INTITUT UNUVERSITAIRE DES SCIENCE

(IUS)

FACULTE DES SCIENCES ET DES TECHNOLOGIE

(FST)

Etudiante : Evena leamande

L3 /FST

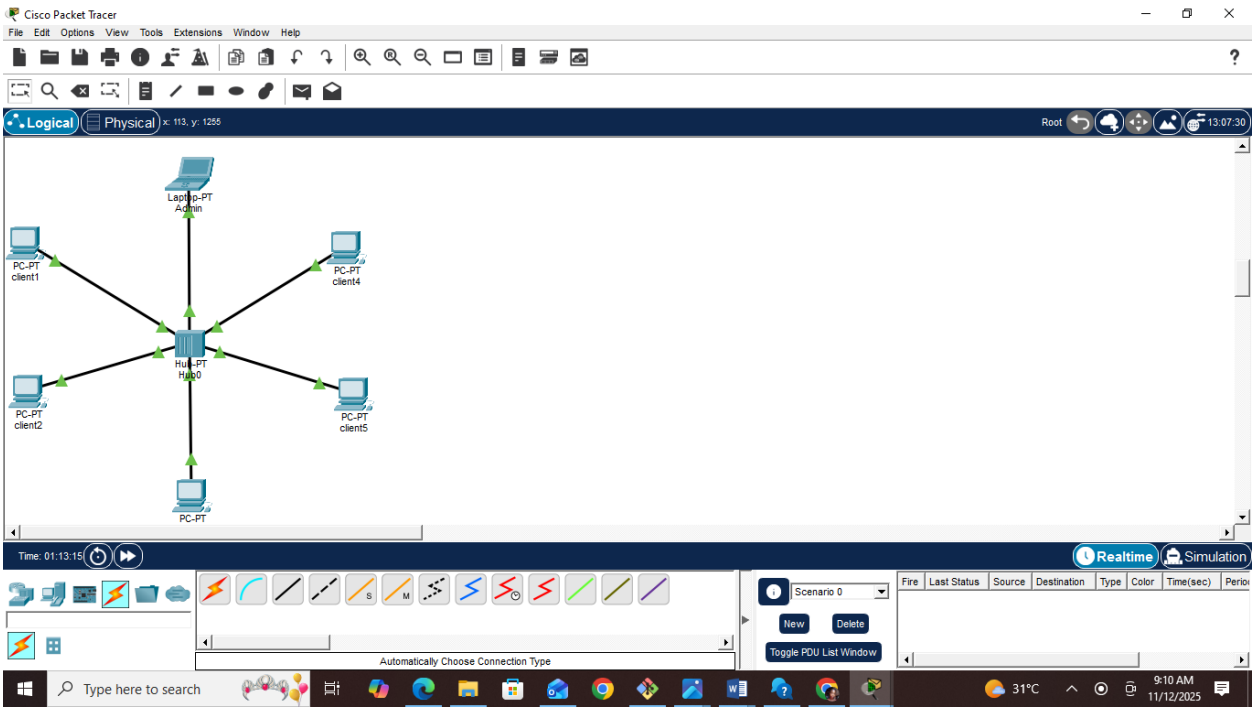
TD3 / Resaux

Prof : Ismael Saint-Amour

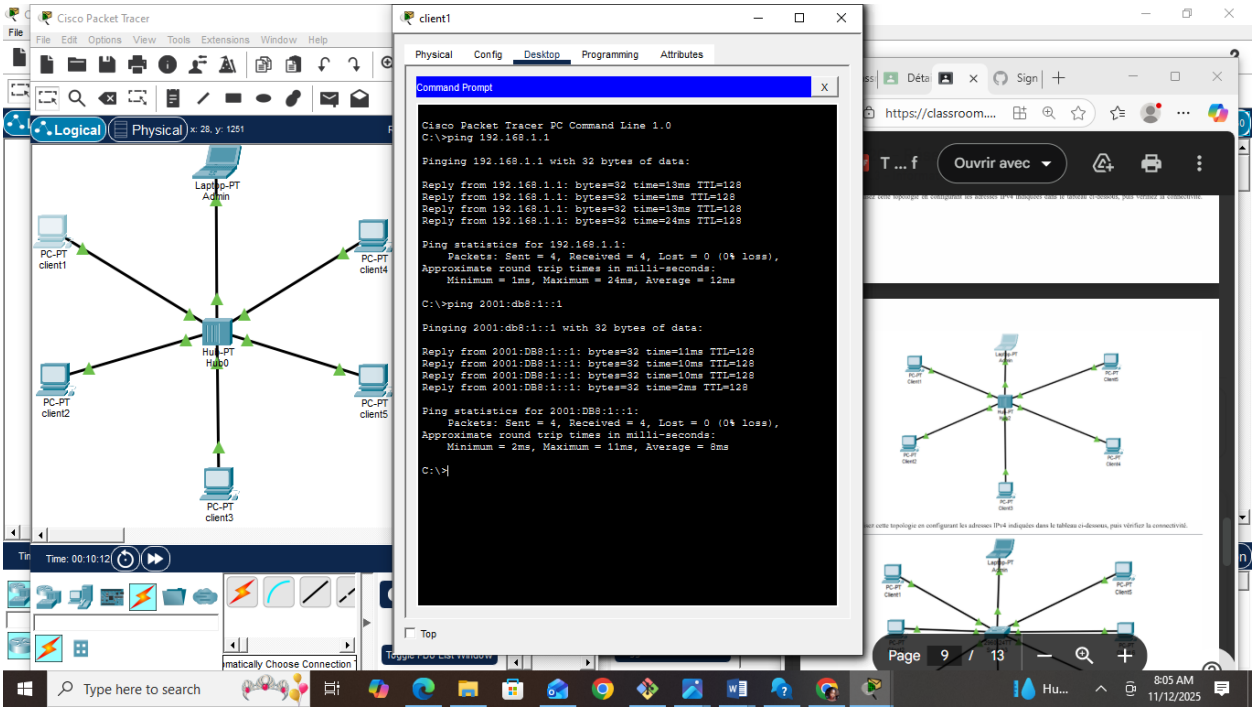
Date : le 12 /11/25

Objectif du TD

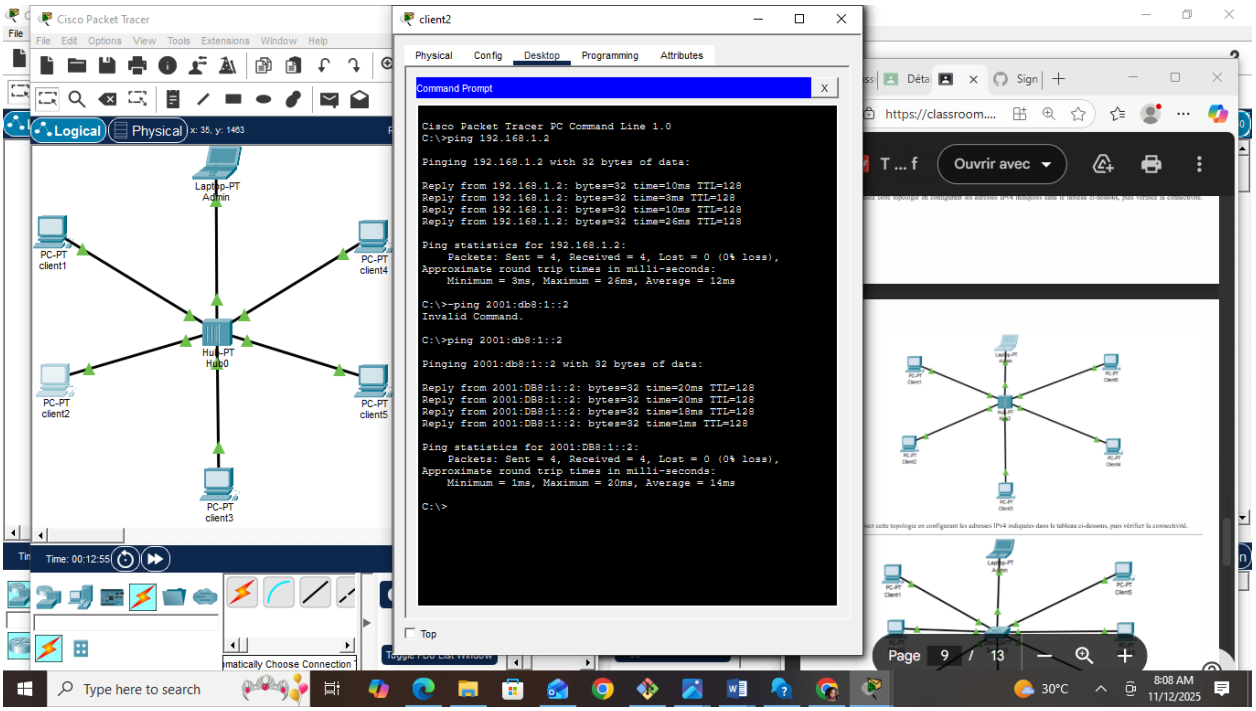
Maîtriser la configuration et le diagnostic d'un réseau local (IPv4/IPv6), tester la connectivité entre les équipements et analyser les performances du réseau.



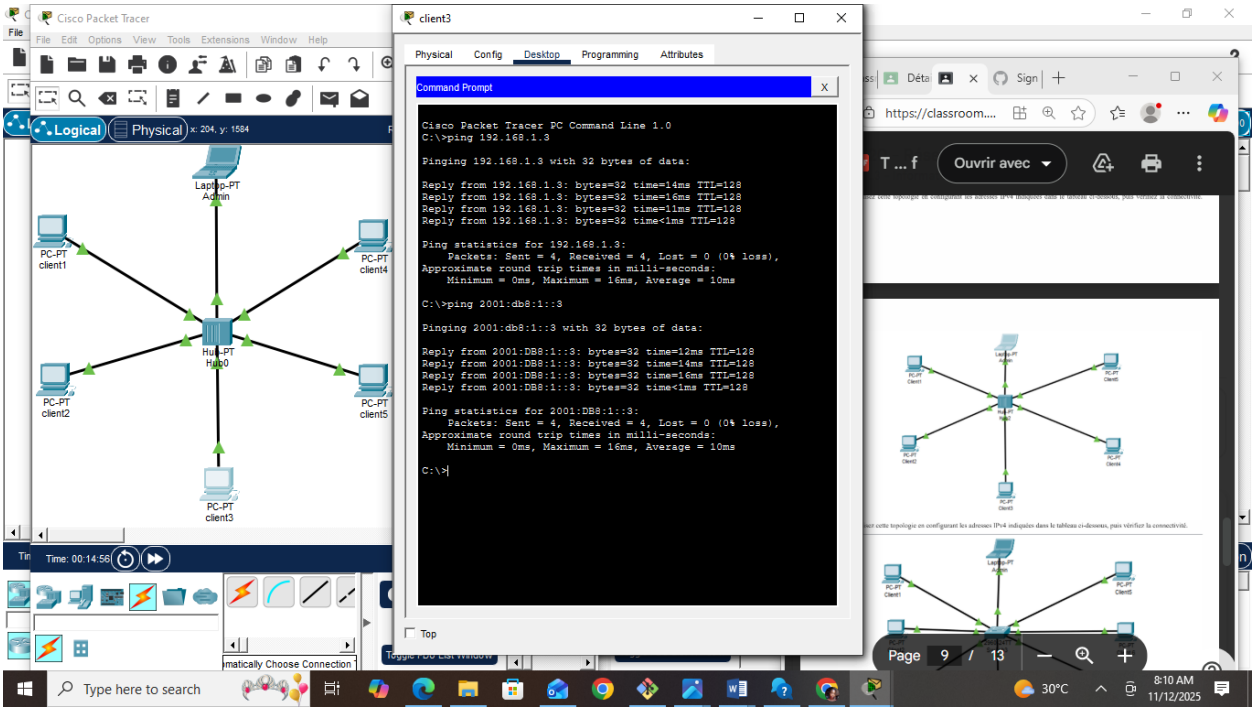
La fugure 1



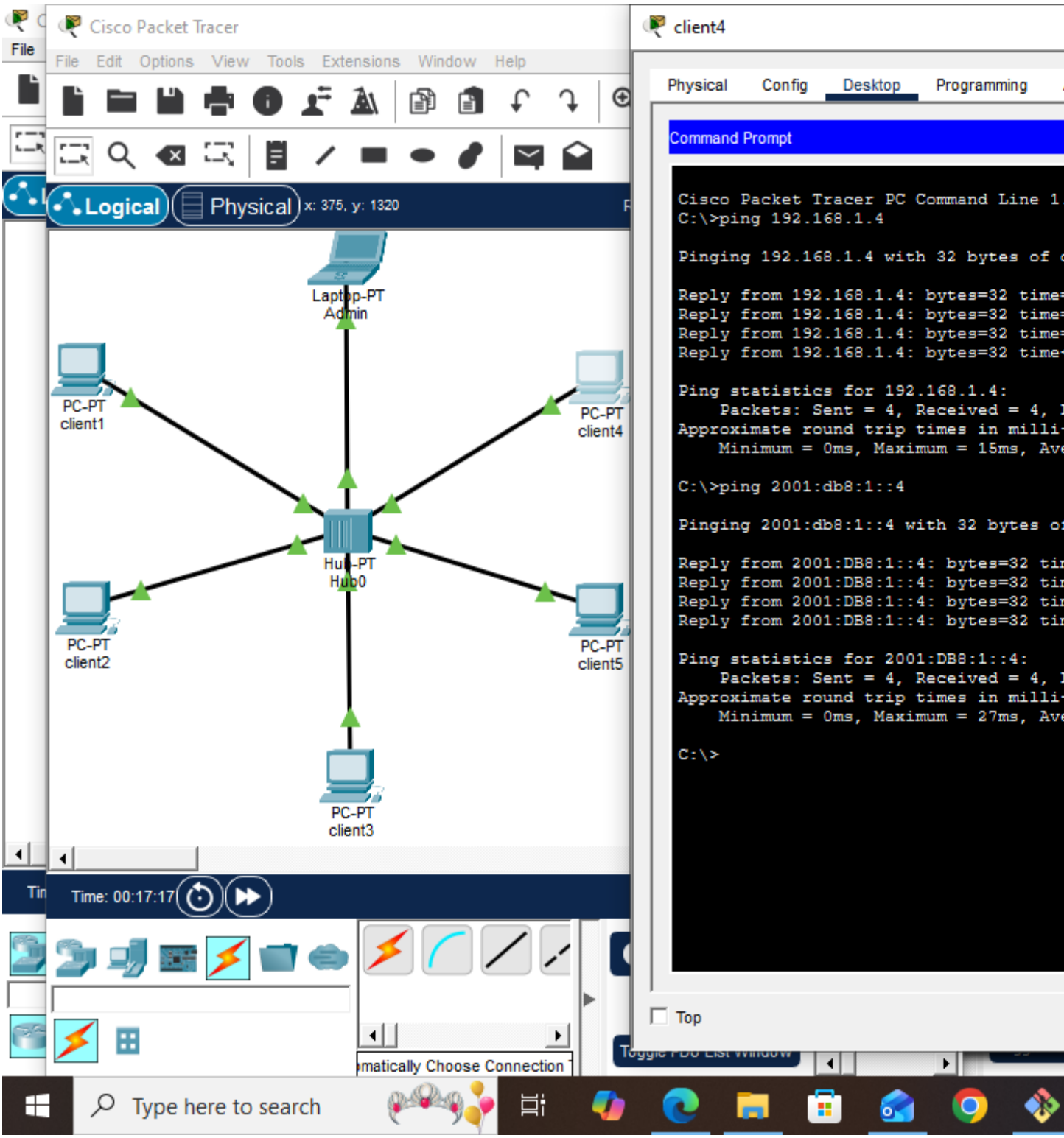
ipv4 et ipv6 pour client 1



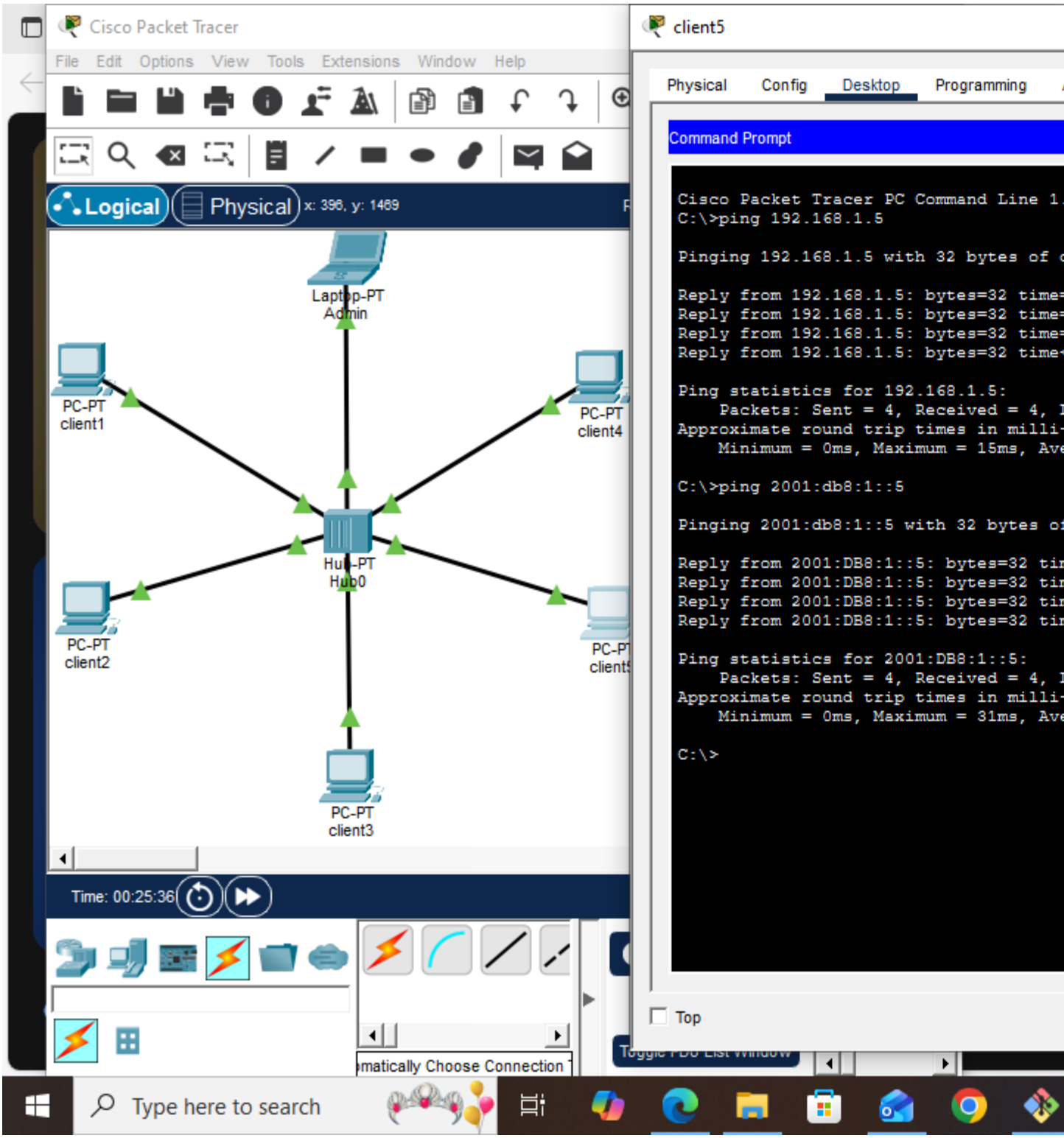
Ipv4 et ipv6 pour client 2



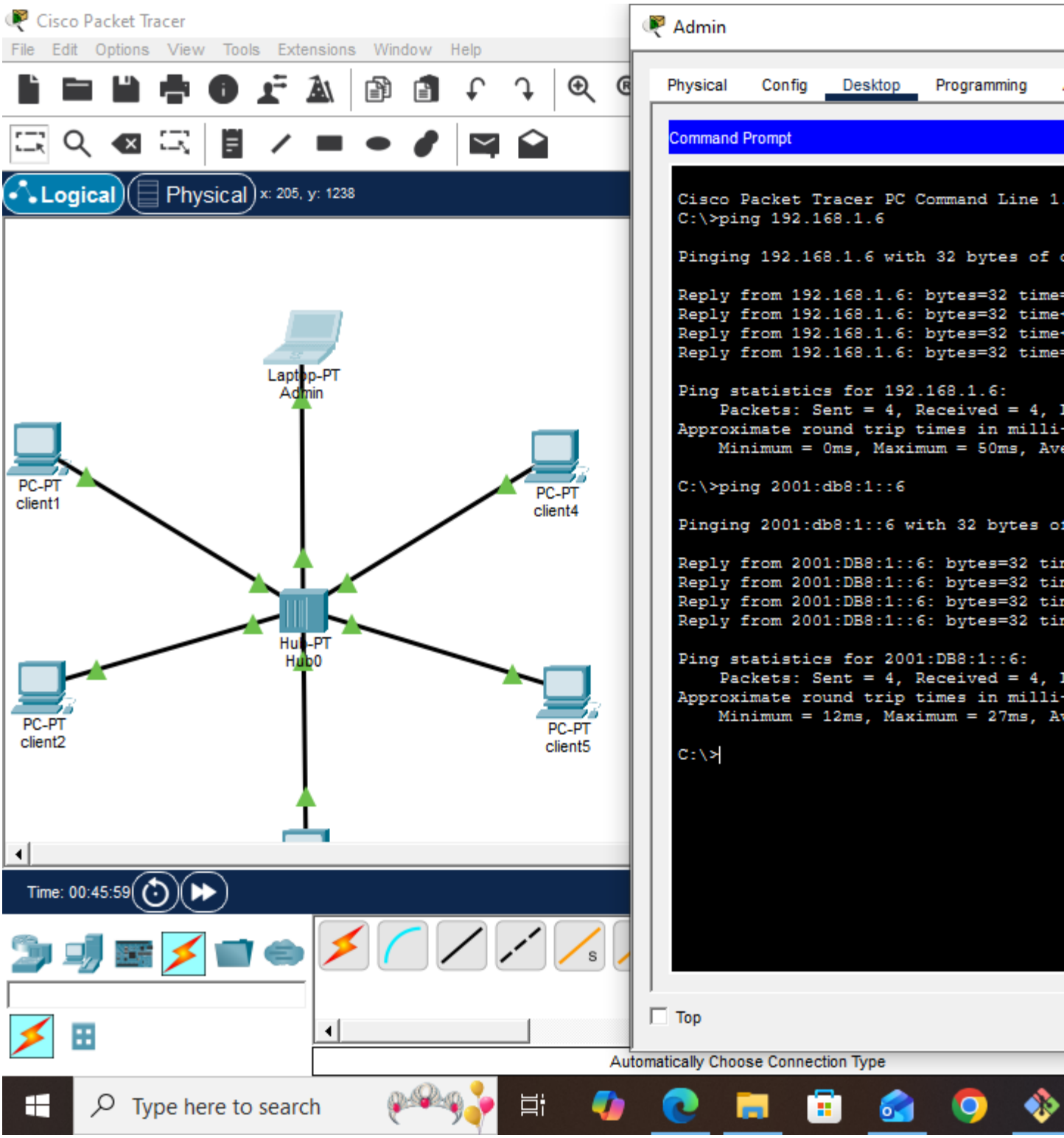
Ipv4 et ippv6 pour client 3



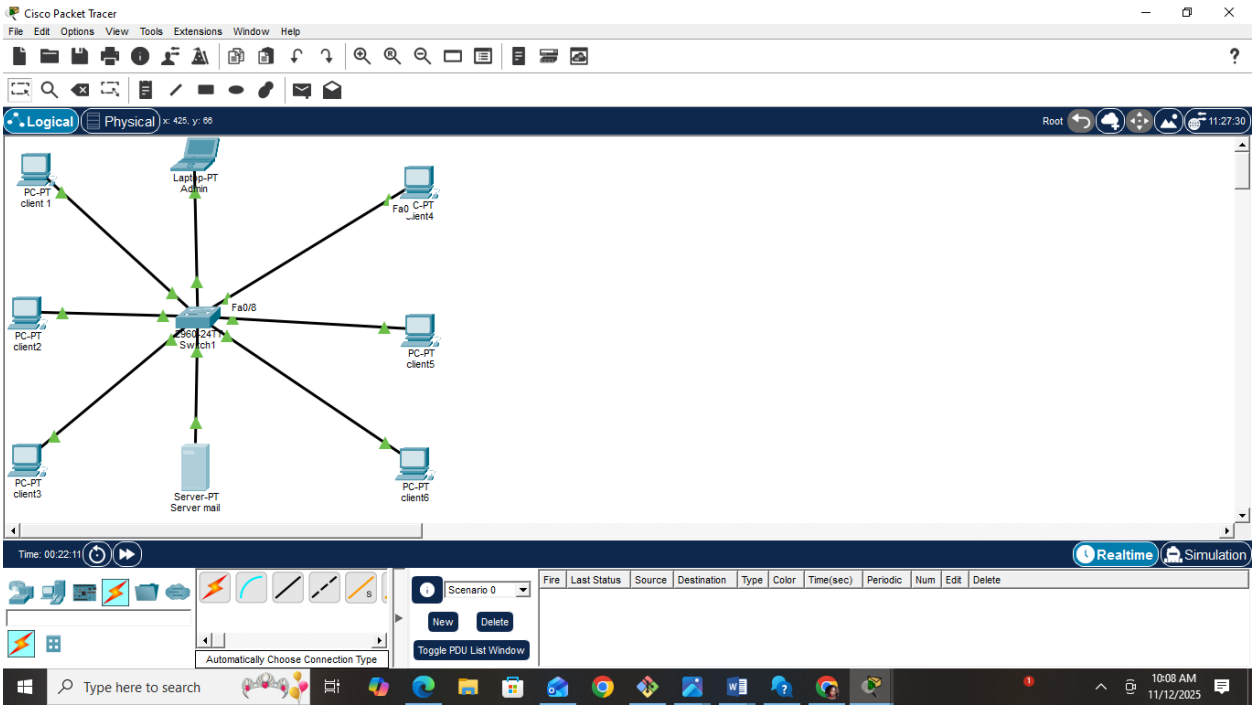
Ipv4 et ipv6 pour client 4



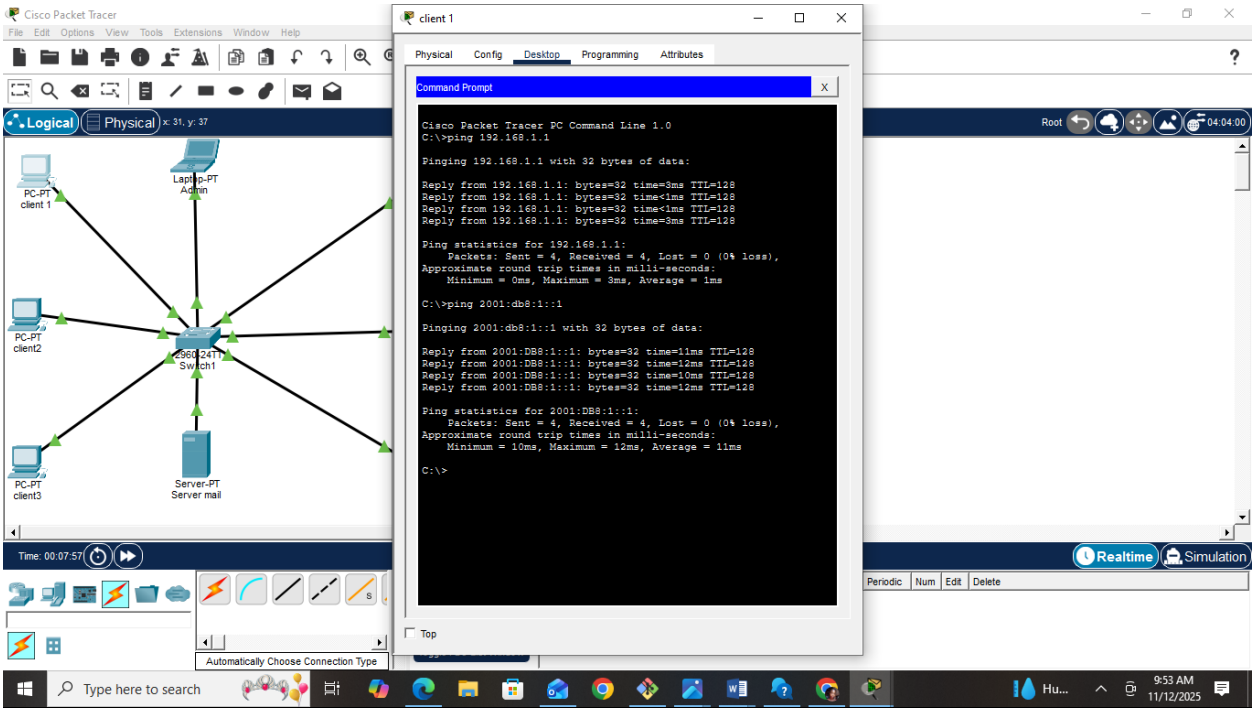
Ipv4 et ipv6 pour client 5



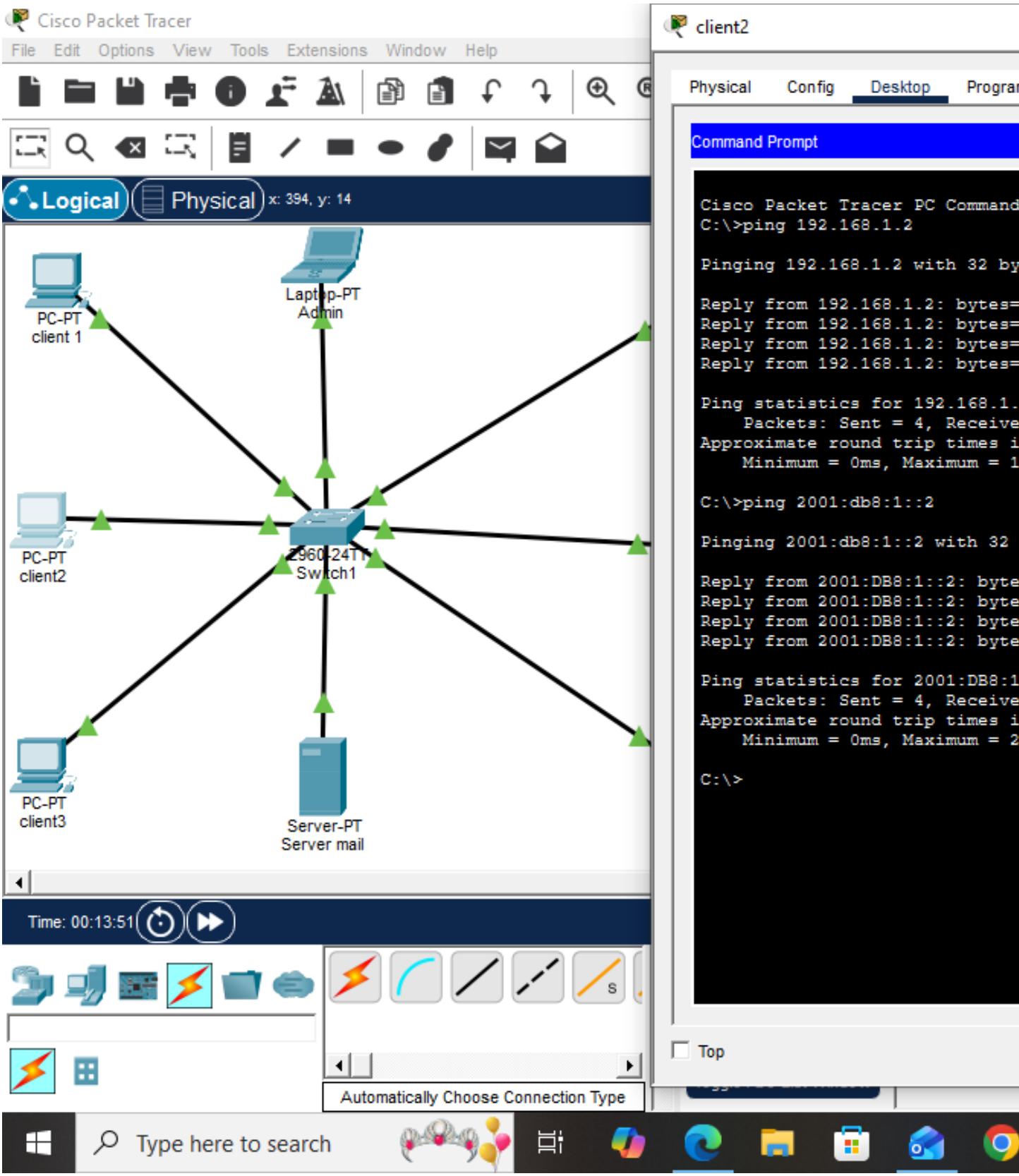
Ipv4 et ipv6 pour Admin


Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical
Physical
Root
PC-PT client 1
Laptop-PT Admin
Fa0 C-PT client4
PC-PT client2
Fa0/8
2960-24TT Switch1
PC-PT client5
PC-PT client3
Server-PT Server mail
PC-PT client6
Time: 00:22:11
Realtime
Simulation
Scenario 0
New
Delete
Toggle PDU List Window
Fire
Last Status
Source
Destination
Type
Color
Time(sec)
Periodic
Num
Edit
Delete
Automatically Choose Connection Type
Type here to search
10:08 AM
11/12/2025

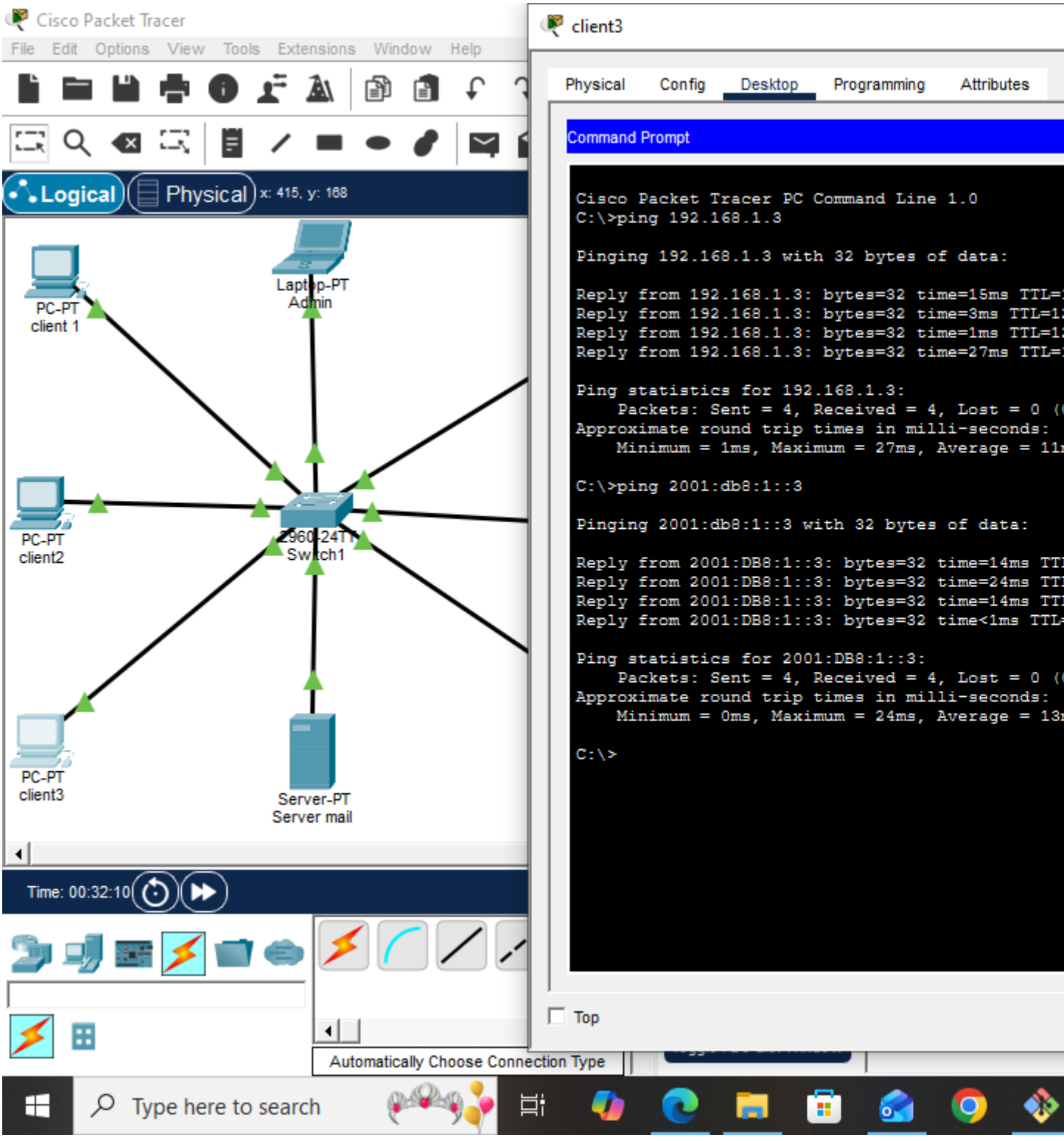
La figure 2

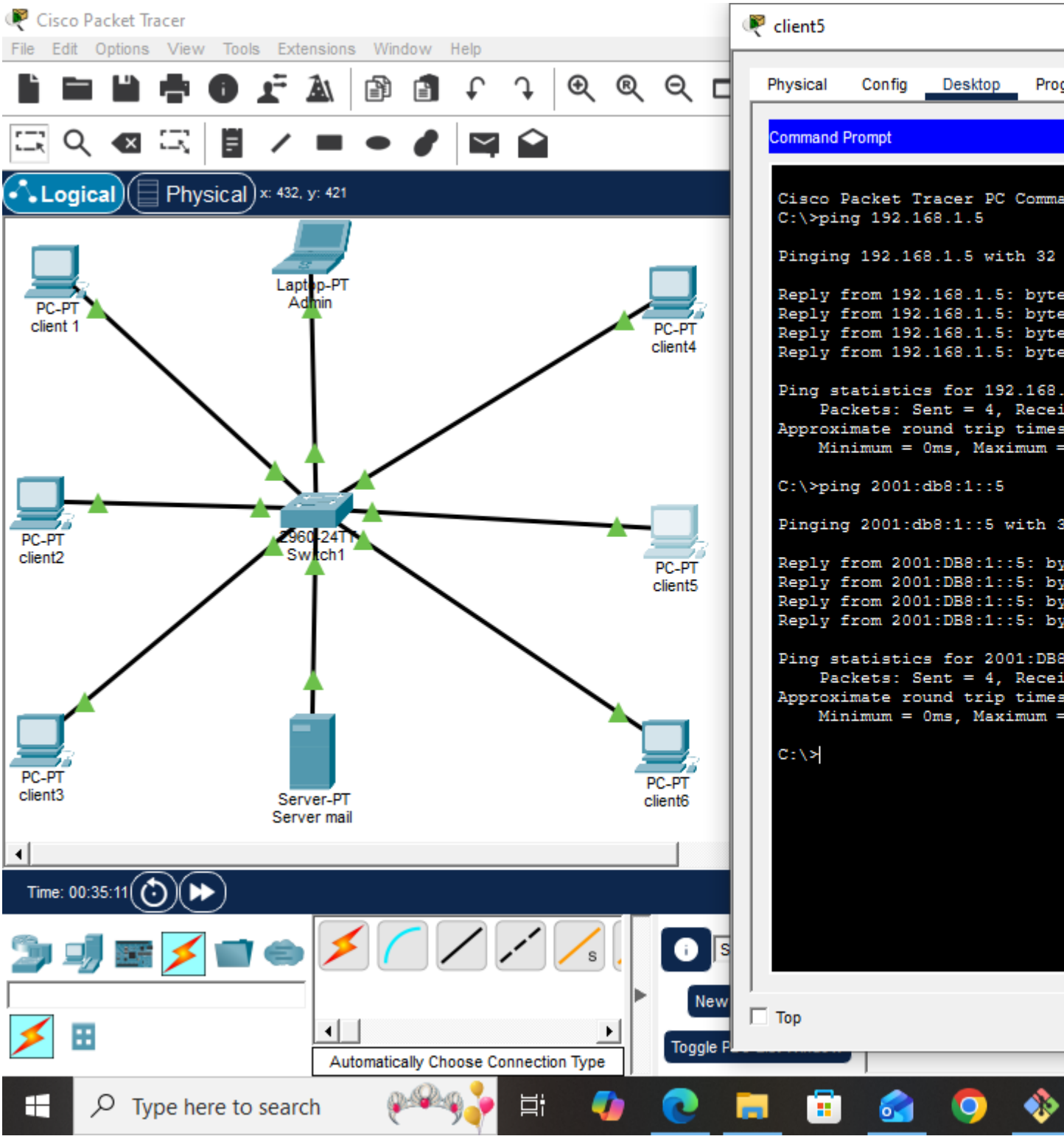


Ipv4 et ipv6 pour client 1

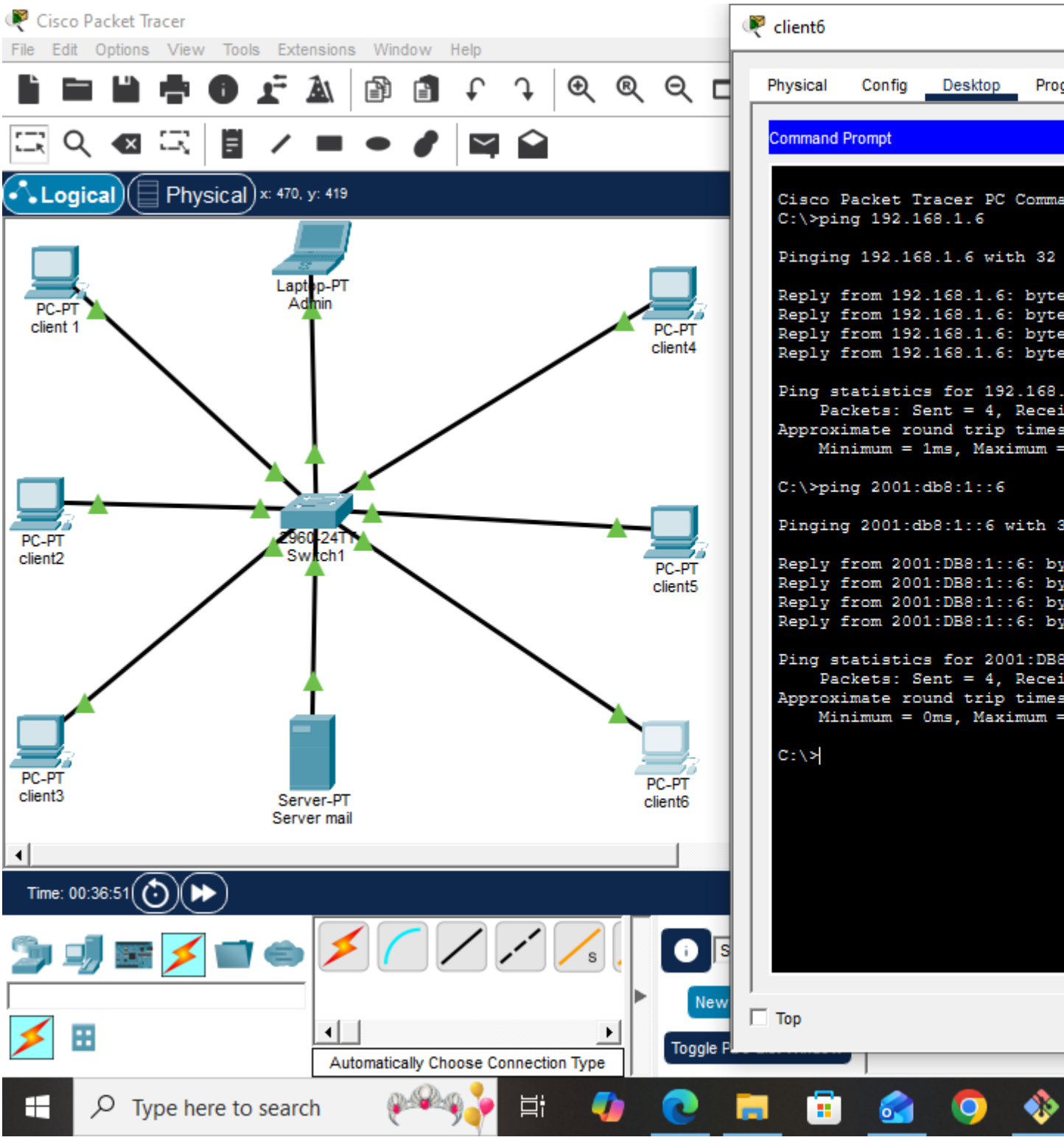


Ipv4 et ipv6 pour client 2

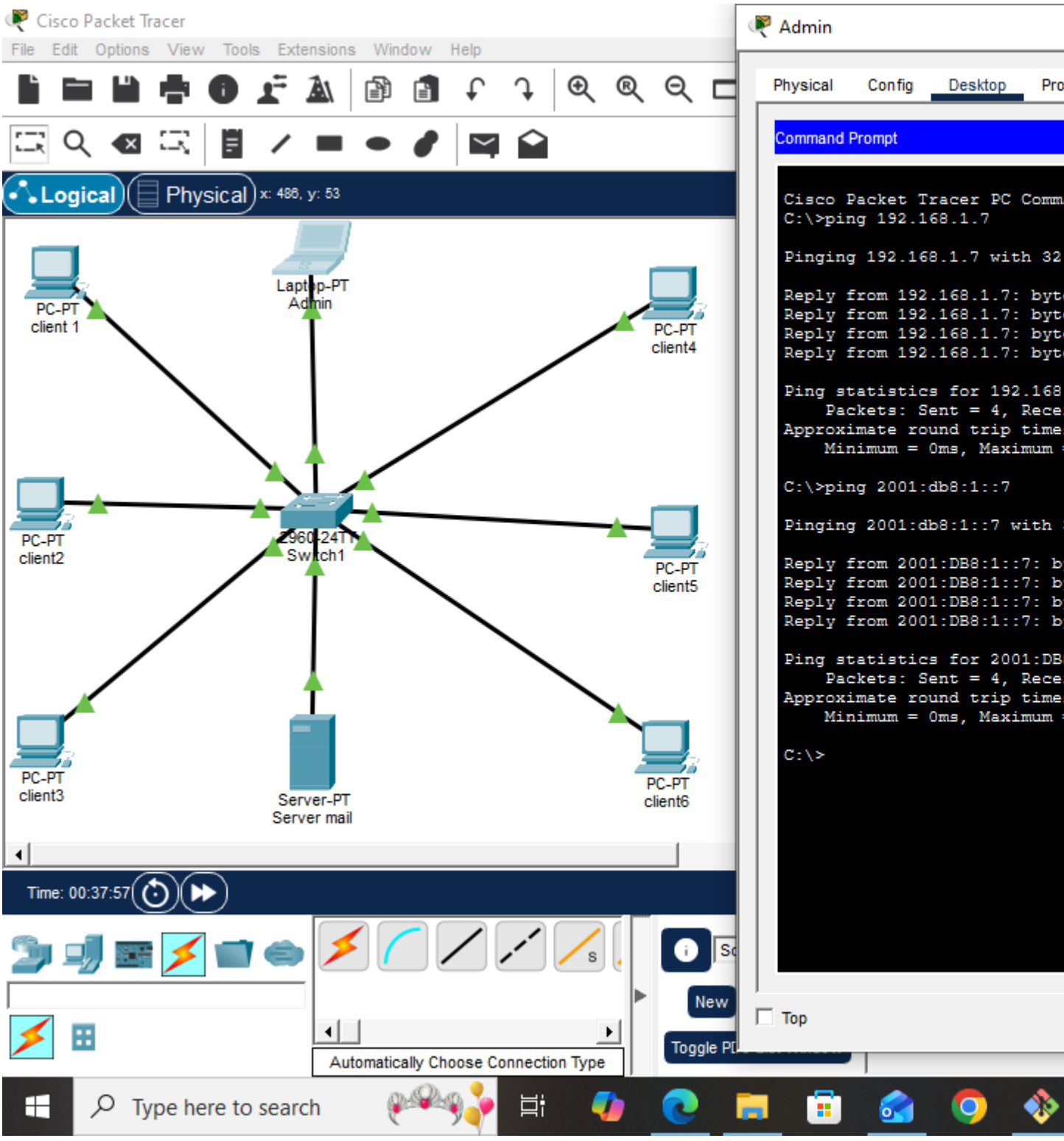

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical
Physical
x: 415, y: 168
PC-PT client 1
Laptop-PT Admin
PC-PT client2
2960-24TT Switch1
PC-PT client3
Server-PT Server mail
Time: 00:32:10
Automatically Choose Connection Type
client3
Physical
Config
Desktop
Programming
Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.3
Pinging 192.168.1.3 with 32 bytes of data:
Reply from 192.168.1.3: bytes=32 time=15ms TTL=
Reply from 192.168.1.3: bytes=32 time=3ms TTL=1
Reply from 192.168.1.3: bytes=32 time=1ms TTL=1
Reply from 192.168.1.3: bytes=32 time=27ms TTL=
Ping statistics for 192.168.1.3:
Packets: Sent = 4, Received = 4, Lost = 0 (
Approximate round trip times in milli-seconds:
Minimum = 1ms, Maximum = 27ms, Average = 11
C:\>ping 2001:db8:1::3
Pinging 2001:db8:1::3 with 32 bytes of data:
Reply from 2001:DB8:1::3: bytes=32 time=14ms TTL
Reply from 2001:DB8:1::3: bytes=32 time=24ms TTL
Reply from 2001:DB8:1::3: bytes=32 time=14ms TTL
Reply from 2001:DB8:1::3: bytes=32 time<1ms TTL=
Ping statistics for 2001:DB8:1::3:
Packets: Sent = 4, Received = 4, Lost = 0 (
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 24ms, Average = 13
C:\>
Top
Type here to search


Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical
Physical
x: 432, y: 421
Laptop-PT
Admin
PC-PT
client 1
PC-PT
client4
PC-PT
client2
2960-24TT
Switch1
PC-PT
client5
PC-PT
client3
Server-PT
Server mail
PC-PT
client6
Time: 00:35:11
Automatically Choose Connection Type
client5
Physical
Config
Desktop
Command Prompt
Cisco Packet Tracer PC Comma
C:\>ping 192.168.1.5
Pinging 192.168.1.5 with 32
Reply from 192.168.1.5: byte
Reply from 192.168.1.5: byte
Reply from 192.168.1.5: byte
Reply from 192.168.1.5: byte
Ping statistics for 192.168.
Packets: Sent = 4, Recei
Approximate round trip times
Minimum = 0ms, Maximum =
C:\>ping 2001:db8:1::5
Pinging 2001:db8:1::5 with 3
Reply from 2001:DB8:1::5: by
Reply from 2001:DB8:1::5: by
Reply from 2001:DB8:1::5: by
Reply from 2001:DB8:1::5: by
Ping statistics for 2001:DB8
Packets: Sent = 4, Recei
Approximate round trip times
Minimum = 0ms, Maximum =
C:\>
Top
Type here to search

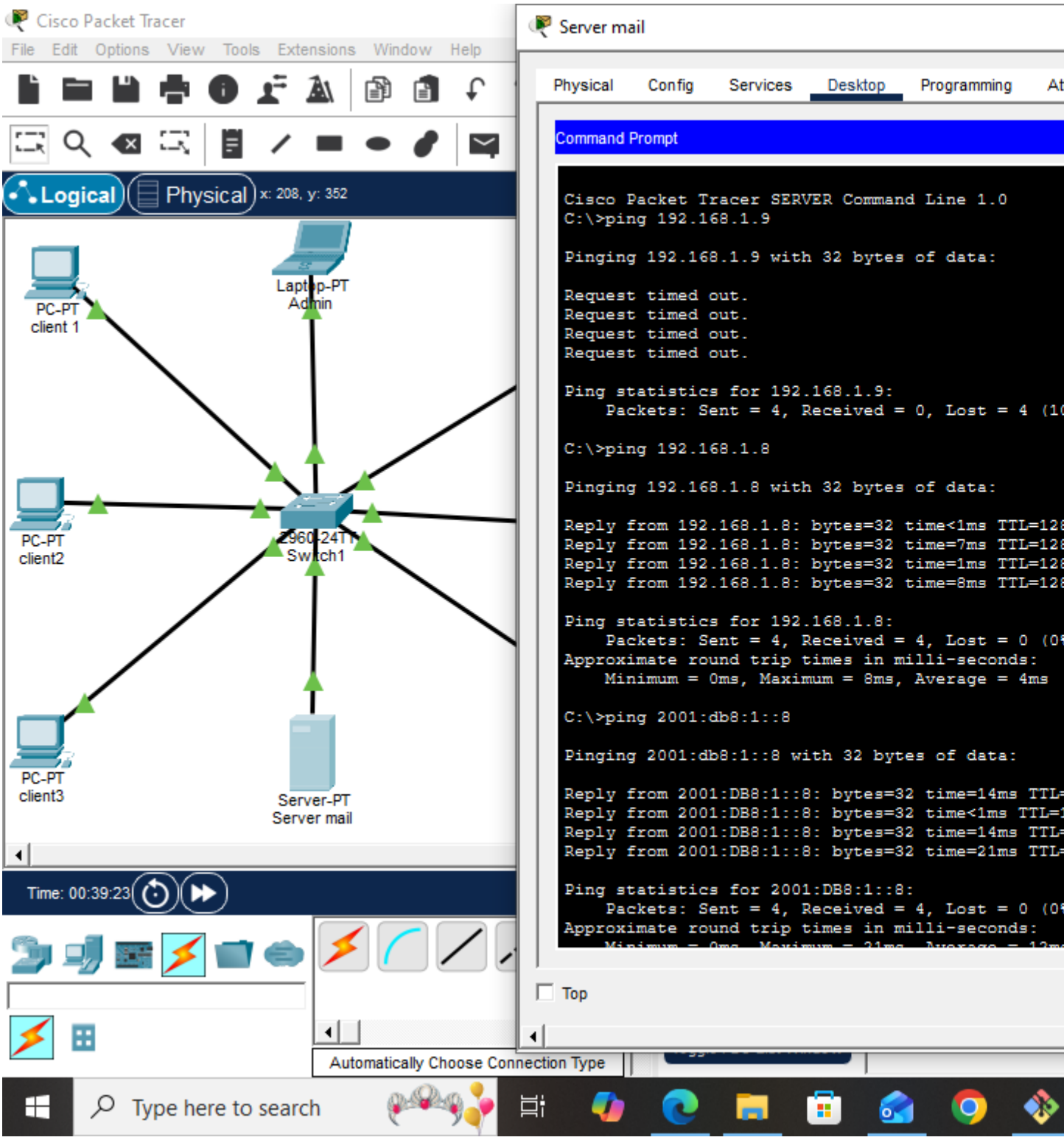
Ipv4 et ipv6 pour client5



Ipv4 et ipv6 pour client6



Ipv4 et ipv6 pour Admin



Ipv4 et ipv6 pour server mail

Conclusion : Ce TD m'a permis de configurer avec succès un réseau local, supportant IPv4 et IPv6.

Difficultés rencontrées :

Échecs de connectivité sur certaines adresses (PC ipv6 avec 3000 :is9 :1 ::1)

Donc, Ce travail m'a permis de bien comprendre concrètement l'architecture réseau, l'importance d'une configuration rigoureuse, et l'utilisation d'outils de diagnostic essentiels. J'ai acquis les compétences fondamentales pour administrer un réseau local moderne et résoudre les problèmes de connectivité.

En somme, ce TD constitue une base solide pour mes futures pratiques en administration réseaux.