

La figure 1

```
client1
Physical Config Desktop Programming Attributes
Command Prompt
[client1] C:\>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:
Reply from 192.168.1.1: bytes=32 time=2ms TTL=128

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 3ms, Average = 2ms

C:\>ping 2001:db8::1

Pinging 2001:db8::1 with 32 bytes of data:
Reply from 2001:db8::1:1: bytes=32 time=2ms TTL=128

Ping statistics for 2001:db8::1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 3ms, Average = 2ms

C:\>
```

Ipv4 et Ipv6 pour le client 1

client 2

Physical Config Desktop Programming Attributes

Command Prompt

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

Pinging 192.168.1.2 with 32 bytes of data:
Reply from 192.168.1.2: bytes=32 time=4ms TTL=128

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

C:\ping 2001:db8::1:1

Pinging 2001:db8::1:1 with 32 bytes of data:
Reply from 2001:db8::1:1: bytes=32 time=4ms TTL=128
Reply from 2001:db8::1:1: bytes=32 time<4ms TTL=128
Reply from 2001:db8::1:1: bytes=32 time<4ms TTL=128
Reply from 2001:db8::1:1: bytes=32 time=4ms TTL=128

Ping statistics for 2001:db8::1:1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 4ms, Maximum = 4ms, Average = 4ms

C:\>
```

Ipv4 et Ipv6 pour le client 2

```
| 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=1ms TTL=128

Ping statistics for 192.168.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 4ms, Average = 1ms

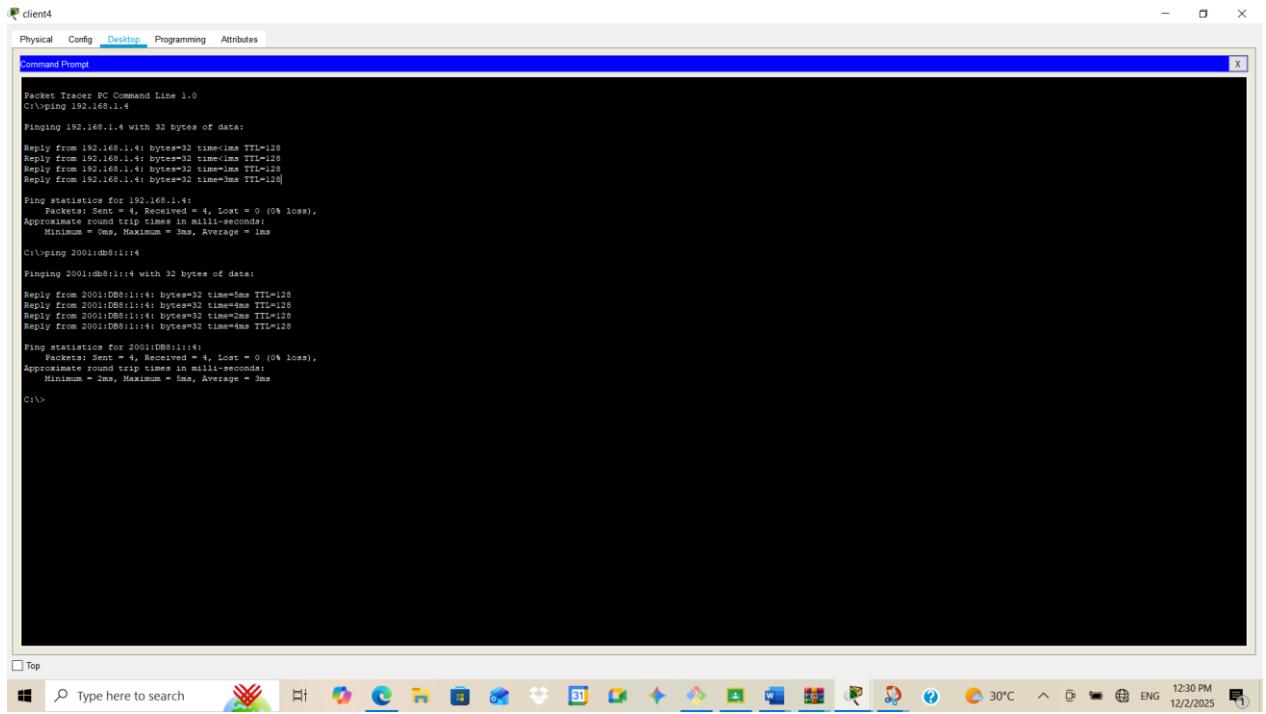
C:\ping 2001:db8::1:3

Pinging 2001:db8::1:3 with 32 bytes of data:
Reply from 2001:db8::1:3: bytes=32 time=5ms TTL=128
Reply from 2001:db8::1:3: bytes=32 time=4ms TTL=128
Reply from 2001:db8::1:3: bytes=32 time=4ms TTL=128
Reply from 2001:db8::1:3: bytes=32 time=4ms TTL=128

Ping statistics for 2001:db8::1:3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 3ms, Maximum = 5ms, Average = 4ms

C:\>
```

Ipv4 et Ipv6 pour le client 3



```
client4
Physical Config Desktop Programming Attributes
Command Prompt
Ping statistics for 192.168.1.4
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

Ping statistics for 192.168.1.4:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 3ms, Average = 1ms

C:\ping 2001:db8:1:1:4

Pinging 2001:db8:1:1:4 with 32 bytes of data:
Reply from 2001:db8:1:1:4: bytes=32 time=4ms TTL=128
Reply from 2001:db8:1:1:4: bytes=32 time=4ms TTL=128
Reply from 2001:db8:1:1:4: bytes=32 time=2ms TTL=128
Reply from 2001:db8:1:1:4: bytes=32 time=4ms TTL=128

Ping statistics for 2001:db8:1:1:4:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 5ms, Average = 3ms

C:\>
```

Ipv4 et Ipv6 pour le client 4

client5

Physical Config **Desktop** Programming Attributes

Command Prompt

```
#Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.5

Pinging 192.168.1.5 with 32 bytes of data:
Reply from 192.168.1.5: bytes=32 time=1ms TTL=128

Ping statistics for 192.168.1.5:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 3ms, Average = 1ms

C:\>ping 2001:db8:1::1

Pinging 2001:db8:1::1 with 32 bytes of data:
Reply from 2001:db8:1::1: bytes=32 time=2ms TTL=128
Reply from 2001:db8:1::1: bytes=32 time=1ms TTL=128
Reply from 2001:db8:1::1: bytes=32 time=1ms TTL=128
Reply from 2001:db8:1::1: bytes=32 time=1ms TTL=128

Ping statistics for 2001:db8:1::1:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 2ms, Average = 0ms

C:\>
```



Ipv4 et Ipv6 pour le client 5

Admin

Physical Config Desktop Programming Attributes

Command Prompt

```
Packet Tracer PC Command Line 1.0
C:\ping 192.168.1.6

Pinging 192.168.1.6 with 32 bytes of data:
Reply from 192.168.1.6: bytes=32 time=3ms TTL=128
Reply from 192.168.1.6: bytes=32 time=4ms TTL=128
Reply from 192.168.1.6: bytes=32 time=3ms TTL=128
Reply from 192.168.1.6: bytes=32 time=3ms TTL=128

Ping statistics for 192.168.1.6:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 4ms, Average = 3ms

C:\ping 2001:db8::1::6

Pinging 2001:db8::1::6 with 32 bytes of data:
Reply from 2001:db8::1::6: bytes=32 time=3ms TTL=128
Reply from 2001:db8::1::6: bytes=32 time=1ms TTL=128
Reply from 2001:db8::1::6: bytes=32 time=4ms TTL=128
Reply from 2001:db8::1::6: bytes=32 time=11ms TTL=128

Ping statistics for 2001:db8::1::6:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 11ms, Average = 3ms

C:\>
```



Ipv4 et Ipv6 pour Admin

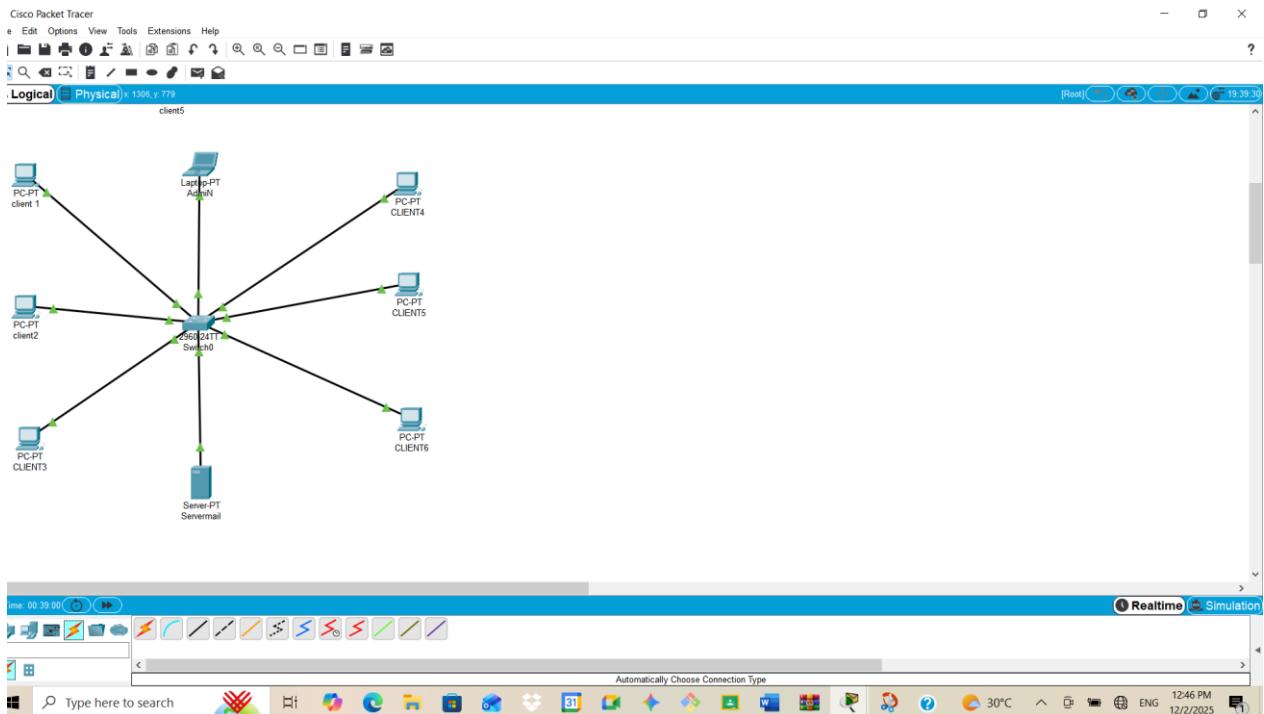


Figure 2

```

client1
Physical Config Desktop Programming Attributes
Command Prompt
Packet Tracer EC Command Line 1.0
C:\>ping 192.168.1.1

Ping from 192.168.1.1: bytes=32 time<1ms TTL=128
Reply from 192.168.1.1: bytes=32 time=1ms TTL=128

Ping statistics for 192.168.1.1:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 3ms, Average = 2ms

C:\>ping 2001:db8::1

Ping statistics for 2001:db8::1:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 3ms, Average = 2ms

C:\>

```

Ipv4 et Ipv6 pour le client 1

A screenshot of a Windows desktop environment. At the top, there is a window titled "client 2" with tabs for "Physical", "Config", "Desktop" (which is selected), "Programming", and "Attributes". Below this is a "Command Prompt" window with the following text:

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

Pinging 192.168.1.2 with 32 bytes of data:
Reply from 192.168.1.2: bytes=32 time=2ms TTL=128

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 4ms, Average = 3ms

C:\>ping 2001:db8::1

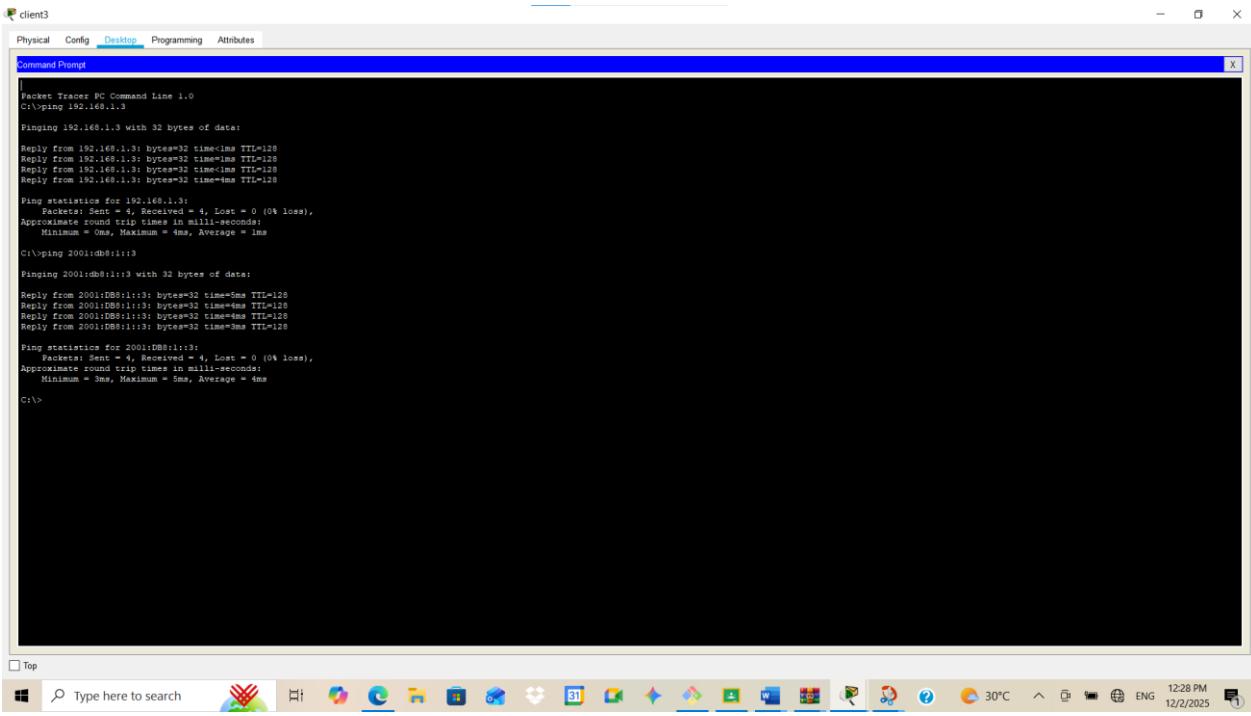
Pinging 2001:db8::1 with 32 bytes of data:
Reply from 2001:db8::1: bytes=32 time=2ms TTL=128
Reply from 2001:db8::1: bytes=32 time<1ms TTL=128
Reply from 2001:db8::1: bytes=32 time=2ms TTL=128
Reply from 2001:db8::1: bytes=32 time=2ms TTL=128

Ping statistics for 2001:db8::1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 2ms, Average = 1ms

C:\>
```

The taskbar at the bottom of the screen shows various pinned icons and the system tray with the date and time (12/2/2025, 12:25 PM) and battery status.

Ipv4 et Ipv6 pour le client 2



```
|> client3
Physical Config Desktop Programming Attributes
Command Prompt
|> ping 192.168.1.3
Pinging 192.168.1.3 with 32 bytes of data:
Reply from 192.168.1.3: bytes=32 time=1ms TTL=128

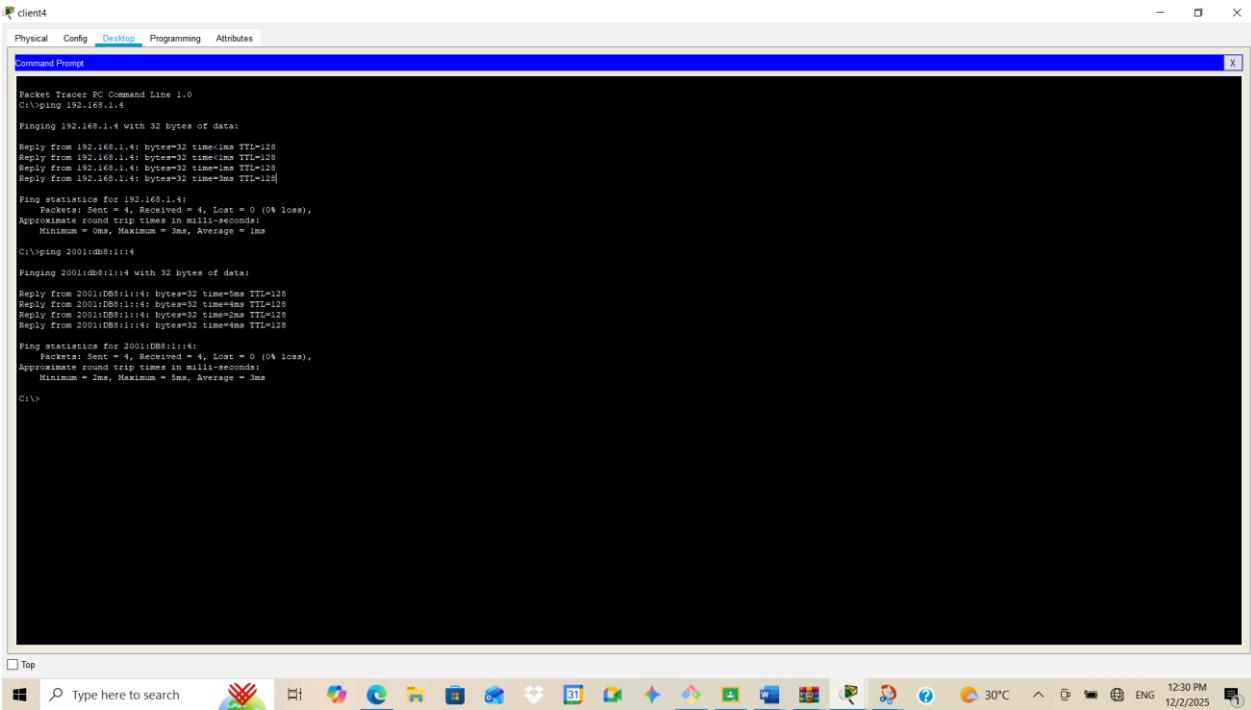
Ping statistics for 192.168.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 4ms, Average = 1ms

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=1ms TTL=128

Ping statistics for 2001:db8::1:3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 3ms, Average = 1ms

C:\>
```

Ipv4 et Ipv6 pour le client 3



```
|> client4
Physical Config Desktop Programming Attributes
Command Prompt
|> 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

Ping statistics for 192.168.1.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 3ms, Average = 1ms

C:\> ping 2001:db8::1:4
Pinging 2001:db8::1:4 with 32 bytes of data:
Reply from 2001:db8::1:4: bytes=32 time=5ms TTL=128

Ping statistics for 2001:db8::1:4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 5ms, Average = 3ms

C:\>
```

Ipv4 et Ipv6 pour le client 4

```
Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.5

Pinging 192.168.1.5 with 32 bytes of data:
Reply from 192.168.1.5: bytes=32 time=1ms TTL=128
Reply from 192.168.1.5: bytes=32 time=1ms TTL=128
Reply from 192.168.1.5: bytes=32 time=3ms TTL=128
Reply from 192.168.1.5: bytes=32 time=2ms TTL=128

Ping statistics for 192.168.1.5:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 3ms, Average = 1ms

C:\>ping 2001:DB8::1:1

Pinging 2001:DB8::1:1 with 32 bytes of data:
Reply from 2001:DB8::1:1: bytes=32 time=2ms TTL=128
Reply from 2001:DB8::1:1: bytes=32 time=1ms TTL=128
Reply from 2001:DB8::1:1: bytes=32 time=1ms TTL=128
Reply from 2001:DB8::1:1: bytes=32 time=1ms TTL=128

Ping statistics for 2001:DB8::1:1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 2ms, Average = 0ms

C:\>
```

Ipv4 et Ipv6 pour le client 5

```
Ping statistics for 192.168.1.6:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 3ms, Average = 3ms

C:\>ping 2001:db8::1::1

Ping statistics for 2001:db8::1::1:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 11ms, Average = 30ms

C:\>
```

IPv4 et Ipv6 pour Admin

```
Ping statistics for 192.168.1.6:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 5ms, Average = 3ms

C:\>ping 2001:db8::1::1

Ping statistics for 2001:db8::1::1:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 5ms, Average = 3ms

C:\>
```

Ipv4 et Ipv6 pour le servermail

INSTITUT UNIVERSITAIRE DES SCIENCES

FACULTE : FACULTE DES SCIENCES ET TECHNOLOGIE

TD : RESEAUX 3

NOM & PRENOM : LaLOI GUIBY KERVENS

NIVEAU : L3

DATE : MARDI 2 DECEMBRE 2025

Objectif du TD

L'objectif principal de ce Travail Dirigé est de **maîtriser l'adressage IP** (IPv4 et IPv6) et de savoir l'appliquer concrètement. Cela se décline en trois points essentiels :

1. **Comprendre et calculer** l'adressage (adresses réseau, hôte, masque) pour attribuer des **adresses valides**.
2. **Mettre en œuvre** cette configuration sur des équipements réseaux (hôtes et routeurs) en utilisant l'environnement de simulation **Cisco Packet Tracer**.
3. **Valider la connectivité** entre les différents équipements configurés en utilisant les commandes de test standard (ping et ping ipv6).

Ce TD est une étape fondamentale pour tout professionnel des réseaux. En réussissant à attribuer des adresses IP correctement et à vérifier la communication entre les machines, vous avez acquis la **compétence de base essentielle** nécessaire à la conception, à la configuration, et au dépannage de tout réseau local ou étendu. La maîtrise de ces principes est la **clé de voûte** pour aborder des sujets plus avancés comme le routage dynamique ou les services réseau. J'ai bel et bien rencontré des difficultés surtout avec la configuration des adresses IP Mais grâce à l'aide que me portent les étudiants et des recherches j'ai pu résolu ces problèmes.