

Institut Universitaire des Sciences (IUS)
FACULTÉ DES SCIENCES ET DES TECHNOLOGIES (FST)

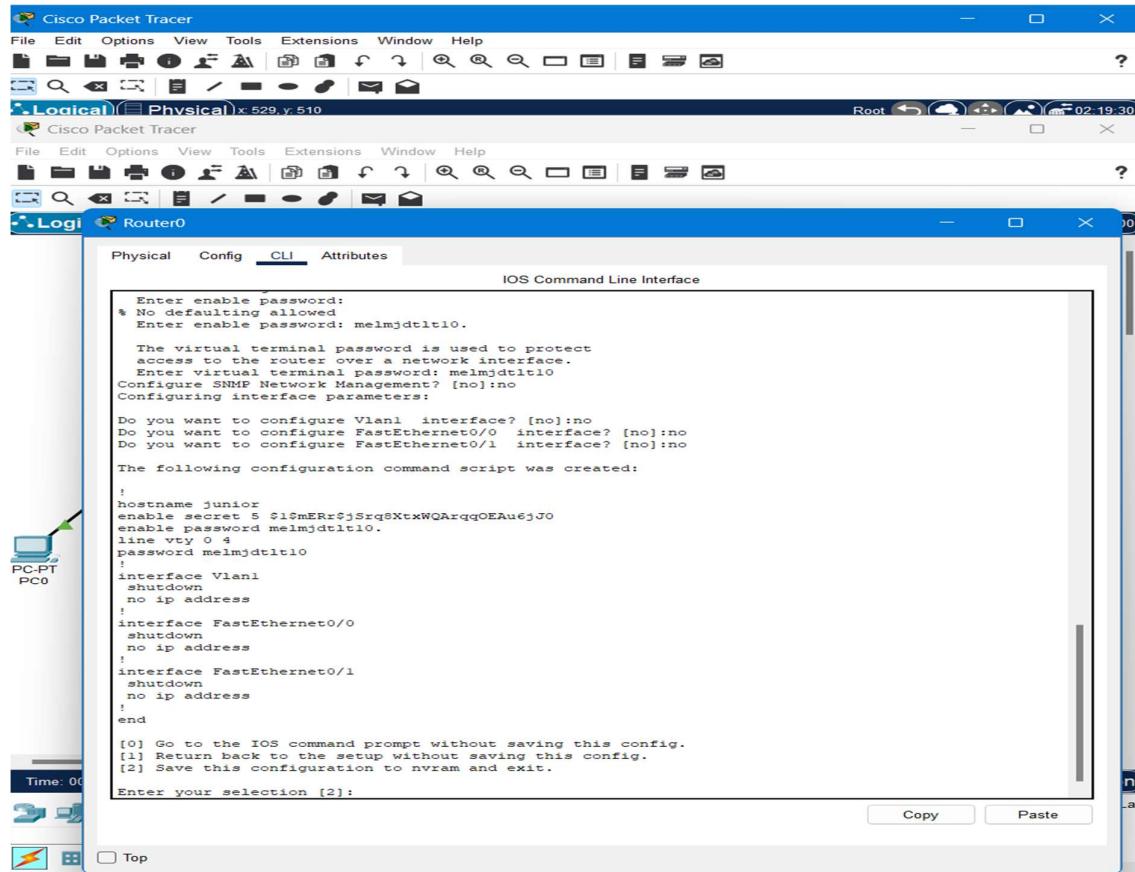
RAPPORT
SUR LE TRAVAIL DE LABORATOIRE № 3

Cours : Réseaux 1

Étudiant : Wendy Colas
Niveau : L3

2024

1. Reproduction de la topologie, configuration du routeur, des commutateurs, des adresses IP et teste de la connectivité.



Router0

Physical Config **CLI** Attributes

IOS Command Line Interface

```
junior>config t
* Invalid input detected at '^' marker.
junior>exit

junior con0 is now available

Press RETURN to get started.
```

Junior>enable
Password:
junior#config t
Enter configuration commands, one per line. End with CNTL/Z.
junior (config)#interface FastEthernet0/0
junior (config-if)#ip address 192.168.1.1 255.255.255.0
junior (config-if)#no shutdown

Copy Paste

Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

PC-PT PC0

Log Router0

Physical Config **CLI** Attributes

IOS Command Line Interface

```
Press RETURN to get started.

junior>enable
Password:
junior#config t
Enter configuration commands, one per line. End with CNTL/Z.
junior (config)#interface FastEthernet0/0
junior (config-if)#ip address 192.168.1.1 255.255.255.0
junior (config-if)#no shutdown

junior (config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
junior (config-if)#ip address 192.168.2.1 255.255.255.0
junior (config-if)#no shutdown

junior (config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
exit
junior(config)#

Copy Paste
```

Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

PC-PT PC0

Log Router0

Physical Config **CLI** Attributes

IOS Command Line Interface

```
junior con0 is now available

Press RETURN to get started.

junior>enable
Password:
junior>show ip interface brief
Interface IP-Address OK? Method Status Protocol
FastEthernet0/0 192.168.1.1 YES manual up
FastEthernet0/1 192.168.2.1 YES manual up
Virtual unassigned YES unset administratively down down
junior>show arp
Protocol Address Age (min) Hardware Address Type Interface
Internet 192.168.1.1 - 00E0.F775.7B02 ARPA FastEthernet0/0
Internet 192.168.2.1 - 00E0.F775.7B02 ARPA FastEthernet0/1
junior>
```

Copy Paste

Switch0

Physical Config CLI Attributes

IOS Command Line Interface

```
Press RETURN to get started.

switch>enable
switch#config t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname cl
Switch(config)#int range f0/1-f1/1
cl(config-if)#ip address 192.168.1.2 255.255.255.0
cl(config-if)#no shutdown

cl(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up
exit
cl(config)#ip default-gateway 192.168.1.1
cl(config)#exit
cl#
%SYS-5-CONFIG_I: Configured from console by console
exit
```

Copy Paste

Top

Cisco Packet Tracer

Switch0

Physical Config CLI Attributes

IOS Command Line Interface

```
cl>config t
% Invalid input detected at '^' marker.

cl>enable
cl>show ip interface brief
Interface          IP-Address      OK? Method Status           Protocol
FastEthernet0/1    unassigned      YES manual up            up
FastEthernet0/2    unassigned      YES manual up            up
FastEthernet0/3    unassigned      YES manual up            up
FastEthernet0/4    unassigned      YES manual up            up
FastEthernet0/5    unassigned      YES manual up            up
FastEthernet0/6    unassigned      YES manual down          down
FastEthernet0/7    unassigned      YES manual up            up
FastEthernet0/8    unassigned      YES manual down          down
FastEthernet0/9    unassigned      YES manual up            up
FastEthernet0/10   unassigned      YES manual down          down
FastEthernet0/11   unassigned      YES manual down          down
FastEthernet0/12   unassigned      YES manual down          down
FastEthernet0/13   unassigned      YES manual down          down
FastEthernet0/14   unassigned      YES manual down          down
FastEthernet0/15   unassigned      YES manual down          down
FastEthernet0/16   unassigned      YES manual down          down
FastEthernet0/17   unassigned      YES manual down          down
FastEthernet0/18   unassigned      YES manual down          down
FastEthernet0/19   unassigned      YES manual down          down
FastEthernet0/20   unassigned      YES manual down          down
FastEthernet0/21   unassigned      YES manual down          down
FastEthernet0/22   unassigned      YES manual down          down
FastEthernet0/23   unassigned      YES manual down          down
FastEthernet0/24   unassigned      YES manual down          down
GigabitEthernet0/1 unassigned      YES manual up            up
GigabitEthernet0/2 unassigned      YES manual up            up
Vlan1             192.168.1.2    YES manual up            up

cl>show arp
Protocol          Address          Age (min)  Hardware Addr      Type      Interface
Internet          192.168.1.2    0000.0000.1544  ARPA     Vlan1

cl>
```

Copy Paste

14:34:30

Simulation

Fire Las

Top

Copper Straight-Through

POD LIST 1

Cisco Packet Tracer

Switch0

Physical Config CLI Attributes

IOS Command Line Interface

```
cl>config t
% Invalid input detected at '^' marker.

cl>enable
cl>show ip interface brief
Interface          IP-Address      OK? Method Status           Protocol
FastEthernet0/1    unassigned      YES manual up            up
FastEthernet0/2    unassigned      YES manual up            up
FastEthernet0/3    unassigned      YES manual up            up
FastEthernet0/4    unassigned      YES manual up            up
FastEthernet0/5    unassigned      YES manual up            up
FastEthernet0/6    unassigned      YES manual down          down
FastEthernet0/7    unassigned      YES manual down          down
FastEthernet0/8    unassigned      YES manual down          down
FastEthernet0/9    unassigned      YES manual down          down
FastEthernet0/10   unassigned      YES manual down          down
FastEthernet0/11   unassigned      YES manual down          down
FastEthernet0/12   unassigned      YES manual down          down
FastEthernet0/13   unassigned      YES manual down          down
FastEthernet0/14   unassigned      YES manual down          down
FastEthernet0/15   unassigned      YES manual down          down
FastEthernet0/16   unassigned      YES manual down          down
FastEthernet0/17   unassigned      YES manual down          down
FastEthernet0/18   unassigned      YES manual down          down
FastEthernet0/19   unassigned      YES manual down          down
FastEthernet0/20   unassigned      YES manual down          down
FastEthernet0/21   unassigned      YES manual down          down
FastEthernet0/22   unassigned      YES manual down          down
FastEthernet0/23   unassigned      YES manual down          down
FastEthernet0/24   unassigned      YES manual down          down
GigabitEthernet0/1 unassigned      YES manual up            up
GigabitEthernet0/2 unassigned      YES manual up            up
Vlan1             192.168.1.2    YES manual up            up

cl>show arp
Protocol          Address          Age (min)  Hardware Addr      Type      Interface
Internet          192.168.1.2    0000.0000.1544  ARPA     Vlan1

cl>
```

Copy Paste

17:52:00

Simulation

Fire Las

Top

Copper Straight-Through

POD LIST 1

ENG

10:29

Cisco Packet Tracer

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>ip interface Vlan1
Switch>(config-if)#ip address 192.168.2.2 255.255.255.0
Switch>(config-if)#no shutdown
Switch>(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up
Switch>exit
Switch>(config)#
Switch>(config)#
Switch>(config)#
%SYS-5-CONFIG_I: Configured from console by console
Switch>show ip interface brief
Interface          IP-Address      OK? Method Status      Protocol
FastEthernet0/1    unassigned     YES manual up       up
FastEthernet0/2    unassigned     YES manual up       up
FastEthernet0/3    unassigned     YES manual up       up
FastEthernet0/4    unassigned     YES manual up       up
FastEthernet0/5    unassigned     YES manual up       up
FastEthernet0/6    unassigned     YES manual down    down
FastEthernet0/7    unassigned     YES manual down    down
FastEthernet0/8    unassigned     YES manual down    down
FastEthernet0/9    unassigned     YES manual down    down
FastEthernet0/10   unassigned     YES manual down    down
FastEthernet0/11   unassigned     YES manual down    down
FastEthernet0/12   unassigned     YES manual down    down
FastEthernet0/13   unassigned     YES manual down    down
FastEthernet0/14   unassigned     YES manual down    down
FastEthernet0/15   unassigned     YES manual down    down
FastEthernet0/16   unassigned     YES manual down    down
FastEthernet0/17   unassigned     YES manual down    down
FastEthernet0/18   unassigned     YES manual down    down
FastEthernet0/19   unassigned     YES manual down    down
FastEthernet0/20   unassigned     YES manual down    down
FastEthernet0/21   unassigned     YES manual down    down
FastEthernet0/22   unassigned     YES manual down    down

```

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Cisco Packet Tracer

Switch1

Physical Config CLI Attributes

IOS Command Line Interface

```

%LINK-5-CHANGED: Interface Vlan1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up
Switch>exit
Switch>(config)#
Switch>(config)#
%SYS-5-CONFIG_I: Configured from console by console
Switch>show ip interface brief
Interface          IP-Address      OK? Method Status      Protocol
FastEthernet0/1    unassigned     YES manual up       up
FastEthernet0/2    unassigned     YES manual up       up
FastEthernet0/3    unassigned     YES manual up       up
FastEthernet0/4    unassigned     YES manual up       up
FastEthernet0/5    unassigned     YES manual up       up
FastEthernet0/6    unassigned     YES manual down    down
FastEthernet0/7    unassigned     YES manual down    down
FastEthernet0/8    unassigned     YES manual down    down
FastEthernet0/9    unassigned     YES manual down    down
FastEthernet0/10   unassigned     YES manual down    down
FastEthernet0/11   unassigned     YES manual down    down
FastEthernet0/12   unassigned     YES manual down    down
FastEthernet0/13   unassigned     YES manual down    down
FastEthernet0/14   unassigned     YES manual down    down
FastEthernet0/15   unassigned     YES manual down    down
FastEthernet0/16   unassigned     YES manual down    down
FastEthernet0/17   unassigned     YES manual down    down
FastEthernet0/18   unassigned     YES manual down    down
FastEthernet0/19   unassigned     YES manual down    down
FastEthernet0/20   unassigned     YES manual down    down
FastEthernet0/21   unassigned     YES manual down    down
FastEthernet0/22   unassigned     YES manual down    down
FastEthernet0/23   unassigned     YES manual down    down
FastEthernet0/24   unassigned     YES manual down    down
FastEthernet0/25   unassigned     YES manual down    down
GigabitEthernet0/1 unassigned     YES manual up       up
Vlan1
Protocol Address      Age (min)  Hardware Addr  Type  Interface
Internet 192.168.2.2           -        00E0.F76A.A037  ARPA  Vlan1
Switch>

```

Copy Paste

Cisco Packet Tracer

PC1

Physical Config Desktop Programming Attributes

IP Configuration

FastEthernet0

IP Configuration

DHCP

IPv4 Address: 192.168.1.11

Subnet Mask: 255.255.255.0

Default Gateway: 0.0.0.0

DNS Server: 0.0.0.0

Automatic

IPv6 Address:

Link Local Address: FE80::260:5CFF:FE38:A642

Default Gateway:

DNS Server:

802.1X

Use 802.1X Security

Authentication: MDS

Username:

Password:

PC0

Physical Config Desktop Programming Attributes

IP Configuration Interface FastEthernet0

IP Configuration

DHCP Static IP Address 192.168.1.10 Subnet Mask 255.255.255.0 Default Gateway 0.0.0.0 DNS Server 0.0.0.0

IPv6 Configuration

Automatic Static IPv6 Address FE80::260:3EFF:FE29:71E2 Link Local Address Default Gateway DNS Server

802.1X

Use 802.1X Security Authentication MD5 Username Password

Time: 0 Top Copper Straight-Through PDU List 10:42

Laptop0

Physical Config Desktop Programming Attributes

IP Configuration Interface FastEthernet0

IP Configuration

DHCP Static IP Address 192.168.1.13 Subnet Mask 255.255.255.0 Default Gateway 0.0.0.0 DNS Server 0.0.0.0

IPv6 Configuration

Automatic Static IPv6 Address FE80::230:A3FF:FEC9:613 Link Local Address Default Gateway DNS Server

802.1X

Use 802.1X Security Authentication MD5 Username Password

Time: 0 Top Copper Straight-Through PDU List 00:35:00 Simulation Fire Las

PC3

Physical Config Desktop Programming Attributes

IP Configuration Interface FastEthernet0

IP Configuration

DHCP Static IP Address 192.168.1.15 Subnet Mask 255.255.255.0 Default Gateway 0.0.0.0 DNS Server 0.0.0.0

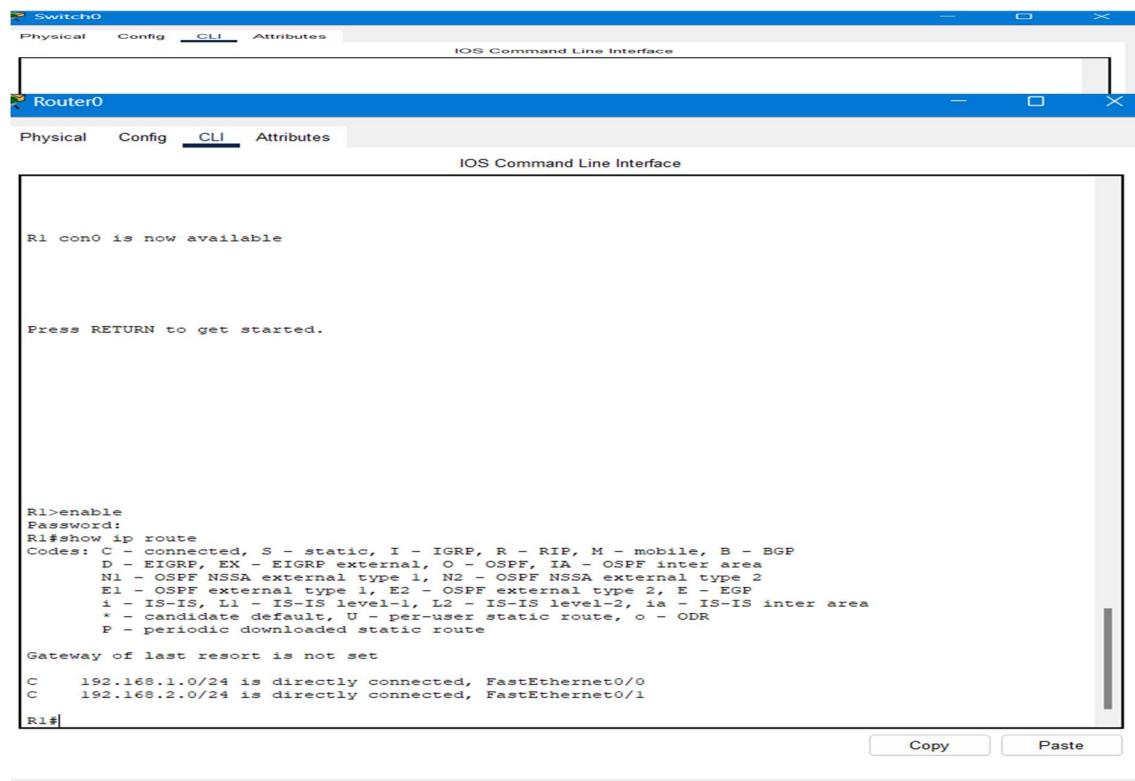
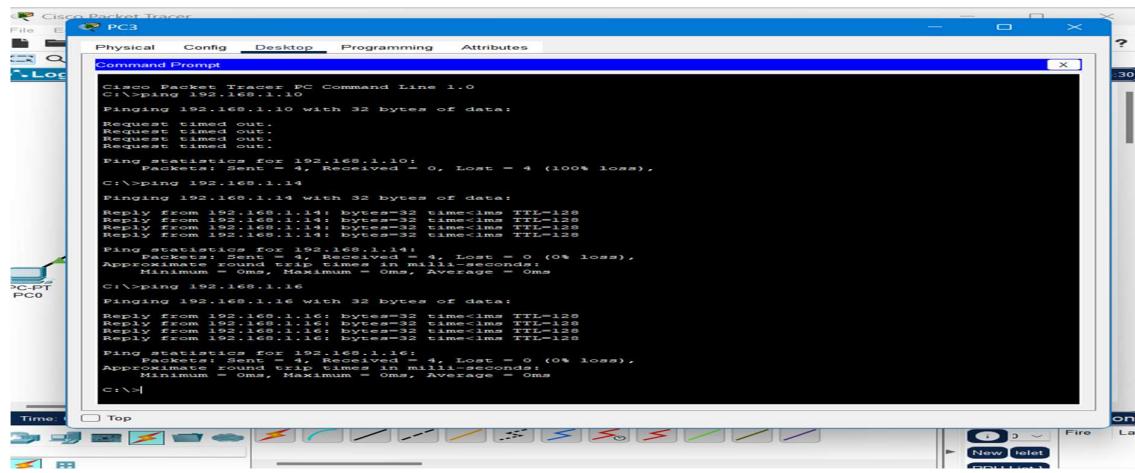
IPv6 Configuration

Automatic Static IPv6 Address FE80::260:3EFF:FE81:1ECD Link Local Address Default Gateway DNS Server

802.1X

Use 802.1X Security Authentication MD5 Username Password

Time: 0 Top Copper Straight-Through PDU List 00:43:30 Simulation Fire Las



1. Reproduction de la topologie, configuration du serveur http et https et affichage de ma page web.

Server0

Physical Config Services Desktop Programming Attributes

SERVICES

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

HTTP

On Off

HTTPS

On Off

File Manager

File Name	Edit	Delete
1 copyrights.html	(edit)	(delete)
2 cscoplogo177x111.jpg	(edit)	(delete)
3 helloworld.html	(edit)	(delete)
4 image.html	(edit)	(delete)
5 index.html	(edit)	(delete)

New File Import

Activer Accédez à

Server0

Physical Config Services Desktop Programming Attributes

IP Configuration

IP Configuration

Static

IPv4 Address: 192.168.1.18
Subnet Mask: 255.255.255.0
Default Gateway: 0.0.0.0
DNS Server: 0.0.0.0

IPv6 Configuration

Static

IPv6 Address: FE80::2D0:56FF:FE11:C428
Link Local Address: FE80::2D0:56FF:FE11:C428
Default Gateway:
DNS Server:
802.1X

Use 802.1X Security:
Authentication: MD5
Username:
Password:
802.1X

Activer Accédez à

Server0

Physical Config Services Desktop Programming Attributes

SERVICES

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

HTTP

On Off

HTTPS

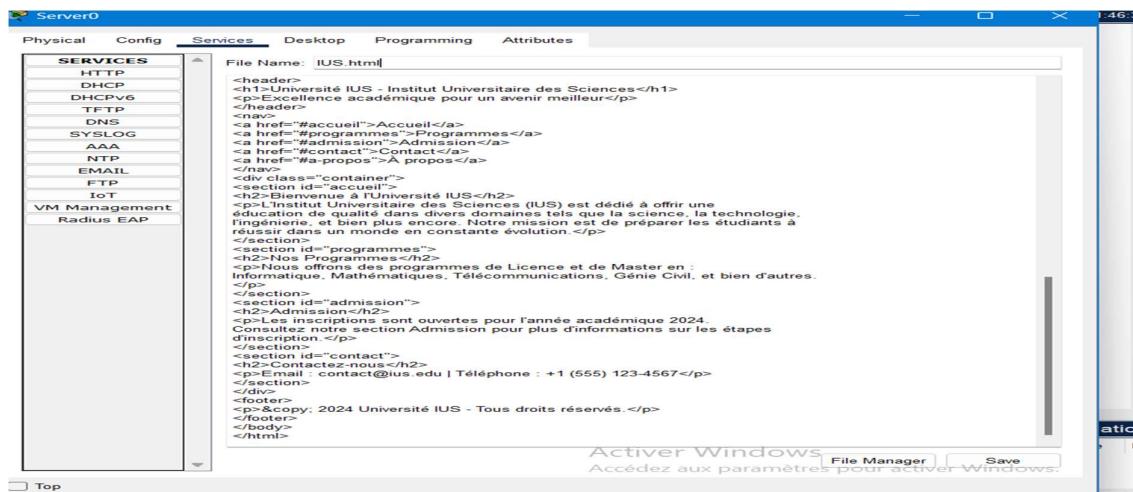
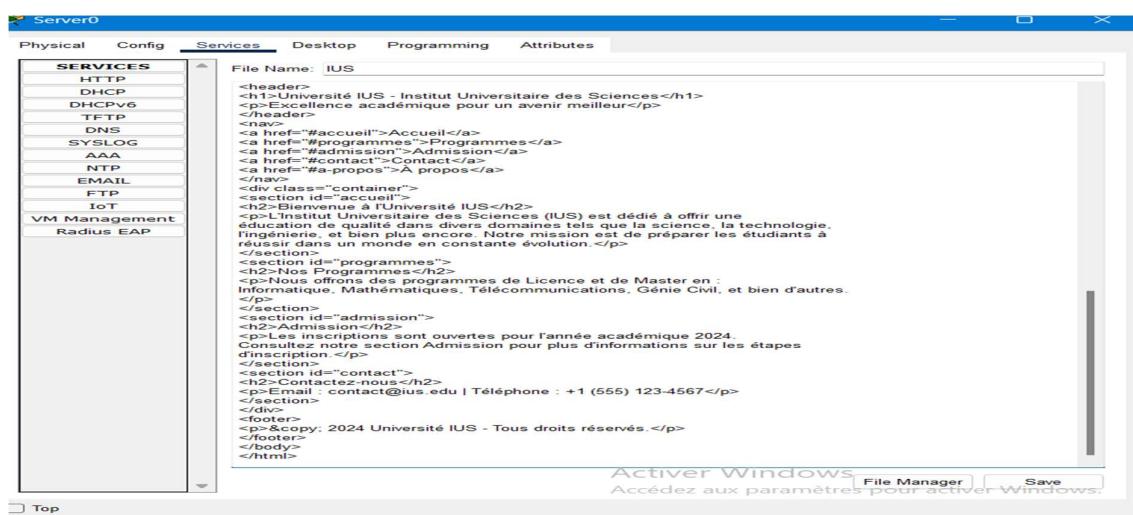
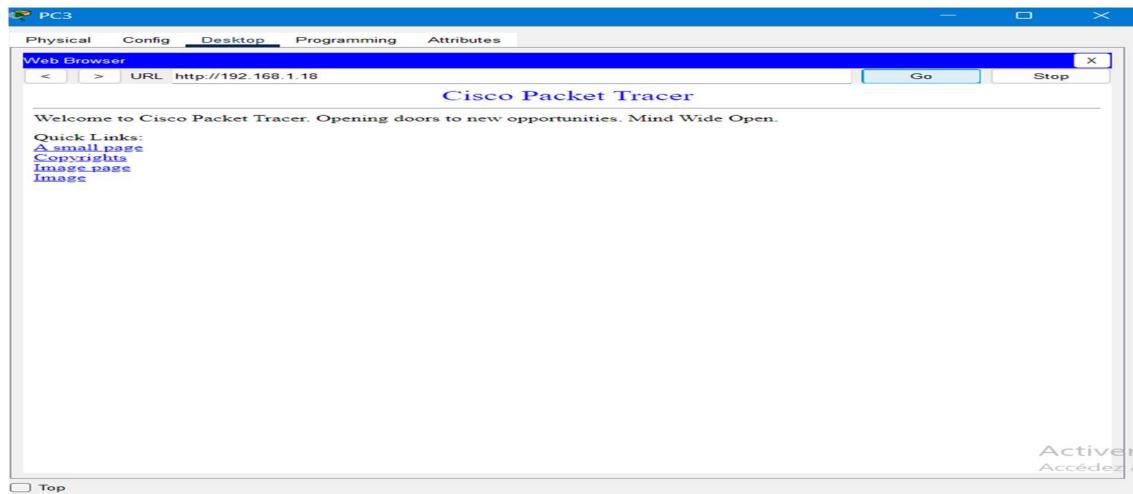
On Off

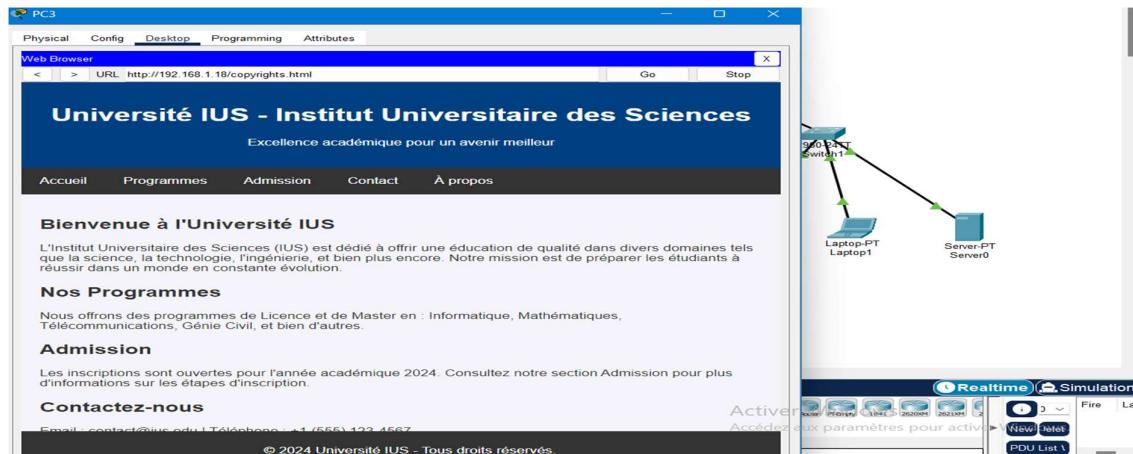
File Manager

File Name	Edit	Delete
1 copyrights.html	(edit)	(delete)
2 cscoplogo177x111.jpg	(edit)	(delete)
3 helloworld.html	(edit)	(delete)
4 image.html	(edit)	(delete)
5 index.html	(edit)	(delete)

New File Import

Activer Accédez à





2. Configuration d'un serveur web dans un réseau en utilisant l'architecture maillée

Router#

```

Physical Config CLI Attributes
IOS Command Line Interface

63488K bytes of ATA CompactFlash (Read/Write)
Cisco IOS Software, 1841 Software (C1841-ADVISERVICESK9-M), Version 12.4(15)T1, RELEASE SOFTWARE
(4.2)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2007 by Cisco Systems, Inc.
Compiled Wed Jul 18 04:52 by pt_team

Press RETURN to get started!

Router>enable
Router#hostname R1
^
* Invalid input detected at '^' marker.

Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname R1
R1(config)#interface FastEthernet0/0
R1(config-if)#ip address 192.168.1.1
* Invalid input detected at '^' marker.

R1(config-if)#ip address 192.168.1.1 255.255.255.0
R1(config-if)#no shutdown

R1(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
exit
R1(config)#exit
R1#
%SYS-5-CONFIG_I: Configured from console by console

R1#show ip interface brief
Interface          IP-Address      OK? Method Status      Protocol
FastEthernet0/0    192.168.1.1    YES manual up        down
FastEthernet0/1    unassigned      YES unset administratively down down
Vlan1             unassigned      YES unset administratively down down
R1#show arp
R1#
R1#
```

Switch#

```

Physical Config CLI Attributes
IOS Command Line Interface

S1(config-if)#ip address 192.168.1.2 255.255.255.0
S1(config-if)#no shutdown

S1(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up
exit
S1(config)#exit
S1#
%SYS-5-CONFIG_I: Configured from console by console

S1#show ip interface brief
Interface          IP-Address      OK? Method Status      Protocol
FastEthernet0/1    unassigned      YES manual down     down
FastEthernet0/2    unassigned      YES manual up       up
FastEthernet0/3    unassigned      YES manual up       up
FastEthernet0/4    unassigned      YES manual up       up
FastEthernet0/5    unassigned      YES manual up       up
FastEthernet0/6    unassigned      YES manual down     down
FastEthernet0/7    unassigned      YES manual down     down
FastEthernet0/8    unassigned      YES manual down     down
FastEthernet0/9    unassigned      YES manual down     down
FastEthernet0/10   unassigned      YES manual down     down
FastEthernet0/11   unassigned      YES manual down     down
FastEthernet0/12   unassigned      YES manual down     down
FastEthernet0/13   unassigned      YES manual down     down
FastEthernet0/14   unassigned      YES manual down     down
FastEthernet0/15   unassigned      YES manual down     down
FastEthernet0/16   unassigned      YES manual down     down
FastEthernet0/17   unassigned      YES manual down     down
FastEthernet0/18   unassigned      YES manual down     down
FastEthernet0/19   unassigned      YES manual down     down
FastEthernet0/20   unassigned      YES manual down     down
FastEthernet0/21   unassigned      YES manual down     down
FastEthernet0/22   unassigned      YES manual down     down
FastEthernet0/23   unassigned      YES manual down     down
FastEthernet0/24   unassigned      YES manual down     down
GigabitEthernet0/1  unassigned      YES manual down     down
GigabitEthernet0/2  unassigned      YES manual down     down
Vlan1             192.168.1.2    YES manual up       up
S1#
```

partielle.

Server0

Physical Config Services Desktop Programming Attributes

SERVICES

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

HTTP

On Off

HTTPS

On Off

File Manager

File Name	Edit	Delete
1 copyrights.html	(edit)	(delete)
2 cscopologo177x111.jpg		(delete)
3 helloworld.html	(edit)	(delete)
4 image.html	(edit)	(delete)
5 index.html	(edit)	(delete)

New File Import Accédez à

Server0

Physical Config Services Desktop Programming Attributes

IP Configuration

IP Configuration

DHCP

Static

IPv4 Address: 192.168.2.12

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.2.1

DNS Server: 0.0.0.0

IPv6 Configuration

Automatic

Static

IPv6 Address: FE80::206:2AFF:FE89:3A12

Link Local Address:

Default Gateway:

DNS Server:

802.1X

Use 802.1X Security

Authentication: MD5

Username:

Password:

Activer Windows Accédez à

Server0

Physical Config Services Desktop Programming Attributes

SERVICES

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

File Name: image.html

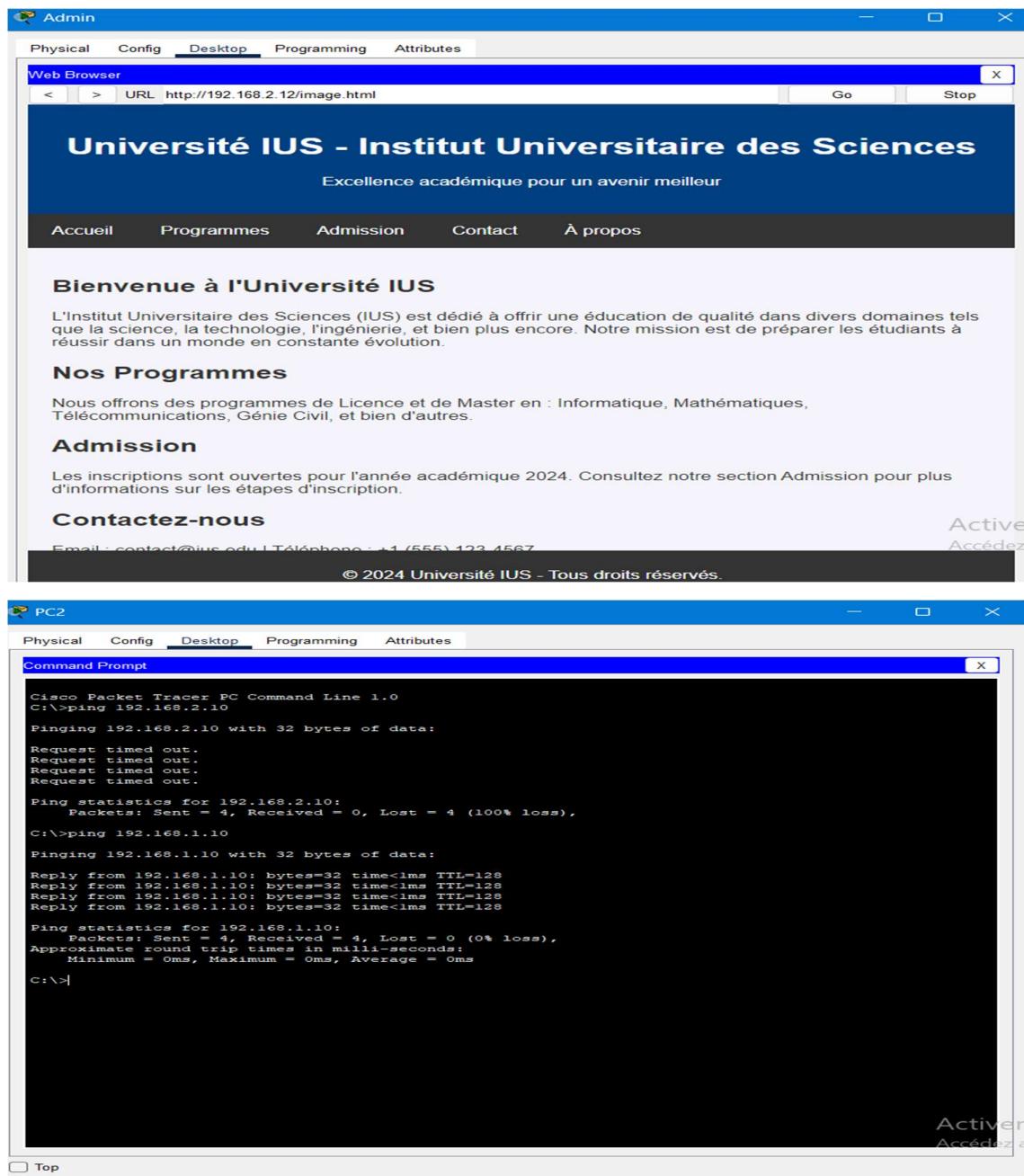
```

<header>
<h1>Université IUS - Institut Universitaire des Sciences</h1>
<p>Excellence académique pour un avenir meilleur</p>
</header>
<nav>
<a href="#accueil">Accueil</a>
<a href="#programmes">Programmes</a>
<a href="#admission">Admission</a>
<a href="#contact">Contact</a>
<a href="#a-propos">À propos</a>
</nav>
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<section id="accueil">
<h2>Université IUS</h2>
<p>L'Institut Universitaire des Sciences (IUS) est dédié à offrir une éducation de qualité dans divers domaines tels que la science, la technologie, l'ingénierie, et bien plus encore. Notre mission est de préparer les étudiants à réussir dans un monde en constante évolution.</p>
</section>
<section id="programmes">
<h2>Programmes</h2>
<p>Nous offrons des programmes de Licence et de Master en : Informatique, Mathématiques, Télécommunications, Génie Civil, et bien d'autres.</p>
</section>
<section id="admission">
<h2>Admission</h2>
<p>Les inscriptions sont ouvertes pour l'année académique 2024. Consultez notre section Admission pour plus d'informations sur les étapes d'inscription.</p>
</section>
<section id="contact">
<h2>Contactez-nous</h2>
<p>Email : contact@ius.edu | Téléphone : +1 (555) 123-4567</p>
</section>
<footer>
<p>&copy; 2024 Université IUS - Tous droits réservés.</p>
</footer>
</body>
</html>

```

Activer Windows
Accédez aux paramètres pour activer Windows

File Manager Save



Conclusion

J'ai étudié les théories relatives à la configuration des routeurs, des commutateurs, des adresses IP, des serveur http et https. J'ai également utilisé ces théories à l'aide du logiciel cisco packet tracer.