



**IUS**  
**INSTITUT**  
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**DES SCIENCES**

**Université: Institut Universitaire des Sciences (IUS)**

**TD N° 4: Réseau1**

**Nom & Prénom: SAINT-JEAN Marc-Evenort**

**Professeur: Ismael SAINT AMOUR**

**Niveau: 3<sup>ème</sup> Année**

**Date: Le 29/Déc/2025**

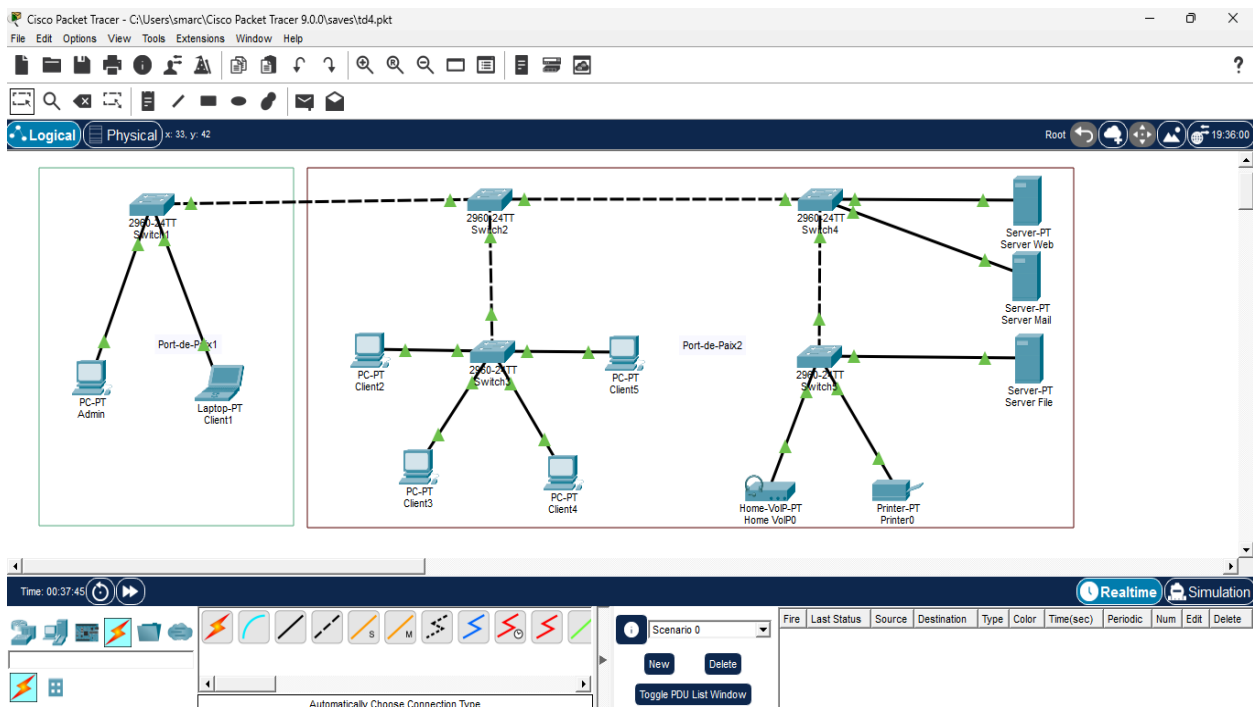
## **Objectif du TD**

L'objectif de ce travail dirigé est de mettre en place une topologie réseau simple comprenant des PC, des switchs et un routeur, en utilisant les protocoles IPv4 et IPv6.

Le but principal est de configurer les équipements réseau, d'attribuer des adresses IP, puis de tester la connectivité entre les hôtes et les VLAN à l'aide de la commande ping et du mode simulation.

**1. Reproduisez cette topologie en configurant les switches, puis en attribuant les adresses IP aux dispositifs. Utilisez soit IPv4, soit IPv6, et testez la connectivité des deux VLAN à l'aide de la commande ping et du mode de simulation.**

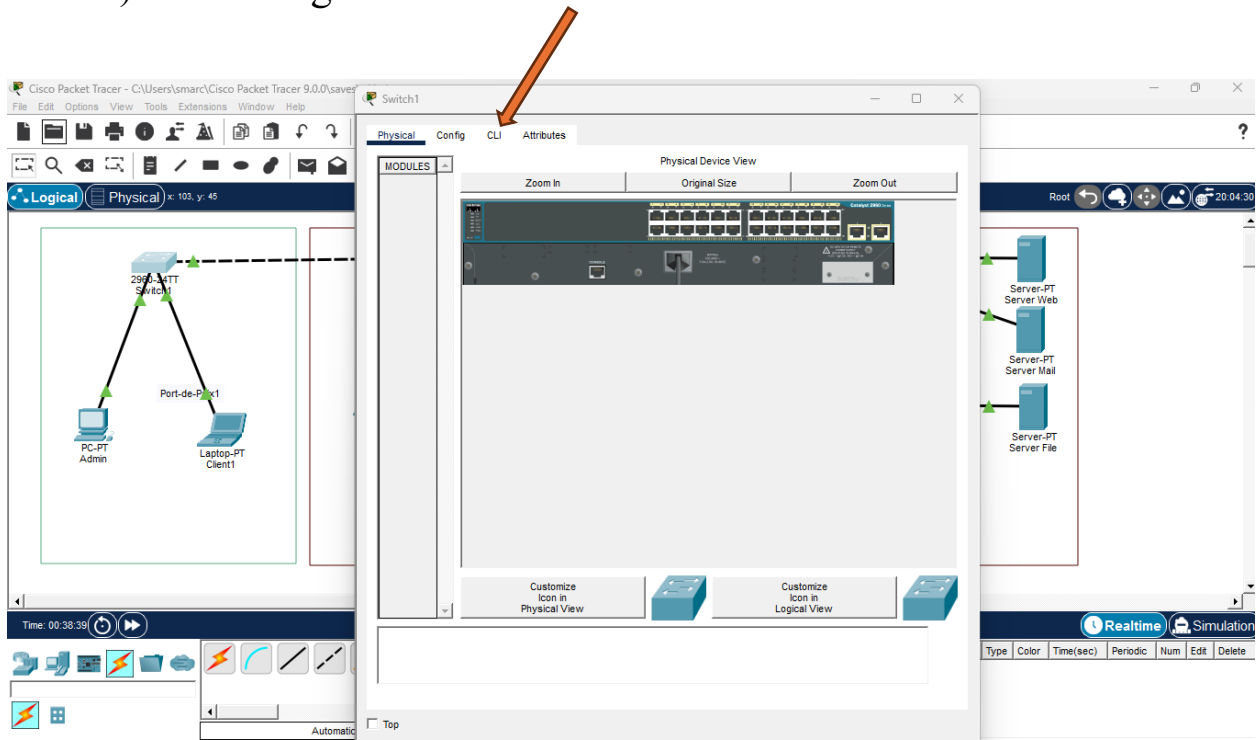
**a) J'ai reproduit cette topologie en configurant les switches**



- Sur cette image, j'ai reproduit la topologie.

## A) Configuration des switches IPv4

a) J'ai configuré le switch IPv4



- Sur cette image, j'ai cliqué sur le Switch 1 pour configurer avec l'adresse IPv4.

Switch1

Physical
Config
CLI
Attributes

### IOS Command Line Interface

```

Power supply part number      : 341-0097-02
Motherboard serial number    : FOC10093R12
Power supply serial number    : AZS1007032H
Model revision number        : B0
Motherboard revision number   : B0
Model number                  : WS-C2960-24TT-L
System serial number          : FOC1010X104
Top Assembly Part Number     : 800-27221-02
Top Assembly Revision Number  : A0
Version ID                    : V02
CLEI Code Number              : COM3L00BRA
Hardware Board Revision Number : 0x01

Switch Ports Model          SW Version        SW Image
-----
*   1 26   WS-C2960-24TT-L  15.0(2)SE4      C2960-LANBASEK9-M

Cisco IOS Software, C2960 Software (C2960-LANBASEK9-M), Version 15.0(2)SE4, RELEASE
SOFTWARE (fc1)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2013 by Cisco Systems, Inc.
Compiled Wed 26-Jun-13 02:49 by mnguyen

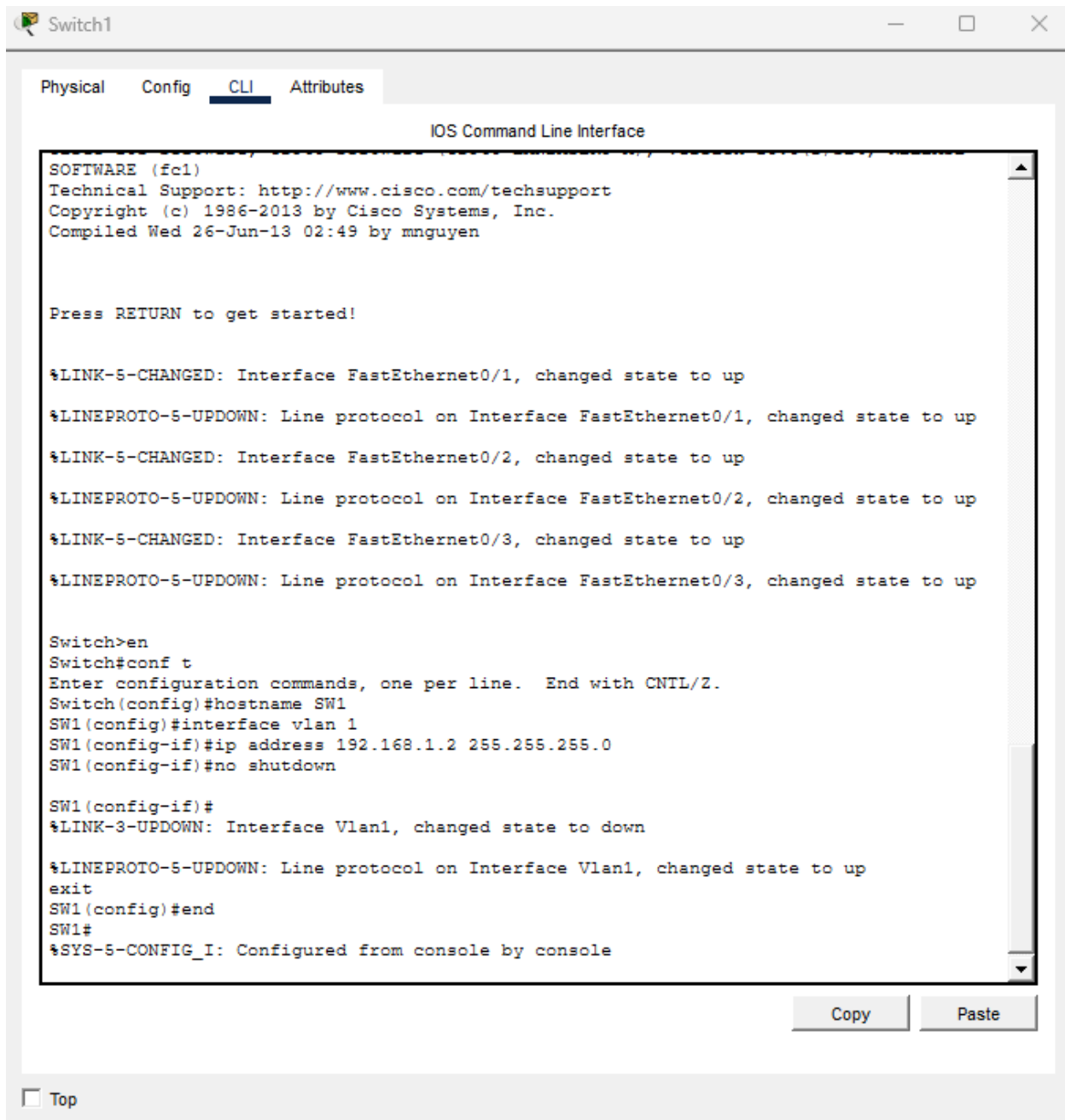
Press RETURN to get started!

%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/2, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/3, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to up

```

Copy
Paste

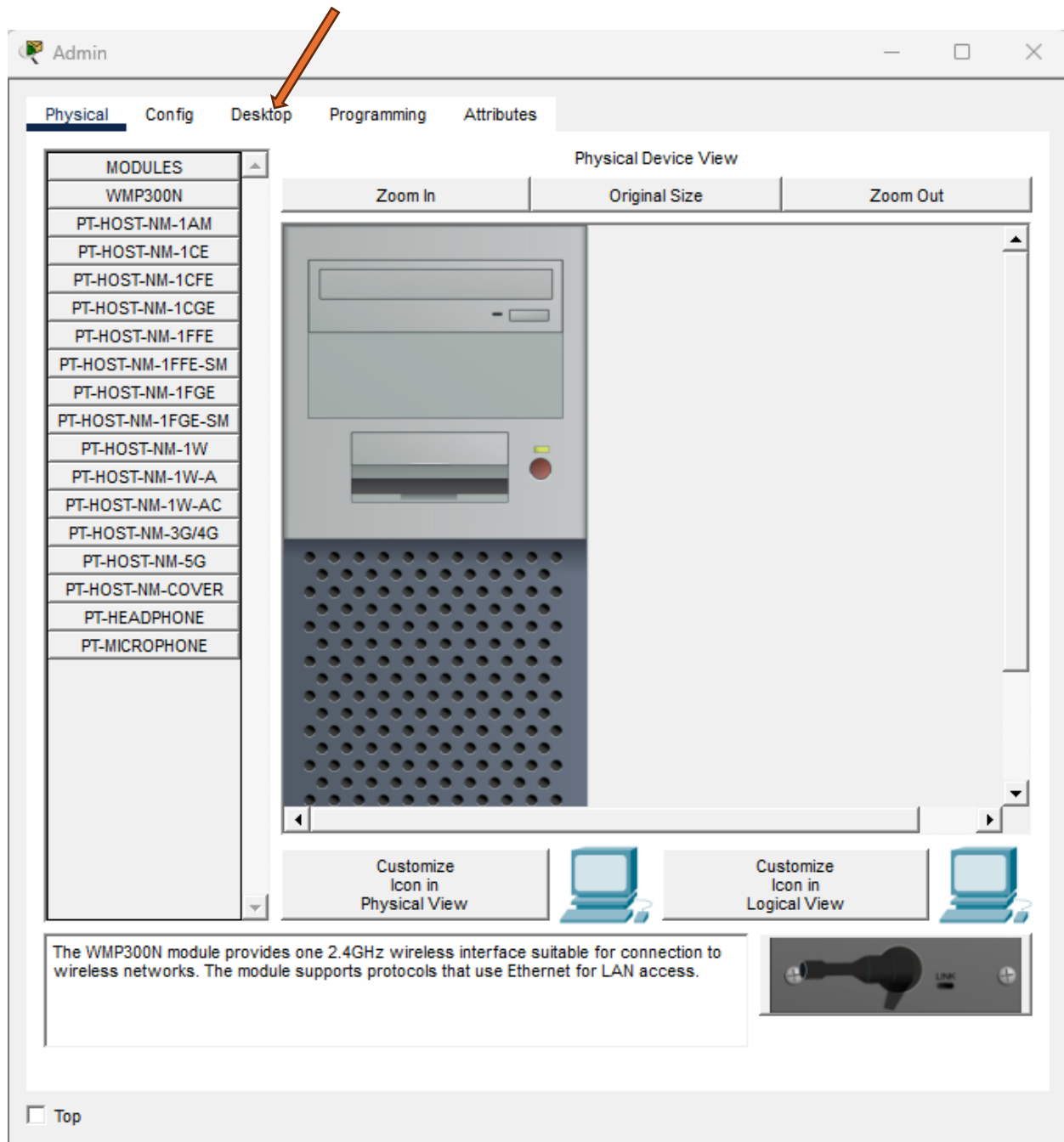
☐ Top



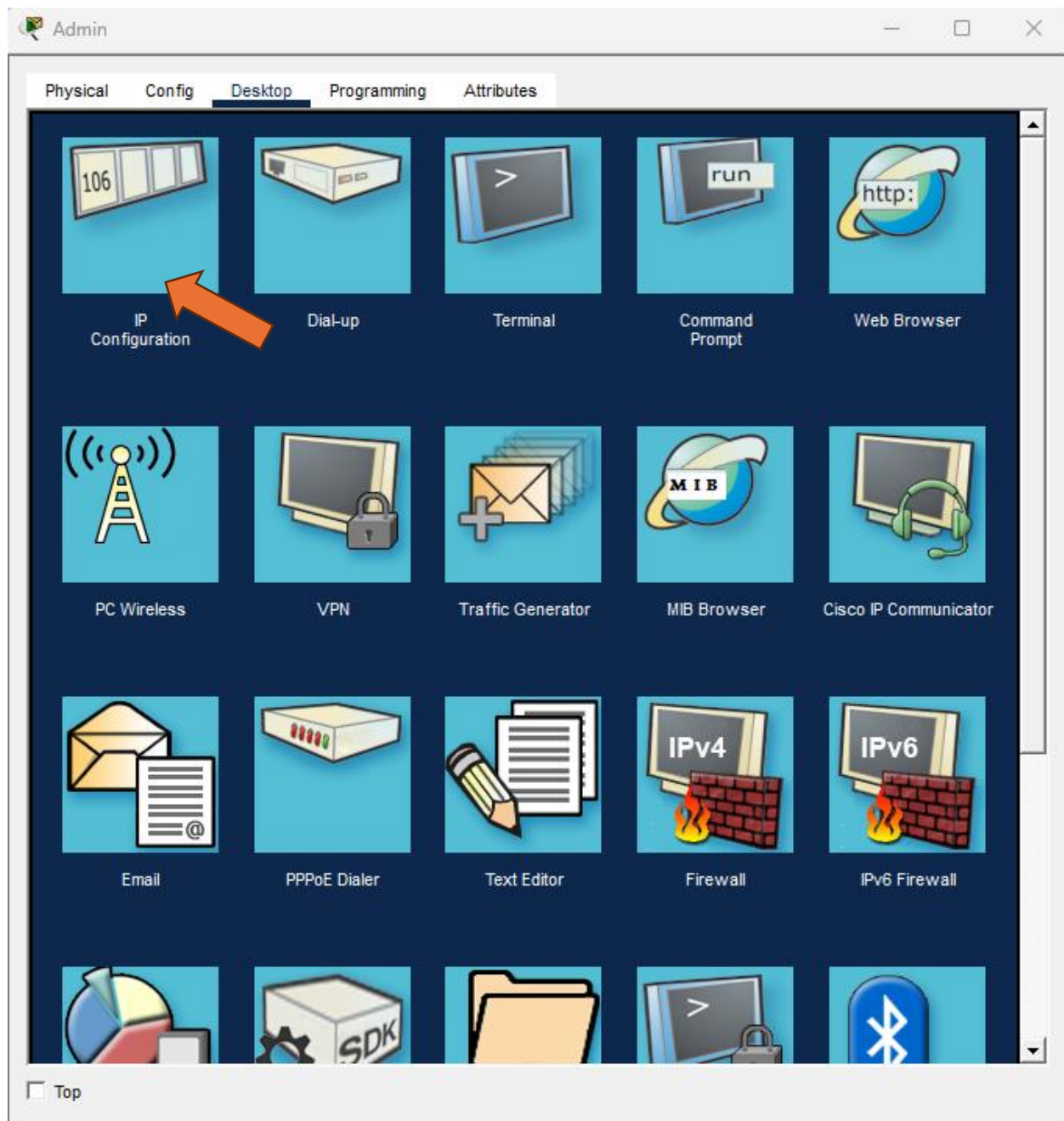
- Sur cette image, j'ai configuré le Switch 1 pour le réseau 1 nommé Port-de-Paix (voir pages 5 à 6).

## 1.1 J'ai attribué les adresses IP aux dispositifs en Utilisant IPv4

a) Admin: 192.168.1.3



- Sur cette image, j'ai cliqué sur le PC Admin et en cliquant sur le bouton Desktop pour accéder à la page suivant.



- Sur cette image, j'ai cliqué sur IP configuration pour passer à la page désiré.



Admin

Physical

Config

Desktop

Programming

Attributes

IP Configuration

InterfaceFastEthernet0

IP Configuration

DHCP

Static

IPv4 Address

Subnet Mask

Default Gateway

DNS Server

0.0.0.0

0.0.0.0

IPv6 Configuration

Automatic

Static

IPv6 Address

Link Local Address

Default Gateway

DNS Server

FE80::200:CFF:FE23:6A2A

802.1X

Use 802.1X Security

Authentication

Username

Password

MD5

Top

The screenshot shows a web-based configuration interface for a device named 'Admin'. The 'Desktop' tab is selected, and the 'IP Configuration' section is active. The interface is divided into three main sections: IP Configuration, IPv6 Configuration, and 802.1X. In the IP Configuration section, the 'Static' radio button is selected, and the IPv4 Address is set to 192.168.1.3 with a Subnet Mask of 255.255.255.0. The IPv6 Configuration section shows the 'Static' radio button selected, with the IPv6 Address field empty. The 802.1X section shows the 'Use 802.1X Security' checkbox unchecked, and the Authentication dropdown menu set to 'MD5'. The Username and Password fields are also empty. A 'Top' link is located at the bottom left of the configuration area.

Admin

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.1.3

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::200:CFF:FE23:6A2A

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

☐ Top

- Sur cette image, j'ai configuré l'adresse IP et le masque de sous-réseau du **PC Admin** (voir pages 9 à 10).

## b) Pour Client1

- Client: 192.168.1.4

The screenshot shows a window titled "Client1" with tabs for Physical, Config, Desktop, Programming, and Attributes. The "Desktop" tab is active, and the "IP Configuration" section is highlighted in blue. Below this, the "Interface" is set to "FastEthernet0". The "IP Configuration" section has two radio buttons: "DHCP" (unselected) and "Static" (selected). The "Static" configuration fields are filled with: IPv4 Address: 192.168.1.4, Subnet Mask: 255.255.255.0, Default Gateway: 0.0.0.0, and DNS Server: 0.0.0.0. The "IPv6 Configuration" section has two radio buttons: "Automatic" (unselected) and "Static" (selected). The "Static" configuration fields are empty, except for the "Link Local Address" which is filled with FE80::20A:41FF:FE01:E650. The "802.1X" section has a checkbox "Use 802.1X Security" which is unchecked. Below this, the "Authentication" dropdown is set to "MD5", and the "Username" and "Password" fields are empty. A "Top" button is located at the bottom left of the window.

IP Configuration	
Interface	FastEthernet0
<input type="radio"/> DHCP <input checked="" type="radio"/> Static	
IPv4 Address	192.168.1.4
Subnet Mask	255.255.255.0
Default Gateway	0.0.0.0
DNS Server	0.0.0.0

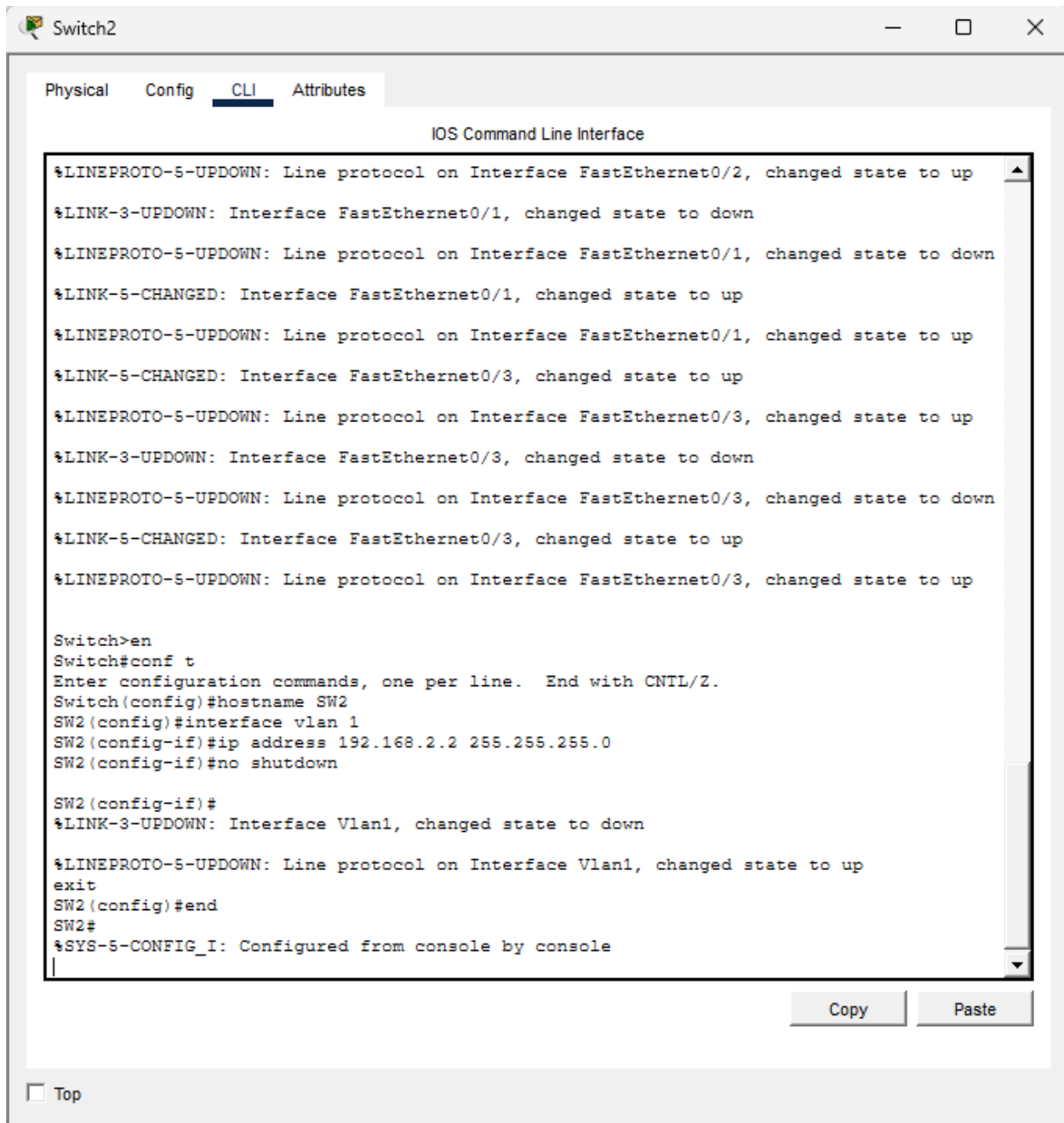
IPv6 Configuration	
<input type="radio"/> Automatic <input checked="" type="radio"/> Static	
IPv6 Address	
Link Local Address	FE80::20A:41FF:FE01:E650
Default Gateway	
DNS Server	

802.1X	
<input type="checkbox"/> Use 802.1X Security	
Authentication	MD5
Username	
Password	

☐ Top

- Sur cette image, j'ai configuré l'adresse IP et le masque de sous-réseau (Mask Subnet) du **Client1**.

## B) J'ai configure le switch IPv4 pr Switch2



- Sur cette image, j'ai configuré le Switch 2 pour le réseau 2 nommé Port-de-Paix2

## a) Pour Client2

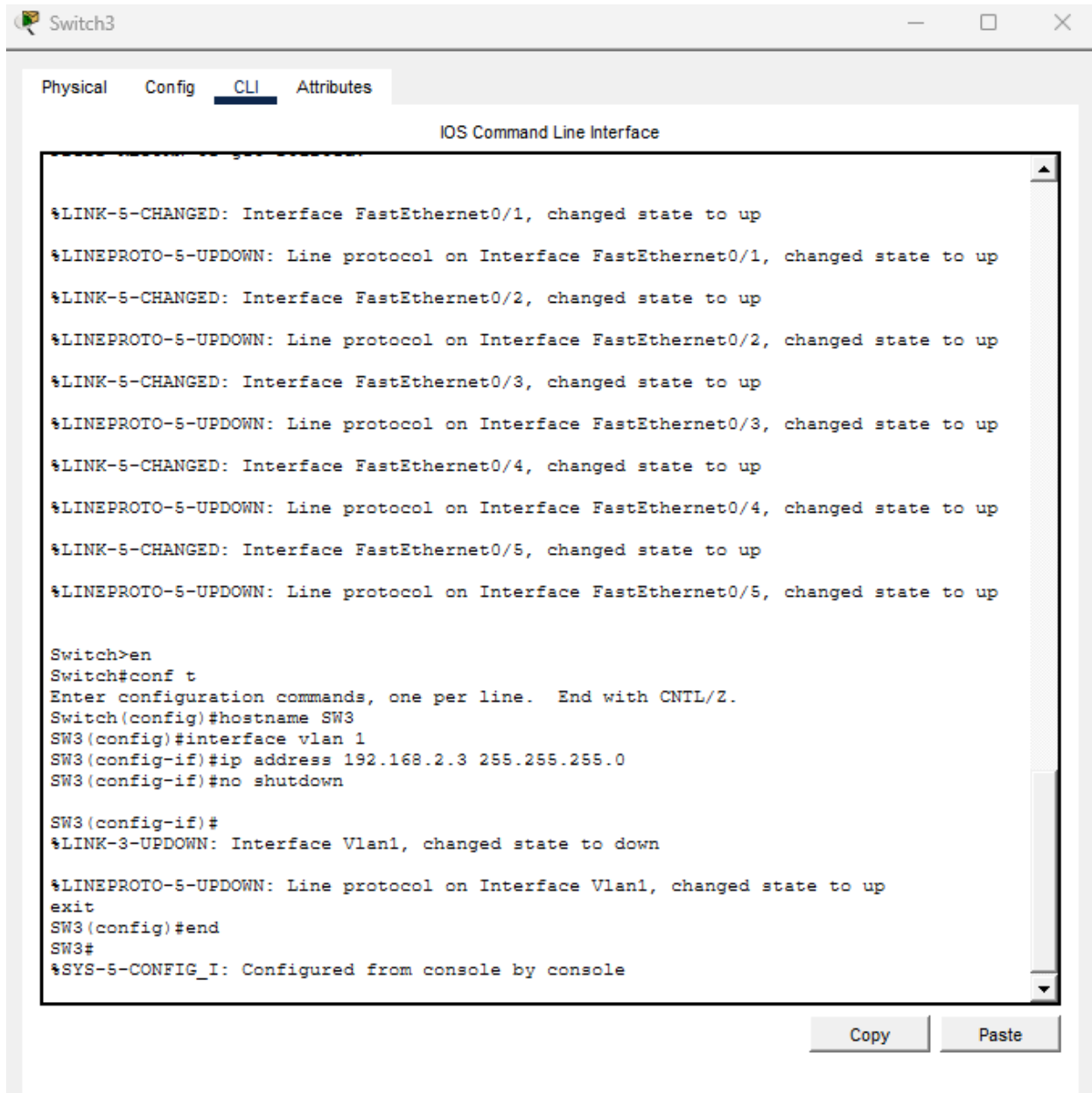
- **Client2**: 192.168.2.4

The screenshot shows a window titled "Client2" with a tabbed interface. The "Desktop" tab is selected. Inside, the "IP Configuration" section is active, showing settings for the "FastEthernet0" interface. The "Static" radio button is selected under "IP Configuration". The "IPv4 Address" is set to "192.168.2.4" and the "Subnet Mask" is "255.255.255.0". The "Default Gateway" and "DNS Server" are both set to "0.0.0.0". The "IPv6 Configuration" section shows "Static" selected, with "IPv6 Address" empty, "Link Local Address" set to "FE80::2E0:A3FF:FED5:38A7", and "Default Gateway" and "DNS Server" empty. The "802.1X" section has "Use 802.1X Security" unchecked, "Authentication" set to "MD5", and "Username" and "Password" fields empty. A "Top" button is at the bottom left.

Interface	FastEthernet0
<b>IP Configuration</b>	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IPv4 Address	192.168.2.4
Subnet Mask	255.255.255.0
Default Gateway	0.0.0.0
DNS Server	0.0.0.0
<b>IPv6 Configuration</b>	
<input type="radio"/> Automatic	<input checked="" type="radio"/> Static
IPv6 Address	
Link Local Address	FE80::2E0:A3FF:FED5:38A7
Default Gateway	
DNS Server	
<b>802.1X</b>	
<input type="checkbox"/> Use 802.1X Security	
Authentication	MD5
Username	
Password	

- Sur cette image, j'ai configuré l'adresse IP et le masque de sous-réseau (Mask Subnet) du **Client2**.

## b) J'ai configure le switch IPv4 pr Switch3



- Sur cette image, j'ai configuré le Switch 3 pour le réseau 2.

### c) Pour Client3

- **Client3:** 192.168.2.5

The screenshot shows a window titled "Client3" with a tabbed interface. The "Desktop" tab is selected. Inside the window, there is a section for "IP Configuration" for the "FastEthernet0" interface. The "Static" radio button is selected under "IP Configuration". The fields are filled with the following values:

Field	Value
IPv4 Address	192.168.2.5
Subnet Mask	255.255.255.0
Default Gateway	0.0.0.0
DNS Server	0.0.0.0

Below the IPv4 configuration, there is an "IPv6 Configuration" section. The "Static" radio button is selected. The fields are filled with the following values:

Field	Value
IPv6 Address	
Link Local Address	FE80::250:FFF:FE6B:51D4
Default Gateway	
DNS Server	

At the bottom, there is a "802.1X" section. The "Use 802.1X Security" checkbox is unchecked. The "Authentication" dropdown menu is set to "MD5". The "Username" and "Password" fields are empty.

- Sur cette image, j'ai configuré l'adresse IP et le masque de sous-réseau (Mask Subnet) du **Client3**.

### d) Pour Client4

- **Client4:** 192.168.2.6

The screenshot shows a window titled "Client4" with a tabbed interface. The "Desktop" tab is selected. Inside the window, there is a section titled "IP Configuration" with a blue header and a close button (X). Below this, a dropdown menu shows "Interface" set to "FastEthernet0". The "IP Configuration" section contains two radio buttons: "DHCP" (unselected) and "Static" (selected). Below the radio buttons are four text input fields: "IPv4 Address" (192.168.2.6), "Subnet Mask" (255.255.255.0), "Default Gateway" (0.0.0.0), and "DNS Server" (0.0.0.0). Below this is the "IPv6 Configuration" section, also with "Automatic" (unselected) and "Static" (selected) radio buttons. It contains four text input fields: "IPv6 Address" (empty), "Link Local Address" (FE80::260:47FF:FE50:9ABA), "Default Gateway" (empty), and "DNS Server" (empty). Below this is the "802.1X" section, which has a checkbox "Use 802.1X Security" (unchecked). Below the checkbox are three text input fields: "Authentication" (MD5), "Username" (empty), and "Password" (empty). At the bottom left of the window is a "Top" button.

- Sur cette image, j'ai configuré l'adresse IP et le masque de sous-réseau (Mask Subnet) du **Client4**.



### e) Pour Client5

- **Client5**: 192.168.2.7

The screenshot shows a window titled "Client5" with a tabbed interface. The "Desktop" tab is selected. Inside the window, there is a section for "IP Configuration" for the "FastEthernet0" interface. The "Static" radio button is selected under "IP Configuration". The fields are filled with the following values:

Field	Value
IPv4 Address	192.168.2.7
Subnet Mask	255.255.255.0
Default Gateway	0.0.0.0
DNS Server	0.0.0.0

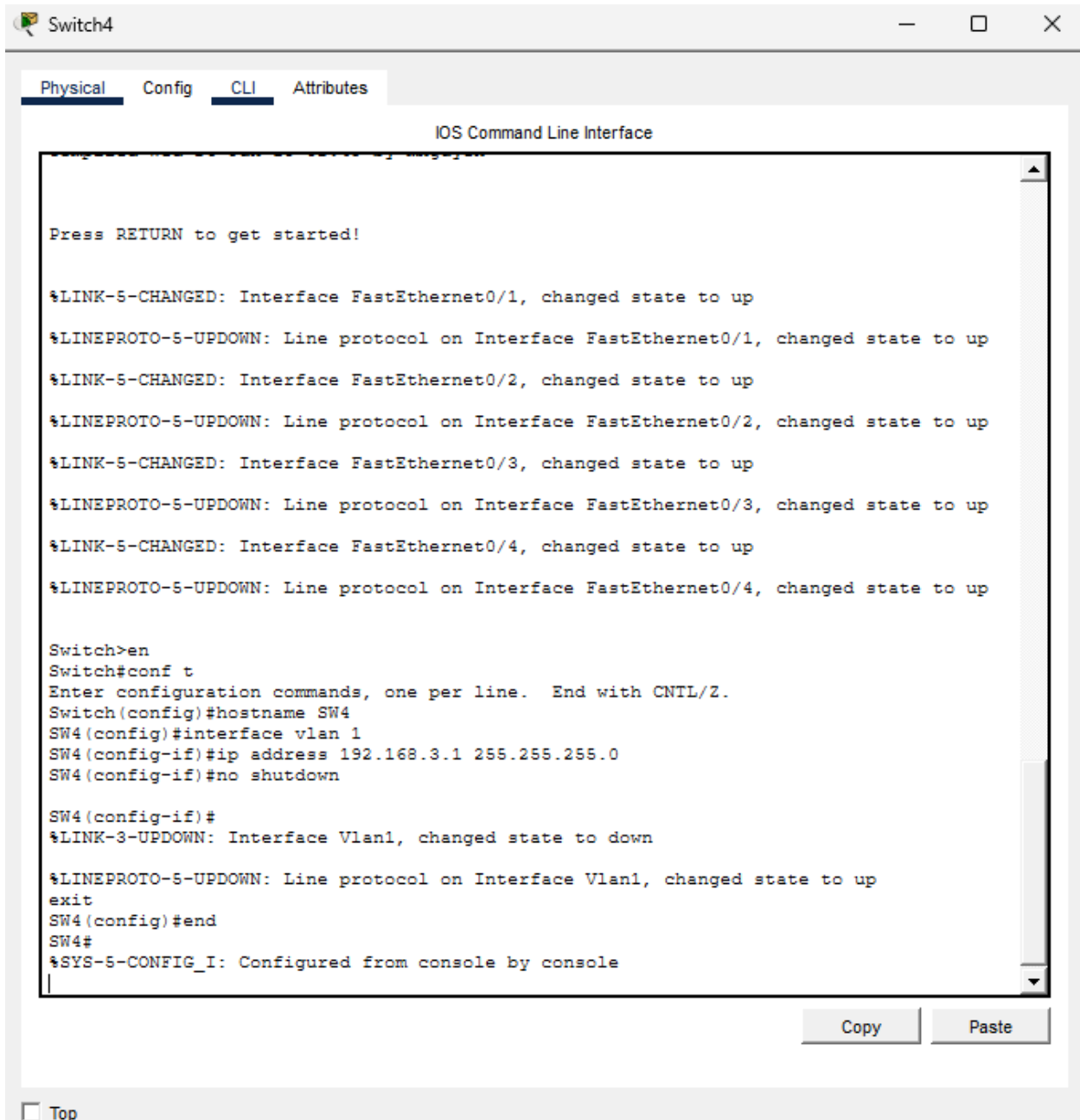
Below the IPv4 configuration, there is an "IPv6 Configuration" section. The "Static" radio button is selected. The fields are empty except for the "Link Local Address" which is set to "FE80::201:C7FF:FE9B:1902".

At the bottom, there is a "802.1X" section. The "Use 802.1X Security" checkbox is unchecked. The "Authentication" dropdown is set to "MD5". The "Username" and "Password" fields are empty.

At the very bottom of the window, there is a "Top" button.

- Sur cette image, j'ai configuré l'adresse IP et le masque de sous-réseau (Mask Subnet) du **Client5**.

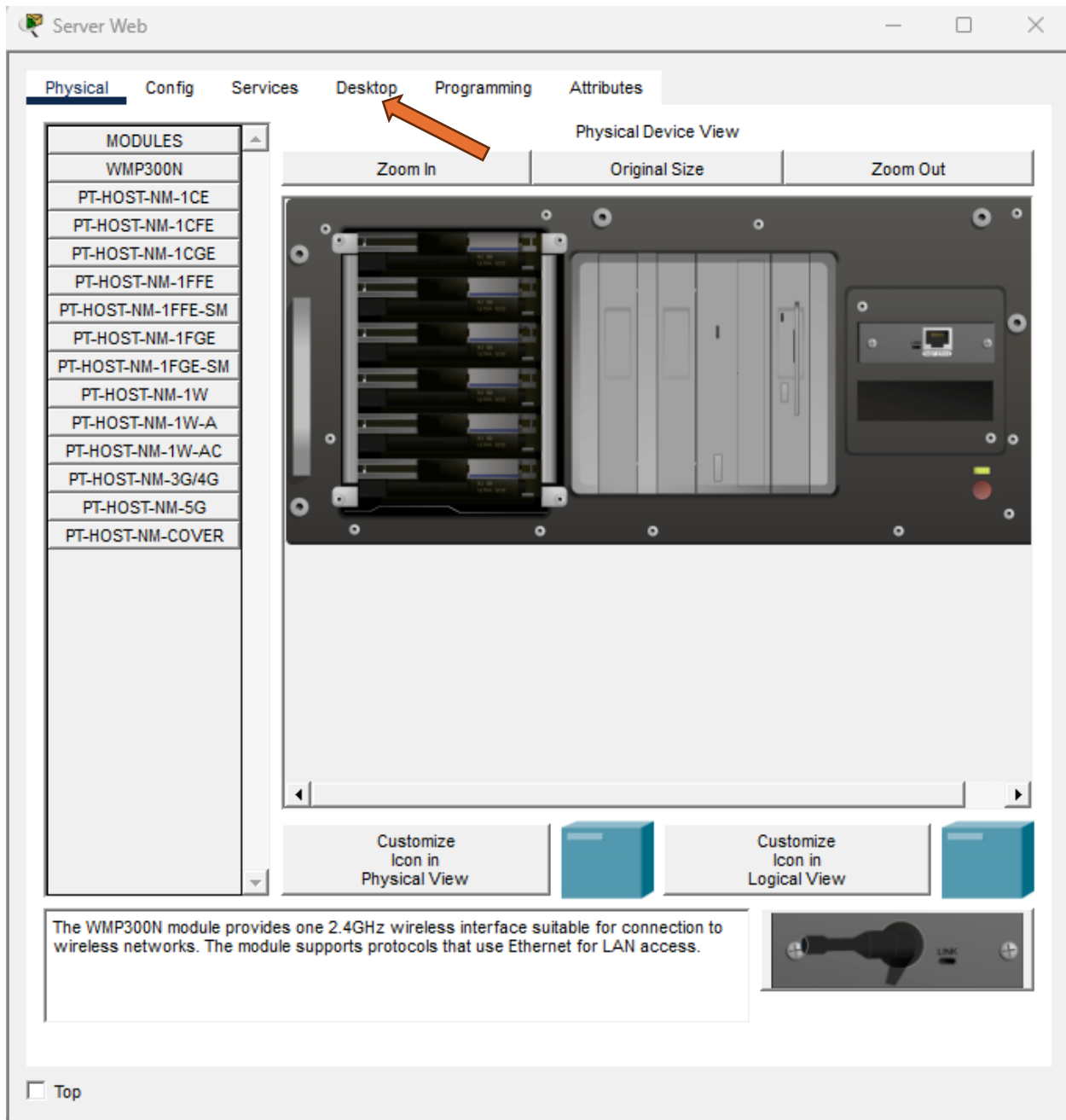
## f) J'ai configure le switch IPv4 pr Switch4



- Sur cette image, j'ai configuré le Switch 4 pour le reseau 2.

## g) Pour le Server Web

- S. Web (iP): 192.168.3.2



Server Web

Physical Config Services **Desktop** Programming Attributes

IP Configuration X

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.2.10

Subnet Mask 255.255.255.0

Default Gateway

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::2E0:B0FF:FE82:297B

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

☐ Top

- Sur cette image, j'ai configuré l'adresse IP et le masque de sous-réseau du serveur Web (voir pages 19 à 20).

## h) Pour le Server Mail

- S. Mail (iP): 192.168.3.3

The screenshot shows the 'Server Mail' configuration window with the 'Desktop' tab selected. The 'IP Configuration' section is active, showing the following settings:

Configuration Type	IPv4 Address	Subnet Mask	Default Gateway	DNS Server
Static	192.168.2.11	255.255.255.0		0.0.0.0

The 'IPv6 Configuration' section is also visible, showing the following settings:

Configuration Type	IPv6 Address	Link Local Address	Default Gateway	DNS Server
Static		FE80::201:96FF:FEBC:504		

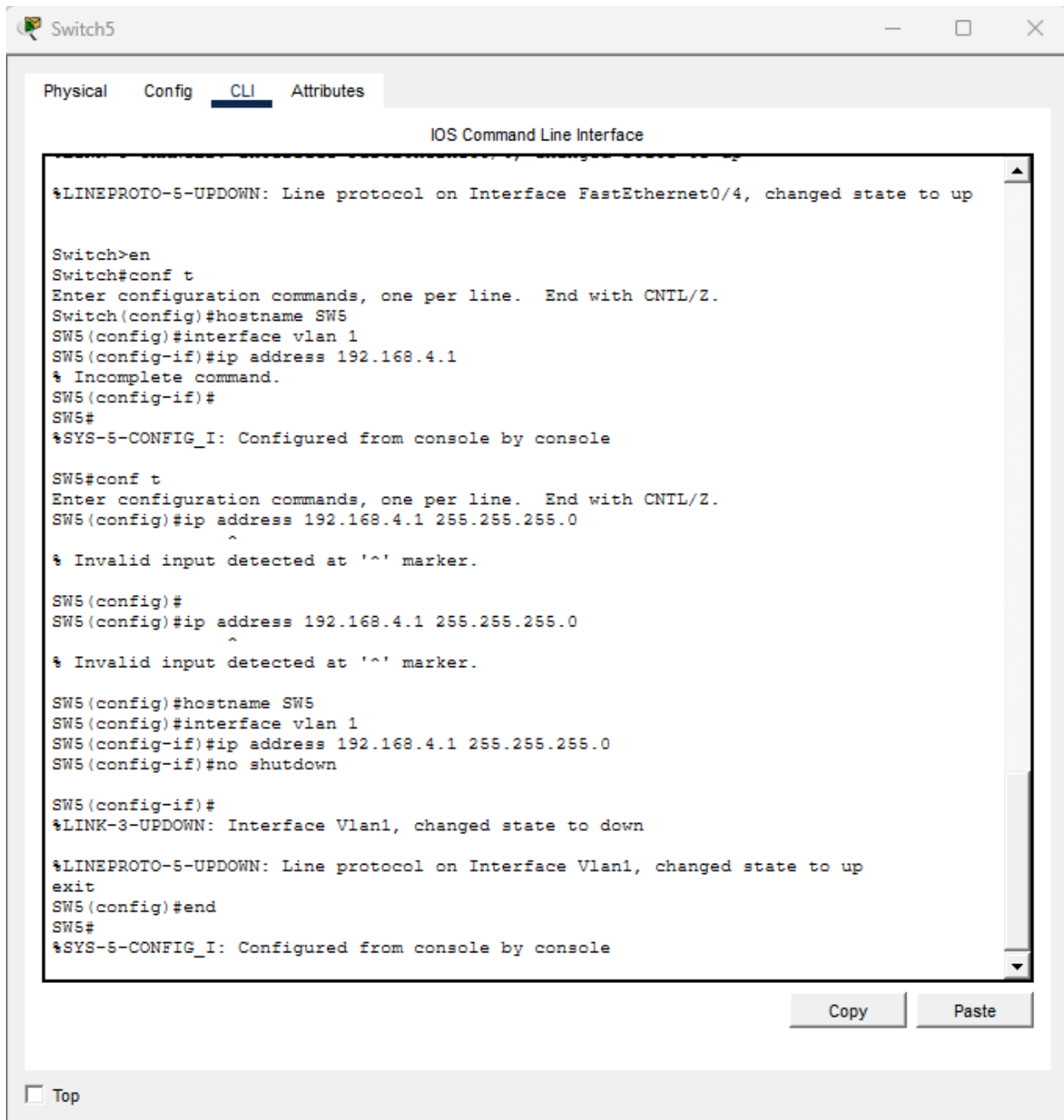
The '802.1X' section is also visible, showing the following settings:

Use 802.1X Security	Authentication	Username	Password
<input type="checkbox"/>	MD5		

At the bottom left, there is a 'Top' button.

Sur cette image, j'ai configuré l'adresse IP et le masque de sous-réseau (Mask Subnet) du **Server Mail**.

## i) J'ai configure le switch IPv4 pr Switch5



- Sur cette image, j'ai configuré le Switch 5 pour le reseau 2.

## j) Pour le Server File

- S.File (iP): 192.168.3.3

The screenshot shows the 'Server File' configuration window with the 'Desktop' tab selected. The 'IP Configuration' section is active, showing 'Static' IP settings. The 'IPv6 Configuration' section is also visible, showing 'Static' settings. The '802.1X' section is partially visible at the bottom.

IP Configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IPv4 Address	192.168.2.12
Subnet Mask	255.255.255.0
Default Gateway	
DNS Server	0.0.0.0

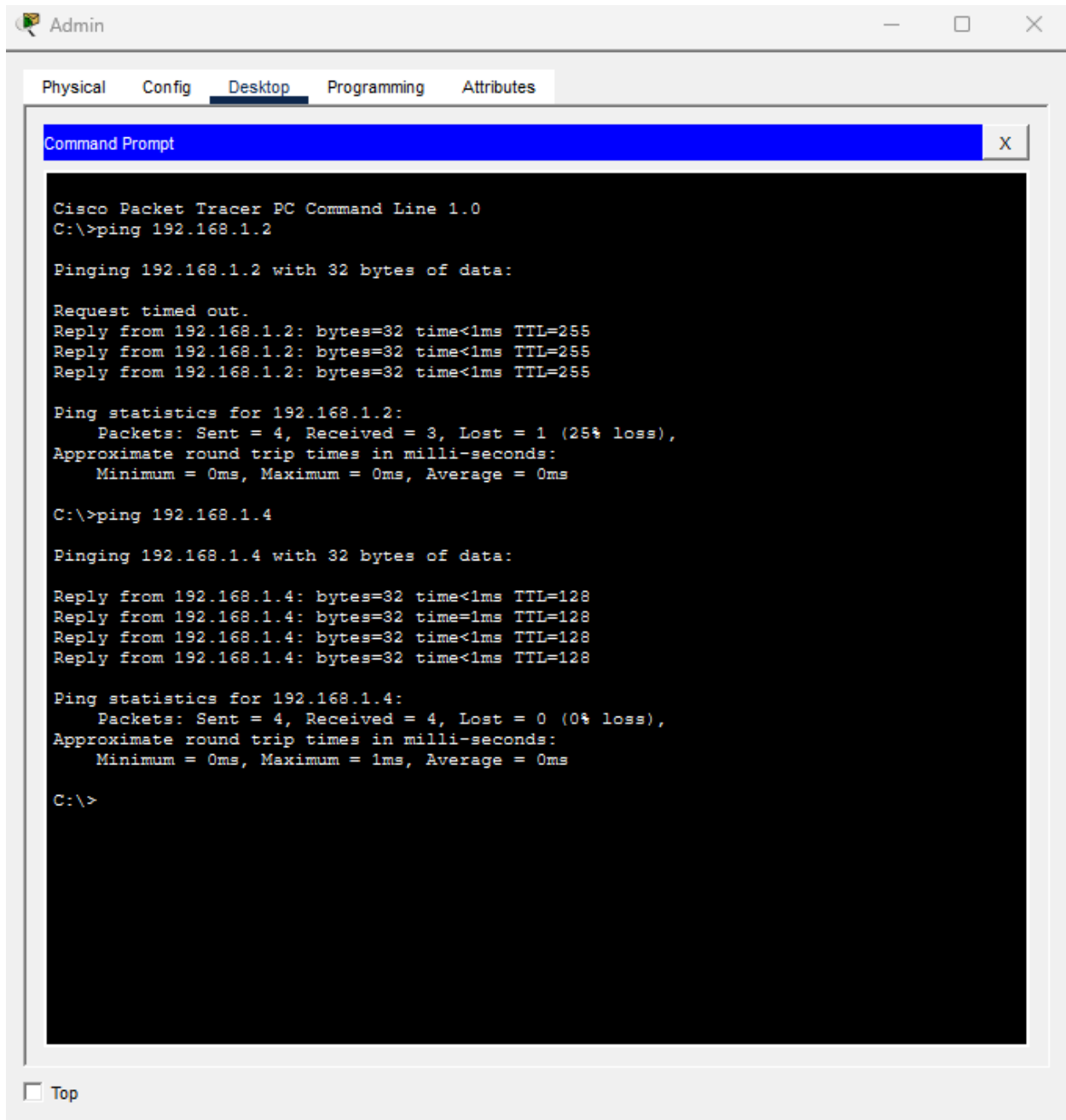
IPv6 Configuration	
<input type="radio"/> Automatic	<input checked="" type="radio"/> Static
IPv6 Address	
Link Local Address	FE80::250:FFF:FE30:3490
Default Gateway	
DNS Server	

802.1X	
<input type="checkbox"/> Use 802.1X Security	
Authentication	MD5
Username	
Password	

Sur cette image, j'ai configuré l'adresse IP et le masque de sous-réseau (Mask Subnet) du **Server File**.

## k) J'ai testé la connectivité pour le reseau 1



The screenshot shows a Cisco Packet Tracer PC Command Line window for a device named 'Admin'. The window has tabs for 'Physical', 'Config', 'Desktop', 'Programming', and 'Attributes', with 'Desktop' selected. Inside the window is a 'Command Prompt' window with a black background and white text. The text shows the following commands and results:

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Request timed out.
Reply from 192.168.1.2: bytes=32 time<1ms TTL=255
Reply from 192.168.1.2: bytes=32 time<1ms TTL=255
Reply from 192.168.1.2: bytes=32 time<1ms TTL=255

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.168.1.4

Pinging 192.168.1.4 with 32 bytes of data:

Reply from 192.168.1.4: bytes=32 time<1ms TTL=128
Reply from 192.168.1.4: bytes=32 time<1ms TTL=128
Reply from 192.168.1.4: bytes=32 time<1ms TTL=128
Reply from 192.168.1.4: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

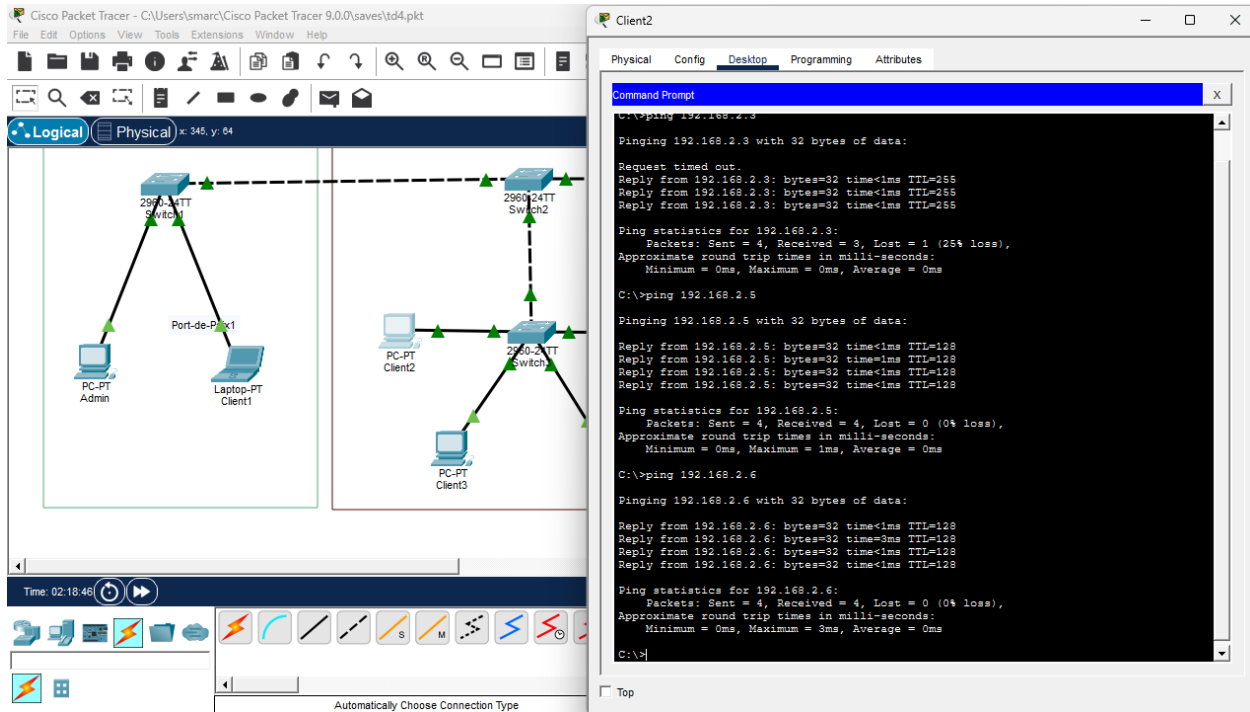
C:\>
```

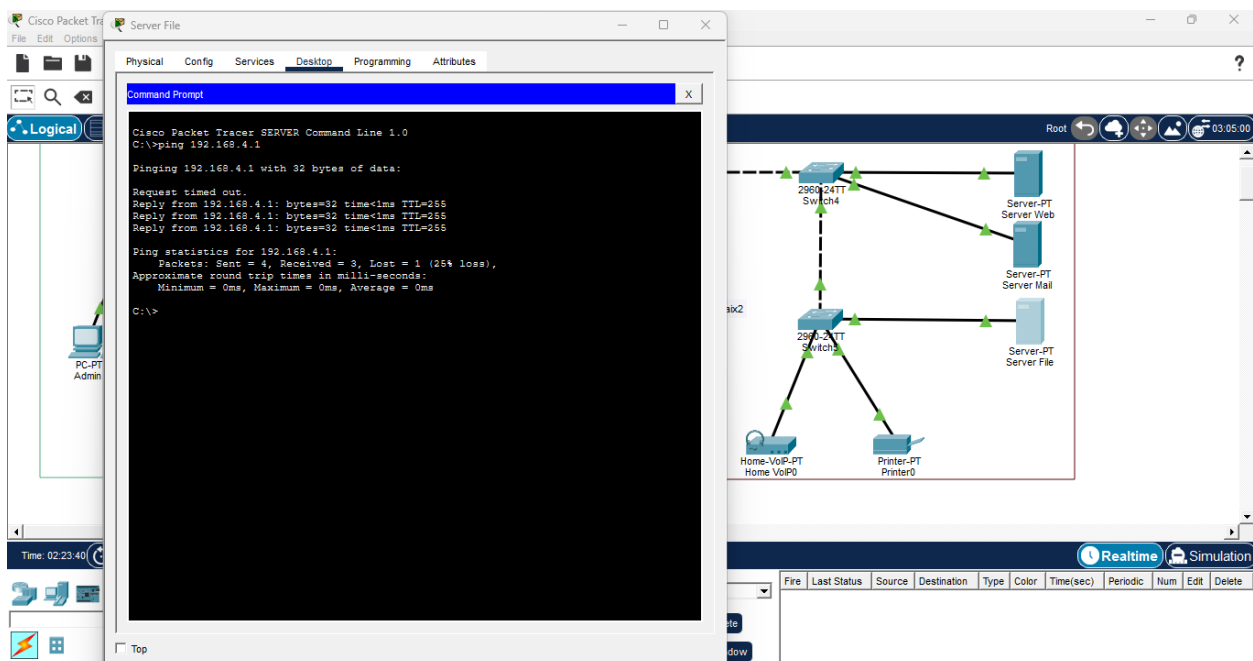
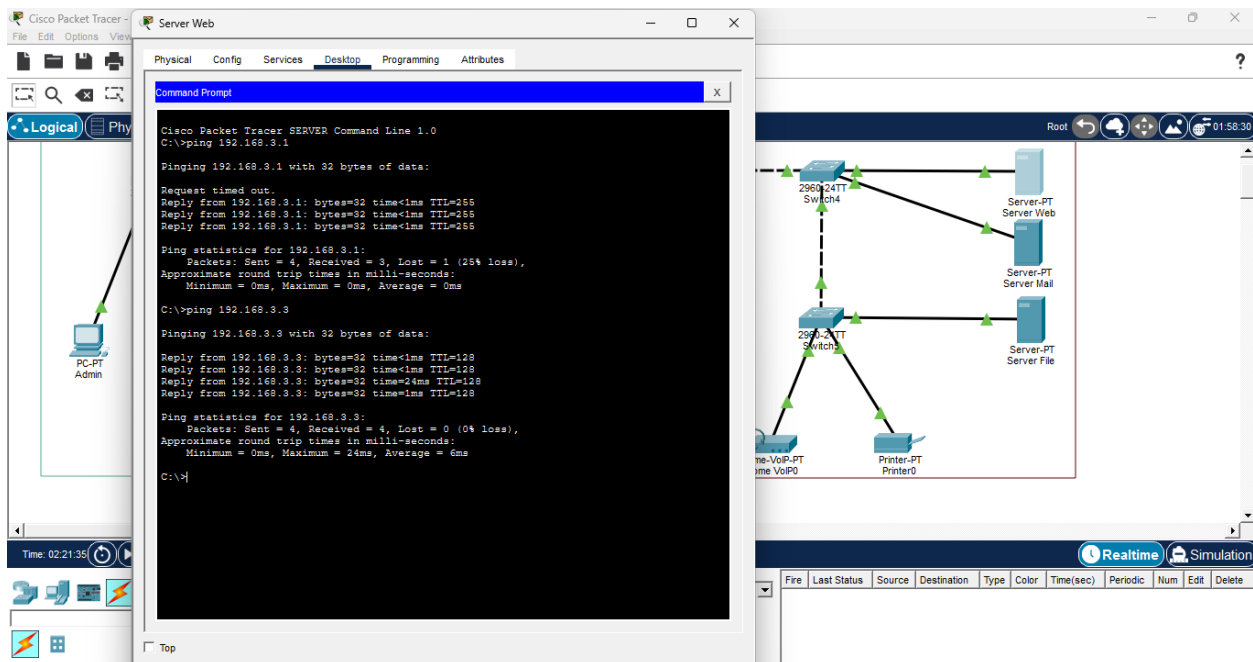
At the bottom left of the window, there is a checkbox labeled 'Top' which is currently unchecked.

- Sur cette image, j'ai pingé les adresses IP afin de vérifier la communication entre les dispositifs et le switch.

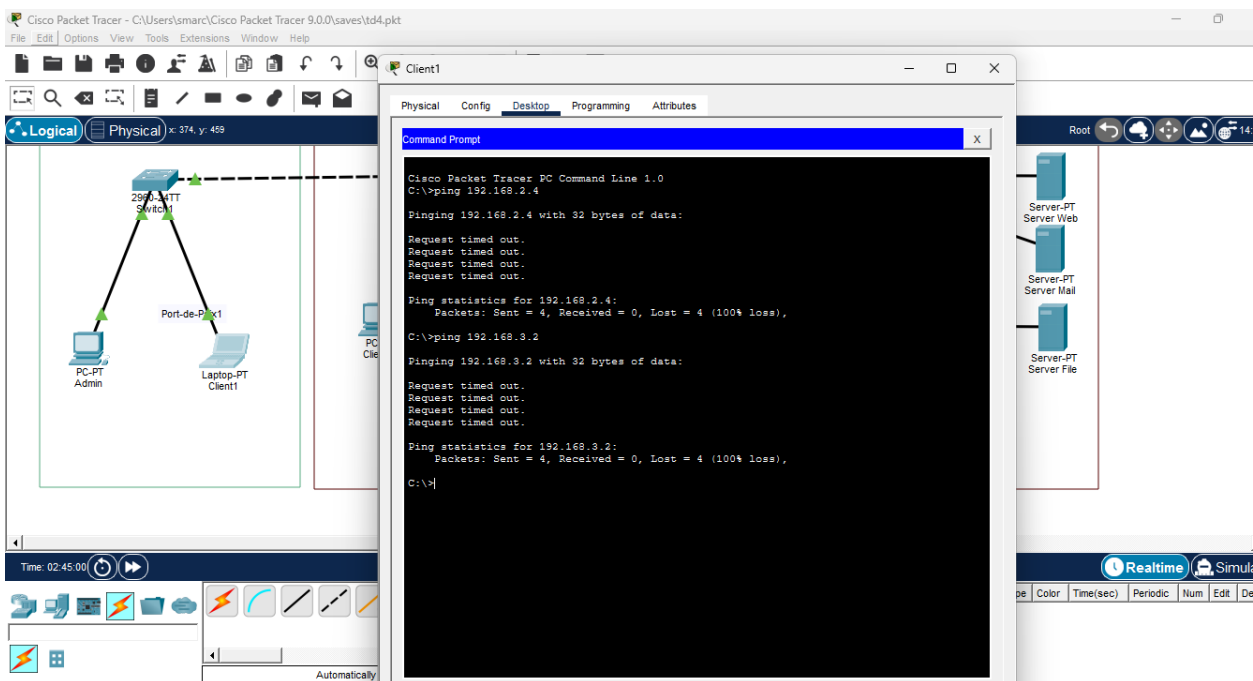
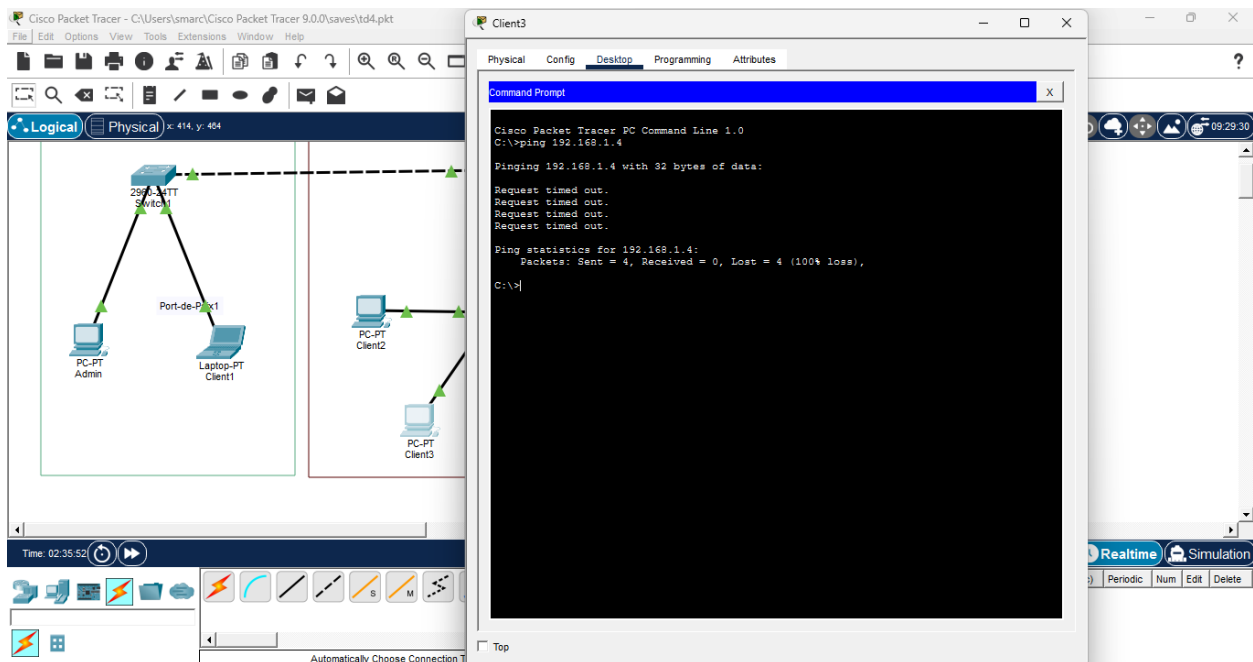


## D) J'ai testé la connectivité pour le reseau 2



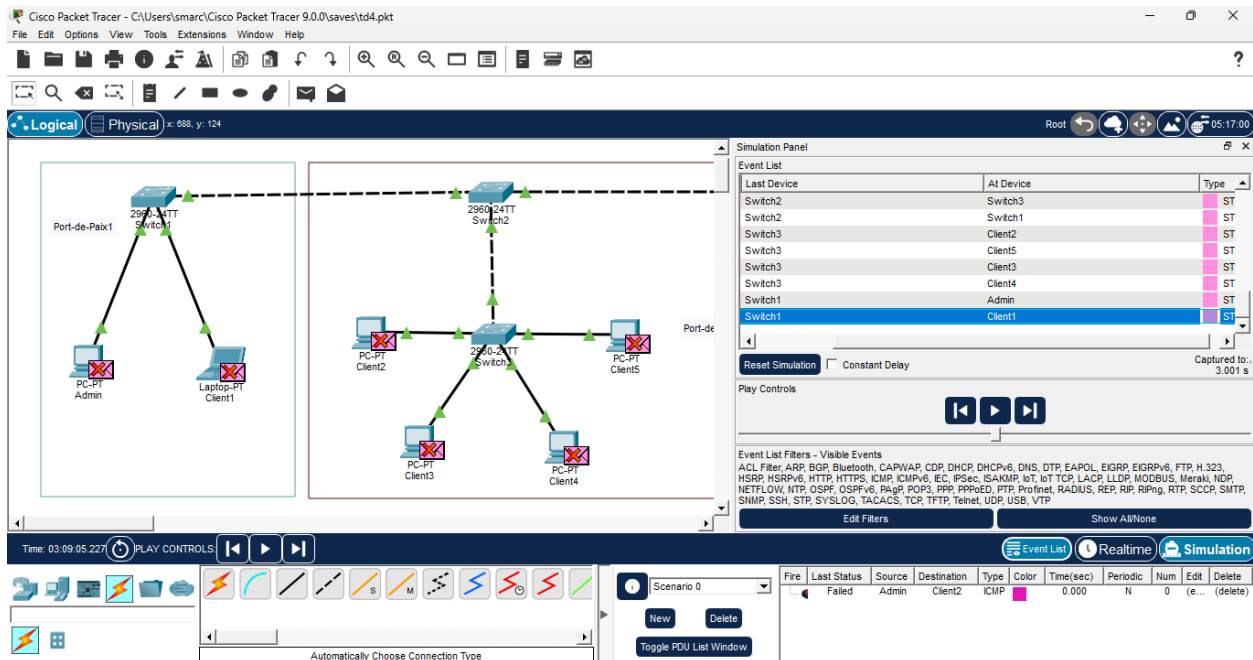


- Sur cette image, les dispositifs sont communiquent correctement avec les switches (voir la page 25 à 26).



- Sur ces images, j'ai effectué plusieurs tests différents. On constate que les réseaux 1 et 2 ne fonctionnent pas en raison de l'absence de passerelle.

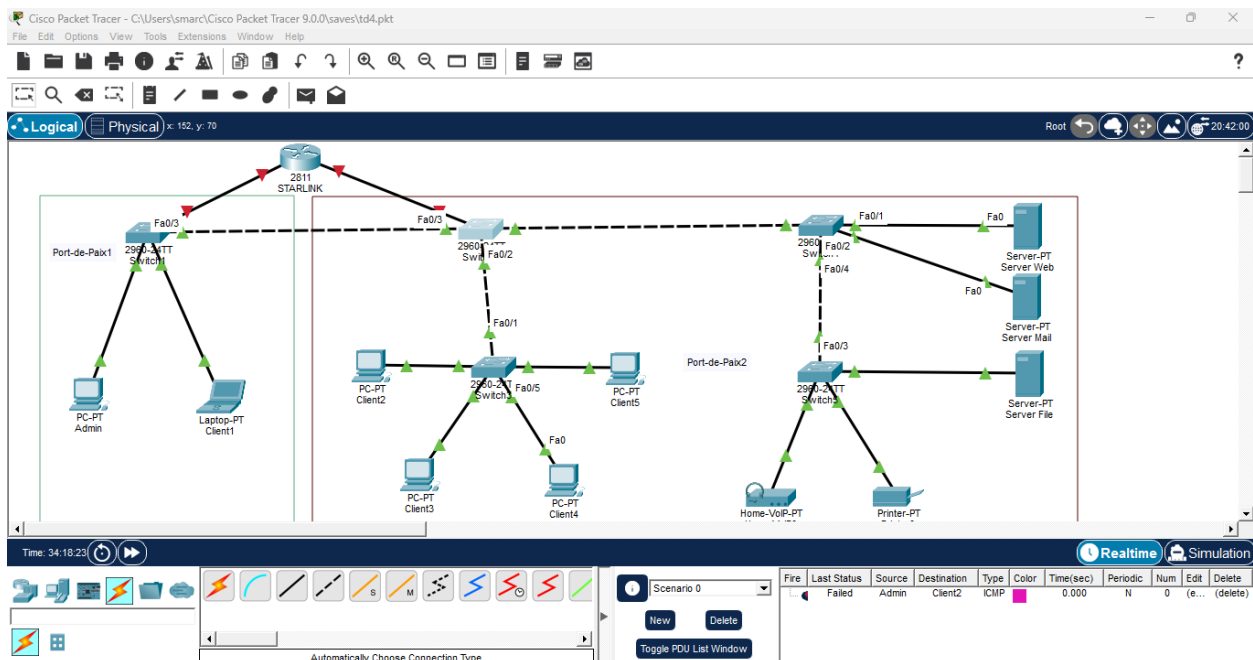
## a) J'ai testé la connectivité en mode de simulation en temps réel



- Sur cette image, j'ai envoyé des paquets (envelopes) afin de tester la connectivité, mais le test a échoué (erreur).

**2. Reproduisez cette topologie en configurant le routeur et les switches, puis en attribuant les adresses IP aux dispositifs. Utilisez soit IPv4, soit IPv6, et testez la connectivité des deux VLAN à l'aide de la commande ping et du mode de simulation.**

A) J'ai reproduit cette topologie en configurant en configurant le routeur



- Sur cette image, j'ai reproduit la topologie demandée.

**NB1: J'ai déjà configuré les switches, puis attribué les adresses IP aux dispositifs en utilisant IPv4.**

**NB2: J'ai conservé la même topologie précédente pour ajouter le routeur, en intégrant les différentes images dans le fichier de travail.**

## b) J'ai configuré le routeur

STARLINK

Physical Config CLI Attributes

Physical Device View

Zoom In Original Size Zoom Out

MODULES

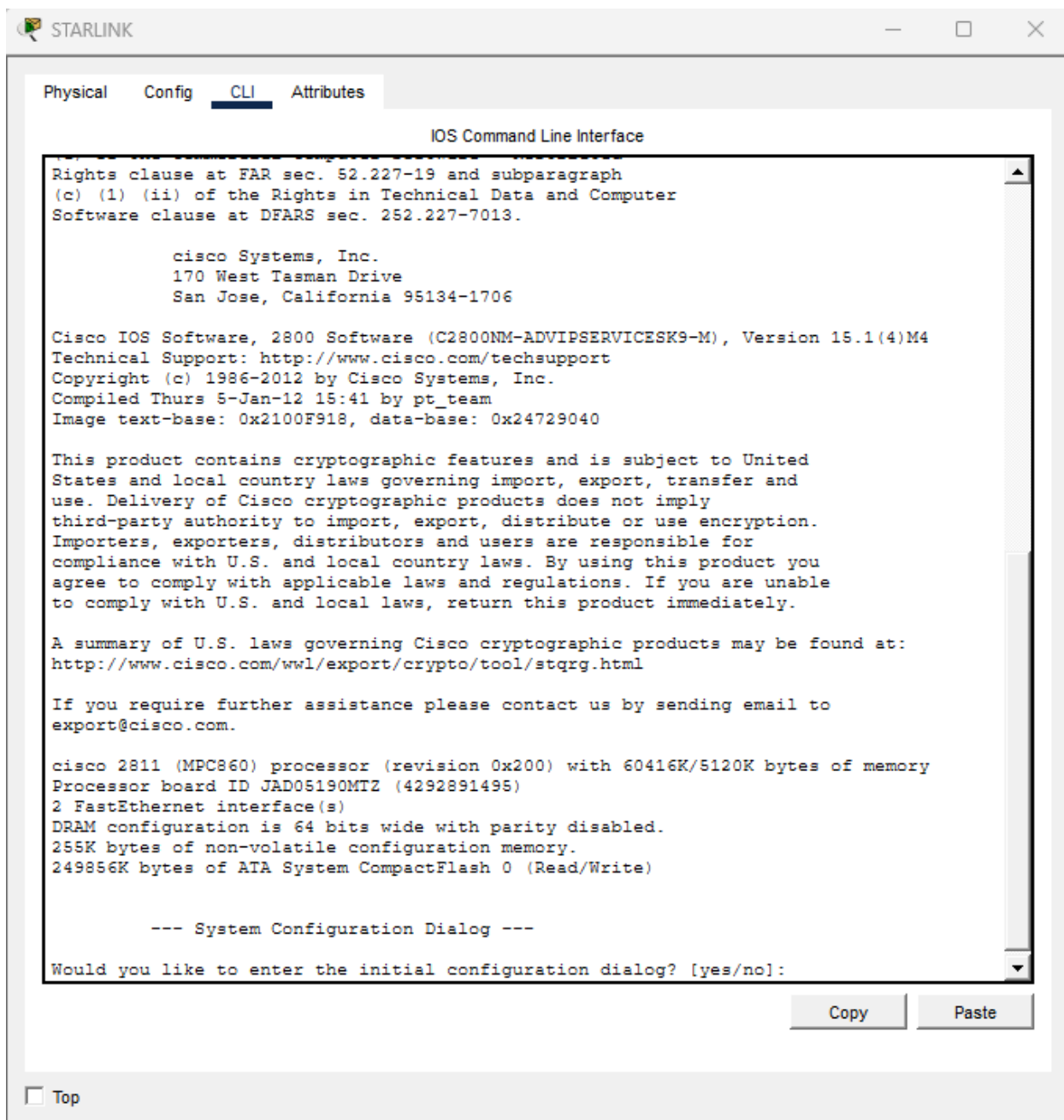
- NM-1E
- NM-1E2W
- NM-1FE-FX
- NM-1FE-TX
- NM-1FE2W
- NM-2E2W
- NM-2FE2W
- NM-2W
- NM-4A/S
- NM-4E
- NM-8A/S
- NM-8AM
- NM-Cover
- NM-ESW-161
- HWIC-1GE-SFP
- HWIC-2T
- HWIC-4ESW
- HWIC-8A
- HWIC-AP-AG-B
- WIC-1AM
- WIC-1ENET
- WIC-1T
- WIC-2AM
- WIC-2T
- WIC-Cover
- GLC-LH-SMD

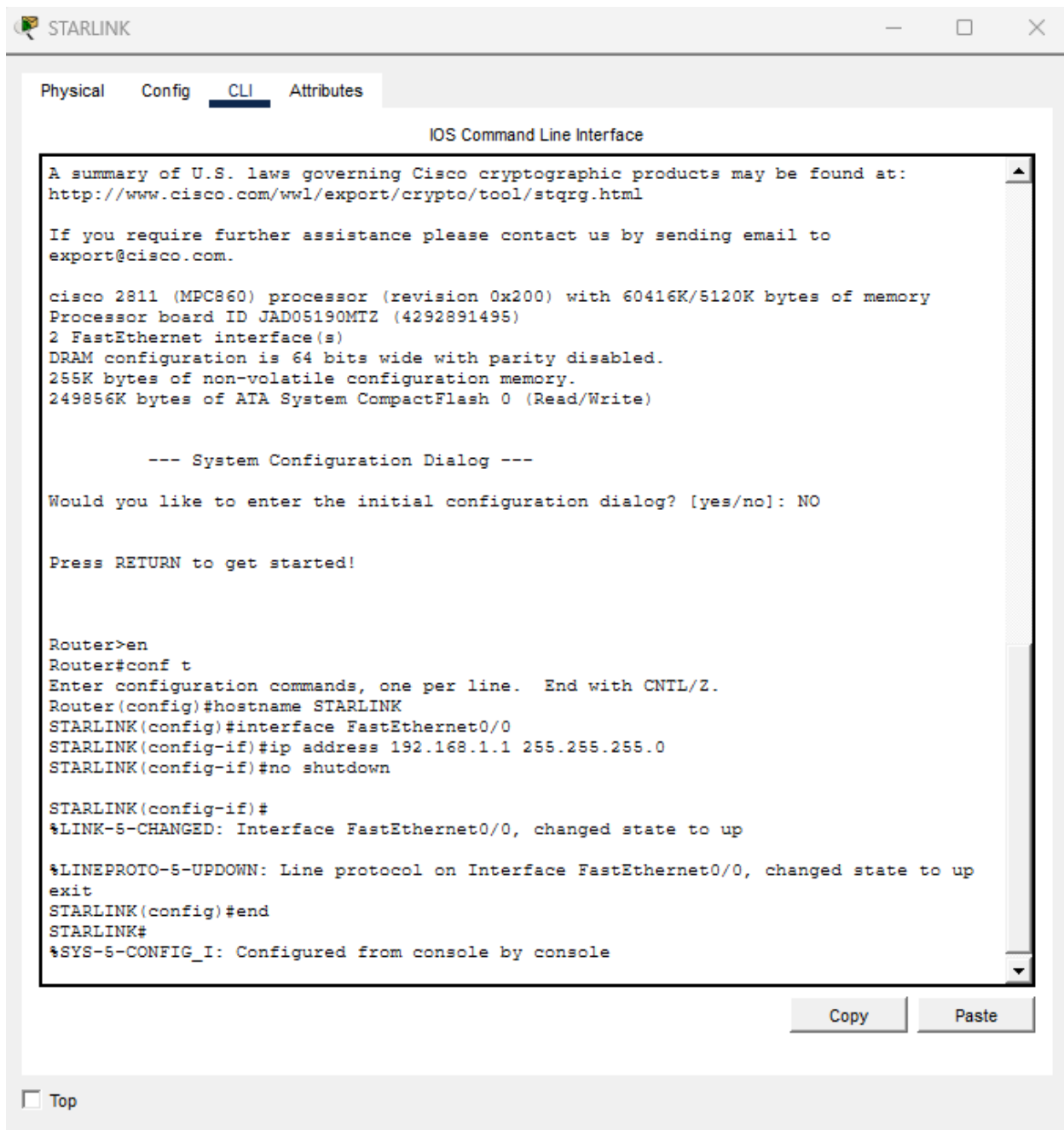
The NM-1E features a single Ethernet port that can connect a LAN backbone which can also support either six PRI connections to aggregate ISDN lines, or 24 synchronous/asynchronous ports.

Customize Icon in Physical View

Customize Icon in Logical View

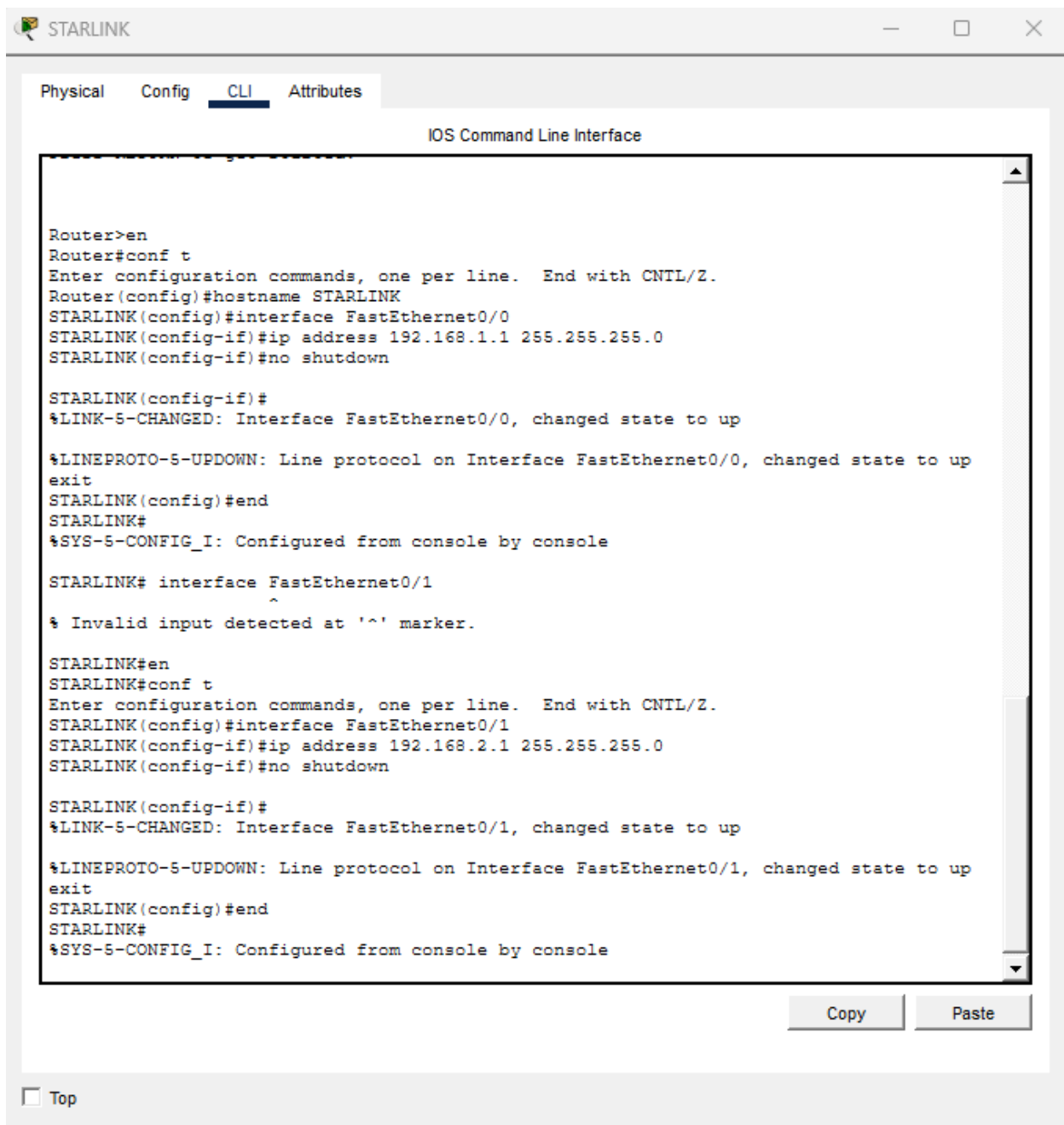
Top





Sur cette image, j'ai configuré l'interface **FastEthernet0/0** pour la connexion **STARLINK** (voir pages 30 à 32).





- Sur cette image, j'ai configuré l'interface **FastEthernet0/1** pour le STARLINK

Admin

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.1.3

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.1

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::200:CFF:FE23:6A2A

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

- Sur cette image, j'ai configuré la passerelle pour **Admin**.

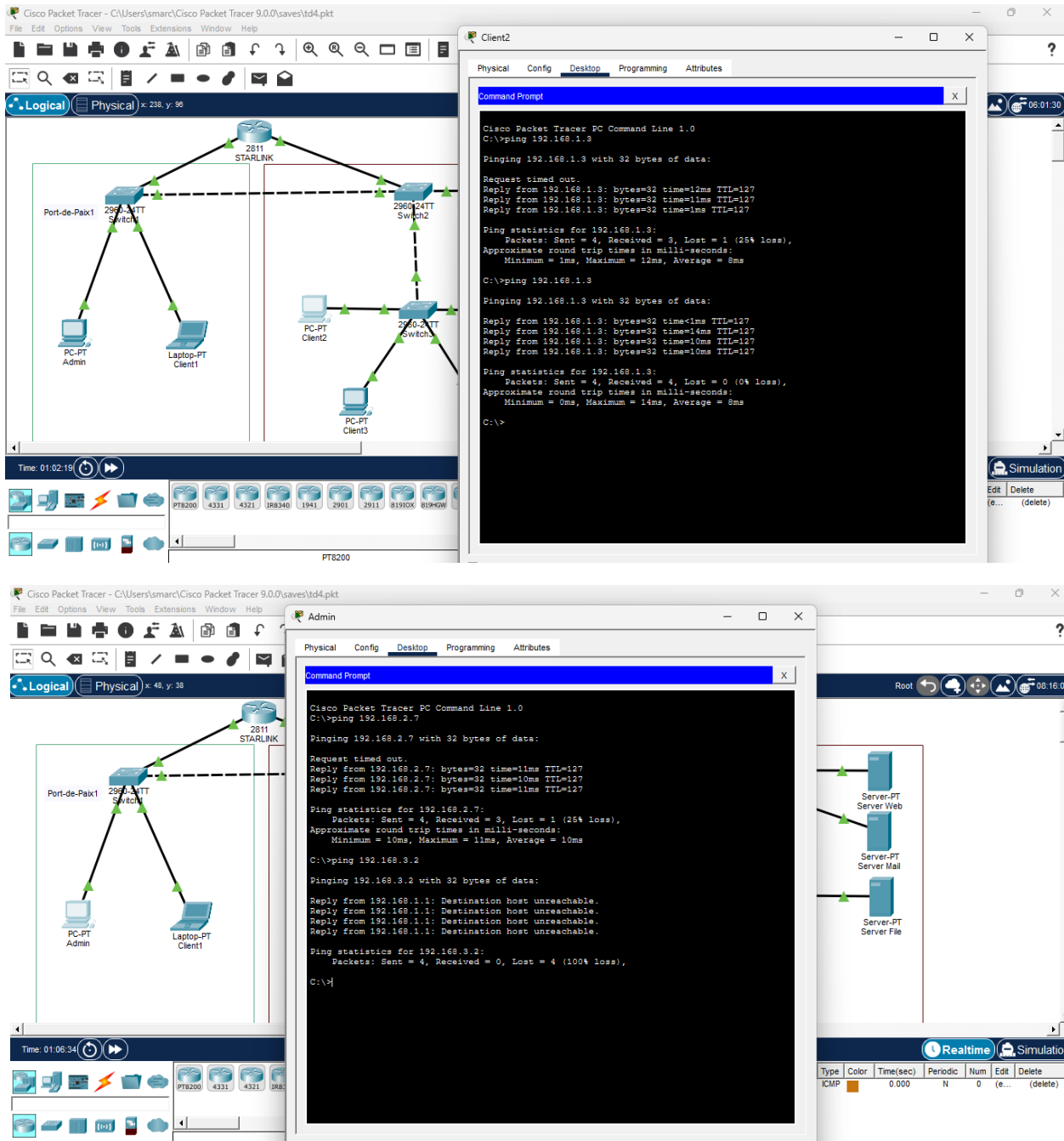
➤ **J'ai adressé un petit tableau**

<b>N°#</b>	<b>Dispositifs</b>	<b>Gateway (Passerelle)</b>
<b>Reseau 1(Port-de-Paix1)</b>	Admin	192.168.1.1
	Client1	192.168.1.1
<b>Reseau 2(Port-de-Paix2)</b>	Client 2	192.168.2.1
	Client3	192.168.2.1
	Client4	192.168.2.1
	Client5	192.168.2.1
	Server Web	192.168.2.1
	Server Mail	192.168.2.1
	Server File	192.168.2.1
	Printer 1	192.168.2.1

**NB: Switch4 a pour adresse IP: 192.168.2.9**

**Switch5 a pour adresse IP: 192.168.2.9 avec Passerelle: 192.168.2.1**

## c) J'ai testé la connectivité avec la commande ping



- Sur ces images, j'ai testé la connectivité des deux VLAN à l'aide de la commande **ping**. On constate ainsi que les réseaux 1 et 2 sont correctement connectés.

## a) J'ai testé la connectivité des deux vlan en mode de simulation en temps réel

Simulation Panel

Time(sec)	Last Device	At Device	Type
0.001	Client1	Switch1	ICMP
0.001	Server File	Switch5	ICMP
0.002	Switch1	STARLINK	ICMP
0.002	Switch5	Switch2	ICMP
0.003	STARLINK	Switch2	ICMP
0.004	Switch2	Switch4	ICMP
0.004	Switch2	STARLINK	ICMP
0.005	Switch4	Server Web	ICMP
0.005	STARLINK	Switch1	ICMP
0.006	Server Web	Switch4	ICMP
0.006	Client1	Switch1	ICMP
0.007	Switch4	Switch2	ICMP
0.007	Client1	STARLINK	ICMP
0.008	Switch2	STARLINK	ICMP
0.008	STARLINK	Switch1	ICMP
0.009	STARLINK	Switch2	ICMP
0.010	Switch1	Client1	ICMP
0.010	Switch2	Switch4	ICMP
0.011	Switch4	Switch5	ICMP

Event List Filters - Visible Events

ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IEC, IPsec, ISAKMP, IoT, IoT TCP, LACP, LLDP, MODBUS, Meraki, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, PTP, Profinet, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Simulation Panel

Device	At Device	Type
15	Switch4	ICMP
15	Switch4	ICMP
14	Switch2	ICMP
14	Switch2	ICMP
12	STARLINK	ICMP
12	STARLINK	ICMP
11K	Switch1	ICMP
11K	Switch1	ICMP
1	Client1	ICMP

Event List Filters - Visible Events

ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IEC, IPsec, ISAKMP, IoT, IoT TCP, LACP, LLDP, MODBUS, Meraki, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, PTP, Profinet, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

- Sur ces images, le test est fait avec succès.

## Conclusion

Ce TD m'a permis de mieux comprendre la configuration des adresses IPv4 et IPv6 ainsi que les méthodes de vérification de la connectivité réseau. Malgré certaines difficultés rencontrées lors de la configuration des adresses IPv6, que je n'ai pas réussi à finaliser, la configuration en IPv4 a permis d'établir correctement la connectivité après vérification des différents paramètres. Ainsi, les objectifs du TD ont été globalement atteints.