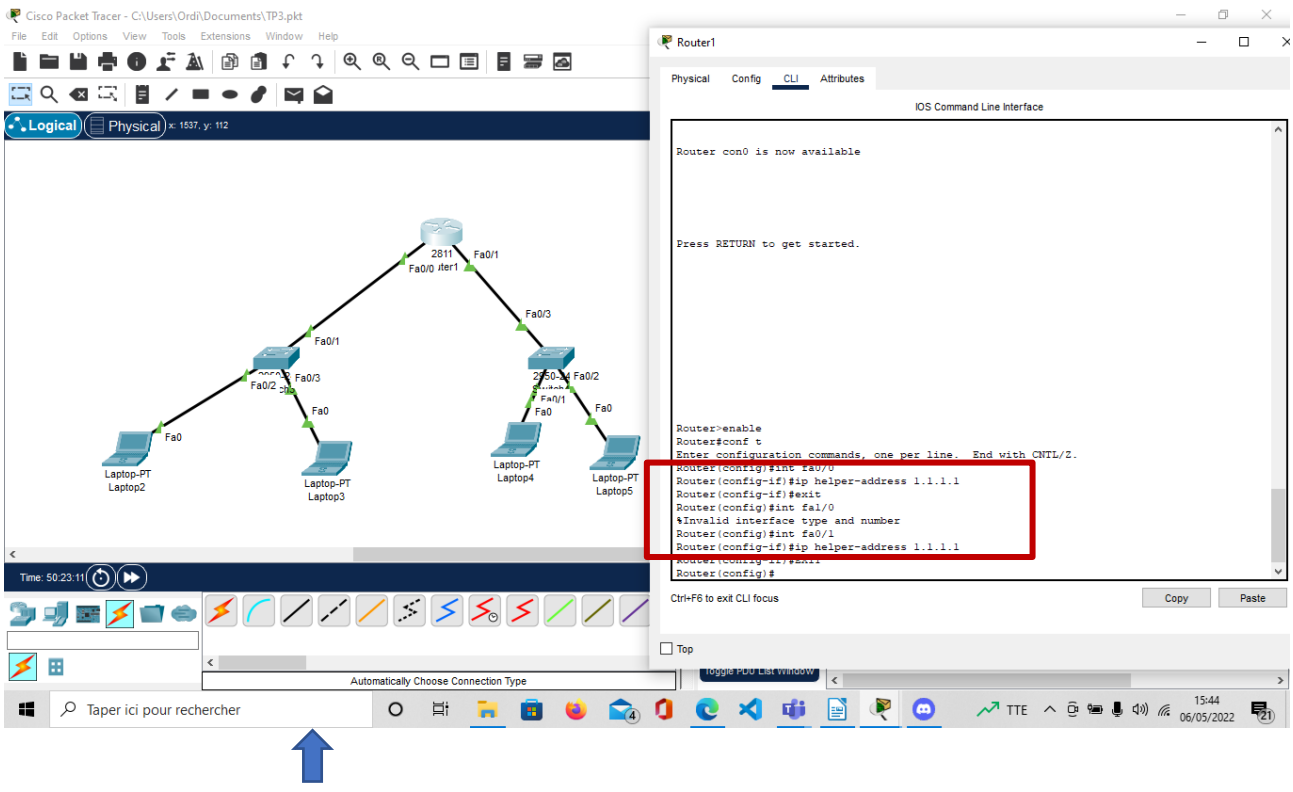




Sur l'interface loopback du routeur on lui a adressé une nouvelle IP et nouveau masque de sous réseau.

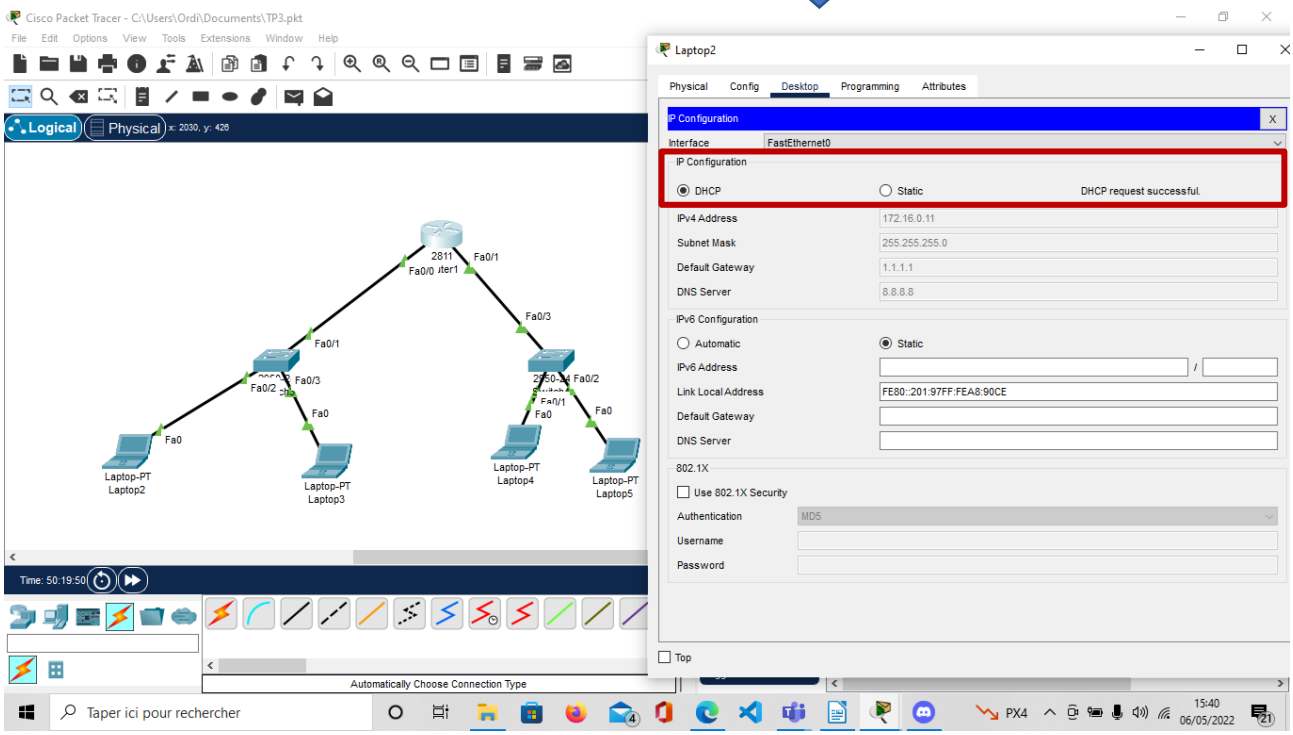
On a ensuite exclu les 2 adresse switch (172.16.0.1 172.16.0.10) et (172.16.1.1 172.16.1.10) (DHCP pool NETI) On crée une nouvel adresse réseau pour le DHCP 172.16.0.0
Et on a créé un routeur par défaut avec un DHCP 1.1.1.1
On a créé un serveur DNS 8.8.8.8

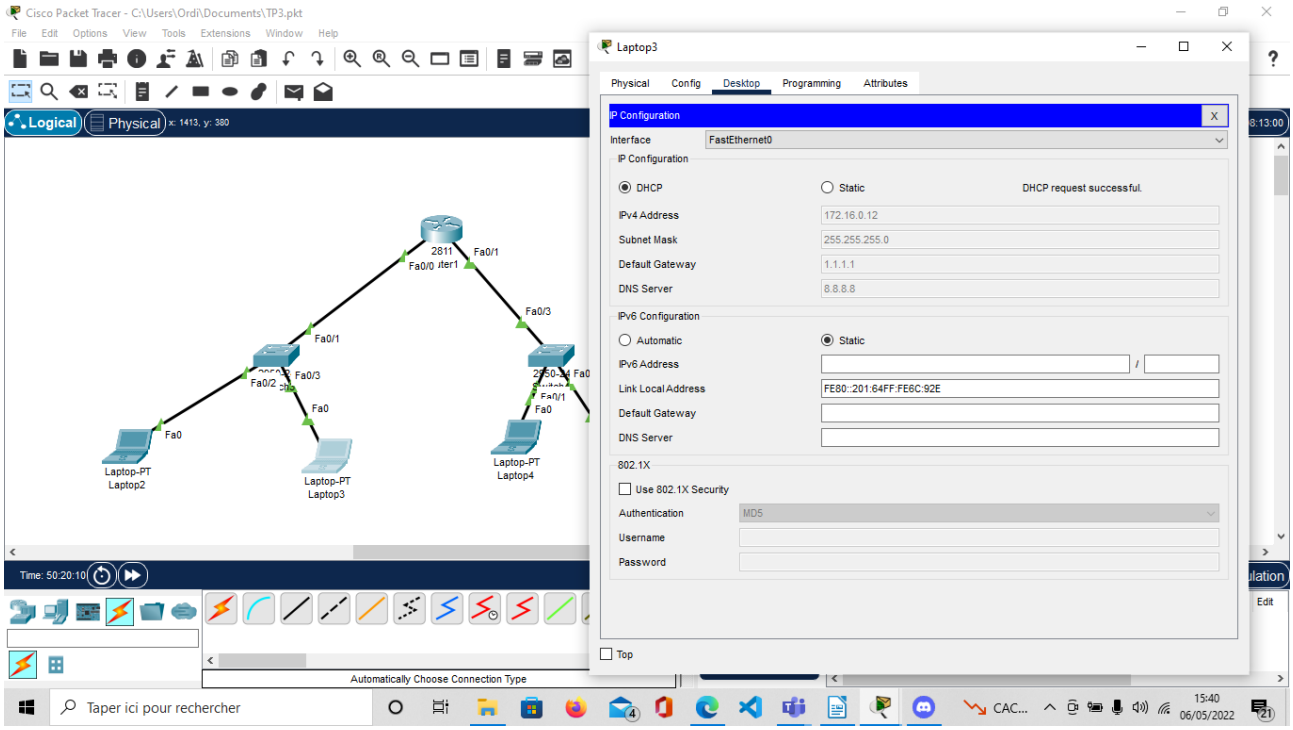


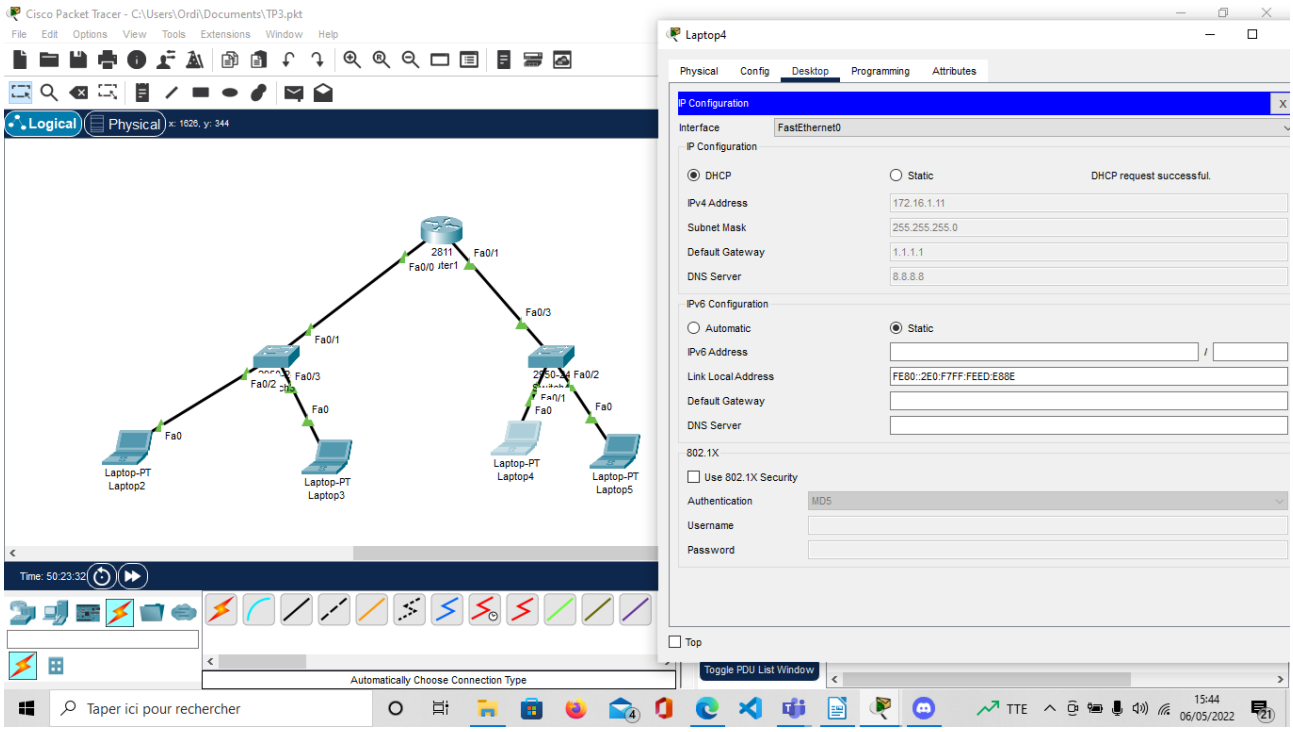


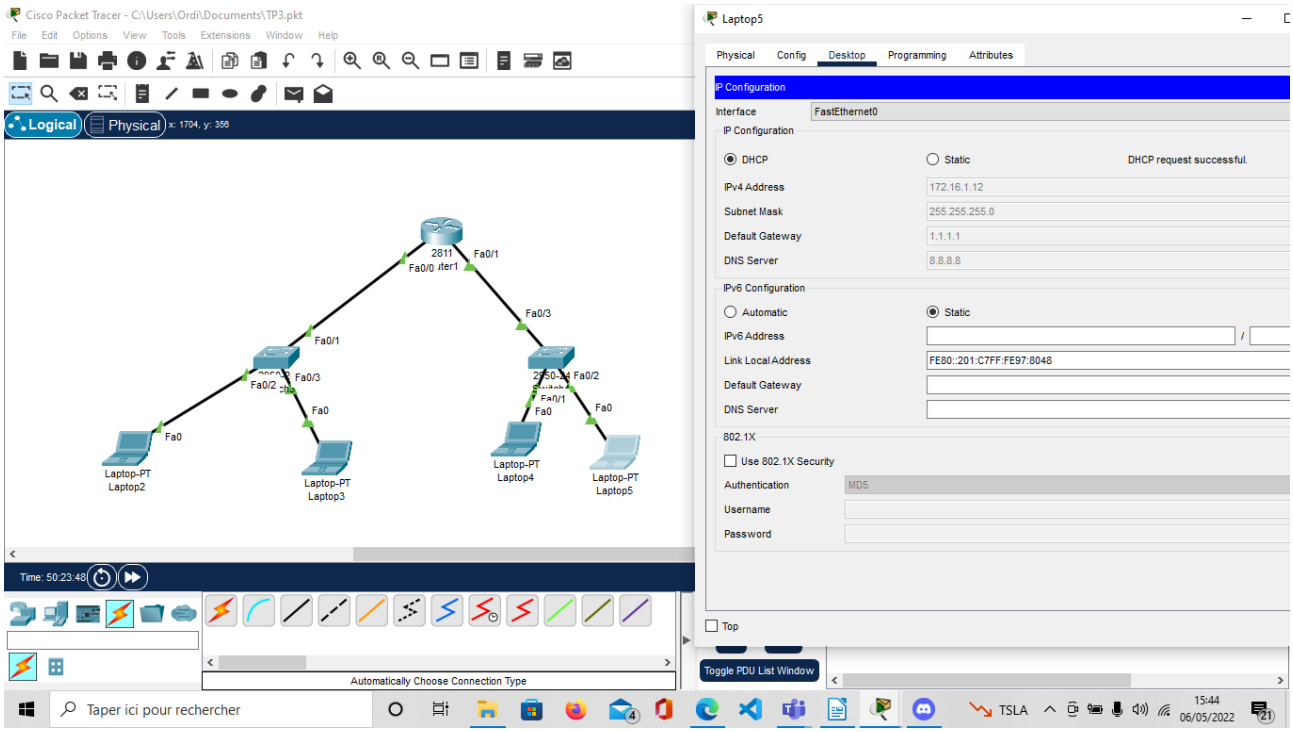
Cette commande permet de relier des trams DHCP à l'adresse 1.1.1.1 en fonction de l'interface.

Ensuite nous avons adresse une IP automatiquement grâce au protocole DHCP



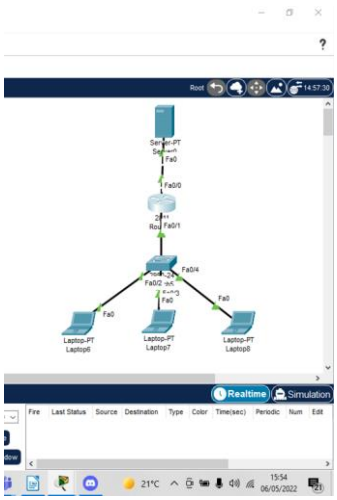


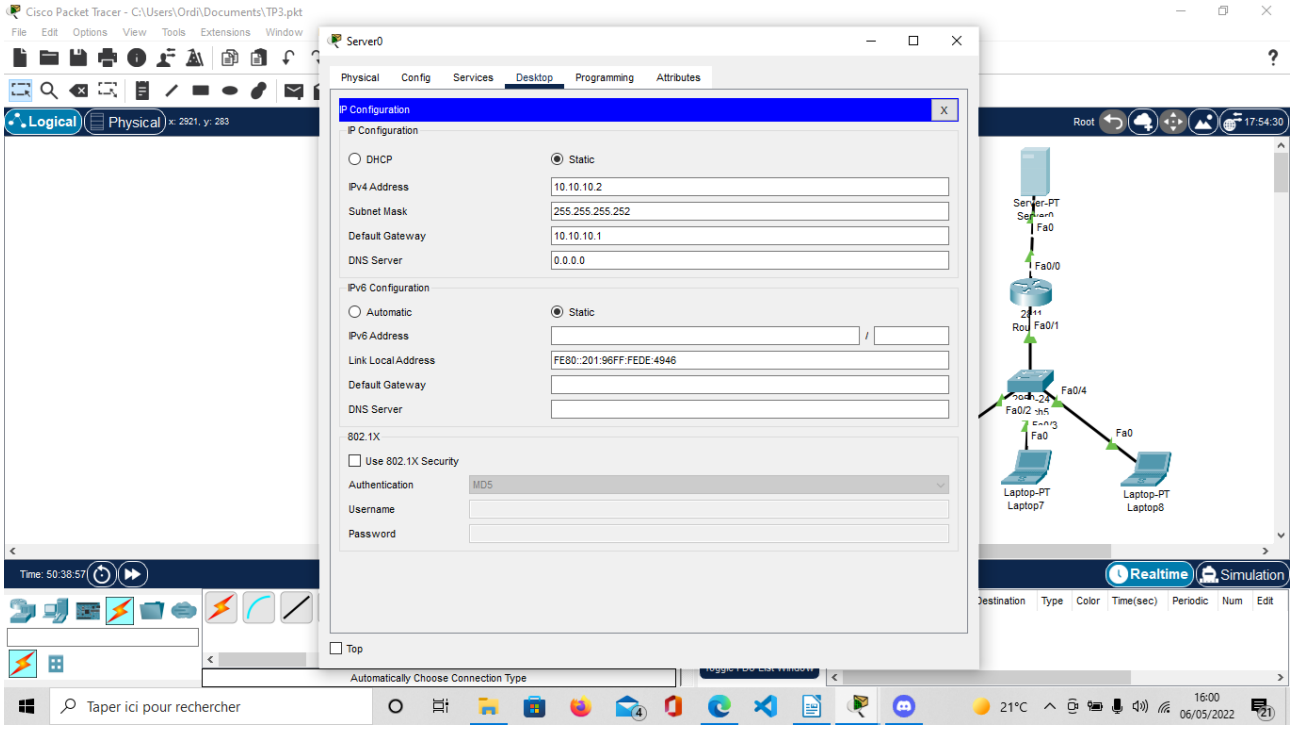

Cisco Packet Tracer - C:\Users\Ordi\Documents\TP3.pkt
Laptop4
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
DHCP request successful.
IPv4 Address
172.16.1.11
Subnet Mask
255.255.255.0
Default Gateway
1.1.1.1
DNS Server
8.8.8.8
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::2E0:F7FF:FEED:E88E
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top
Toggle PDU List Window
Logical
Physical
Laptop-PT Laptop2
Laptop-PT Laptop3
Laptop-PT Laptop4
Laptop-PT Laptop5
Automatically Choose Connection Type
Taper ici pour rechercher
06/05/2022


Cisco Packet Tracer - C:\Users\Ordi\Documents\TP3.pkt
Laptop5
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
DHCP request successful.
IPv4 Address
172.16.1.12
Subnet Mask
255.255.255.0
Default Gateway
1.1.1.1
DNS Server
8.8.8.8
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::201:C7FF:FE97:8048
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top
Toggle PDU List Window
Logical
Physical
Laptop-PT Laptop2
Laptop-PT Laptop3
Laptop-PT Laptop4
Laptop-PT Laptop5
Automatically Choose Connection Type
Taper ici pour rechercher
06/05/2022

SCHEMA 2 :

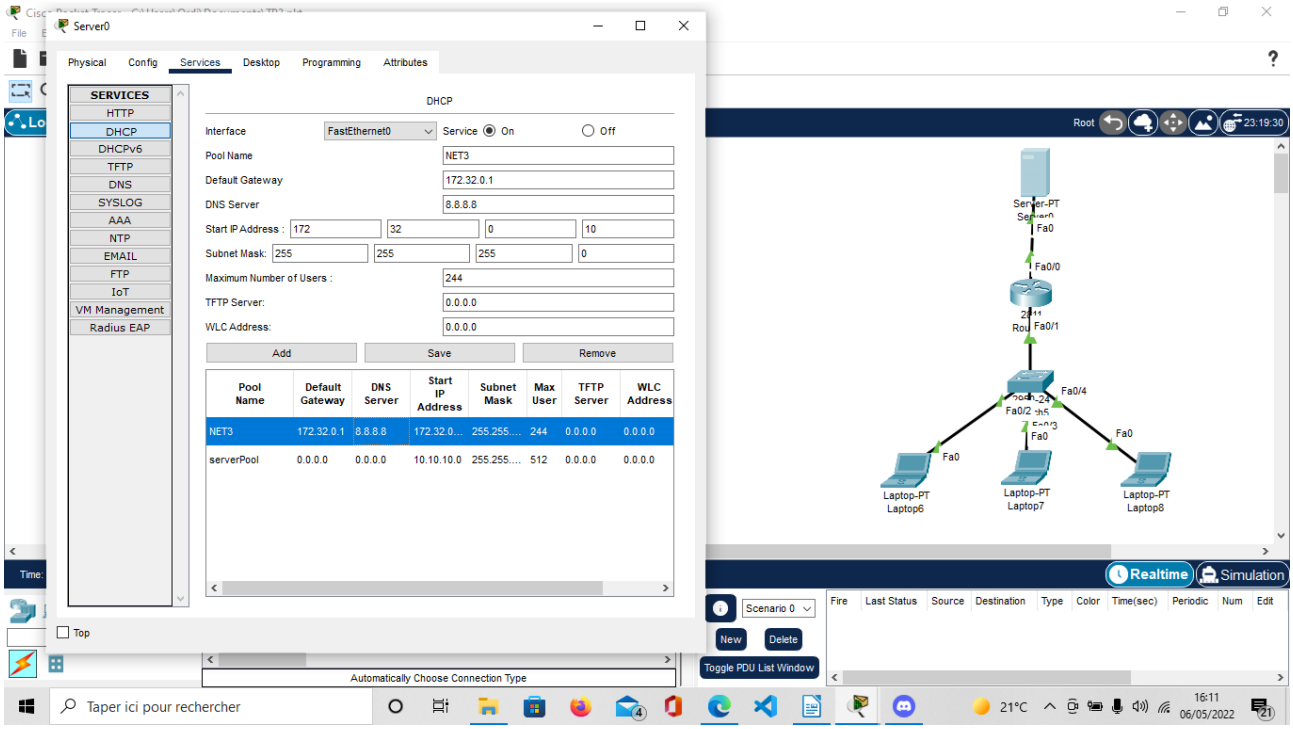
Nous avons reproduit le schéma :

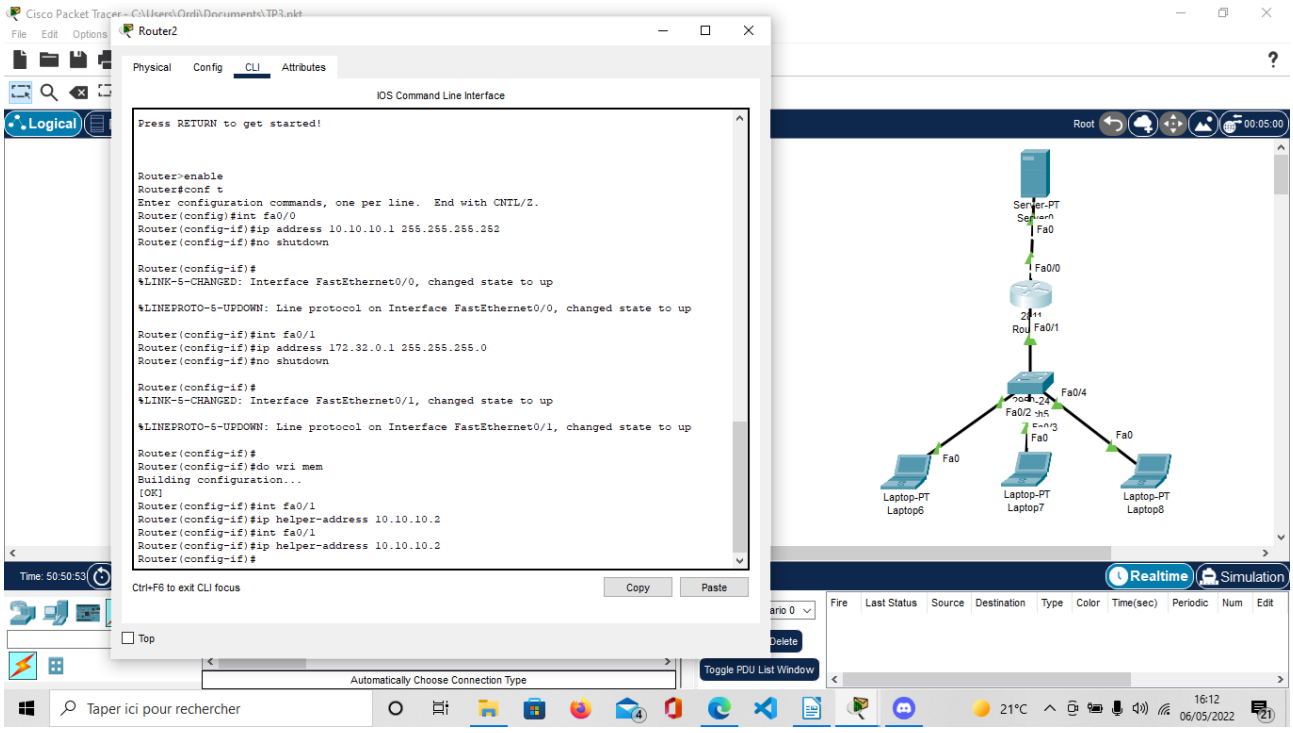




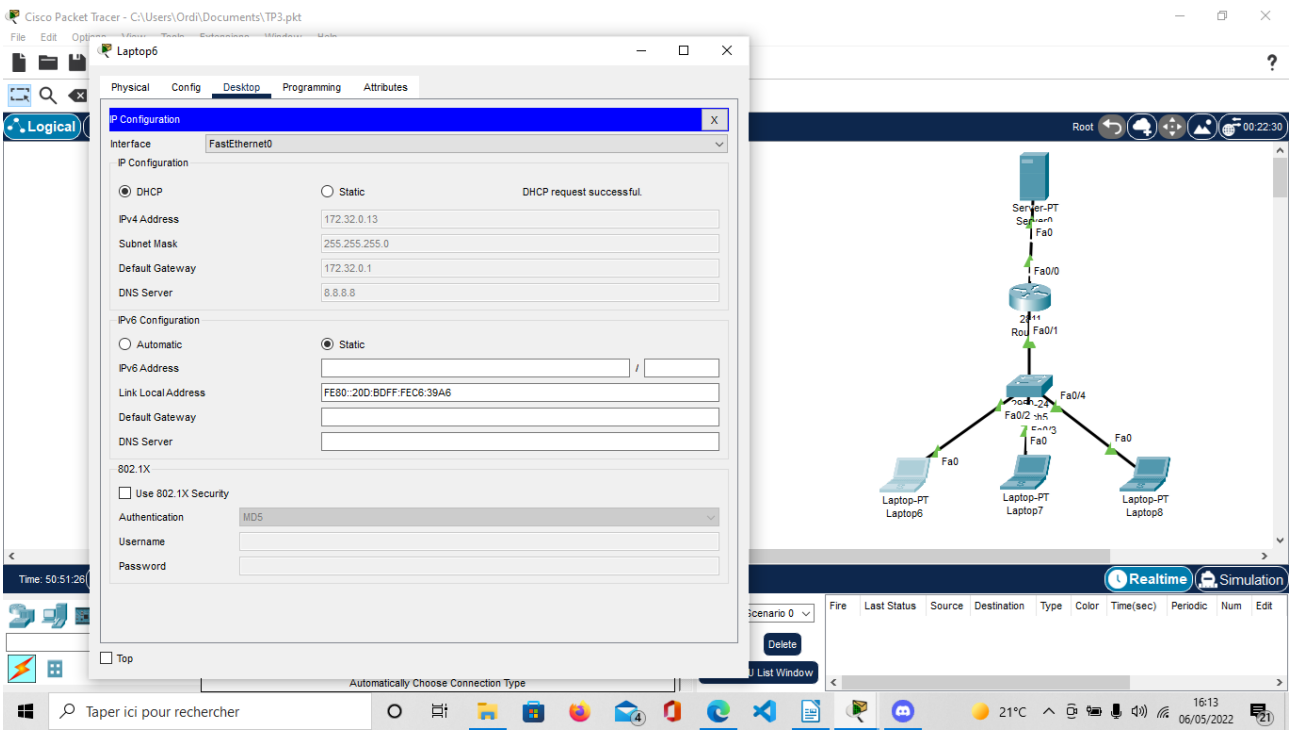
On a donné au serveur une adresses IP et un masque de sous réseaux et une passerelle par défaut qui correspond à l'interface Fa0/0.

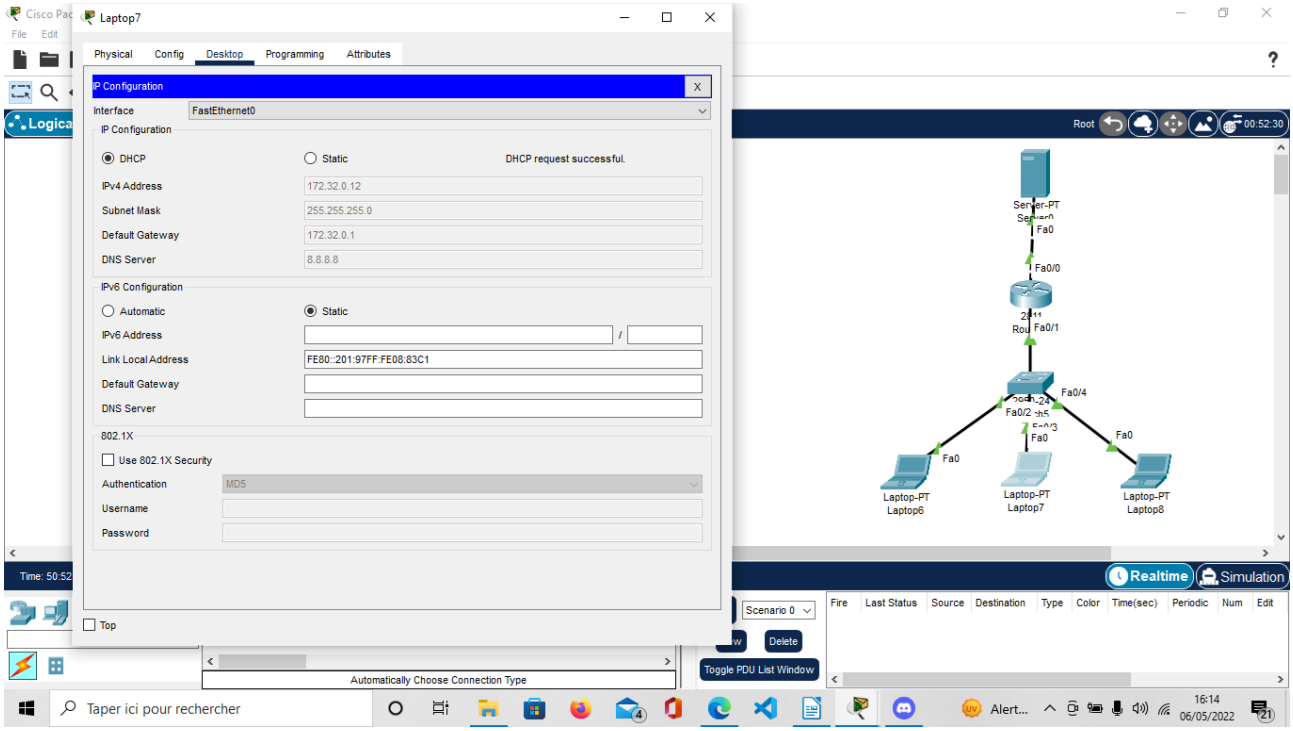
On a sélectionné l'option DHCP dans le service du serveur.
On configure un protocole de DHCP du nom de NET3 qui doit s'adapter en fonction de l'adresse IP de l'interface.

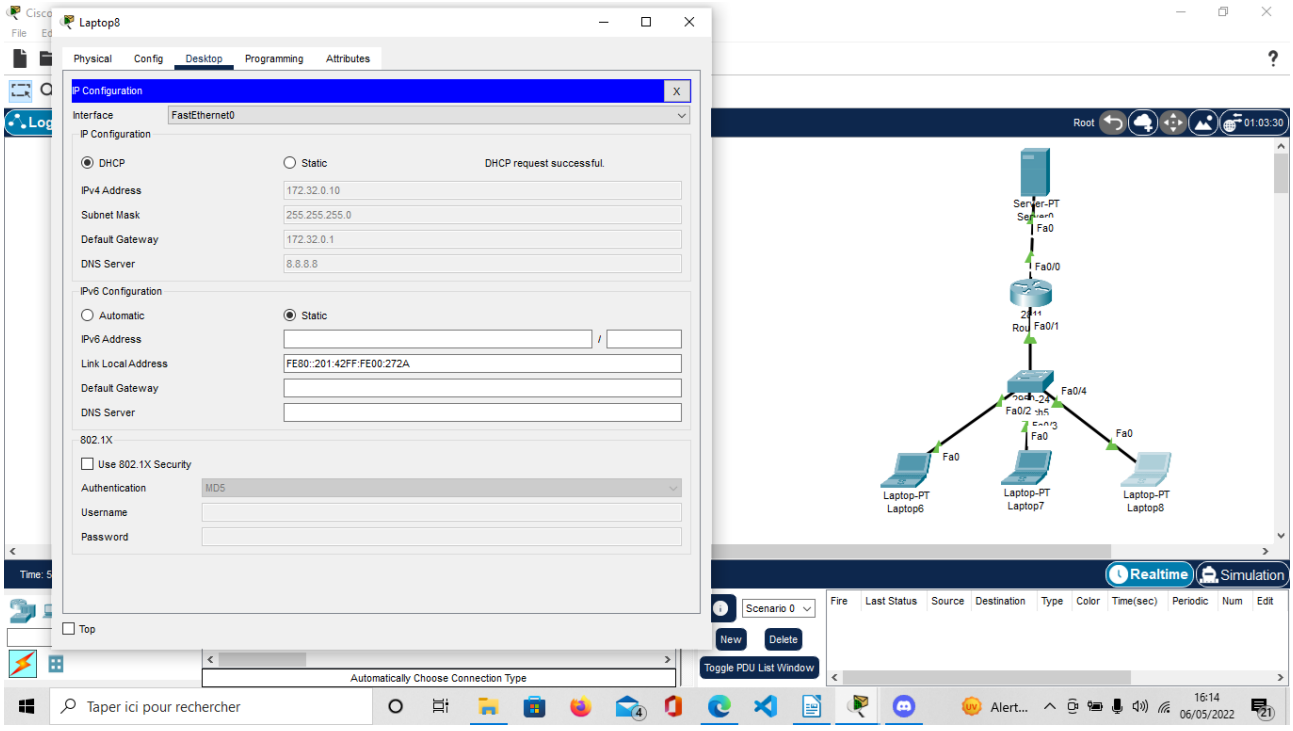




On relais les trames DHCP à l'adresse 10.10.10.2 et grâce a cela l'adresse IP des ordinateurs est attribuer automatiquement grâce au protocole DHCP.


Cisco Packet Tracer - C:\Users\Ordi\Documents\TP3.pkt
Laptop6
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
DHCP request successful.
IPv4 Address
172.32.0.13
Subnet Mask
255.255.255.0
Default Gateway
172.32.0.1
DNS Server
8.8.8.8
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::20D:BDFF:FEC6:39A6
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top
Logical
Root
Server-PT
Fa0
Fa0/0
Fa0/1
Fa0/4
Laptop-PT
Laptop6
Laptop-PT
Laptop7
Laptop-PT
Laptop8
Realtime
Simulation
Delete
Automatically Choose Connection Type
Taper ici pour rechercher
21°C
16:13
06/05/2022


Laptop7
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
IP Configuration
DHCP
Static
DHCP request successful.
IPv4 Address
172.32.0.12
Subnet Mask
255.255.255.0
Default Gateway
172.32.0.1
DNS Server
8.8.8.8
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::201:97FF:FE08:83C1
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top
Root
Server-PT
Fa0
Fa0/0
Fa0/1
Fa0/4
Fa0
Laptop-PT
Laptop6
Laptop7
Laptop8
Realtime
Simulation
Scenario 0
Delete
Toggle PDU List Window
Automatically Choose Connection Type
Taper ici pour rechercher
Alert...
16:14
06/05/2022


Laptop8
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
IP Configuration
DHCP
Static
DHCP request successful.
IPv4 Address
172.32.0.10
Subnet Mask
255.255.255.0
Default Gateway
172.32.0.1
DNS Server
8.8.8.8
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::201:42FF:FE00:272A
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top
Root
Server-PT
Fa0
Fa0/0
Fa0/1
Fa0/4
Fa0
Laptop-PT
Laptop6
Laptop7
Laptop8
Realtime
Simulation
Scenario 0
New
Delete
Toggle PDU List Window
Automatically Choose Connection Type
Taper ici pour rechercher
Alert...
16:14
06/05/2022