

FACULTÉ DES SCIENCES ET TECHNOLOGIES (FST)

TROISIÈME ANNÉE

Rapport du travail de Laboratoire N° 5

Cours : Réseaux I

Étudiante : Christy Gérys LAMBERT

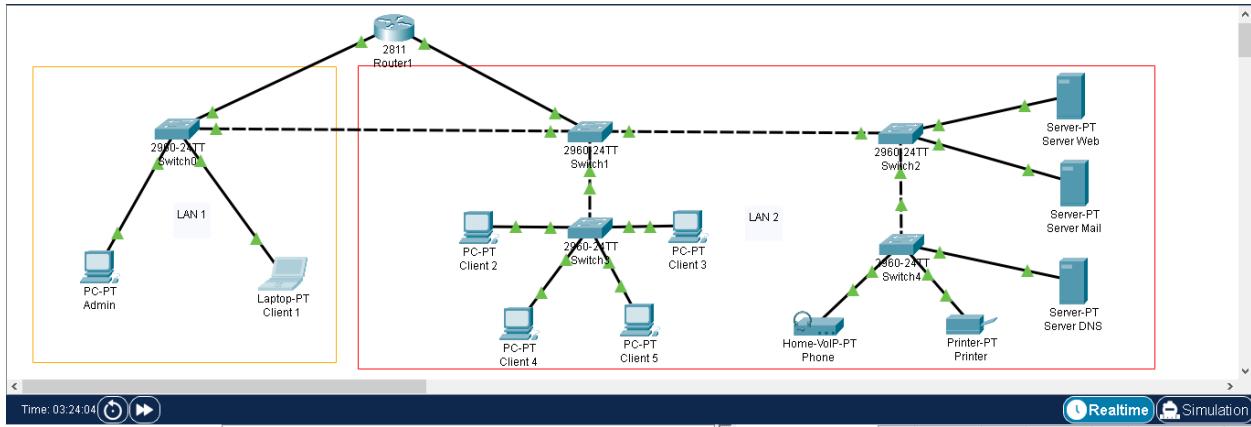
Professeur : Ismaël SAINT AMOUR

Le 28 Novembre 2025

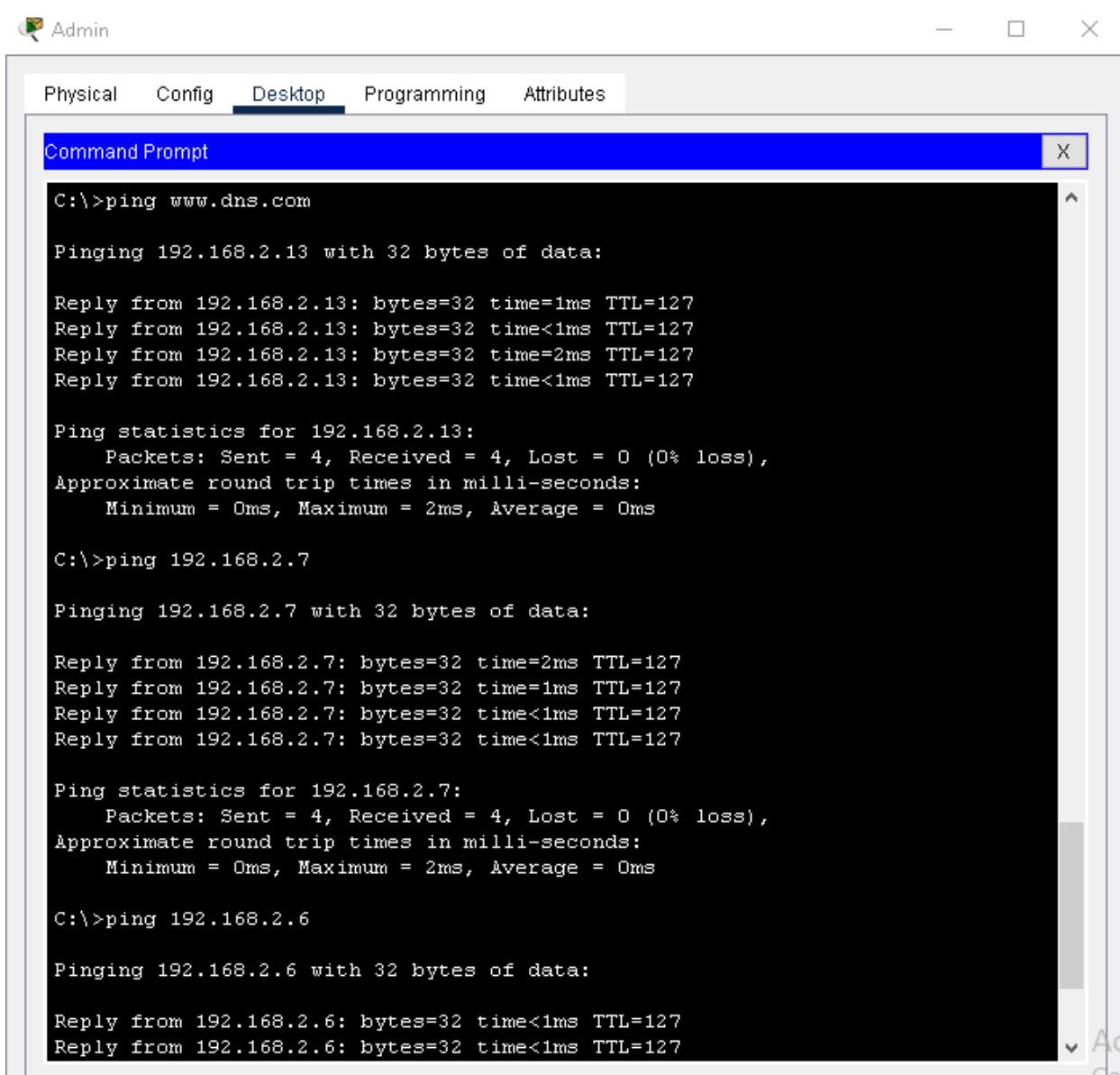
OBJECTIF

1. Configurer un serveur DNS centralisé dans un réseau.
2. Associer plusieurs noms de domaine à différents serveurs (Web, Mail, FTP).
3. Intégrer le DNS avec d'autres services (Web Server).
4. Tester la résolution de noms depuis des PC clients et depuis le routeur.
5. Configurer un serveur Web (HTTP et HTTPS) dans Cisco Packet Tracer.
6. Comprendre la différence entre HTTP et HTTPS.
7. Tester l'accès aux pages web depuis des PC clients.

I-Configuration des services DNS, HTTP, HTTPS puis affichage d'une page web, de cette topologie.



Vérification si la communication est réussie entre le serveur DNS et les différents appareils



The screenshot shows a software interface with a title bar "Admin" and a menu bar with tabs: Physical, Config, Desktop, Programming, and Attributes. The "Desktop" tab is selected. Below the menu is a "Command Prompt" window with a blue header bar containing the text "Command Prompt" and a close button "X". The main area of the window displays the output of several ping commands:

```
C:\>ping www.dns.com

Pinging 192.168.2.13 with 32 bytes of data:

Reply from 192.168.2.13: bytes=32 time=1ms TTL=127
Reply from 192.168.2.13: bytes=32 time<1ms TTL=127
Reply from 192.168.2.13: bytes=32 time=2ms TTL=127
Reply from 192.168.2.13: bytes=32 time<1ms TTL=127

Ping statistics for 192.168.2.13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 2ms, Average = 0ms

C:\>ping 192.168.2.7

Pinging 192.168.2.7 with 32 bytes of data:

Reply from 192.168.2.7: bytes=32 time=2ms TTL=127
Reply from 192.168.2.7: bytes=32 time=1ms TTL=127
Reply from 192.168.2.7: bytes=32 time<1ms TTL=127
Reply from 192.168.2.7: bytes=32 time<1ms TTL=127

Ping statistics for 192.168.2.7:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 2ms, Average = 0ms

C:\>ping 192.168.2.6

Pinging 192.168.2.6 with 32 bytes of data:

Reply from 192.168.2.6: bytes=32 time<1ms TTL=127
Reply from 192.168.2.6: bytes=32 time<1ms TTL=127
```

Client 1

Physical Config Desktop Programming Attributes

Command Prompt X

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping www.dns.com

Pinging 192.168.2.13 with 32 bytes of data:

Reply from 192.168.2.13: bytes=32 time<1ms TTL=127

Ping statistics for 192.168.2.13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.168.2.6

Pinging 192.168.2.6 with 32 bytes of data:

Reply from 192.168.2.6: bytes=32 time=2ms TTL=127
Reply from 192.168.2.6: bytes=32 time=1ms TTL=127
Reply from 192.168.2.6: bytes=32 time=1ms TTL=127
Reply from 192.168.2.6: bytes=32 time<1ms TTL=127

Ping statistics for 192.168.2.6:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 2ms, Average = 1ms
```

Client 2

Physical Config Desktop Programming Attributes

Command Prompt X

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping www.ius.com

Pinging 192.168.2.10 with 32 bytes of data:

Reply from 192.168.2.10: bytes=32 time=10ms TTL=128
Reply from 192.168.2.10: bytes=32 time<1ms TTL=128
Reply from 192.168.2.10: bytes=32 time<1ms TTL=128
Reply from 192.168.2.10: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.2.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 10ms, Average = 2ms

C:\>ping www.dns.com

Pinging 192.168.2.13 with 32 bytes of data:

Reply from 192.168.2.13: bytes=32 time<1ms TTL=128
Reply from 192.168.2.13: bytes=32 time=1ms TTL=128
Reply from 192.168.2.13: bytes=32 time=1ms TTL=128
Reply from 192.168.2.13: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.2.13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

Client 2

Physical Config Desktop Programming Attributes

Command Prompt X

```
Ping statistics for 192.168.2.13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

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=127
Reply from 192.168.1.3: bytes=32 time=1ms TTL=127
Reply from 192.168.1.3: bytes=32 time=1ms TTL=127
Reply from 192.168.1.3: bytes=32 time<1ms TTL=127

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

Client 5

Physical Config Desktop Programming Attributes

Command Prompt X

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping www.dns.com

Pinging 192.168.2.13 with 32 bytes of data:

Reply from 192.168.2.13: bytes=32 time=10ms TTL=128
Reply from 192.168.2.13: bytes=32 time<1ms TTL=128
Reply from 192.168.2.13: bytes=32 time<1ms TTL=128
Reply from 192.168.2.13: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.2.13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 10ms, Average = 2ms

C:\>ping www.ius.com

Pinging 192.168.2.10 with 32 bytes of data:

Reply from 192.168.2.10: bytes=32 time=10ms TTL=128
Reply from 192.168.2.10: bytes=32 time=13ms TTL=128
Reply from 192.168.2.10: bytes=32 time<1ms TTL=128
Reply from 192.168.2.10: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.2.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 13ms, Average = 5ms

C:\>|
```

Realtime Simulation

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	P
●	Successful	Admin	Client 2	ICMP	■	0.000	▲
●	Successful	Admin	Client 5	ICMPs	■	0.000	
●	Successful	Client 1	Server Web	ICMP	■	0.000	
●	Successful	Client 1	Server DNS	ICMP	■	0.000	▼

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	P
●	Successful	Admin	Server Mail	ICMP	■	0.000	
●	Successful	Admin	Server Web	ICMP	■	0.000	
●	Successful	Admin	Client 4	ICMP	■	0.000	
●	Successful	Client 3	Admin	ICMP	■	0.000	

Test d'accès aux pages web depuis des PC clients.

The screenshot shows a network monitoring interface at the top with a table of recent fire events. Below it is a client browser window titled 'Admin' showing the Université IUS website.

Network Monitoring Table:

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	P
●	Successful	Admin	Server Mail	ICMP	■	0.000	
●	Successful	Admin	Server Web	ICMP	■	0.000	
●	Successful	Admin	Client 4	ICMP	■	0.000	
●	Successful	Client 3	Admin	ICMP	■	0.000	

Client Browser Window:

Admin

Physical Config Desktop Programming Attributes

Web Browser

URL: http://192.168.2.10

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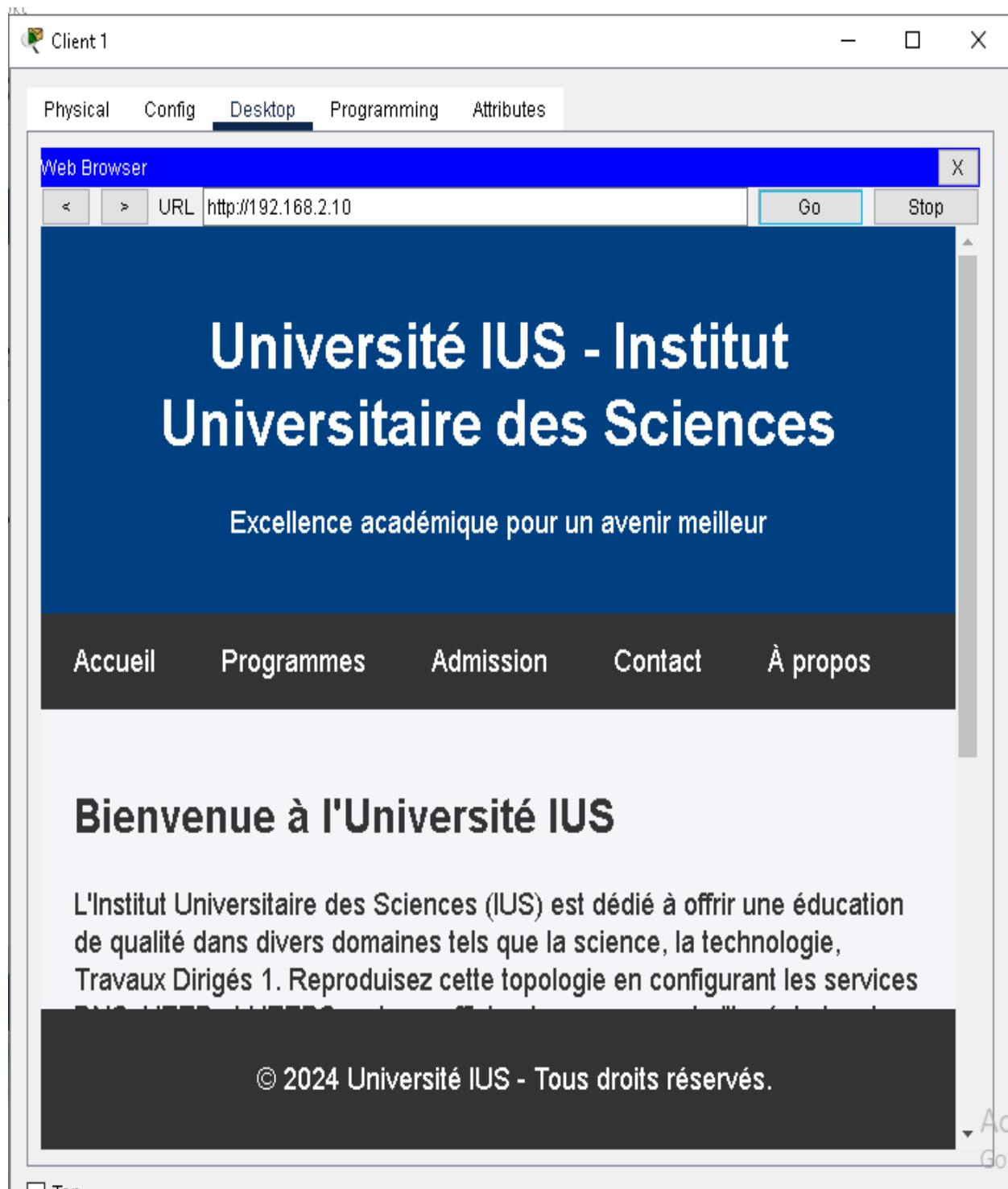
Excellence académique pour un avenir meilleur

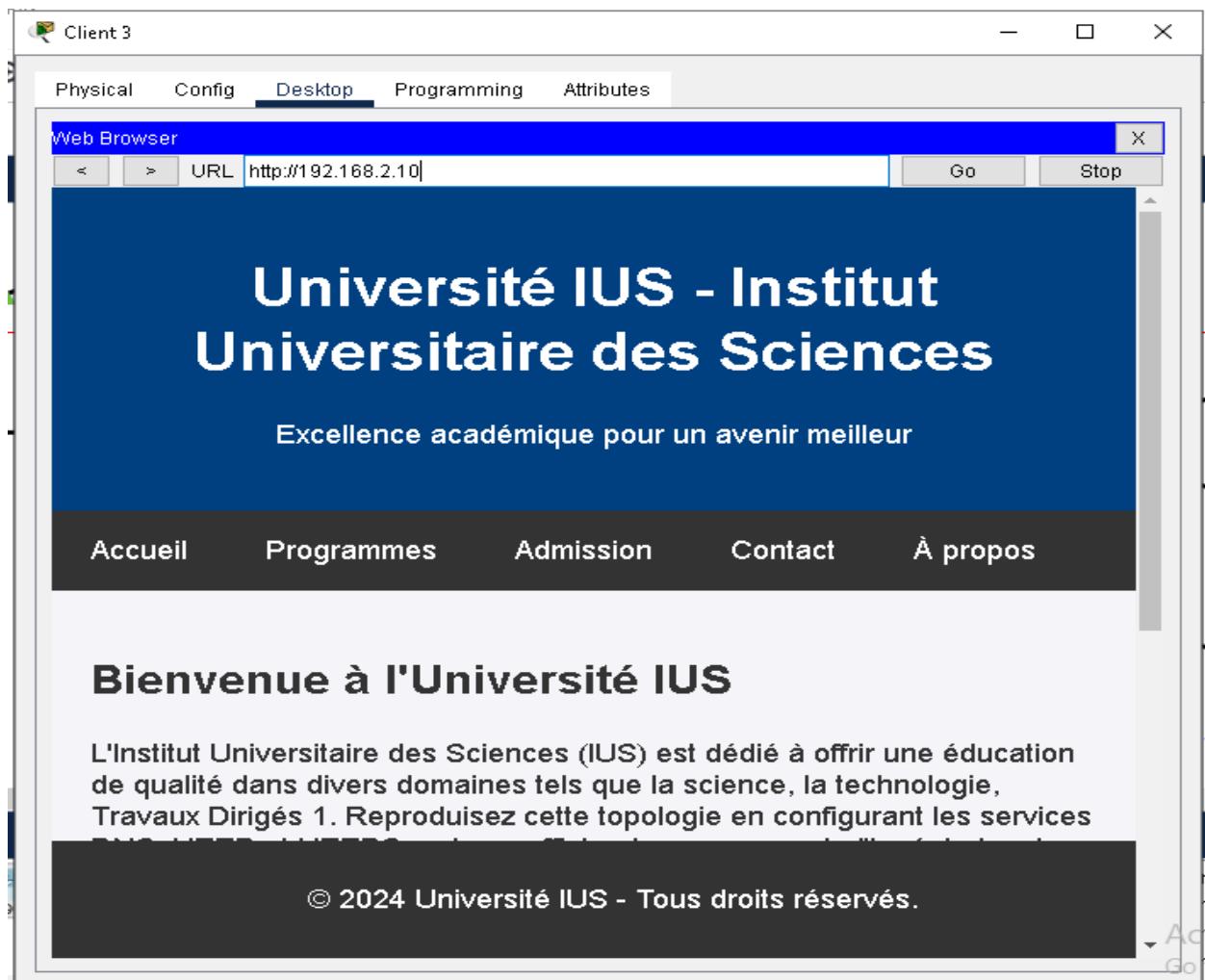
Accueil Programmes Admission Contact À propos

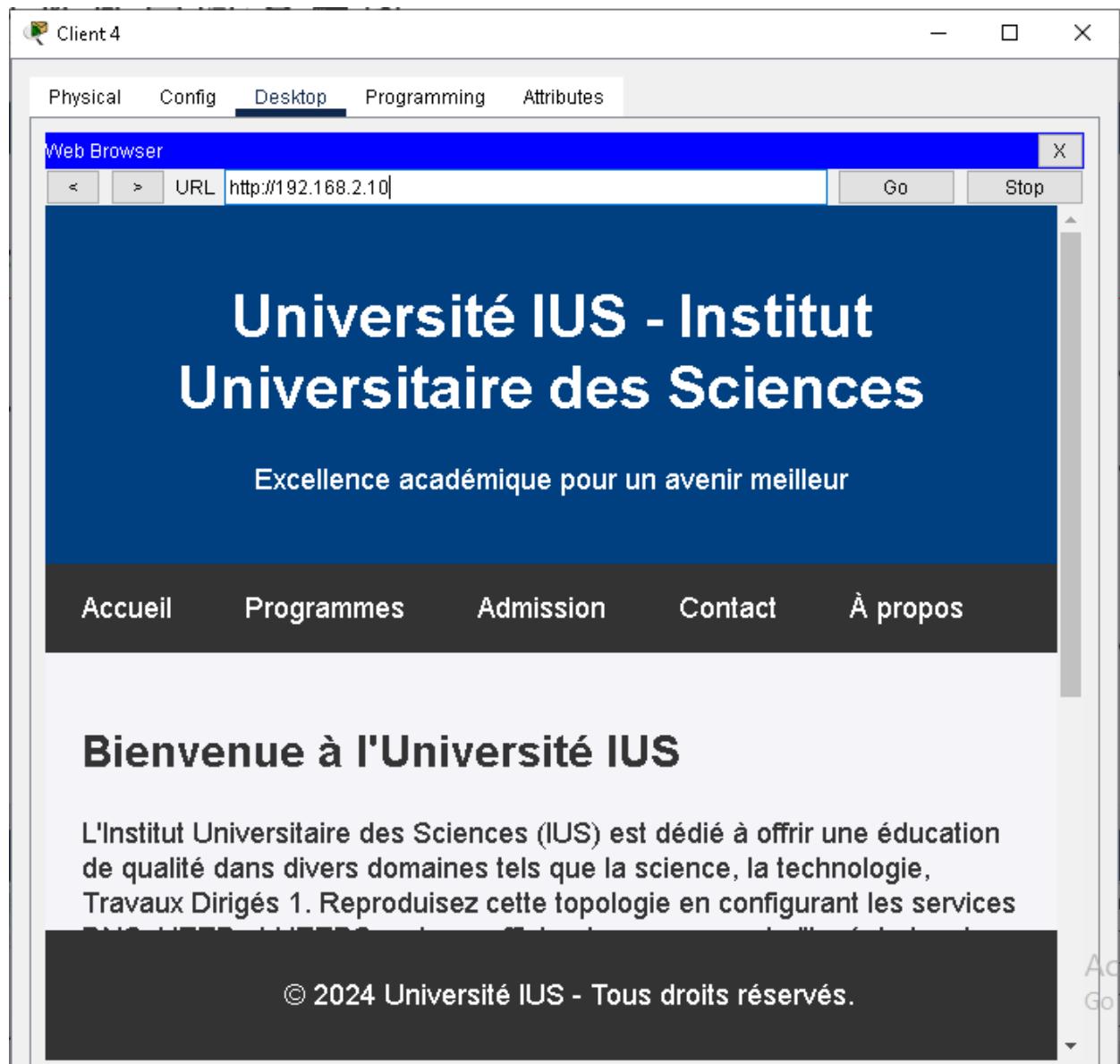
Bienvenue à l'Université IUS

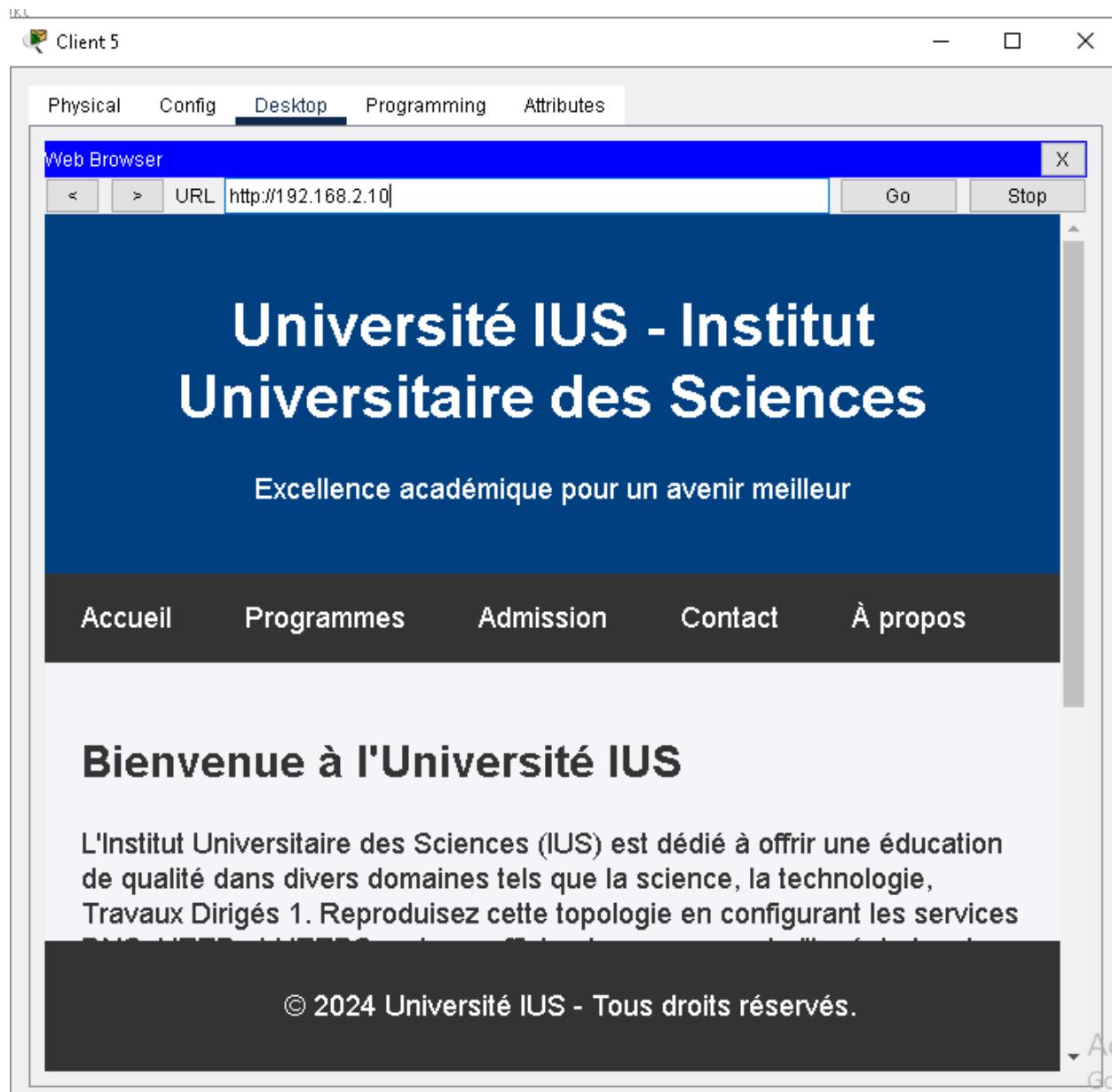
L'Institut Universitaire des Sciences (IUS) est dédié à offrir une éducation de qualité dans divers domaines tels que la science, la technologie, Travaux Dirigés 1. Reproduisez cette topologie en configurant les services

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Conclusion

L'ensemble des tests effectués confirme le bon fonctionnement des services et renforce ma maîtrise des concepts fondamentaux liés aux architectures réseau.

