FACULTÉ DES SCIENCES ET DES TECHNOLOGIES

(FST)

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Niveau :   **3ième année**

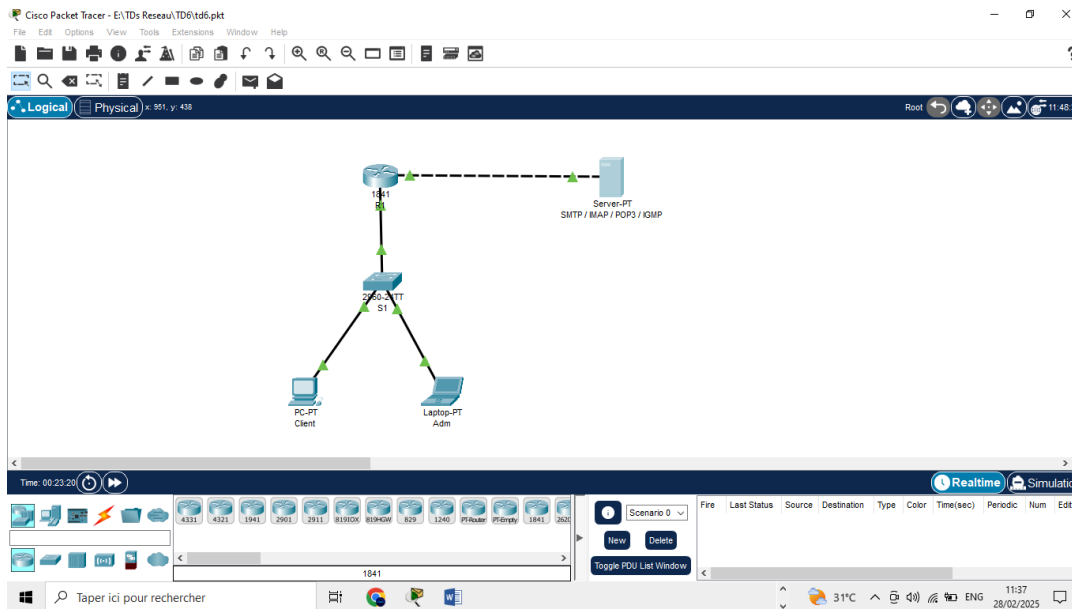**Année :**   **2024-2025**

Le 28/02/2025

Exécution du TD

▪Processus de configuration et d'utilisation du protocole SMTP, IMAP et POP3 sur Cisco Packet Tracer.


```
M860 processor: part number 0, mask 49
2 FastEthernet/IEEE 802.3 interface(s)
191K bytes of NVRAM.
63488K bytes of ATA CompactFlash (Read/Write)
Cisco IOS Software, 1841 Software (C1841-ADVIPSERVICESK9-M), Version 12.4(15)T1, RELEASE SOFTWARE
(fc2)
Technical Support: http://www.cisco.com/techsupport
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Compiled Wed 18-Jul-07 04:52 by pt_team


         --- System Configuration Dialog ---

Would you like to enter the initial configuration dialog? [yes/no]:

Press RETURN to get started!



Router>enable
Router#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#hostname R1
R1(config)#interface FastEthernet0/0
R1(config-if)#ip address 192.168.1.1 255.255.255.0
R1(config-if)#no shutdown

R1(config-if)#exit
R1(config)#interface FastEthernet0/1
R1(config-if)#ip address 192.168.2.1 255.255.255.0
R1(config-if)#no shutdown

R1(config-if)#exit
R1(config)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
```

```
Device Name: R1
Device Model: 1841
Hostname: R1

Port             Link   VLAN   IP Address        IPv6 Address                    MAC Address
FastEthernet0/0  Up     --     192.168.1.1/24    <not set>                       00D0.9783.2601
FastEthernet0/1  Up     --     192.168.2.1/24    <not set>                       00D0.9783.2602
Vlan1            Down   1      <not set>         <not set>                       00E0.F793.995A

Physical Location: Intercity > Home City > Corporate Office > Main Wiring Closet > Rack > R1
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

R1(config)#exit
R1#
%SYS-5-CONFIG_I: Configured from console by console
show ip interface brief
Interface            IP-Address      OK? Method Status                  Protocol
FastEthernet0/0      192.168.1.1     YES manual up                      up
FastEthernet0/1      192.168.2.1     YES manual up                      up
Vlan1                unassigned      YES unset  administratively down down
R1#show arp
Protocol  Address        Age (min)  Hardware Addr   Type   Interface
Internet  192.168.1.1         -     00D0.9783.2601  ARPA   FastEthernet0/0
Internet  192.168.2.1         -     00D0.9783.2602  ARPA   FastEthernet0/1
R1#
```

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```
Cisco IOS Software, C2960 Software (C2960-LANBASEK9-M), Version 15.0(2)SE4, RELEASE SOFTWARE (fc1)
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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 FastEthernet0/2, 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

%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

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

Switch>enable
Switch#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname S1
S1(config)#interface vlan 1
S1(config-if)#ip address 192.168.1.2 255.255.255.0
S1(config-if)#no shutdown

S1(config-if)#exit
S1(config)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up

S1(config)#enable
% Incomplete command.
S1(config)#configure terminal
                        ^
% Invalid input detected at '^' marker.

S1(config)#hostname S2
S2(config)#interface vlan 1
S2(config-if)#ip address 192.168.2.2 255.255.255.0
S2(config-if)#no shutdown
S2(config-if)#exit
S2(config)#
S2(config)#
```

Copy

S1

Physical | Config | CLI | Attributes

IOS Command Line Interface

```
% Incomplete command.
S1(config)#configure terminal
                     ^
% Invalid input detected at '^' marker.

S1(config)#hostname S2
S2(config)#interface vlan 1
S2(config-if)#ip address 192.168.2.2 255.255.255.0
S2(config-if)#no shutdown
S2(config-if)#exit
S2(config)#
S2(config)#ip default-gateway 192.168.1.1
S2(config)#hostname S1
S1(config)#ip default-gateway 192.168.1.1
S1(config)#exit
S1#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 down                  down
FastEthernet0/5    unassigned      YES manual down                  down
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

S1#how arp
%SYS-5-CONFIG_I: Configured from console by console
```

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```
Device Name: Client
Device Model: PC-PT


Port            Link    IP Address          IPv6 Address          MAC Address
FastEthernet0   Up      192.168.1.10/24     <not set>             0007.ECB0.61AE
Bluetooth       Down    <not set>           <not set>             0001.42E4.92D5

Gateway: 192.168.1.1
DNS Server: <not set>
Line Number:  <not set>


Physical Location: Intercity > Home City > Corporate Office > Client
```

```
Device Name: Adm
Device Model: Laptop-PT


Port            Link    IP Address          IPv6 Address          MAC Address
FastEthernet0   Up      192.168.2.11/24     <not set>             0007.EC3B.EB3C
Bluetooth       Down    <not set>           <not set>             0003.E450.8BC2

Gateway: 192.168.1.1
DNS Server: <not set>
Line Number:  <not set>

Physical Location: Intercity > Home City > Corporate Office > Adm
```

```
Device Name: SMTP / IMAP /POP3
Device Model: Server-PT

Port            Link    IP Address          IPv6 Address          MAC Address
FastEthernet0   Up      192.168.2.10/24     <not set>             0010.1124.8639

Gateway: 192.168.2.1
DNS Server: <not set>
Line Number:  <not set>


Physical Location: Intercity > Home City > Corporate Office > Main Wiring Closet > Rack > SMTP / IMAP /POP3
```

Physical   Config   Services   Desktop   Programming   Attributes

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

EMAIL

SMTP Service
◉ ON   ○ OFF

POP3 Service
◉ ON   ○ OFF

Domain Name: example.com   [Set]

User Setup
User user2   Password password2

User1
user2

[+]

[-]

Change
Password

Physical   Config   Desktop   Programming   Attributes

Configure Mail   X

User Information

Your Name: User1

Email Address user1@example.com

Server Information

Incoming Mail Server   192.168.2.10

Outgoing Mail Server   192.168.2.10

Logon Information

User Name: user1

Password: ●●●●●●●●

[Save] [Remove]   [Clear] [Reset]

Configure Mail   X

User Information

| Your Name: | User2 |
| Email Address | user2@example.com |

Server Information

| Incoming Mail Server | 168.192.2.10 |
| Outgoing Mail Server | 168.192.2.10 |

Logon Information

| User Name: | user2 |
| Password: | ●●●●●●●● |

| Save | Remove | | Clear | Reset |

Compose Mail   X

| Send | To: | user1@exemple.com |
| | Subject: | "Test IMAP" |

Bonjour, je test mon petit programme.

Ne craignez pas, je vais pas pirater votre systeme.

blague, rire.
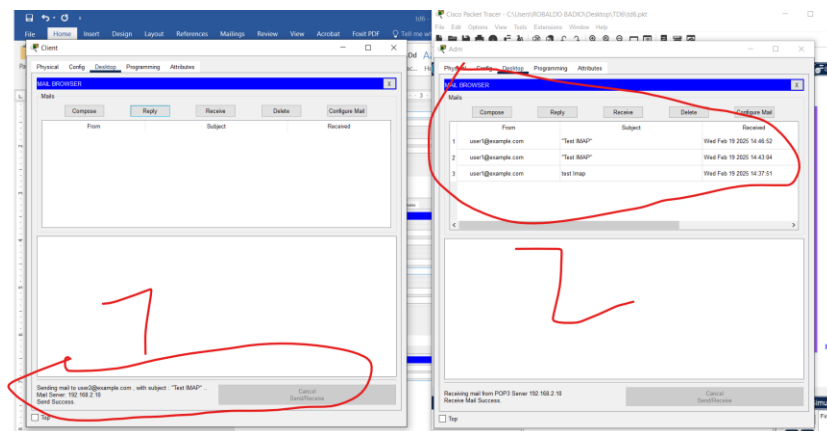
SMTP

```
R1>enable
R1#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
R1(config)#interface FastEthernet0/0
R1(config-if)#ip address 192.168.1.1 255.255.255.0
R1(config-if)#no shutdown
R1(config-if)#interface FastEthernet0/1
R1(config-if)#ip address 192.168.2.1 255.255.255.0
R1(config-if)#no shutdown
R1(config-if)#exit
R1(config)#access-list 110 permit tcp any any eq smtp
R1(config)#line vty 0 4
R1(config-line)#login
% Login disabled on line 194, until 'password' is set
% Login disabled on line 195, until 'password' is set
% Login disabled on line 196, until 'password' is set
% Login disabled on line 197, until 'password' is set
% Login disabled on line 198, until 'password' is set
R1(config-line)#password cisco
R1(config-line)#login
R1(config-line)#enable secret cisco
R1(config)#exit
R1#write memory
%SYS-5-CONFIG_I: Configured from console by console

Building configuration...
[OK]
R1#
```

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☐ Top

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.10

Pinging 192.168.1.10 with 32 bytes of data:

Reply from 192.168.1.10: bytes=32 time<1ms TTL=128
Reply from 192.168.1.10: bytes=32 time=2ms TTL=128
Reply from 192.168.1.10: bytes=32 time<1ms TTL=128
Reply from 192.168.1.10: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 2ms, Average = 0ms

C:\>
C:\>
C:\>
C:\> telnet 192.168.2.100 25
Trying 192.168.2.100 ...
% Connection timed out; remote host not responding
C:\>
C:\>
```

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
R1>enable
Password:
Password:
R1#enable
R1#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
R1(config)## Bloquer ICMP pour un rseau spcifique
            ^
% Invalid input detected at '^' marker.

R1(config)#access-list 100 deny icmp any any
R1(config)#access-list 100 permit ip any any
R1(config)## Appliquer l'ACL sur une interface
            ^
% Invalid input detected at '^' marker.

R1(config)#interface GigabitEthernet0/0
%Invalid interface type and number
R1(config)#ip access-group 100 in
                     ^
% Invalid input detected at '^' marker.

R1(config)#exit
R1#write memory
%SYS-5-CONFIG_I: Configured from console by console

Building configuration...
[OK]
R1#
```

Co

```
C:\>ping 8.8.8.8

Pinging 8.8.8.8 with 32 bytes of data:

Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.

Ping statistics for 8.8.8.8:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```

```
Press RETURN to get started:


%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

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


R1>enable
Password:
Password:
R1#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
R1(config)#interface GigabitEthernet0/0
%Invalid interface type and number
R1(config)#ip address 192.168.1.254 255.255.255.0
                    ^
% Invalid input detected at '^' marker.

R1(config)#ip pim sparse-dense-mode
              ^
% Invalid input detected at '^' marker.

R1(config)#
```

```
R1>interface GigabitEthernet0/0
              ^
% Invalid input detected at '^' marker.

R1>ip igmp join-group 239.1.1.1
        ^
% Invalid input detected at '^' marker.

R1>exit
```

```
R1>show ip igmp groups
           ^
% Invalid input detected at '^' marker.

R1>
```

Client

Physical | Config | Desktop | Programming | Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\> ping 239.1.1.1

Pinging 239.1.1.1 with 32 bytes of data:

Request timed out.
```

```
R1>show ip igmp groups
          ^
% Invalid input detected at '^' marker.

R1>
R1>access-list 10 permit 239.1.1.1
            ^
% Invalid input detected at '^' marker.

R1>interface GigabitEthernet0/0
          ^
% Invalid input detected at '^' marker.

R1>ip igmp access-group 10
      ^
% Invalid input detected at '^' marker.

R1>
```

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En conclusion, ce cours nous permet de de comprendre comment configurer et utiliser le protocole SMTP, IMAP, POP3, IGMP dans un réseau.