IUS
INSTITUT
UNIVERSITAIRE
DES SCIENCES

Faculté des Sciences et Technologie

(FST)

Niveau : L3-FST

Cours : Réseaux 2

Soumis au chargé de cours : Ismaël SAINT AMOUR

Préparé par : Jameson DOMINIQUE

Date : 28 Mars 2025

Configuration de NAT et un réseau IoT (Internet des Objets) sur Cisco Packet Tracer

TD 4

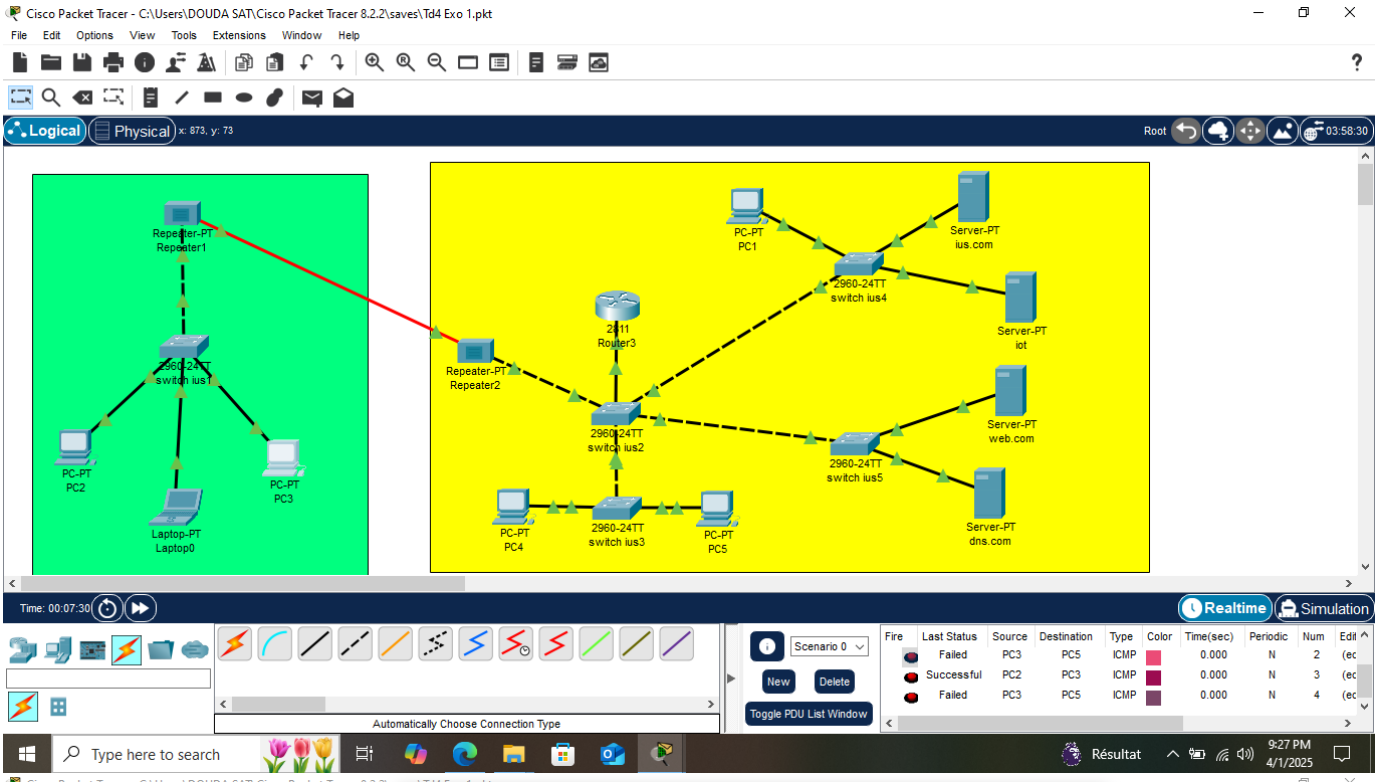
Objectif :

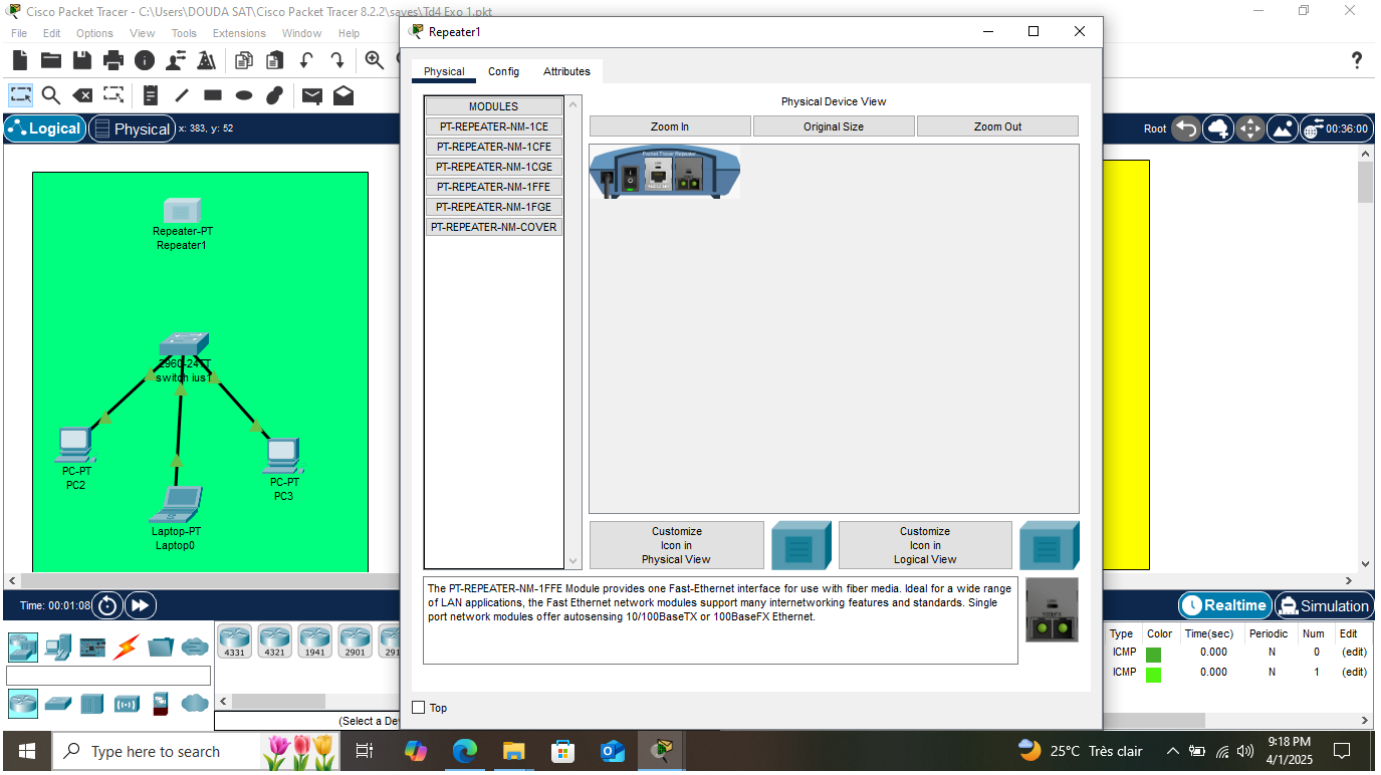
Dans ce TD, nous allons configurer **NAT** sur un **routeur Cisco** dans **Packet Tracer** pour permettre aux hôtes de communiquer avec l'extérieur tout en utilisant des adresses privées, et la configuration d'un **réseau IoT** dans Cisco Packet Tracer. L'objectif est d'intégrer des dispositifs IoT, comme des capteurs, des caméras ou des thermostats, et de les connecter à un réseau pour qu'ils puissent communiquer et échanger des informations.

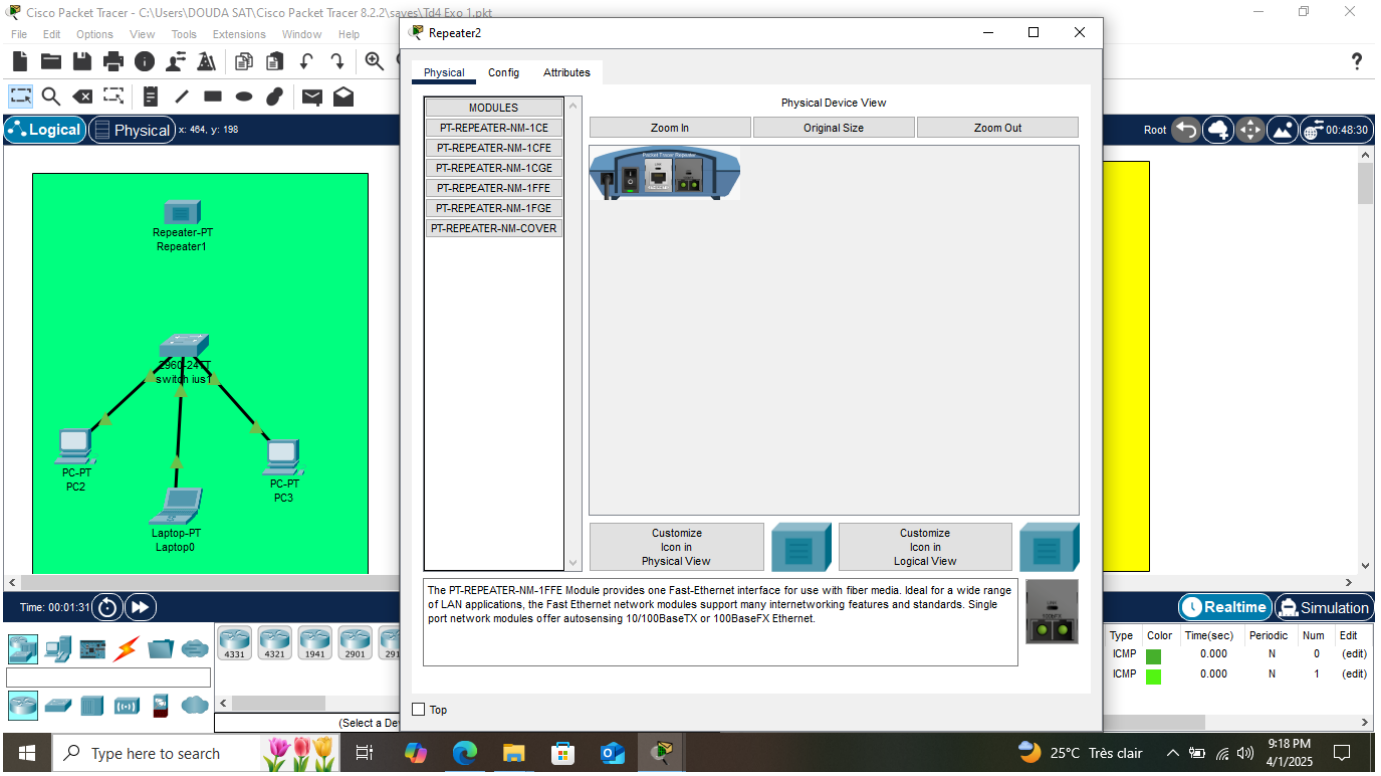
- Configurer la **NAT statique** pour une translation d'une adresse spécifique (pour un serveur web, par exemple).
- Configurer la **NAT dynamique** (PAT ou Port Address Translation) pour partager une adresse IP publique entre plusieurs hôtes internes.
- Tester la connectivité avec Internet.
- Comprendre comment intégrer des dispositifs IoT dans un réseau.
- Configurer la connectivité réseau entre un routeur, des switches et des dispositifs IoT (comme des capteurs, des caméras, des systèmes domotiques, etc.).
- Tester l'interconnexion et la communication entre ces dispositifs.

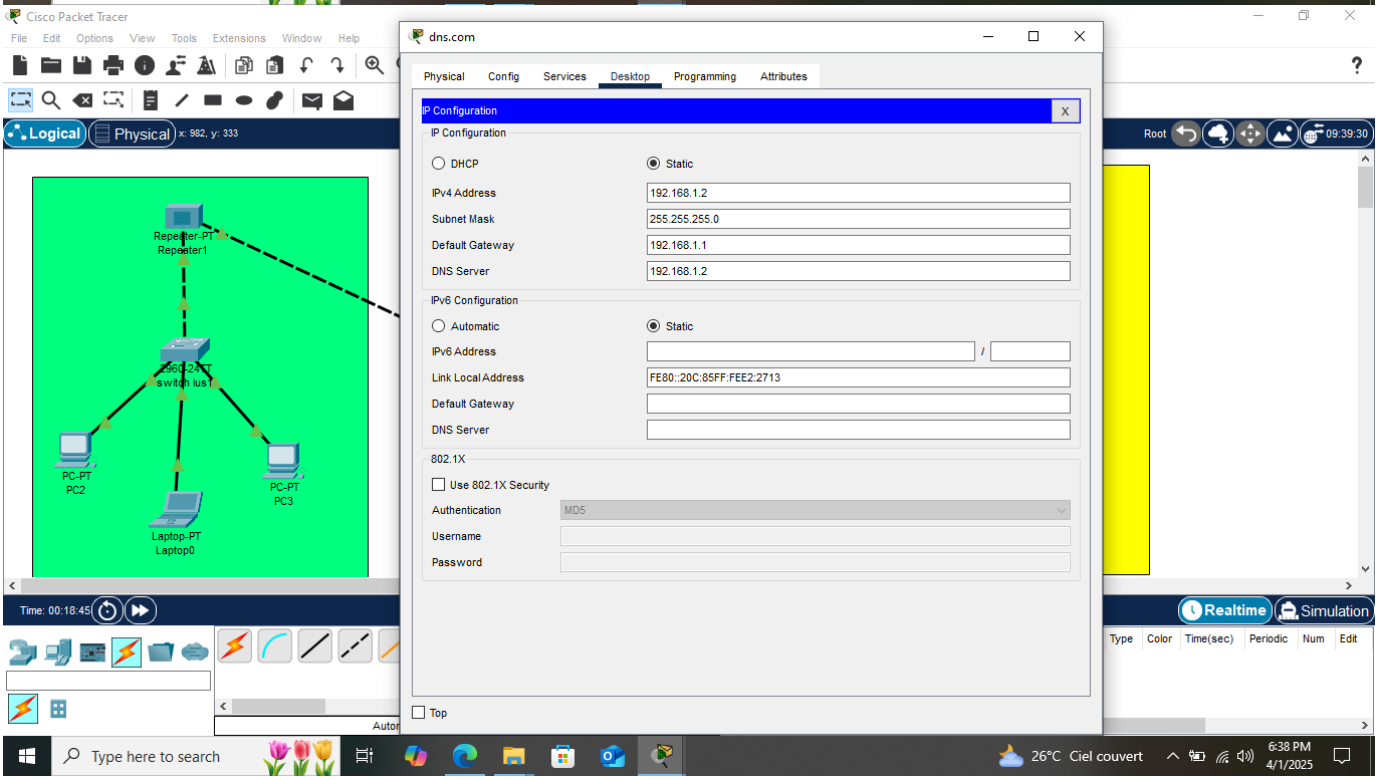
Travaux Dirigés

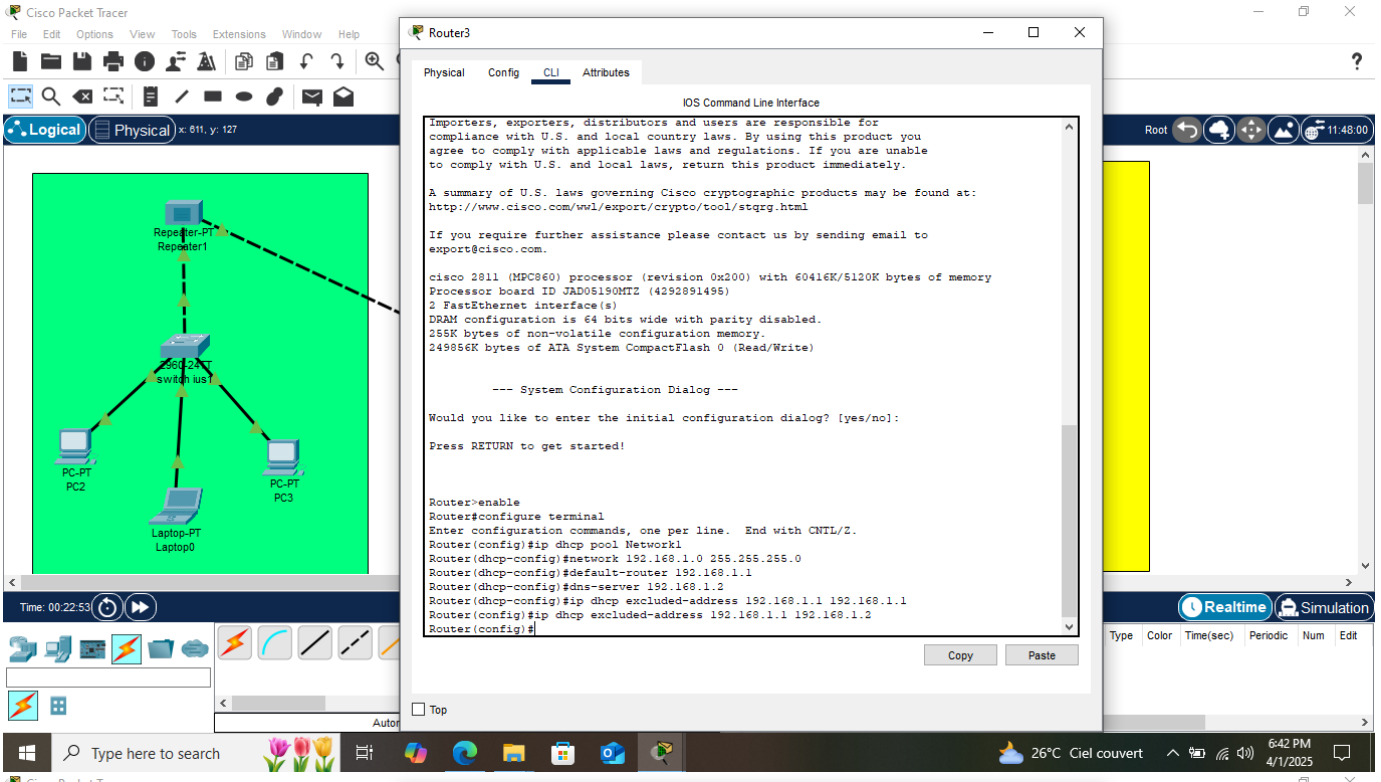
1. Reproduisez cette topologie en configurant le NAT du réseau

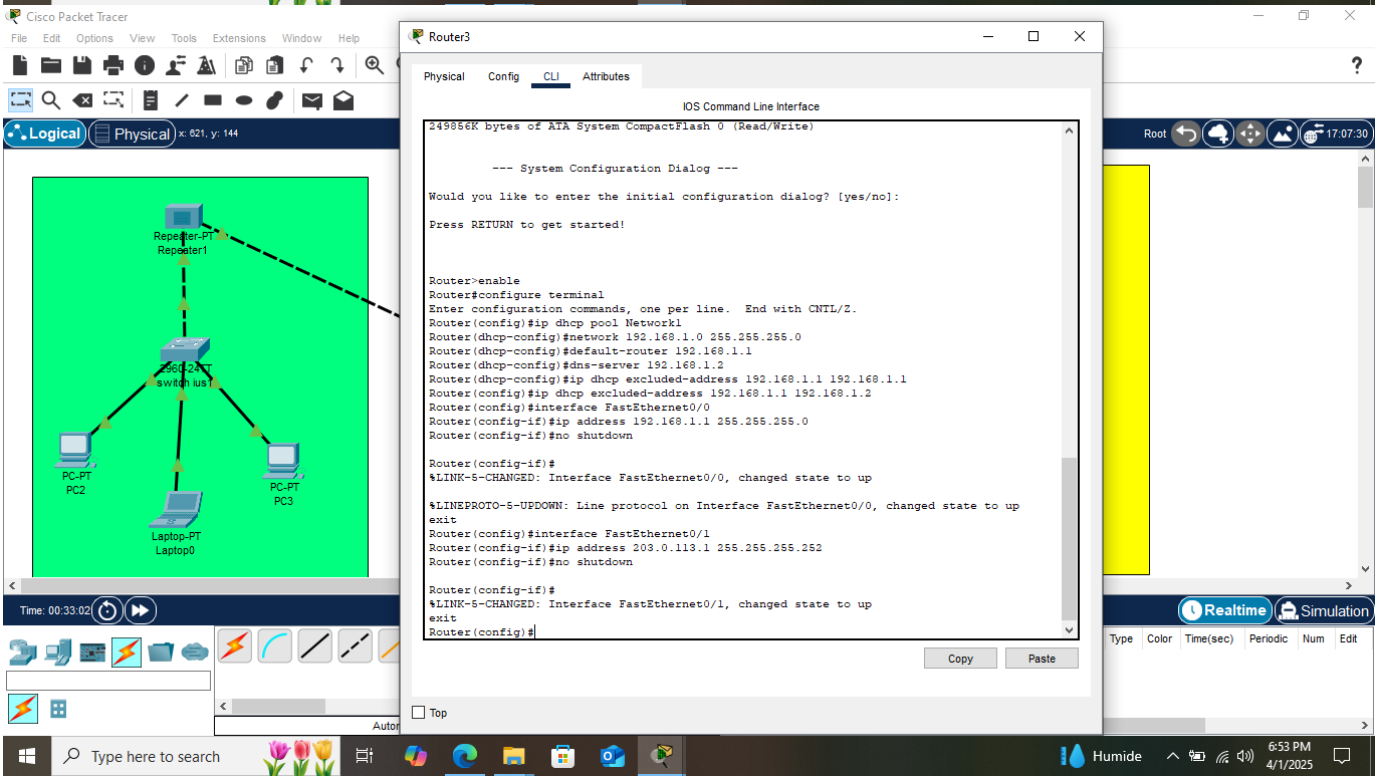


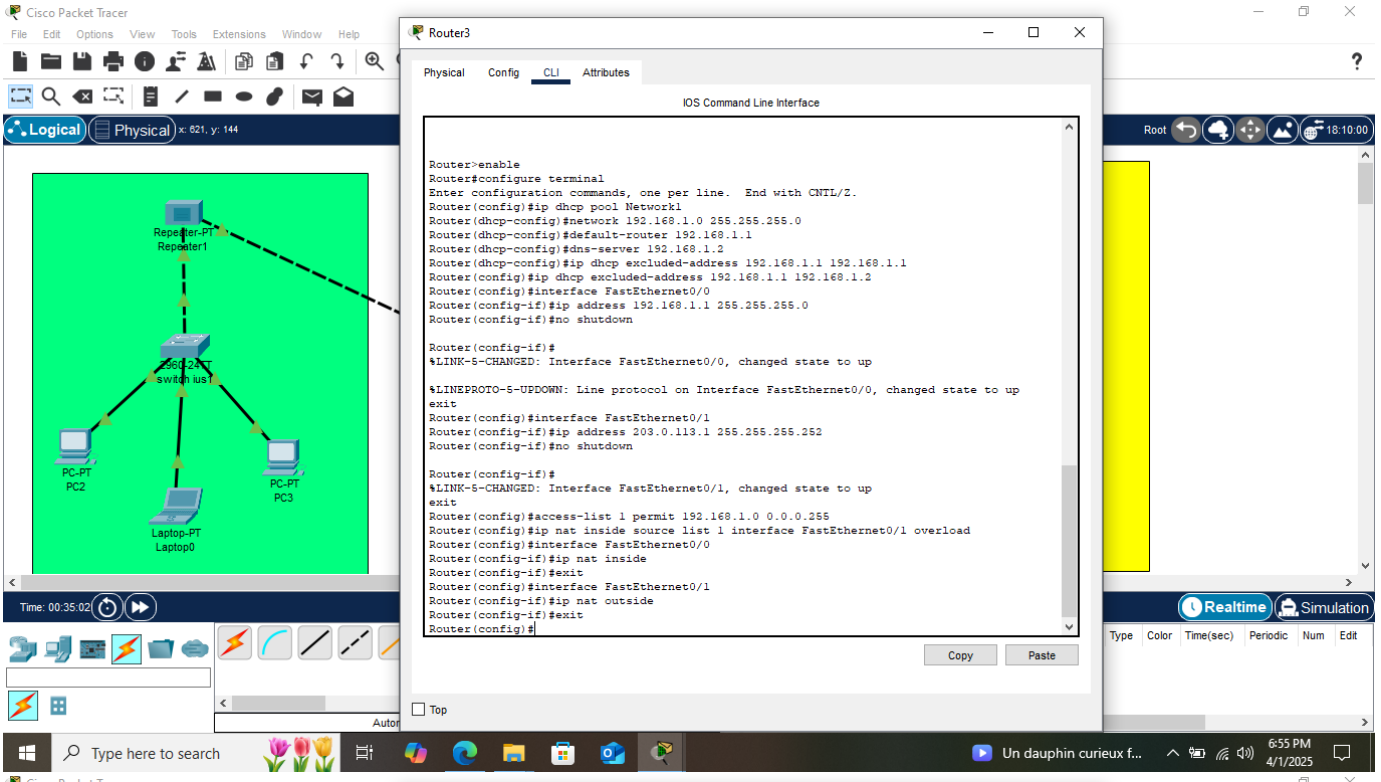


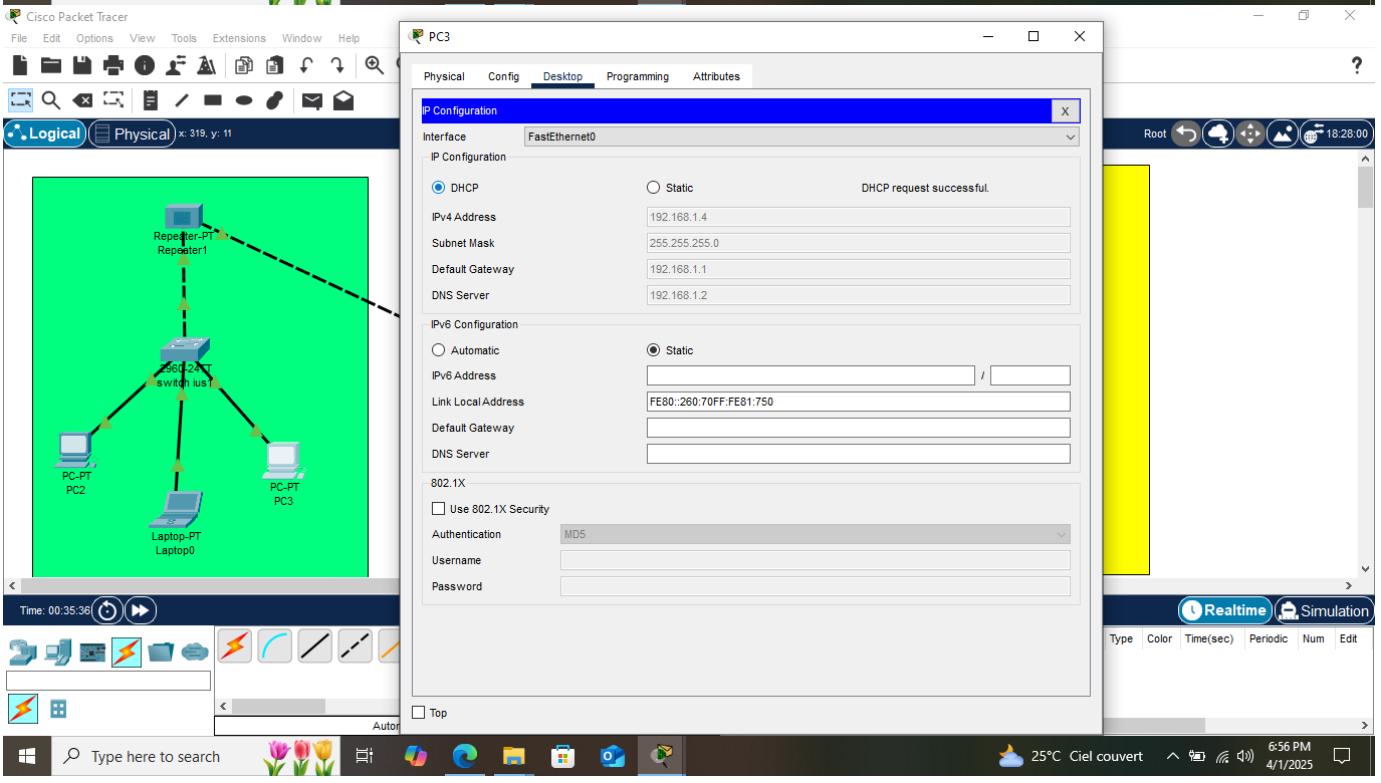

Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 1.pkt
Repeater2
Physical
Config
Attributes
MODULES
PT-REPEATER-NM-1CE
PT-REPEATER-NM-1CFE
PT-REPEATER-NM-1CGE
PT-REPEATER-NM-1FFE
PT-REPEATER-NM-1FGE
PT-REPEATER-NM-COVER
Physical Device View
Zoom In
Original Size
Zoom Out
Customize Icon in Physical View
Customize Icon in Logical View
The PT-REPEATER-NM-1FFE Module provides one Fast-Ethernet interface for use with fiber media. Ideal for a wide range of LAN applications, the Fast Ethernet network modules support many internetworking features and standards. Single port network modules offer autosensing 10/100BaseTX or 100BaseFX Ethernet.
Top
Repeater-PT Repeater1
2960-24TT switch lus1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Logical
Physical
Time: 00:01:31
Realtime
Simulation
Type here to search
25°C Très clair
9:18 PM
4/1/2025

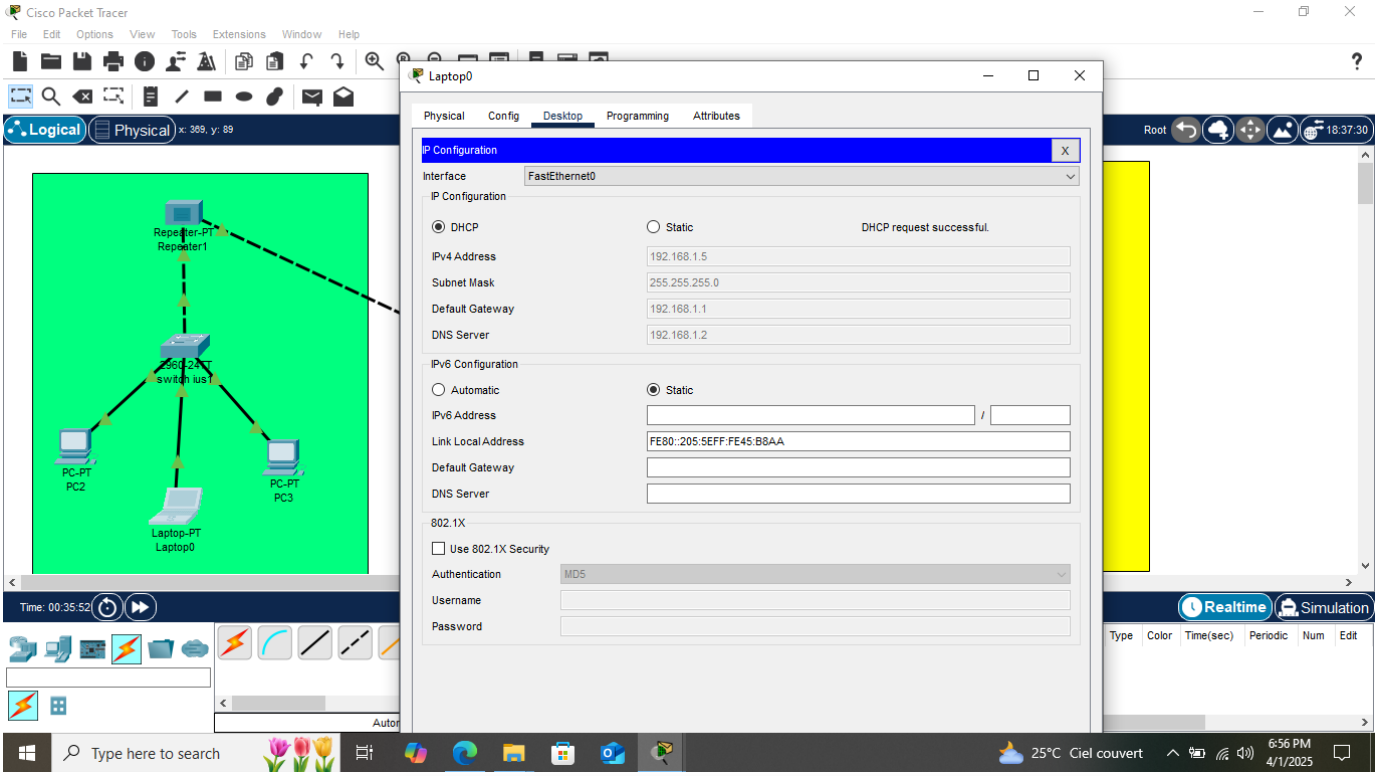

Cisco Packet Tracer
dns.com
Physical
Config
Services
Desktop
Programming
Attributes
IP Configuration
DHCP
Static
IPv4 Address 192.168.1.2
Subnet Mask 255.255.255.0
Default Gateway 192.168.1.1
DNS Server 192.168.1.2
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address FE80::20C:85FF:FEE2:2713
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Top
Repeater-PT Repeater1
2960-24TT switch lus1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Logical
Physical
Time: 00:18:45
Realtime
Simulation
Type here to search
26°C Ciel couvert
6:38 PM
4/1/2025

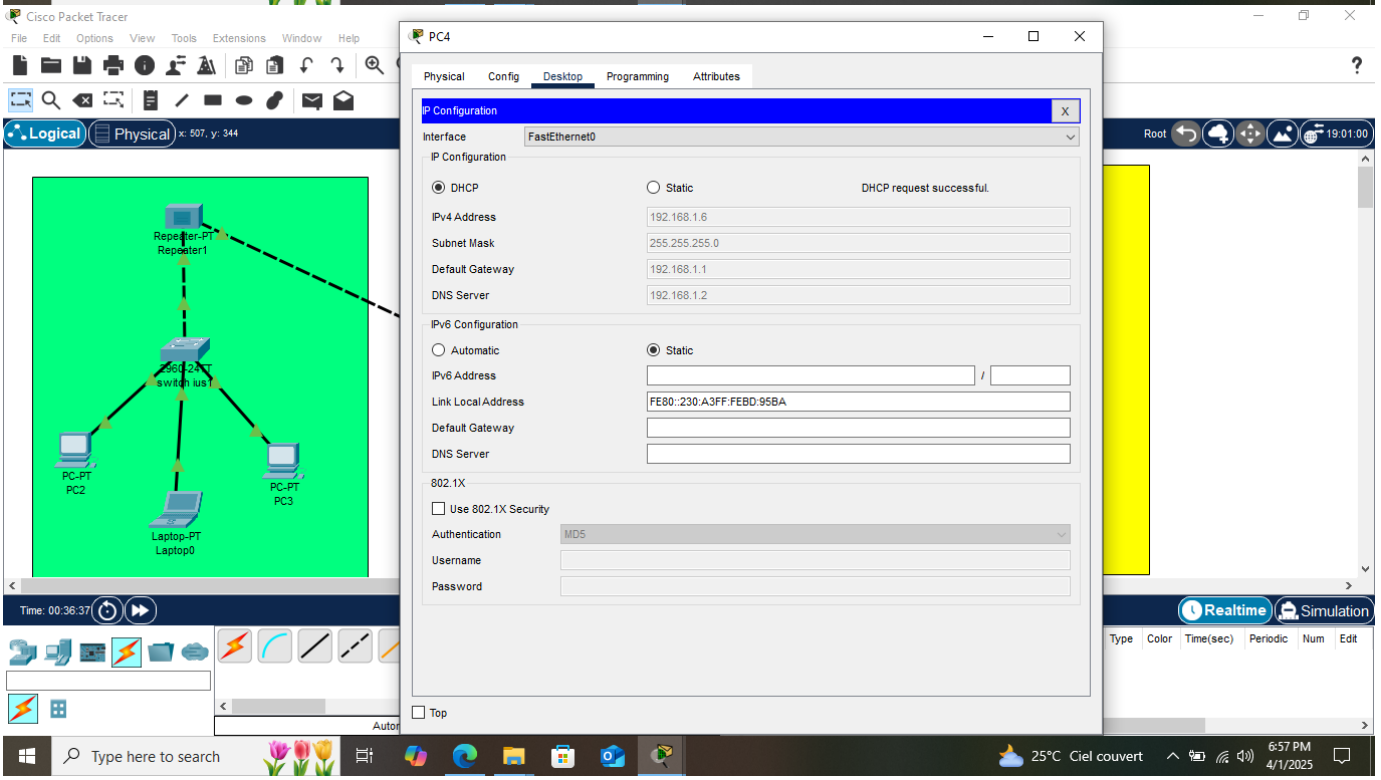

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 611, y: 127
Root 11:48:00
Repeater-PT
Repeater1
2960-24TT
switch lus1
PC-PT
PC2
PC-PT
PC3
Laptop-PT
Laptop0
Time: 00:22:53
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
Router3
Physical Config CLI Attributes
IOS Command Line Interface
Importers, exporters, distributors and users are responsible for
compliance with U.S. and local country laws. By using this product you
agree to comply with applicable laws and regulations. If you are unable
to comply with U.S. and local laws, return this product immediately.
A summary of U.S. laws governing Cisco cryptographic products may be found at:
http://www.cisco.com/wwl/export/crypto/tool/stqrg.html
If you require further assistance please contact us by sending email to
export@cisco.com.
cisco 2811 (MPC860) processor (revision 0x200) with 60416K/5120K bytes of memory
Processor board ID JAD05190MTZ (4292891495)
2 FastEthernet interface(s)
DRAM configuration is 64 bits wide with parity disabled.
255K bytes of non-volatile configuration memory.
249856K bytes of ATA System CompactFlash 0 (Read/Write)
--- 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)#ip dhcp pool Network1
Router(dhcp-config)#network 192.168.1.0 255.255.255.0
Router(dhcp-config)#default-router 192.168.1.1
Router(dhcp-config)#dns-server 192.168.1.2
Router(dhcp-config)#ip dhcp excluded-address 192.168.1.1 192.168.1.1
Router(config)#ip dhcp excluded-address 192.168.1.1 192.168.1.2
Router(config)#
Copy Paste
Top
Type here to search
26°C Ciel couvert
6:42 PM
4/1/2025

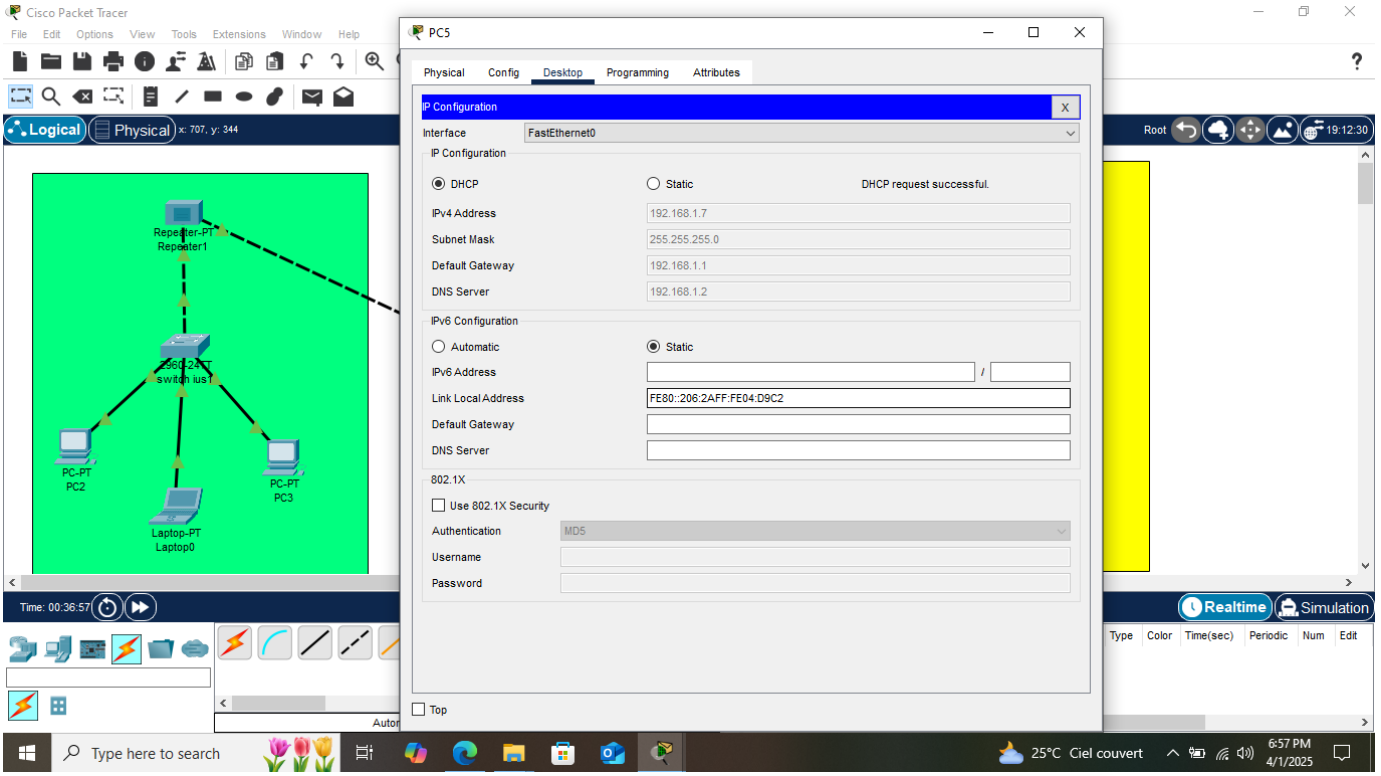

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 621, y: 144
Root 17:07:30
Repeater-PT
Repeater1
2960-24TT
switch lus1
PC-PT
PC2
PC-PT
PC3
Laptop-PT
Laptop0
Time: 00:33:02
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
Router3
Physical Config CLI Attributes
IOS Command Line Interface
249856K bytes of ATA System CompactFlash 0 (Read/Write)
--- 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)#ip dhcp pool Network1
Router(dhcp-config)#network 192.168.1.0 255.255.255.0
Router(dhcp-config)#default-router 192.168.1.1
Router(dhcp-config)#dns-server 192.168.1.2
Router(dhcp-config)#ip dhcp excluded-address 192.168.1.1 192.168.1.1
Router(config)#ip dhcp excluded-address 192.168.1.1 192.168.1.2
Router(config)#interface FastEthernet0/0
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#no shutdown
Router(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
exit
Router(config)#interface FastEthernet0/1
Router(config-if)#ip address 203.0.113.1 255.255.255.252
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
exit
Router(config)#
Copy Paste
Top
Type here to search
Humide
6:53 PM
4/1/2025

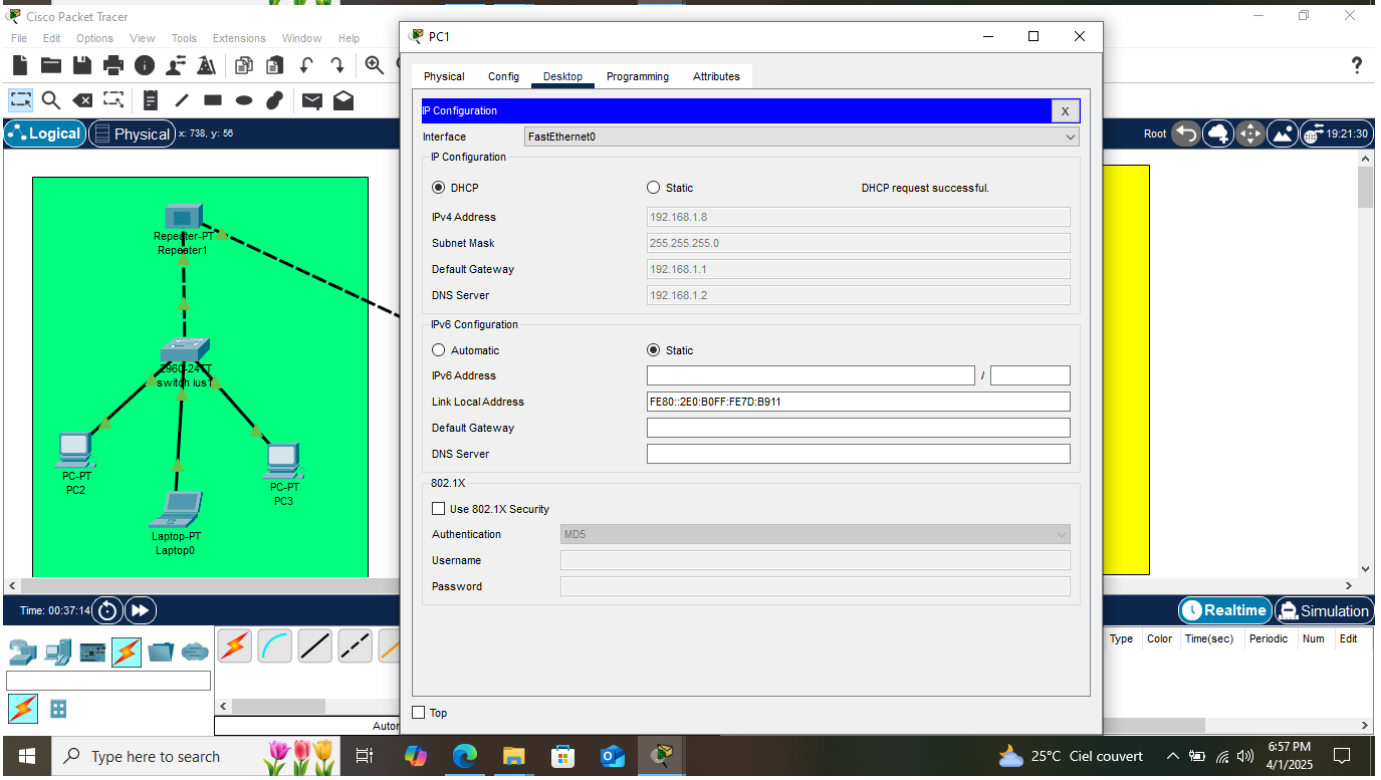

Cisco Packet Tracer
Router3
Physical
Config
CLI
Attributes
IOS Command Line Interface
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip dhcp pool Network1
Router(dhcp-config)#network 192.168.1.0 255.255.255.0
Router(dhcp-config)#default-router 192.168.1.1
Router(dhcp-config)#dns-server 192.168.1.2
Router(dhcp-config)#ip dhcp excluded-address 192.168.1.1 192.168.1.1
Router(config)#ip dhcp excluded-address 192.168.1.1 192.168.1.2
Router(config)#interface FastEthernet0/0
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#no shutdown
Router(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
exit
Router(config)#interface FastEthernet0/1
Router(config-if)#ip address 203.0.113.1 255.255.255.252
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
exit
Router(config)#access-list 1 permit 192.168.1.0 0.0.0.255
Router(config)#ip nat inside source list 1 interface FastEthernet0/1 overload
Router(config)#interface FastEthernet0/0
Router(config-if)#ip nat inside
Router(config-if)#exit
Router(config)#interface FastEthernet0/1
Router(config-if)#ip nat outside
Router(config-if)#exit
Router(config)#
Copy
Paste
Top
Repeater-PT Repeater1
2960-24TT switch lus1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Logical
Physical
Realtime
Simulation
Type here to search
6:55 PM 4/1/2025

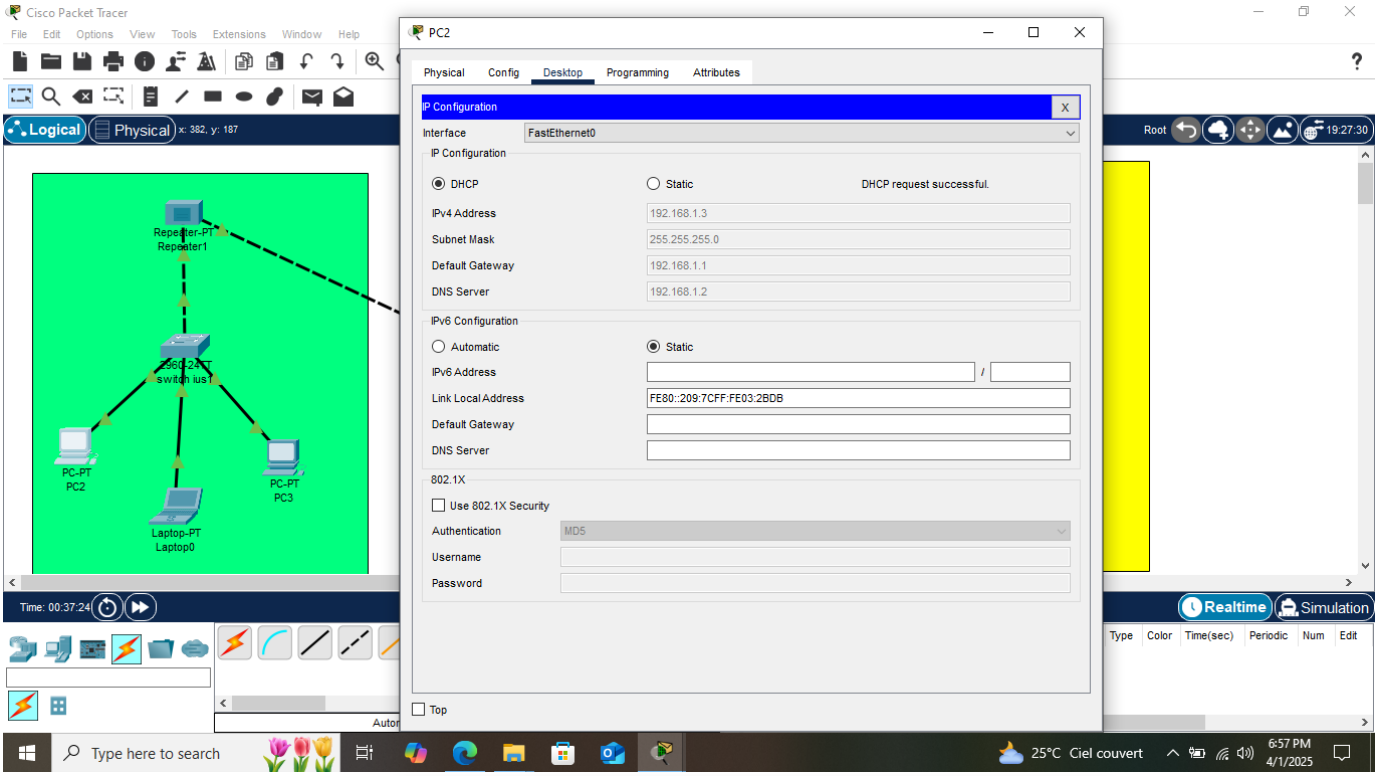

Cisco Packet Tracer
PC3
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
IP Configuration
DHCP
Static
DHCP request successful.
IPv4 Address
192.168.1.4
Subnet Mask
255.255.255.0
Default Gateway
192.168.1.1
DNS Server
192.168.1.2
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::260:70FF:FE81:750
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top
Repeater-PT Repeater1
2960-24TT switch lus1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Logical
Physical
Realtime
Simulation
Type here to search
25°C Ciel couvert
6:56 PM 4/1/2025

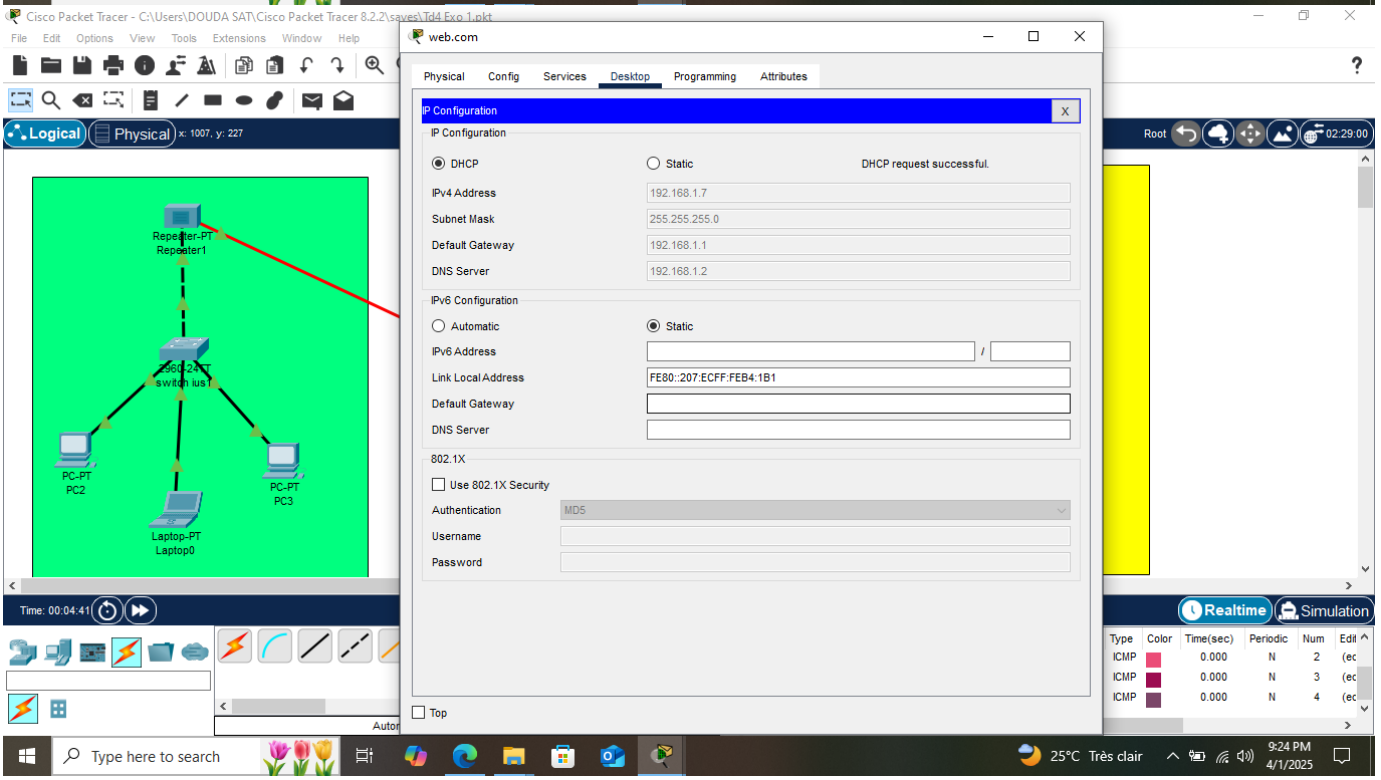

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 369, y: 89
Root 18:37:30
Repeater-PT Repeater1
2960-24TT switch lus1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Time: 00:35:52
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
Laptop0
Physical Config Desktop Programming Attributes
IP Configuration
Interface FastEthernet0
IP Configuration
DHCP Static DHCP request successful.
IPv4 Address 192.168.1.5
Subnet Mask 255.255.255.0
Default Gateway 192.168.1.1
DNS Server 192.168.1.2
IPv6 Configuration
Automatic Static
IPv6 Address
Link Local Address FE80::205:5EFF:FE45:B8AA
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Type here to search
25°C Ciel couvert
6:56 PM 4/1/2025

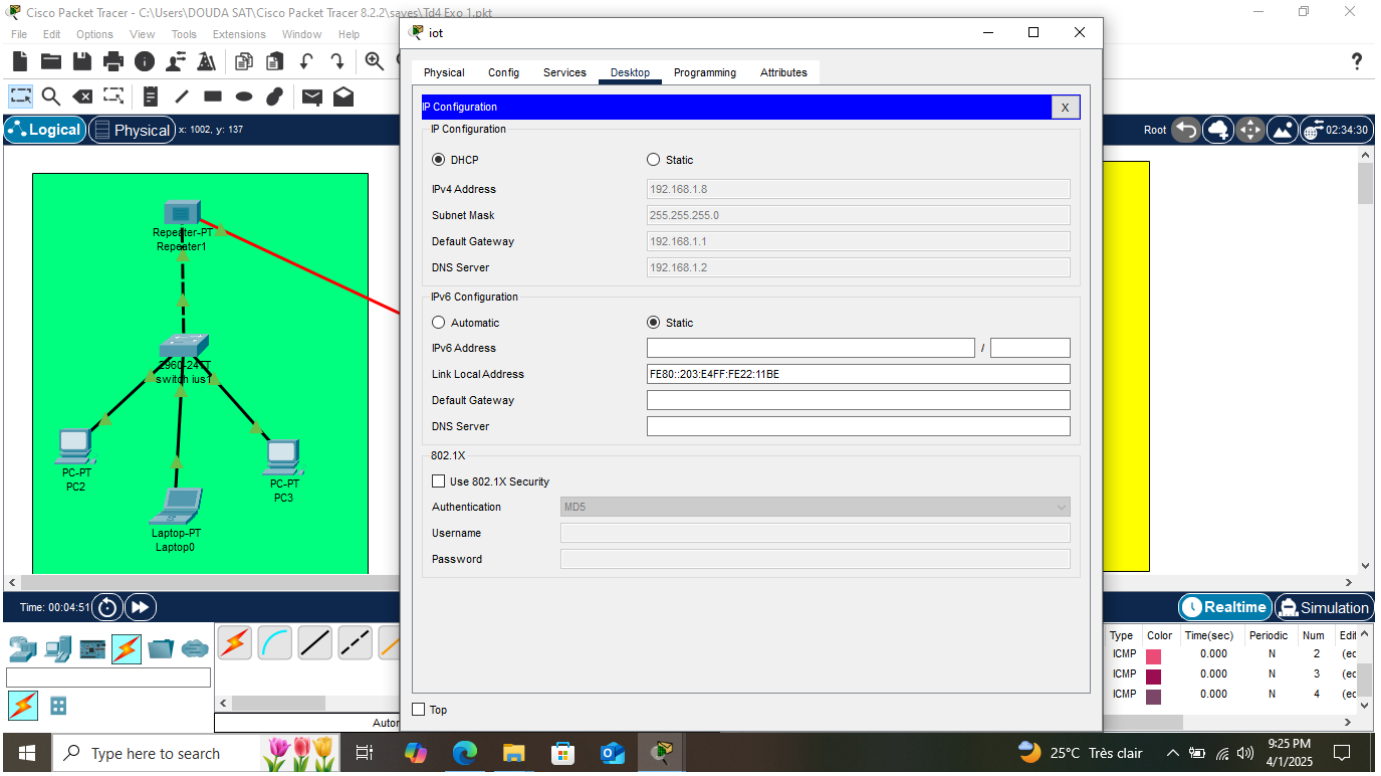

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 507, y: 344
Root 19:01:00
Repeater-PT Repeater1
2960-24TT switch lus1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Time: 00:36:37
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
PC4
Physical Config Desktop Programming Attributes
IP Configuration
Interface FastEthernet0
IP Configuration
DHCP Static DHCP request successful.
IPv4 Address 192.168.1.6
Subnet Mask 255.255.255.0
Default Gateway 192.168.1.1
DNS Server 192.168.1.2
IPv6 Configuration
Automatic Static
IPv6 Address
Link Local Address FE80::230:A3FF:FEBD:95BA
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Top
Type here to search
25°C Ciel couvert
6:57 PM 4/1/2025

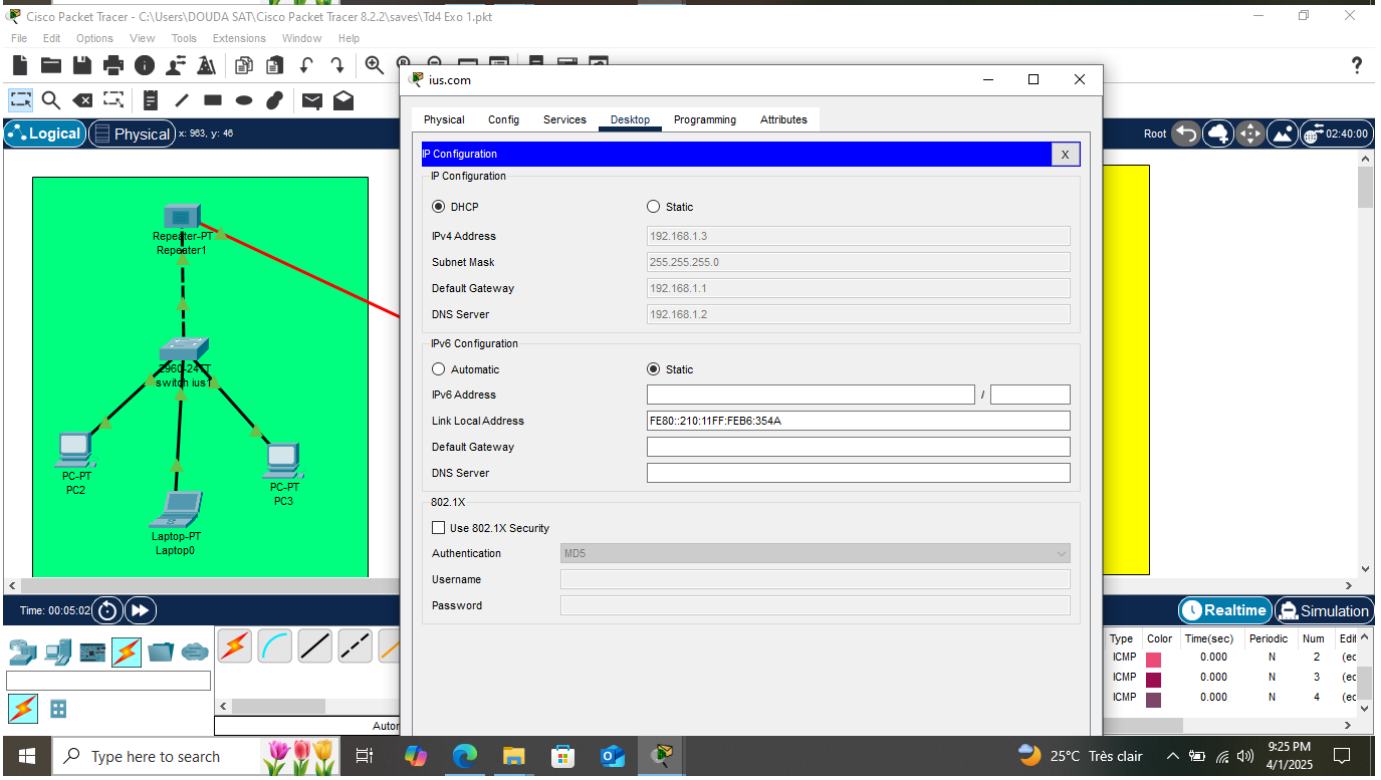

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 707, y: 344
Root 19:12:30
Repeater-PT Repeater1
2960-24TT switch lus1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Time: 00:36:57
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
PC5
Physical Config Desktop Programming Attributes
IP Configuration
Interface FastEthernet0
IP Configuration
DHCP
Static
DHCP request successful.
IPv4 Address 192.168.1.7
Subnet Mask 255.255.255.0
Default Gateway 192.168.1.1
DNS Server 192.168.1.2
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address FE80::206:2AFF:FE04:D9C2
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Top
Type here to search
25°C Ciel couvert
6:57 PM 4/1/2025

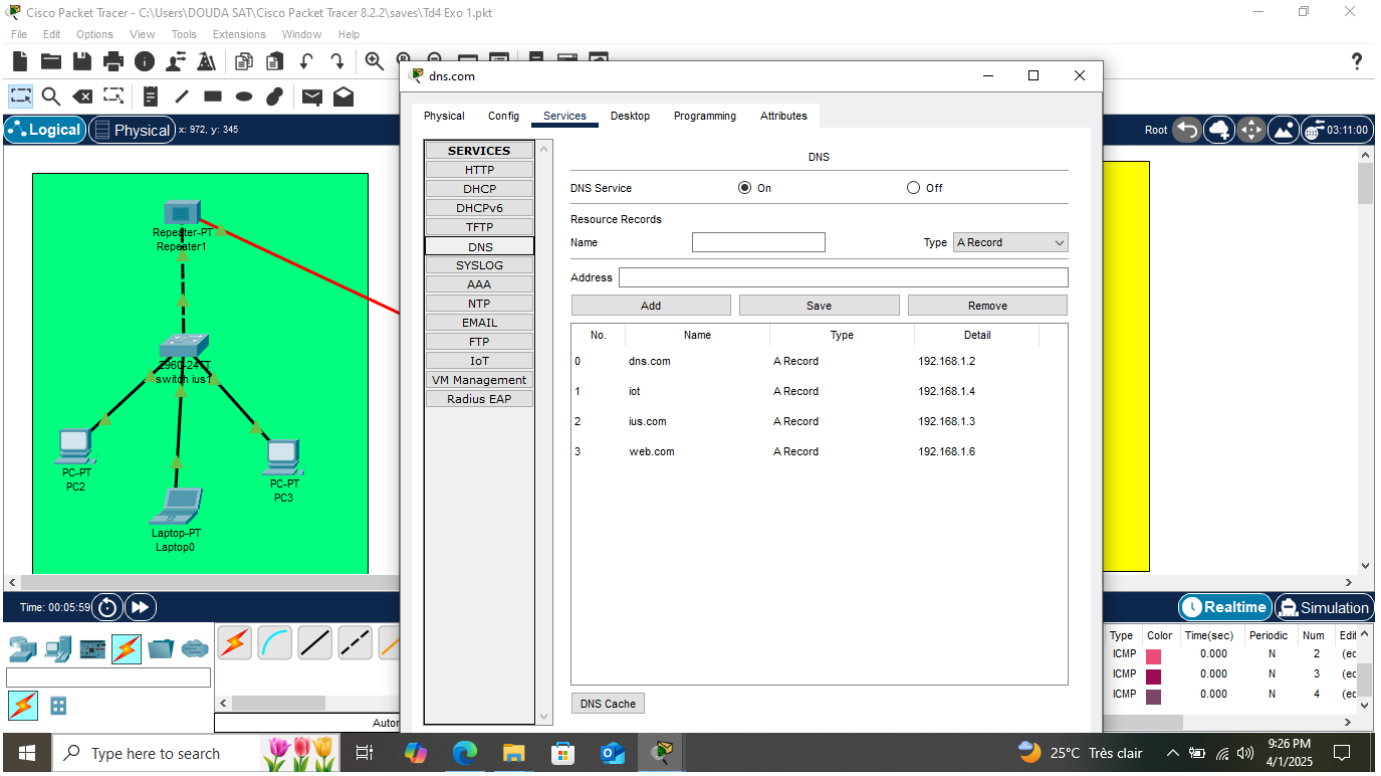

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 738, y: 56
Root 19:21:30
Repeater-PT Repeater1
2960-24TT switch lus1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Time: 00:37:14
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
PC1
Physical Config Desktop Programming Attributes
IP Configuration
Interface FastEthernet0
IP Configuration
DHCP
Static
DHCP request successful.
IPv4 Address 192.168.1.8
Subnet Mask 255.255.255.0
Default Gateway 192.168.1.1
DNS Server 192.168.1.2
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address FE80::2E0:B0FF:FE7D:B911
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Top
Type here to search
25°C Ciel couvert
6:57 PM 4/1/2025

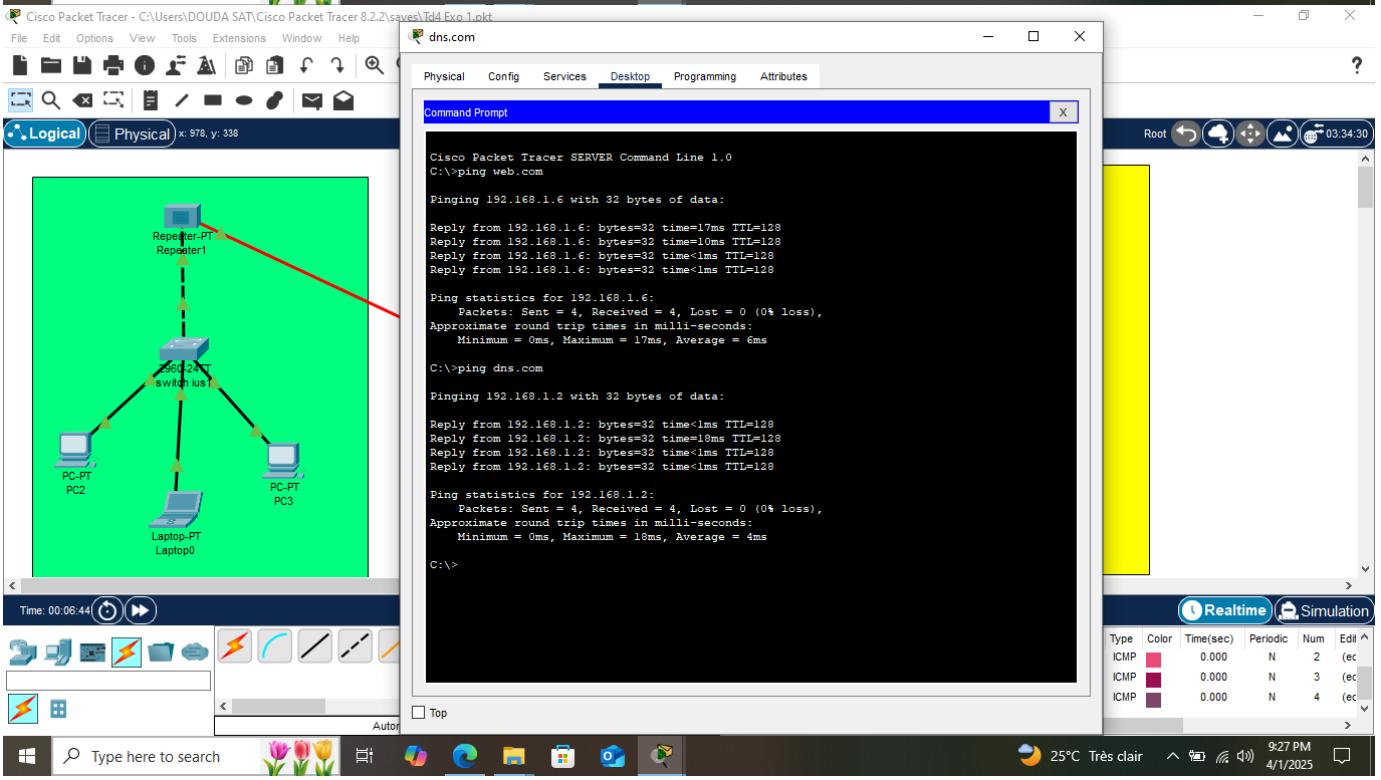

Cisco Packet Tracer
PC2
Physical Config Desktop Programming Attributes
IP Configuration
Interface FastEthernet0
IP Configuration
DHCP
Static
DHCP request successful.
IPv4 Address 192.168.1.3
Subnet Mask 255.255.255.0
Default Gateway 192.168.1.1
DNS Server 192.168.1.2
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address FE80::209:7CFF:FE03:2BDB
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Top
Repeater-PT Repeater1
2960-24TT switch lus1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Logical Physical x: 382, y: 187
Root 19:27:30
Time: 00:37:24
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
Type here to search
25°C Ciel couvert
6:57 PM 4/1/2025

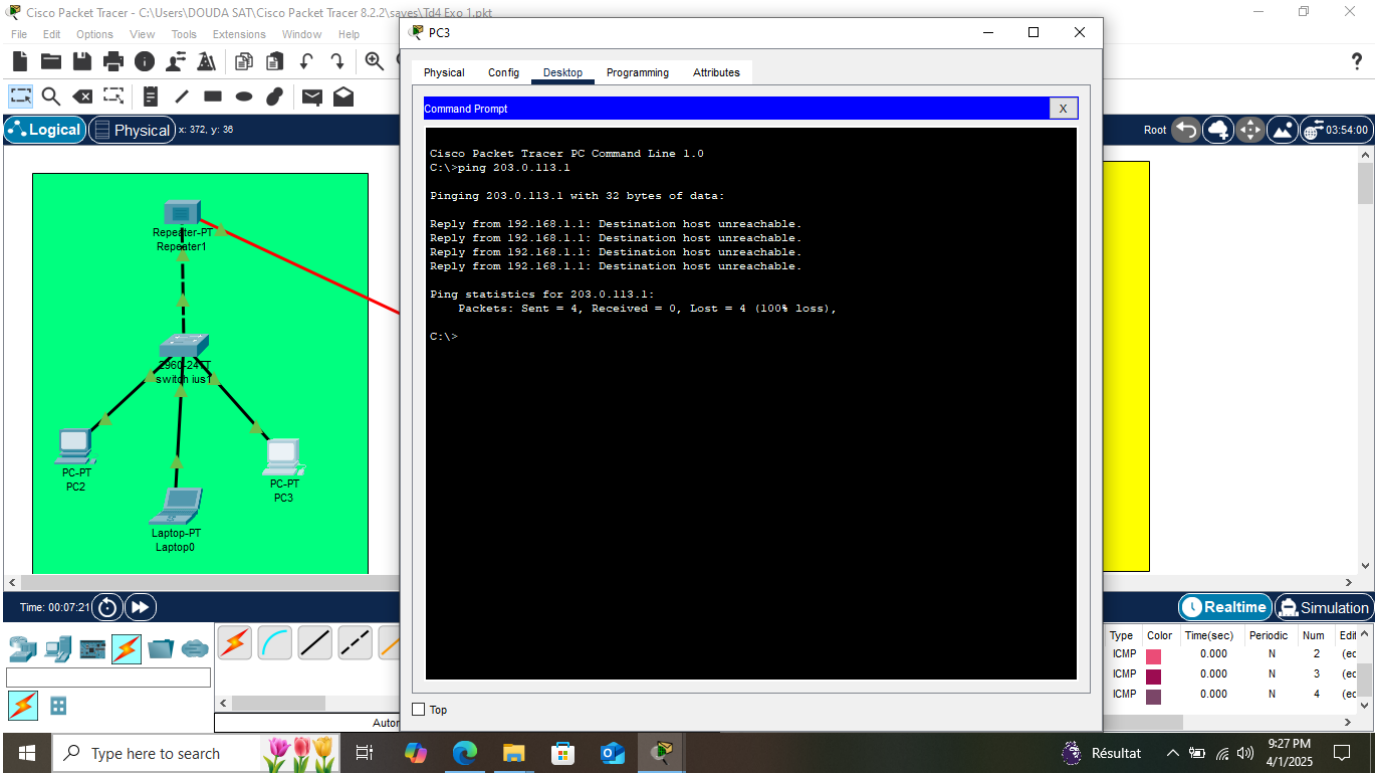

Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 1.pkt
web.com
Physical Config Services Desktop Programming Attributes
IP Configuration
IP Configuration
DHCP
Static
DHCP request successful.
IPv4 Address 192.168.1.7
Subnet Mask 255.255.255.0
Default Gateway 192.168.1.1
DNS Server 192.168.1.2
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address FE80::207:ECFF:FEB4:1B1
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Top
Repeater-PT Repeater1
2960-24TT switch lus1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Logical Physical x: 1007, y: 227
Root 02:29:00
Time: 00:04:41
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
ICMP 0.000 N 2
ICMP 0.000 N 3
ICMP 0.000 N 4
Type here to search
25°C Très clair
9:24 PM 4/1/2025


Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 1.pkt
File Edit Options View Tools Extensions Window Help
Logical Physical x: 1002, y: 137
Root 02:34:30
Repeater-PT Repeater1
2960-24TT switch ius1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Time: 00:04:51
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
ICMP 0.000 N 2
ICMP 0.000 N 3
ICMP 0.000 N 4
iot
Physical Config Services Desktop Programming Attributes
IP Configuration
IP Configuration
DHCP Static
IPv4 Address 192.168.1.8
Subnet Mask 255.255.255.0
Default Gateway 192.168.1.1
DNS Server 192.168.1.2
IPv6 Configuration
Automatic Static
IPv6 Address
Link Local Address FE80::203:E4FF:FE22:11BE
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Top
Type here to search
25°C Très clair
9:25 PM 4/1/2025

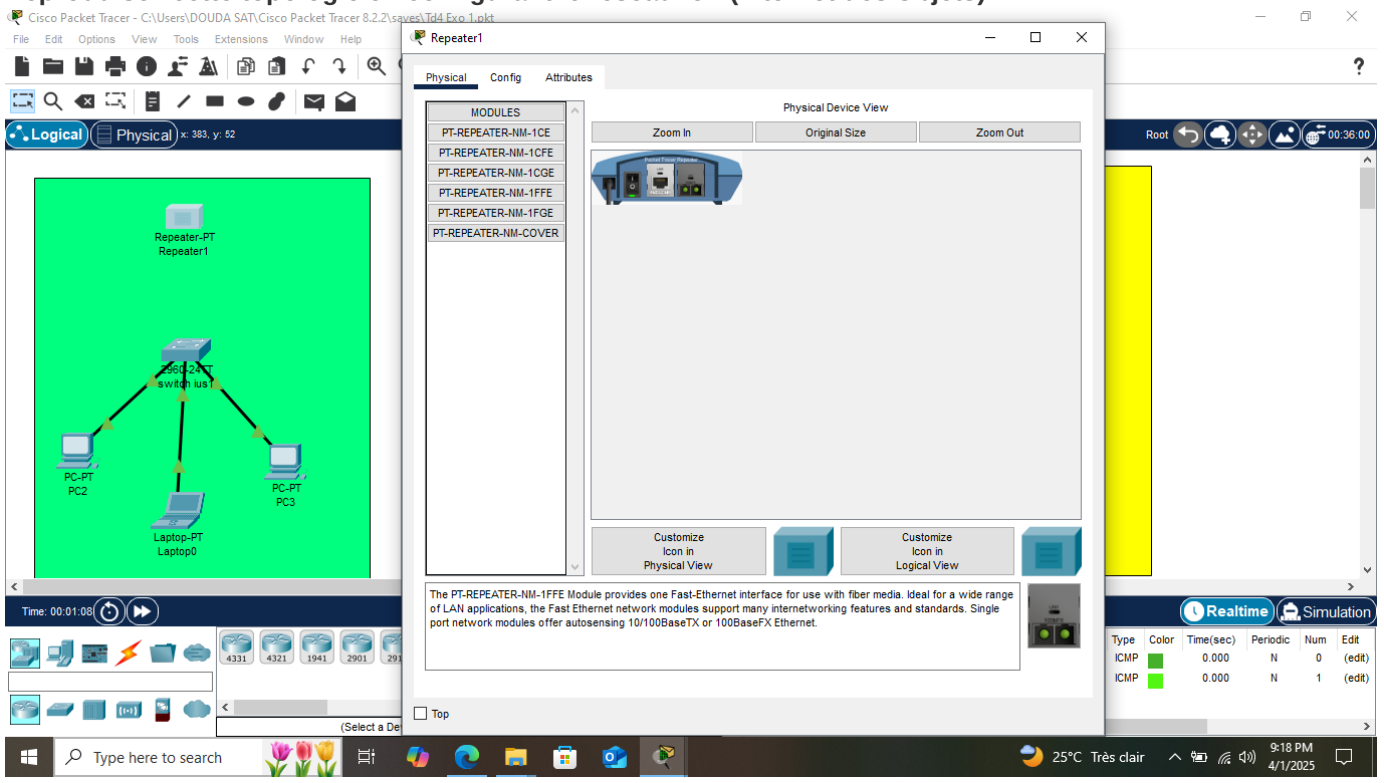

Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 1.pkt
File Edit Options View Tools Extensions Window Help
Logical Physical x: 963, y: 46
Root 02:40:00
Repeater-PT Repeater1
2960-24TT switch ius1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Time: 00:05:02
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
ICMP 0.000 N 2
ICMP 0.000 N 3
ICMP 0.000 N 4
ius.com
Physical Config Services Desktop Programming Attributes
IP Configuration
IP Configuration
DHCP Static
IPv4 Address 192.168.1.3
Subnet Mask 255.255.255.0
Default Gateway 192.168.1.1
DNS Server 192.168.1.2
IPv6 Configuration
Automatic Static
IPv6 Address
Link Local Address FE80::210:11FF:FEB6:354A
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Type here to search
25°C Très clair
9:25 PM 4/1/2025

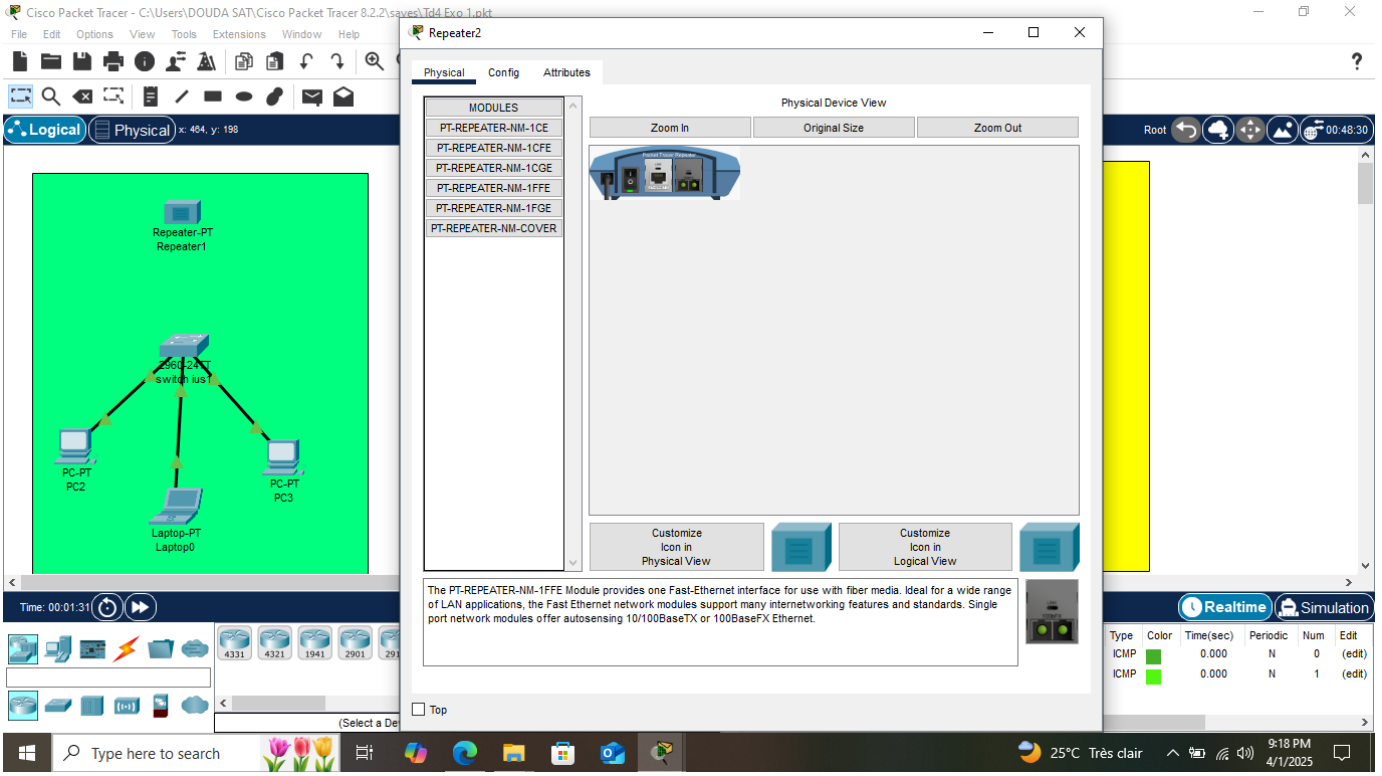

Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 1.pkt
dns.com
Physical
Config
Services
Desktop
Programming
Attributes
SERVICES
HTTP
DHCP
DHCPv6
TFTP
DNS
SYSLOG
AAA
NTP
EMAIL
FTP
IoT
VM Management
Radius EAP
DNS
DNS Service
On
Off
Resource Records
Name
Type
A Record
Address
Add
Save
Remove
No.
Name
Type
Detail
0 dns.com A Record 192.168.1.2
1 iot A Record 192.168.1.4
2 ius.com A Record 192.168.1.3
3 web.com A Record 192.168.1.6
DNS Cache
Repeater-PT Repeater1
2960-24TT switch ius1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Time: 00:05:59
Realtime
Simulation
Type here to search
25°C Très clair
9:26 PM
4/1/2025

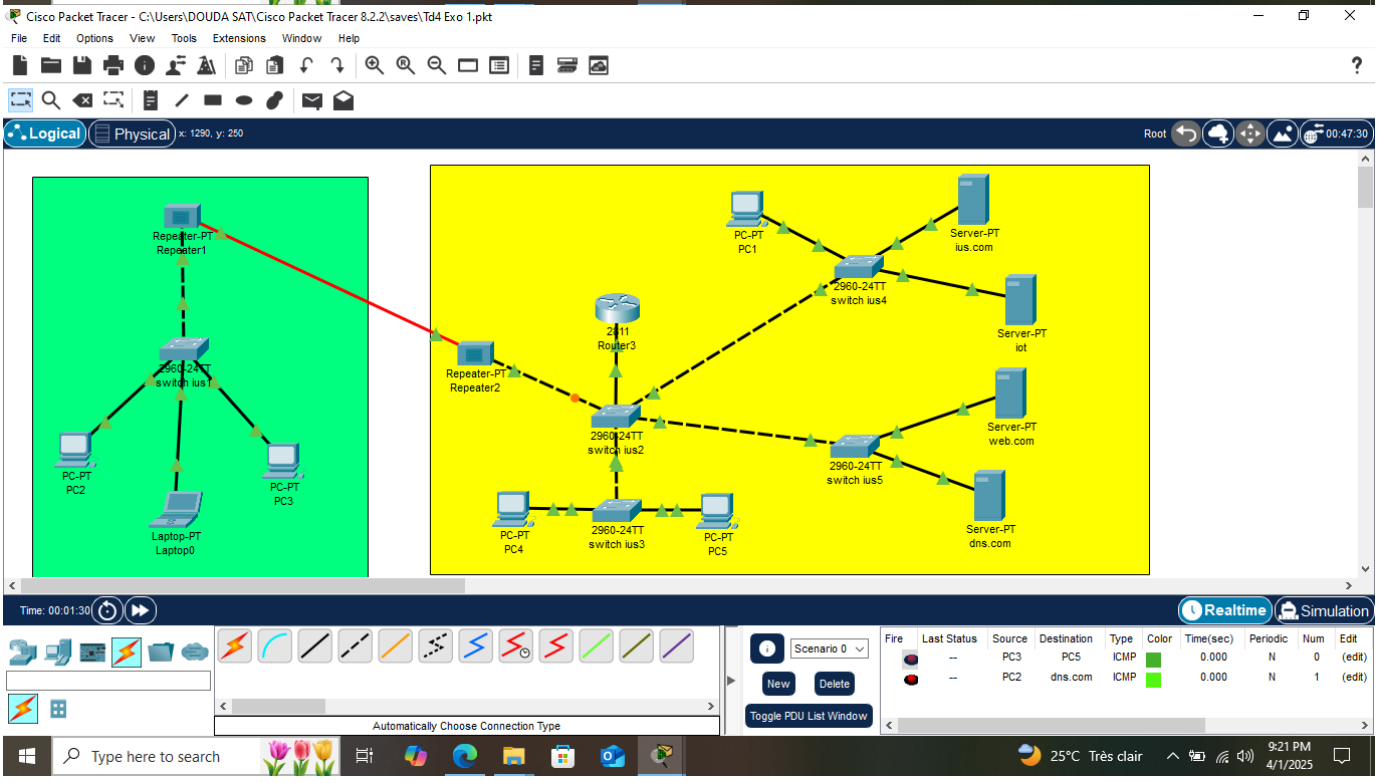

Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 1.pkt
dns.com
Physical
Config
Services
Desktop
Programming
Attributes
Command Prompt
Cisco Packet Tracer SERVER Command Line 1.0
C:\>ping web.com
Pinging 192.168.1.6 with 32 bytes of data:
Reply from 192.168.1.6: bytes=32 time=17ms TTL=128
Reply from 192.168.1.6: bytes=32 time=10ms TTL=128
Reply from 192.168.1.6: bytes=32 time<1ms TTL=128
Reply from 192.168.1.6: bytes=32 time<1ms 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 = 0ms, Maximum = 17ms, Average = 6ms
C:\>ping dns.com
Pinging 192.168.1.2 with 32 bytes of data:
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128
Reply from 192.168.1.2: bytes=32 time=18ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms 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 = 0ms, Maximum = 18ms, Average = 4ms
C:\>
Top
Repeater-PT Repeater1
2960-24TT switch ius1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Time: 00:06:44
Realtime
Simulation
Type here to search
25°C Très clair
9:27 PM
4/1/2025

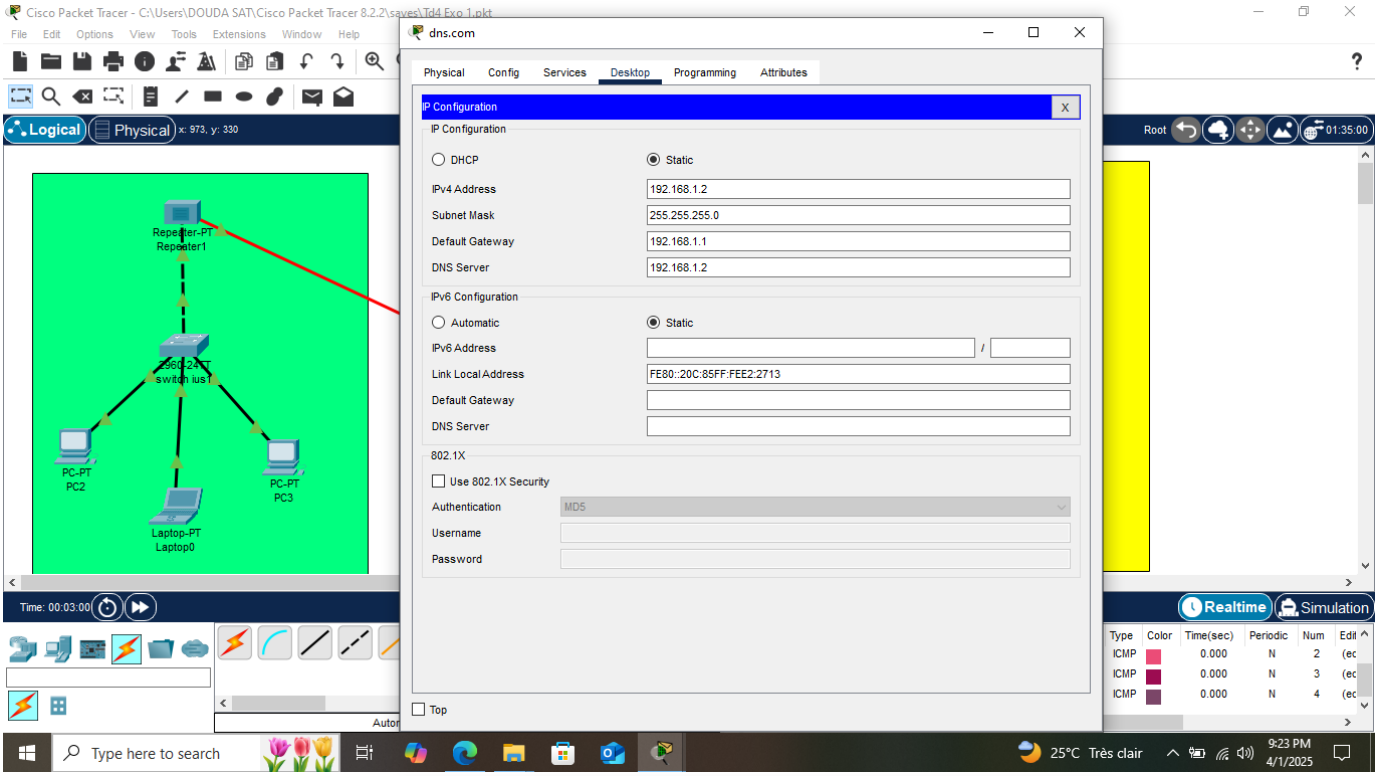


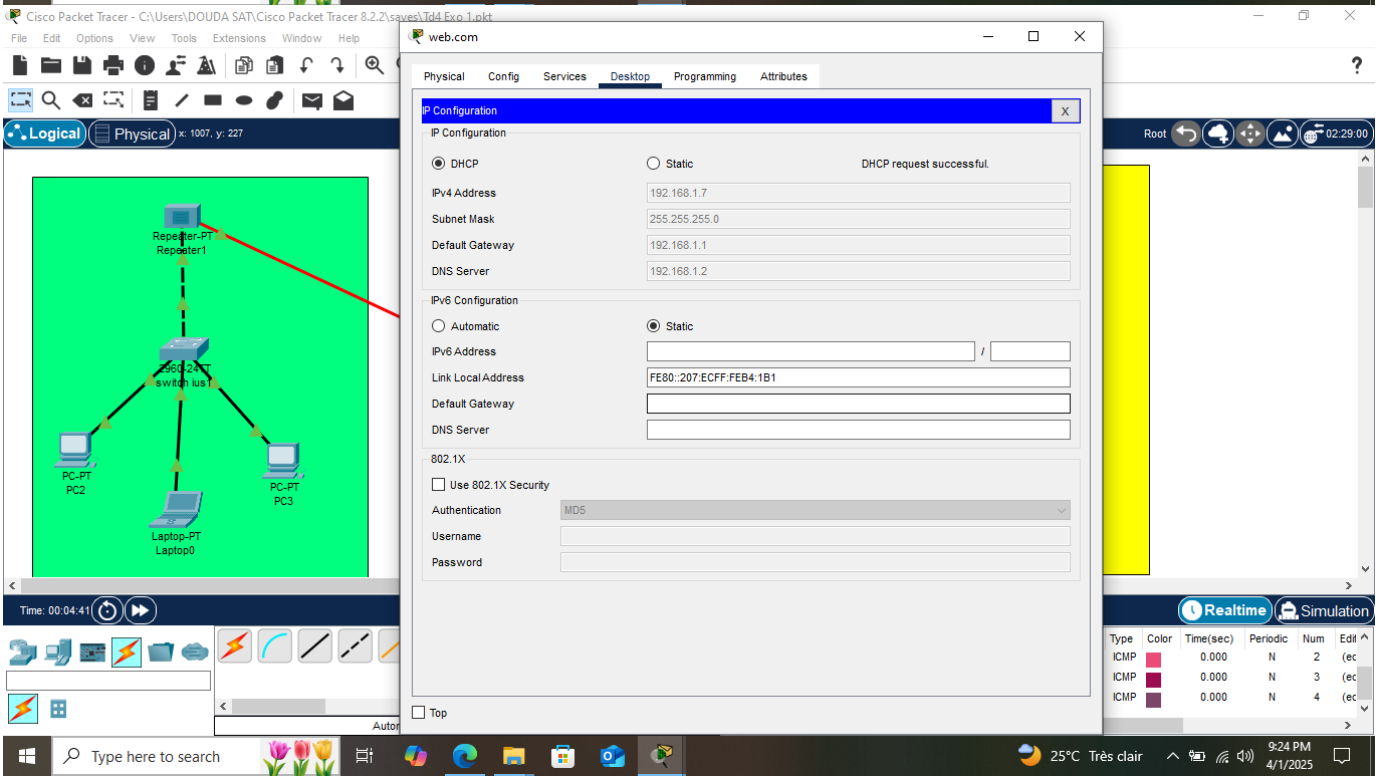
2. Reproduisez cette topologie en configurant le réseau IoT (Internet des Objets).

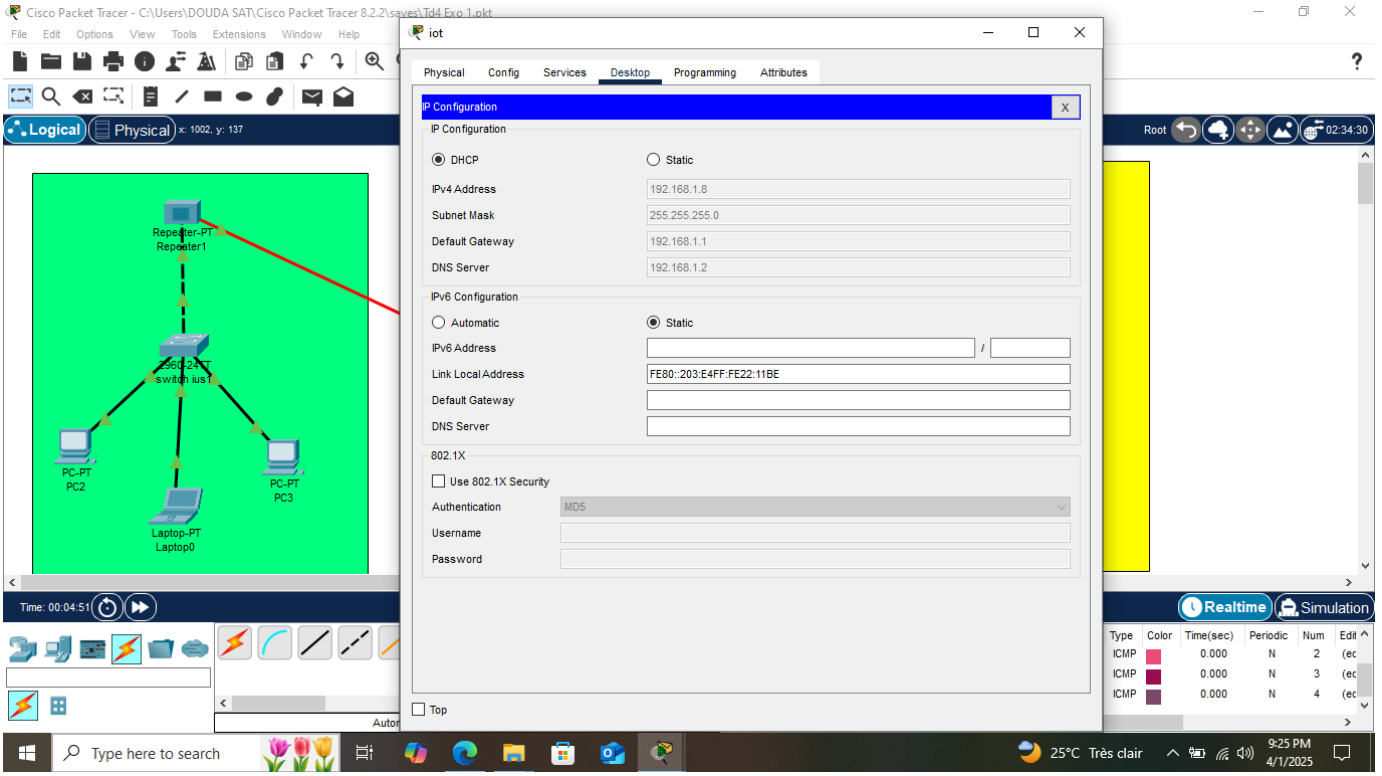


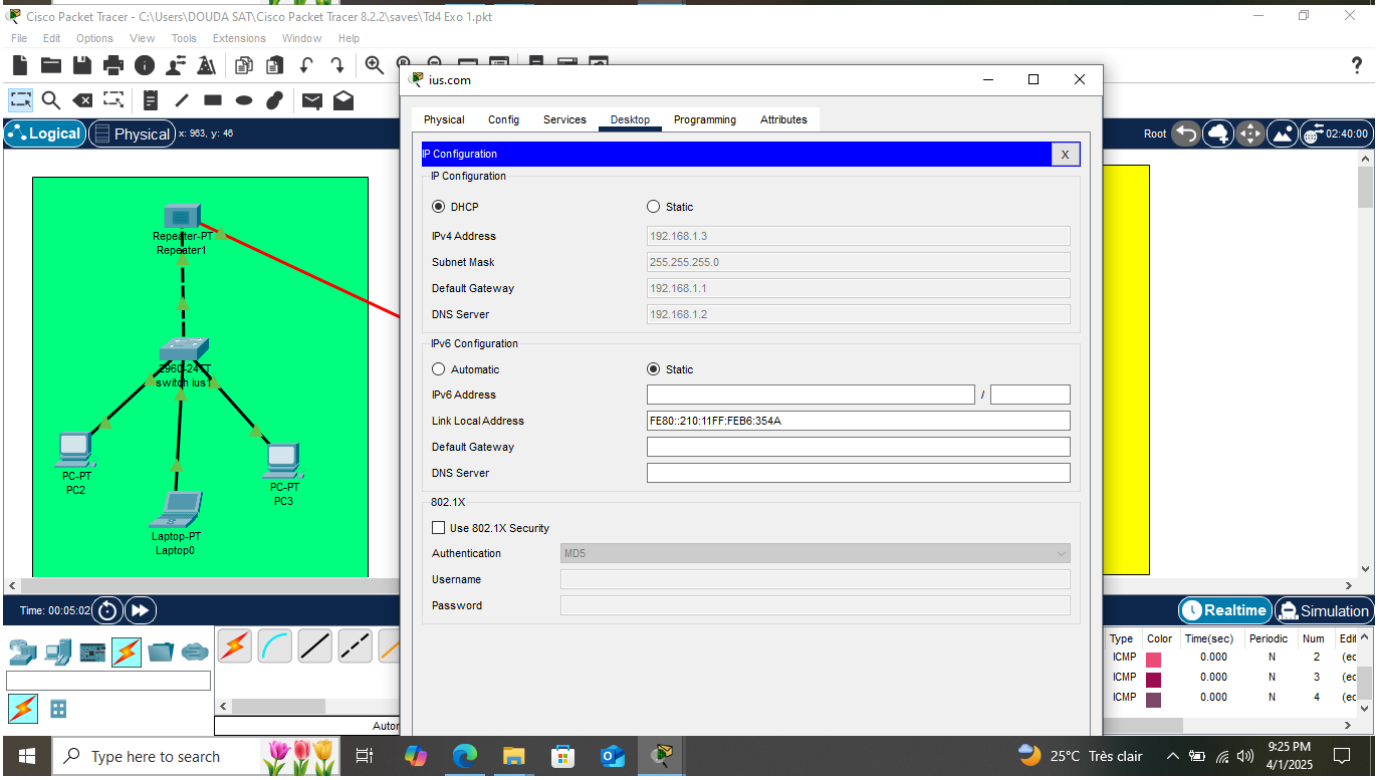

Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 1.pkt
File Edit Options View Tools Extensions Window Help
Logical Physical x: 464, y: 198
Root 00:48:30
Repeater-PT
Repeater1
2960-24TT
switch ius1
PC-PT
PC2
PC-PT
PC3
Laptop-PT
Laptop0
Time: 00:01:31
Realtime Simulation
Repeater2
Physical Config Attributes
MODULES
PT-REPEATER-NM-1CE
PT-REPEATER-NM-1CFE
PT-REPEATER-NM-1CGE
PT-REPEATER-NM-1FFE
PT-REPEATER-NM-1FGE
PT-REPEATER-NM-COVER
Physical Device View
Zoom In
Original Size
Zoom Out
Customize
Icon in
Physical View
Customize
Icon in
Logical View
The PT-REPEATER-NM-1FFE Module provides one Fast-Ethernet interface for use with fiber media. Ideal for a wide range of LAN applications, the Fast Ethernet network modules support many internetworking features and standards. Single port network modules offer autosensing 10/100BaseTX or 100BaseFX Ethernet.
Top
Type here to search
25°C Très clair
9:18 PM
4/1/2025

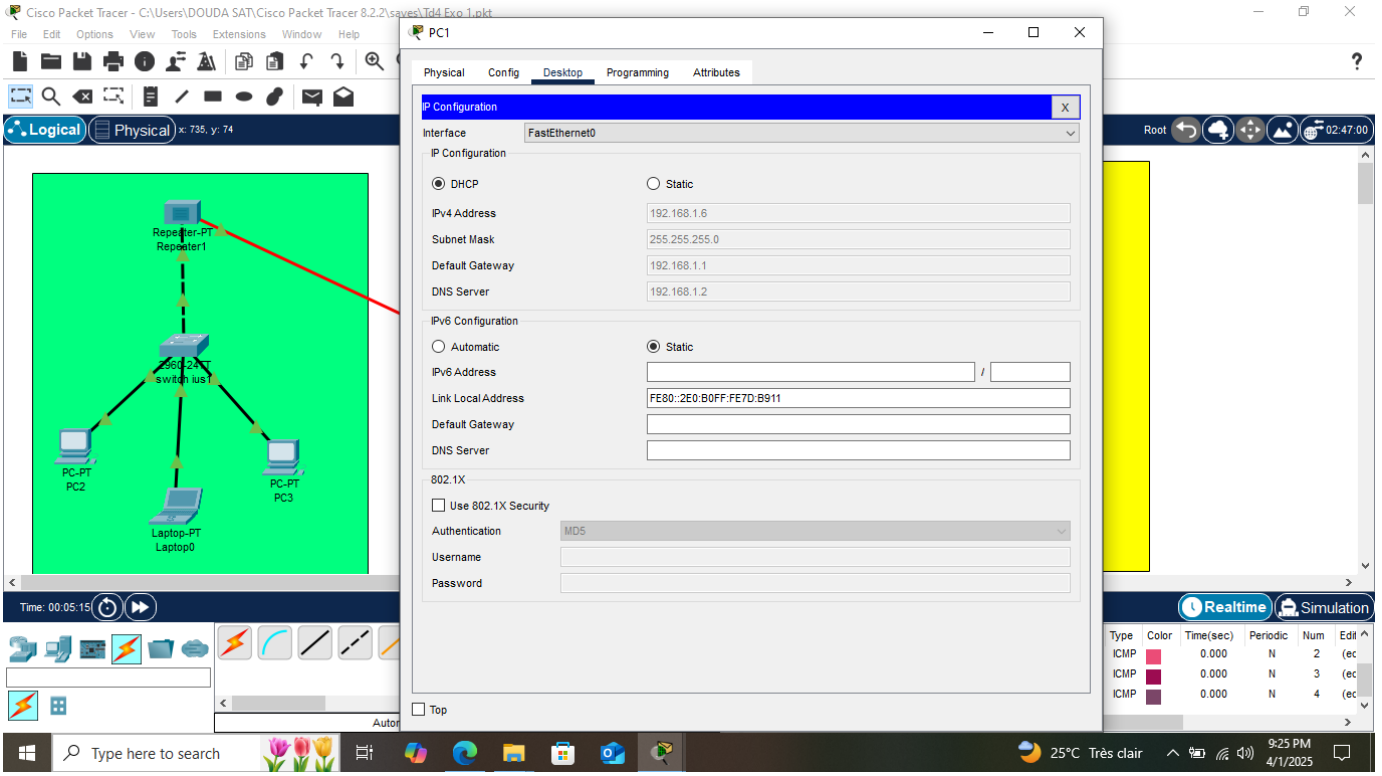

Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 1.pkt
File Edit Options View Tools Extensions Window Help
Logical Physical x: 1290, y: 250
Root 00:47:30
Repeater-PT
Repeater1
2960-24TT
switch ius1
PC-PT
PC2
PC-PT
PC3
Laptop-PT
Laptop0
PC-PT
PC1
Server-PT
ius.com
2960-24TT
switch ius4
Server-PT
iot
2811
Router3
Repeater-PT
Repeater2
2960-24TT
switch ius2
Server-PT
web.com
2960-24TT
switch ius5
PC-PT
PC4
2960-24TT
switch ius3
PC-PT
PC5
Server-PT
dns.com
Time: 00:01:30
Realtime Simulation
Automatically Choose Connection Type
Scenario 0
New
Delete
Toggle PDU List Window
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit
-- PC3 PC5 ICMP 0.000 N 0 (edit)
-- PC2 dns.com ICMP 0.000 N 1 (edit)
Type here to search
25°C Très clair
9:21 PM
4/1/2025

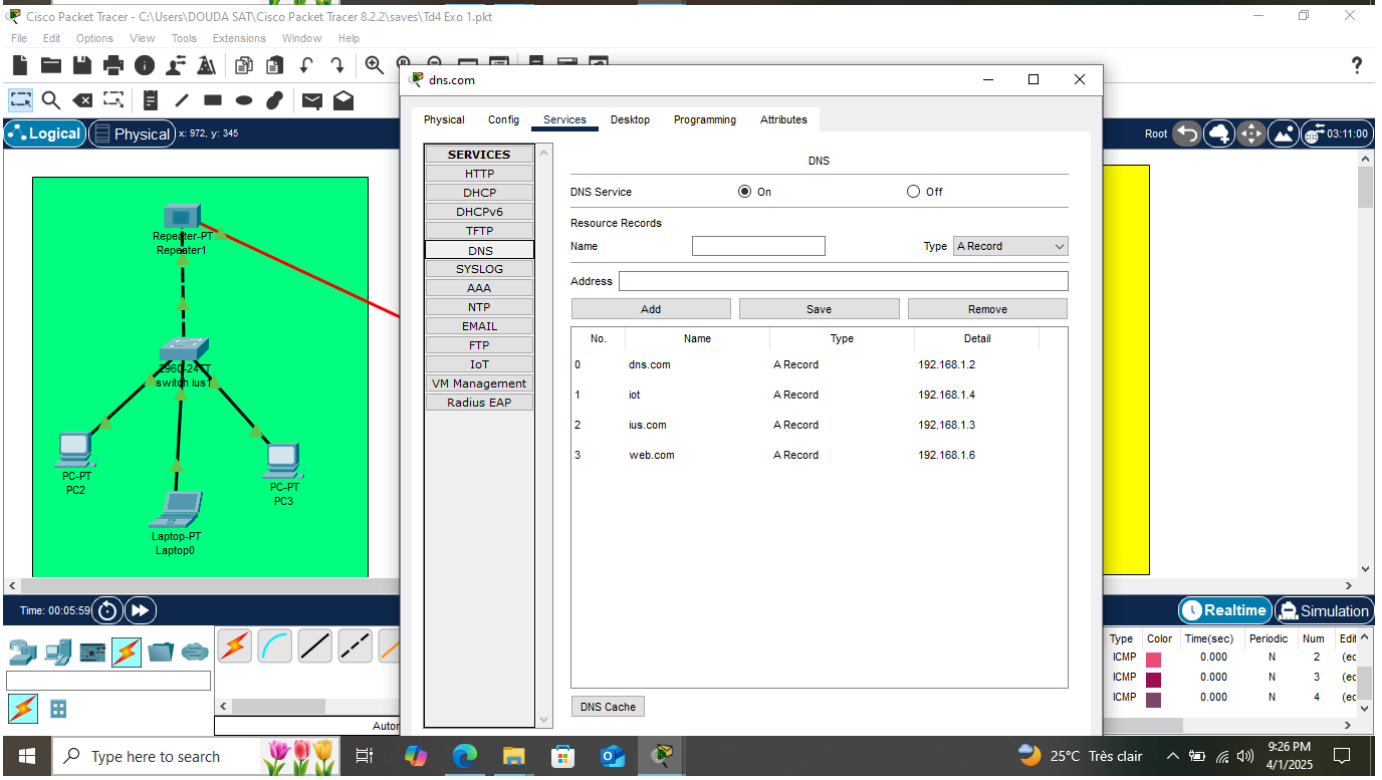

Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 1.pkt
File Edit Options View Tools Extensions Window Help
Logical Physical x: 973, y: 330
Root 01:35:00
Repeater-PT Repeater1
2960-24TT switch ius1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Time: 00:03:00
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
ICMP 0.000 N 2
ICMP 0.000 N 3
ICMP 0.000 N 4
dns.com
Physical Config Services Desktop Programming Attributes
IP Configuration
IP Configuration
DHCP Static
IPv4 Address 192.168.1.2
Subnet Mask 255.255.255.0
Default Gateway 192.168.1.1
DNS Server 192.168.1.2
IPv6 Configuration
Automatic Static
IPv6 Address
Link Local Address FE80::20C:85FF:FEE2:2713
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Top
Type here to search
25°C Très clair
9:23 PM 4/1/2025

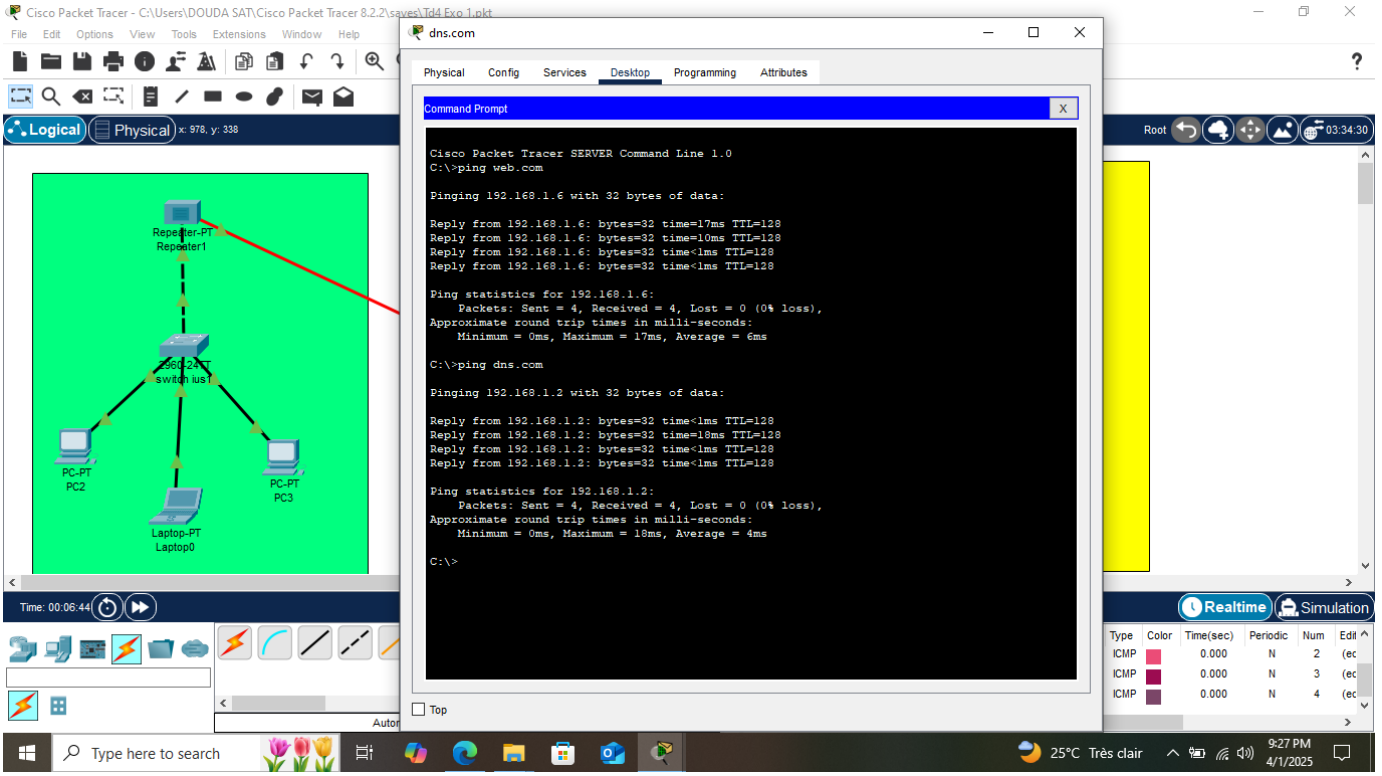

Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 1.pkt
File Edit Options View Tools Extensions Window Help
Logical Physical x: 1007, y: 227
Root 02:29:00
Repeater-PT Repeater1
2960-24TT switch ius1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Time: 00:04:41
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
ICMP 0.000 N 2
ICMP 0.000 N 3
ICMP 0.000 N 4
web.com
Physical Config Services Desktop Programming Attributes
IP Configuration
IP Configuration
DHCP Static DHCP request successful.
IPv4 Address 192.168.1.7
Subnet Mask 255.255.255.0
Default Gateway 192.168.1.1
DNS Server 192.168.1.2
IPv6 Configuration
Automatic Static
IPv6 Address
Link Local Address FE80::207:ECFF:FEB4:1B1
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Top
Type here to search
25°C Très clair
9:24 PM 4/1/2025

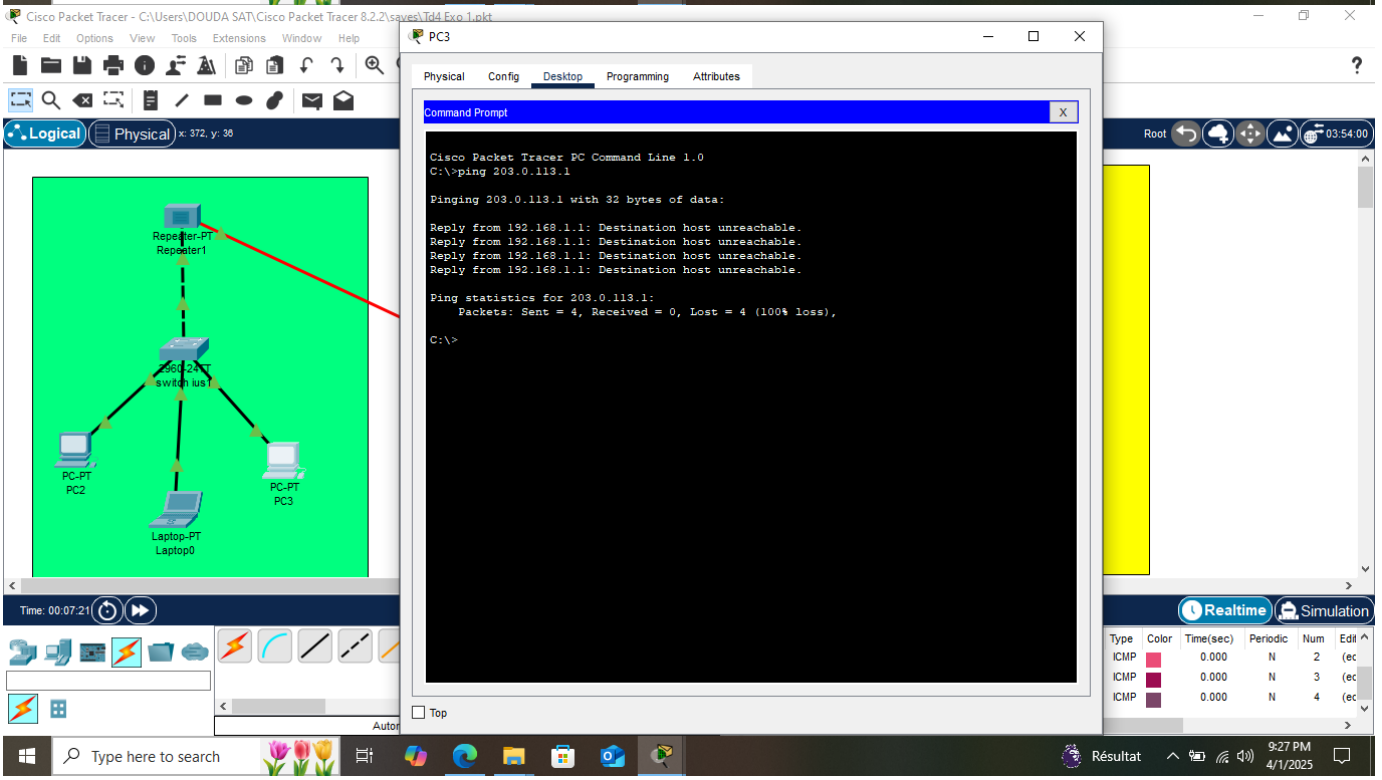

Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 1.pkt
File Edit Options View Tools Extensions Window Help
Logical Physical x: 1002, y: 137
Root 02:34:30
Repeater-PT Repeater1
2960-24TT switch ius1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Time: 00:04:51
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
ICMP 0.000 N 2
ICMP 0.000 N 3
ICMP 0.000 N 4
iot
Physical Config Services Desktop Programming Attributes
IP Configuration
IP Configuration
DHCP Static
IPv4 Address 192.168.1.8
Subnet Mask 255.255.255.0
Default Gateway 192.168.1.1
DNS Server 192.168.1.2
IPv6 Configuration
Automatic Static
IPv6 Address
Link Local Address FE80::203:E4FF:FE22:11BE
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Top
Type here to search
25°C Très clair
9:25 PM 4/1/2025

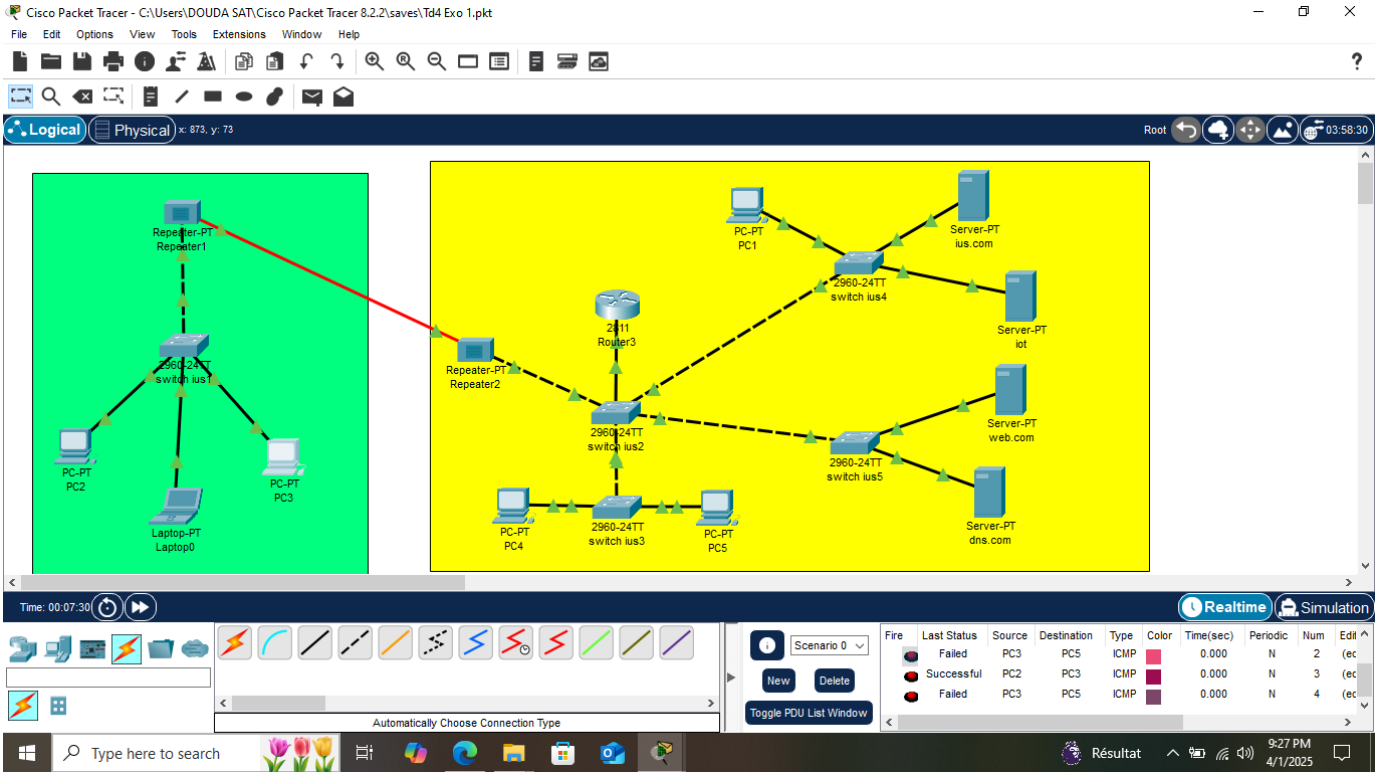

Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 1.pkt
File Edit Options View Tools Extensions Window Help
Logical Physical x: 963, y: 46
Root 02:40:00
Repeater-PT Repeater1
2960-24TT switch ius1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Time: 00:05:02
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
ICMP 0.000 N 2
ICMP 0.000 N 3
ICMP 0.000 N 4
ius.com
Physical Config Services Desktop Programming Attributes
IP Configuration
IP Configuration
DHCP Static
IPv4 Address 192.168.1.3
Subnet Mask 255.255.255.0
Default Gateway 192.168.1.1
DNS Server 192.168.1.2
IPv6 Configuration
Automatic Static
IPv6 Address
Link Local Address FE80::210:11FF:FEB6:354A
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Type here to search
25°C Très clair
9:25 PM 4/1/2025

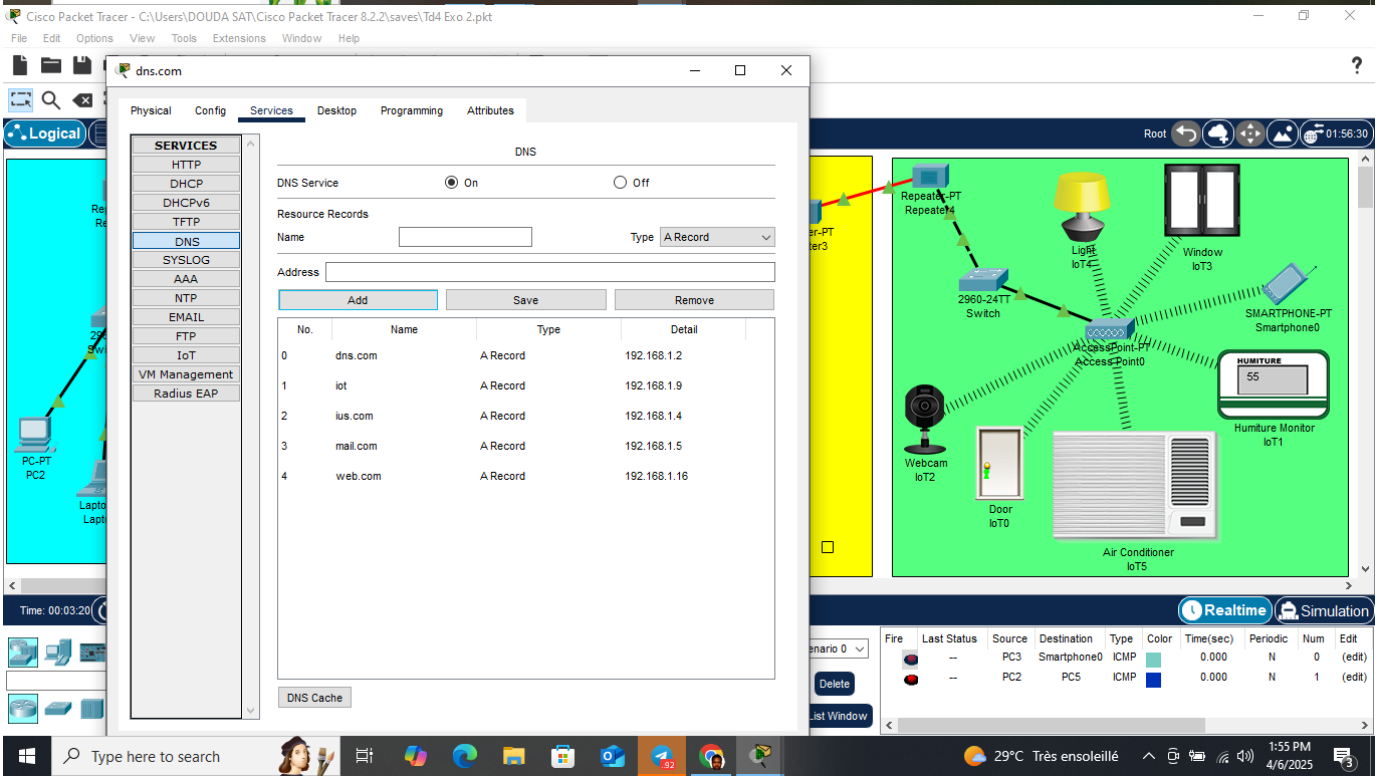

Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 1.pkt
File Edit Options View Tools Extensions Window Help
Logical Physical x: 735, y: 74
Root 02:47:00
Repeater-PT Repeater1
2960-24TT switch ius1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Time: 00:05:15
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
ICMP 0.000 N 2
ICMP 0.000 N 3
ICMP 0.000 N 4
PC1
Physical Config Desktop Programming Attributes
IP Configuration
Interface FastEthernet0
IP Configuration
DHCP Static
IPv4 Address 192.168.1.6
Subnet Mask 255.255.255.0
Default Gateway 192.168.1.1
DNS Server 192.168.1.2
IPv6 Configuration
Automatic Static
IPv6 Address
Link Local Address FE80::2E0:B0FF:FE7D:B911
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Top
Type here to search
25°C Très clair
9:25 PM 4/1/2025

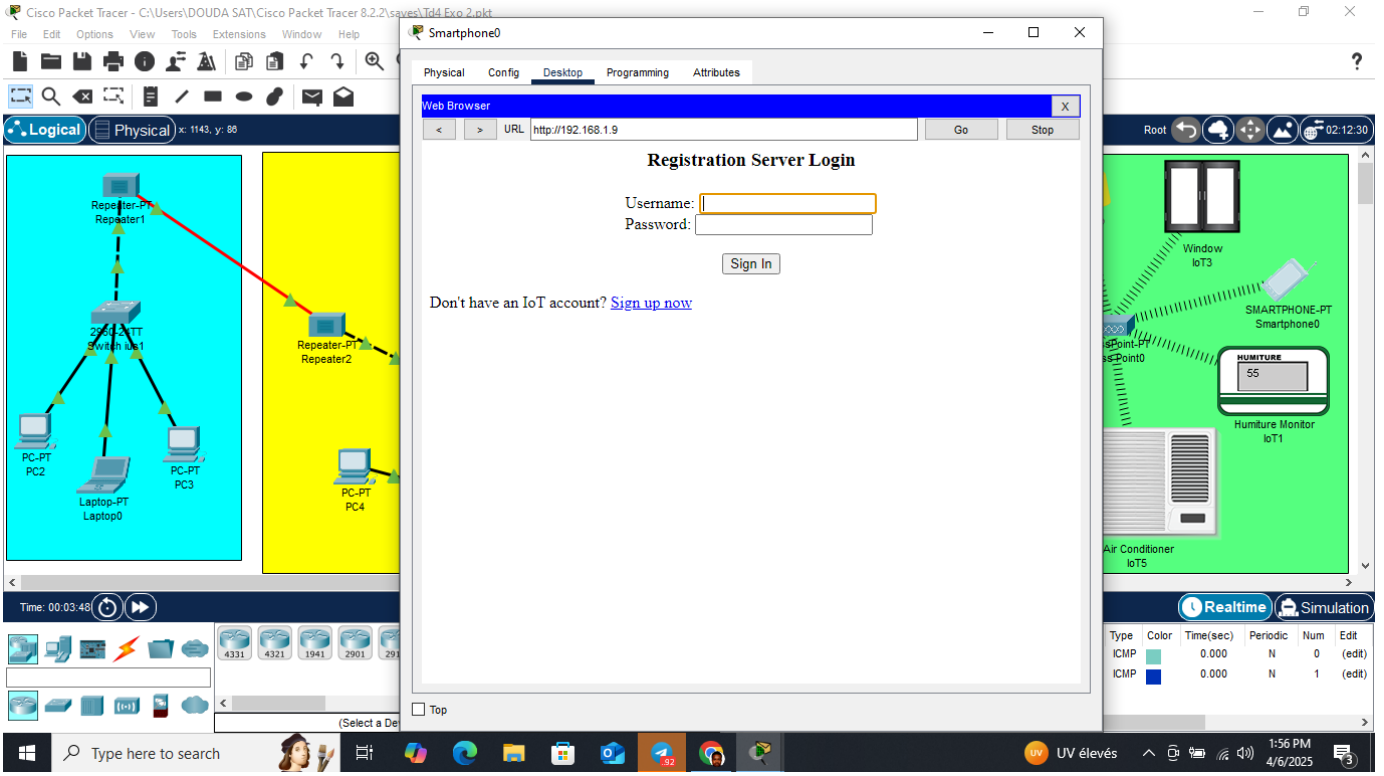

Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 1.pkt
File Edit Options View Tools Extensions Window Help
Logical Physical x: 972, y: 345
Root 03:11:00
Repeater-PT Repeater1
2960-24TT switch ius1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Time: 00:05:59
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
ICMP 0.000 N 2
ICMP 0.000 N 3
ICMP 0.000 N 4
dns.com
Physical Config Services Desktop Programming Attributes
SERVICES
HTTP
DHCP
DHCPv6
TFTP
DNS
SYSLOG
AAA
NTP
EMAIL
FTP
IoT
VM Management
Radius EAP
DNS
DNS Service On Off
Resource Records
Name
Type A Record
Address
Add Save Remove
No. Name Type Detail
0 dns.com A Record 192.168.1.2
1 iot A Record 192.168.1.4
2 ius.com A Record 192.168.1.3
3 web.com A Record 192.168.1.6
DNS Cache
Type here to search
25°C Très clair
9:26 PM 4/1/2025

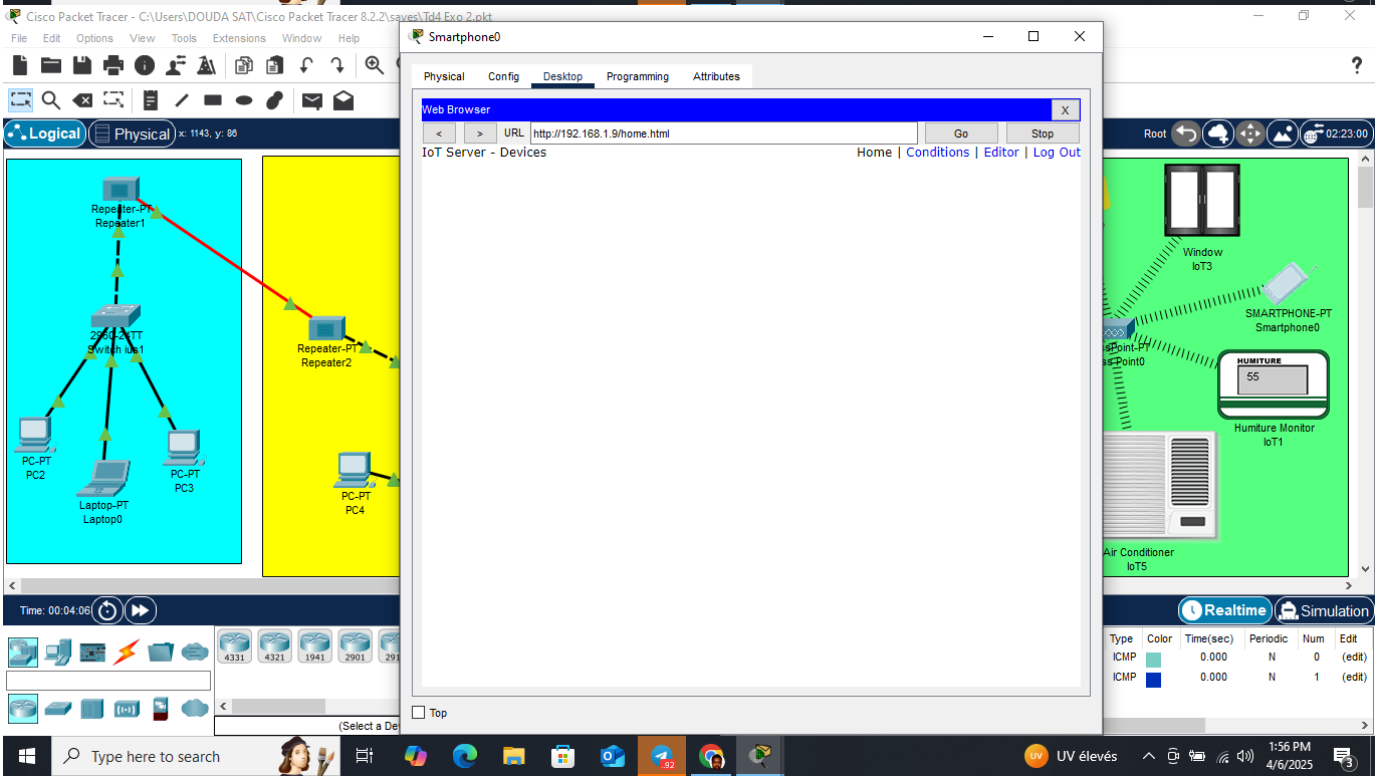

dns.com
Physical
Config
Services
Desktop
Programming
Attributes
Command Prompt
Cisco Packet Tracer SERVER Command Line 1.0
C:\>ping web.com
Pinging 192.168.1.6 with 32 bytes of data:
Reply from 192.168.1.6: bytes=32 time=17ms TTL=128
Reply from 192.168.1.6: bytes=32 time=10ms TTL=128
Reply from 192.168.1.6: bytes=32 time<1ms TTL=128
Reply from 192.168.1.6: bytes=32 time<1ms 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 = 0ms, Maximum = 17ms, Average = 6ms
C:\>ping dns.com
Pinging 192.168.1.2 with 32 bytes of data:
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128
Reply from 192.168.1.2: bytes=32 time=18ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms 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 = 0ms, Maximum = 18ms, Average = 4ms
C:\>
Top
Repeater-PT
Repeater1
PC-PT
PC2
PC-PT
PC3
Laptop-PT
Laptop0
Logical
Physical
Root
Realtime
Simulation
Type
Color
Time(sec)
Periodic
Num
ICMP
Type here to search
25°C Très clair
9:27 PM
4/1/2025

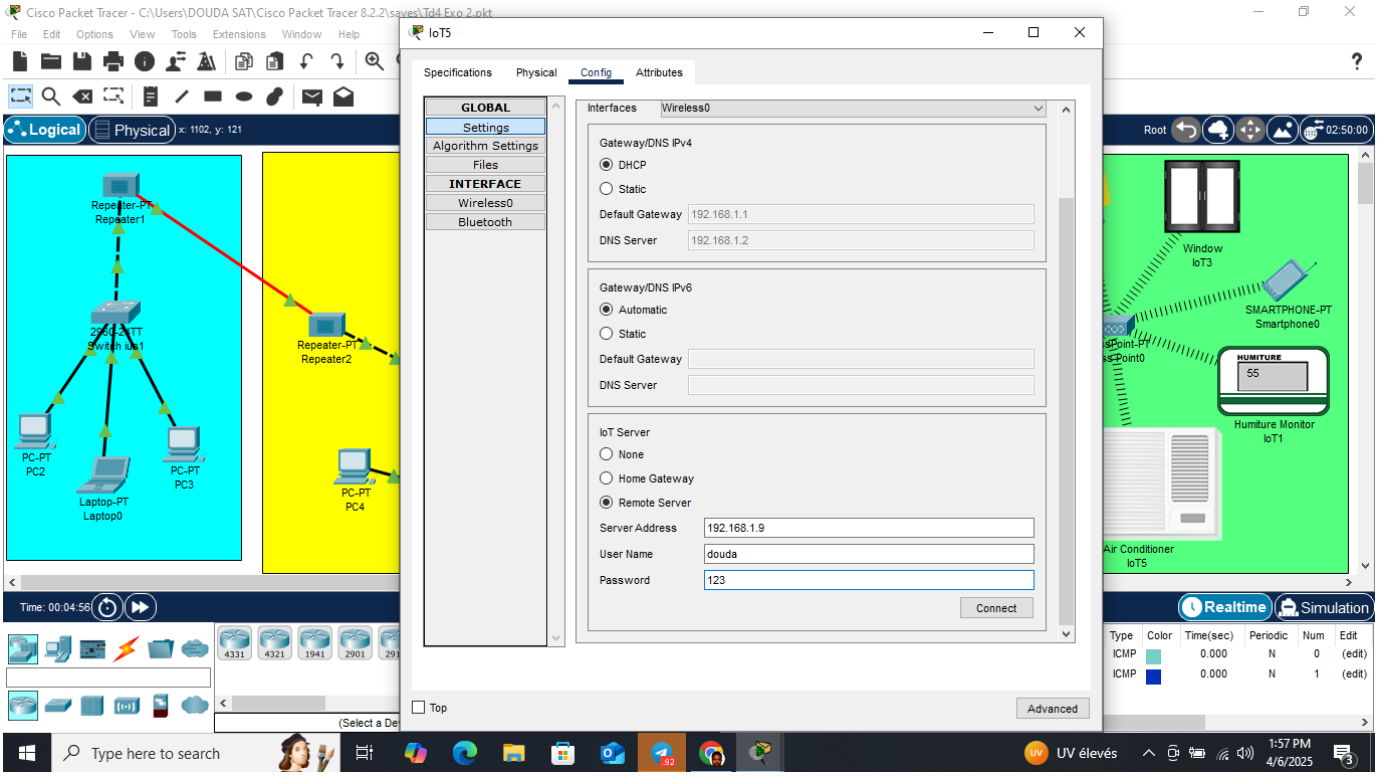

PC3
Physical
Config
Desktop
Programming
Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 203.0.113.1
Pinging 203.0.113.1 with 32 bytes of data:
Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.
Ping statistics for 203.0.113.1:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>
Top
Repeater-PT
Repeater1
PC-PT
PC2
PC-PT
PC3
Laptop-PT
Laptop0
Logical
Physical
Root
Realtime
Simulation
Type
Color
Time(sec)
Periodic
Num
ICMP
Type here to search
Résultat
9:27 PM
4/1/2025

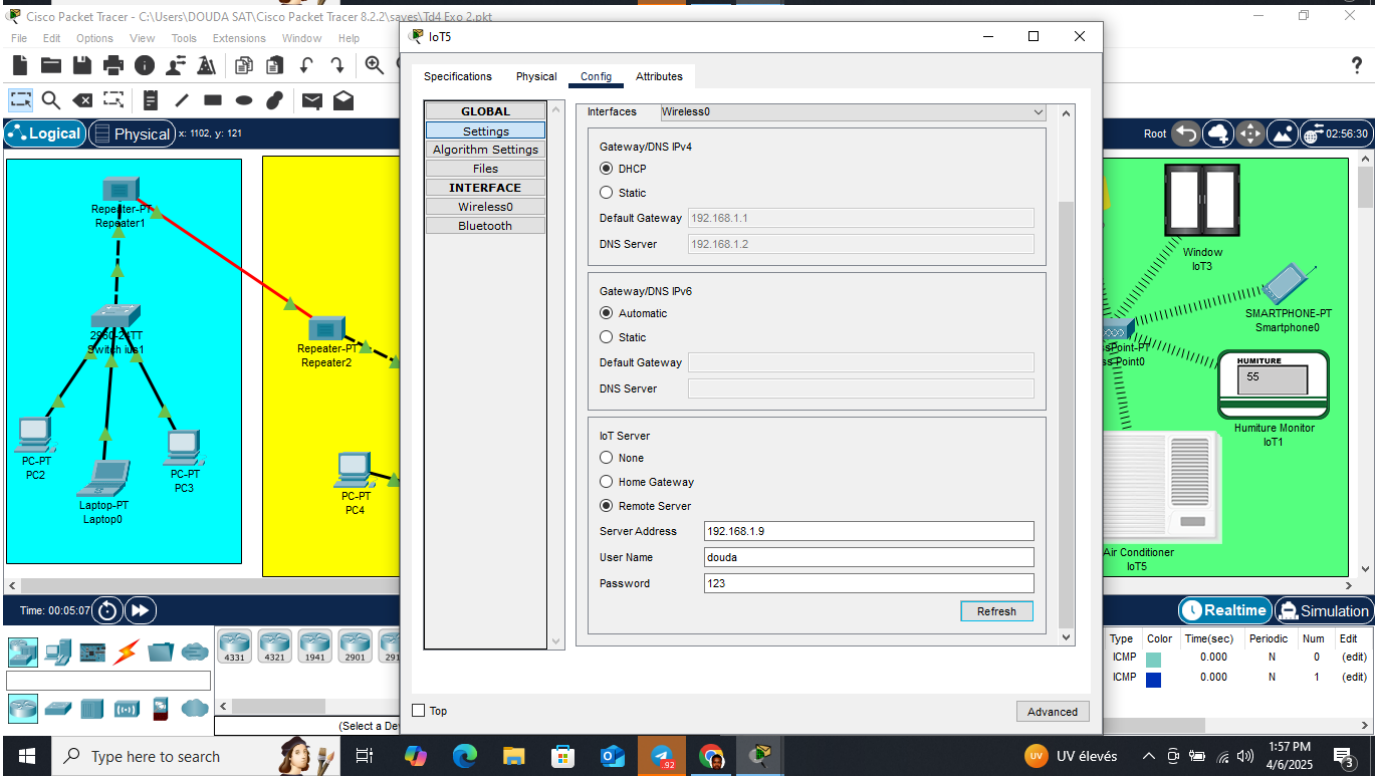

Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 1.pkt
File Edit Options View Tools Extensions Window Help
Logical
Physical
Root
Repeater-PT Repeater1
2960-24TT switch ius1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Repeater-PT Repeater2
2811 Router3
2960-24TT switch ius2
PC-PT PC4
2960-24TT switch ius3
PC-PT PC5
2960-24TT switch ius5
Server-PT dns.com
Server-PT web.com
2960-24TT switch ius4
PC-PT PC1
Server-PT ius.com
Server-PT iot
Realtime
Simulation
Automatically Choose Connection Type
Scenario 0
New
Delete
Toggle PDU List Window
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit
Failed PC3 PC5 ICMP 0.000 N 2
Successful PC2 PC3 ICMP 0.000 N 3
Failed PC3 PC5 ICMP 0.000 N 4
Type here to search
Résultat
9:27 PM
4/1/2025

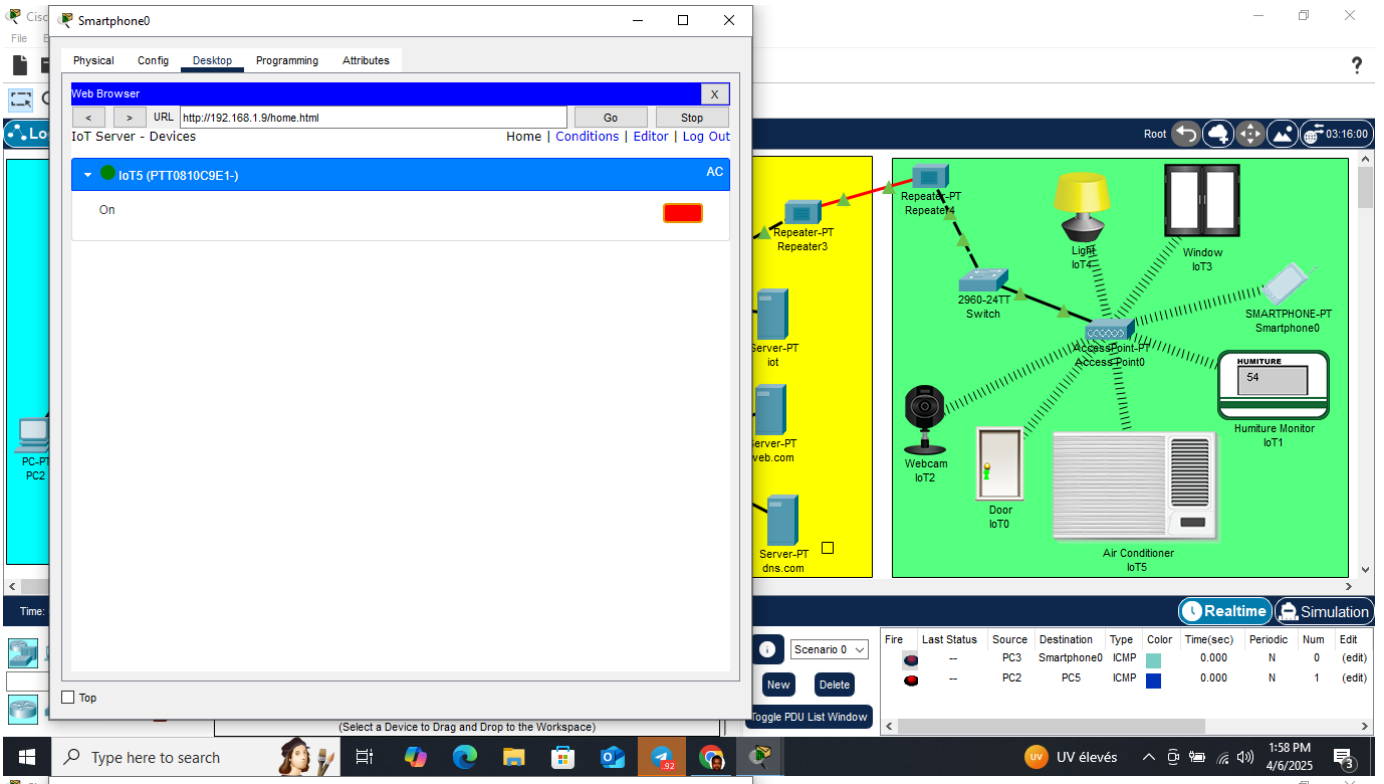

Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 2.pkt
dns.com
Physical Config Services Desktop Programming Attributes
SERVICES
HTTP
DHCP
DHCPv6
TFTP
DNS
SYSLOG
AAA
NTP
EMAIL
FTP
IoT
VM Management
Radius EAP
DNS
DNS Service On Off
Resource Records
Name
Type A Record
Address
Add Save Remove
No. Name Type Detail
0 dns.com A Record 192.168.1.2
1 iot A Record 192.168.1.9
2 ius.com A Record 192.168.1.4
3 mail.com A Record 192.168.1.5
4 web.com A Record 192.168.1.16
DNS Cache
Logical
Root
Repeater-PT Repeater4
2960-24TT Switch
Light IoT4
Window IoT3
SMARTPHONE-PT Smartphone0
Access Point-PT Access Point0
Humiture Monitor IoT1
Webcam IoT2
Door IoT0
Air Conditioner IoT5
Realtime
Simulation
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit
-- PC3 Smartphone0 ICMP 0.000 N 0 (edit)
-- PC2 PC5 ICMP 0.000 N 1 (edit)
Type here to search
29°C Très ensoleillé
1:55 PM
4/6/2025

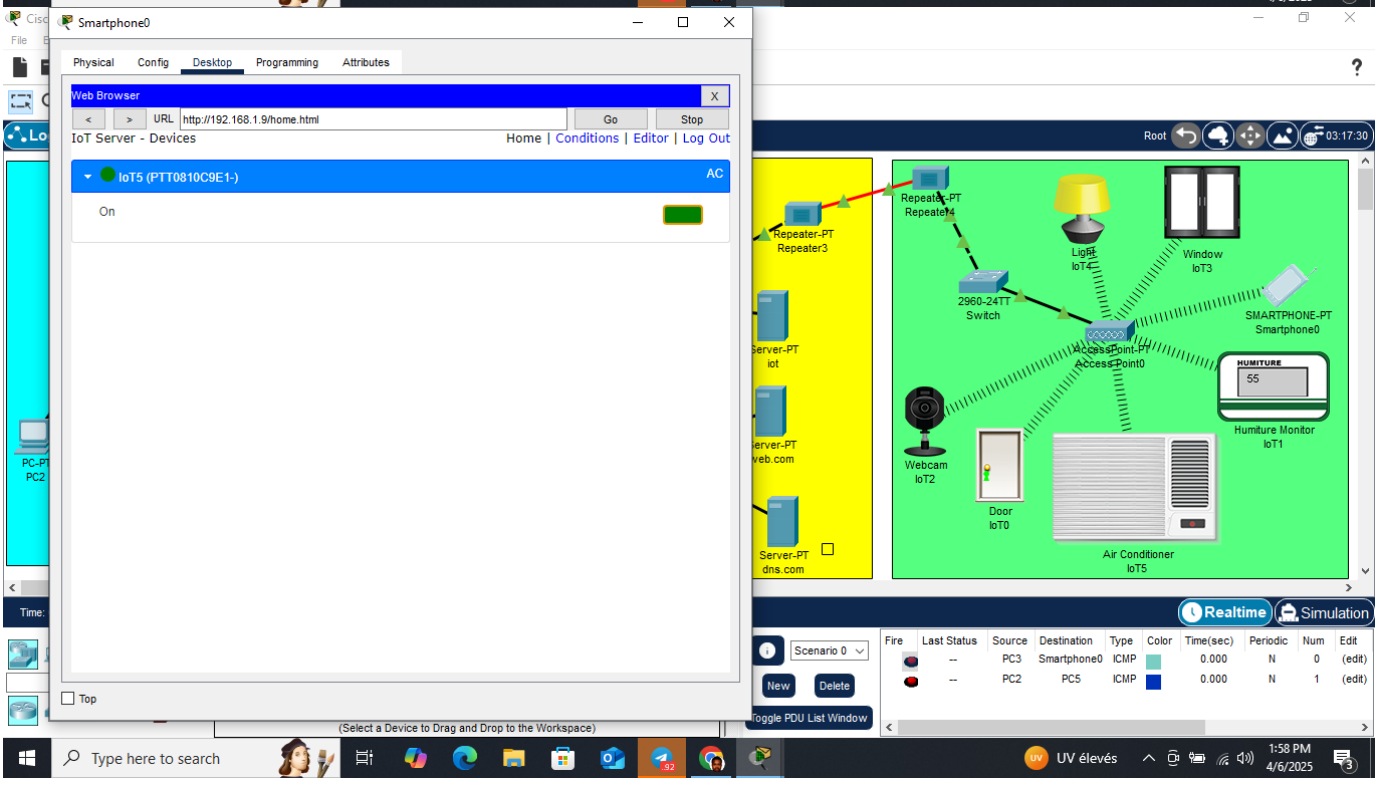

Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 2.pkt
Smartphone0
Physical
Config
Desktop
Programming
Attributes
Web Browser
URL
http://192.168.1.9
Go
Stop
Registration Server Login
Username:
Password:
Sign In
Don't have an IoT account? Sign up now
Top
Repeater-PT
Repeater1
Repeater-PT
Repeater2
PC-PT
PC2
PC-PT
PC3
Laptop-PT
Laptop0
PC-PT
PC4
Window
IoT3
SMARTPHONE-PT
Smartphone0
HUMITURE
55
Humiture Monitor
IoT1
Air Conditioner
IoT5
Logical
Physical
Root
Realtime
Simulation
Type
Color
Time(sec)
Periodic
Num
Edit
ICMP
0.000
N
0
(edit)
ICMP
0.000
N
1
(edit)
Type here to search
UV élevés
1:56 PM
4/6/2025

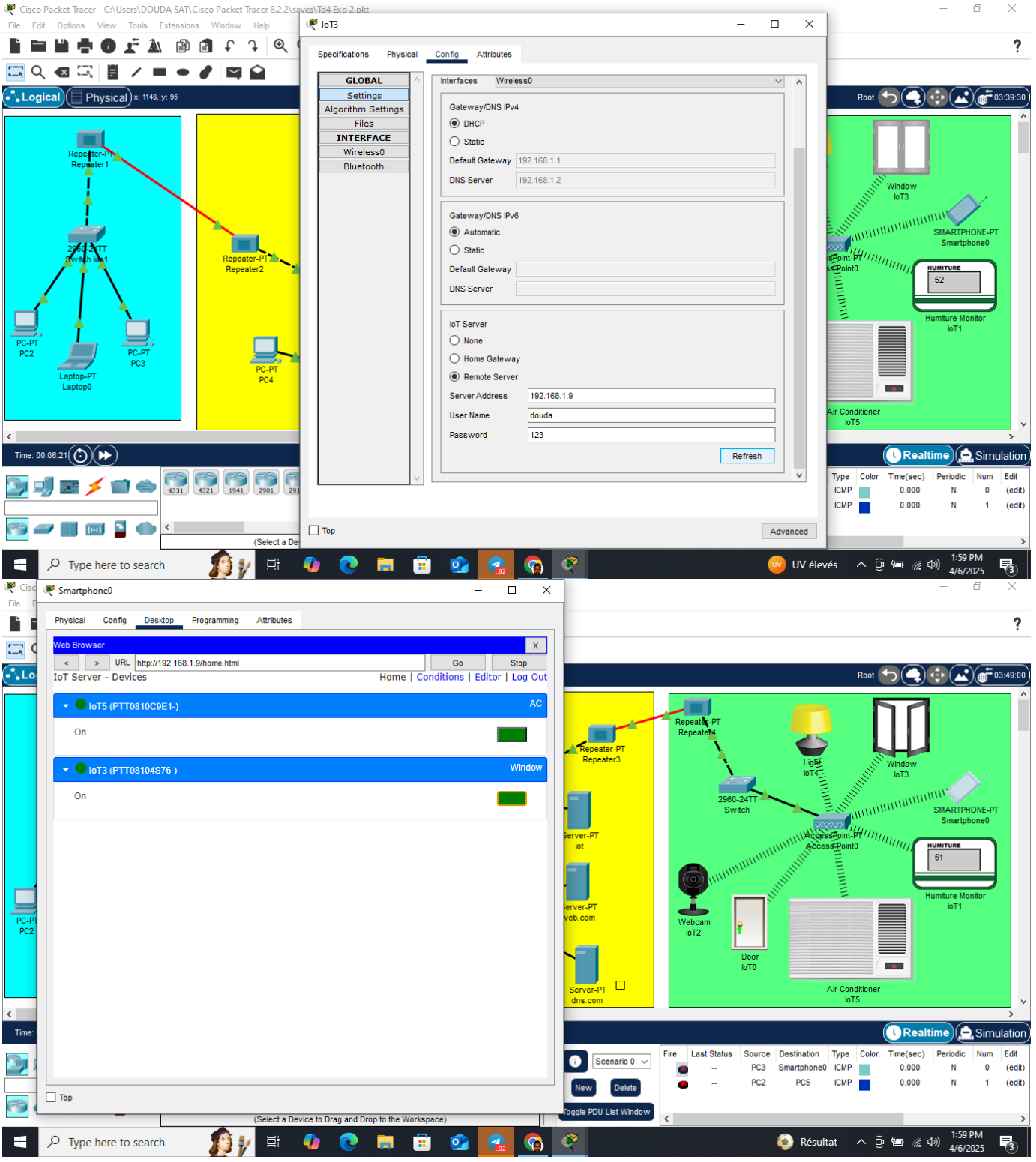

Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 2.pkt
Smartphone0
Physical
Config
Desktop
Programming
Attributes
Web Browser
URL
http://192.168.1.9/home.html
Go
Stop
IoT Server - Devices
Home | Conditions | Editor | Log Out
Top
Repeater-PT
Repeater1
Repeater-PT
Repeater2
PC-PT
PC2
PC-PT
PC3
Laptop-PT
Laptop0
PC-PT
PC4
Window
IoT3
SMARTPHONE-PT
Smartphone0
HUMITURE
55
Humiture Monitor
IoT1
Air Conditioner
IoT5
Logical
Physical
Root
Realtime
Simulation
Type
Color
Time(sec)
Periodic
Num
Edit
ICMP
0.000
N
0
(edit)
ICMP
0.000
N
1
(edit)
Type here to search
UV élevés
1:56 PM
4/6/2025

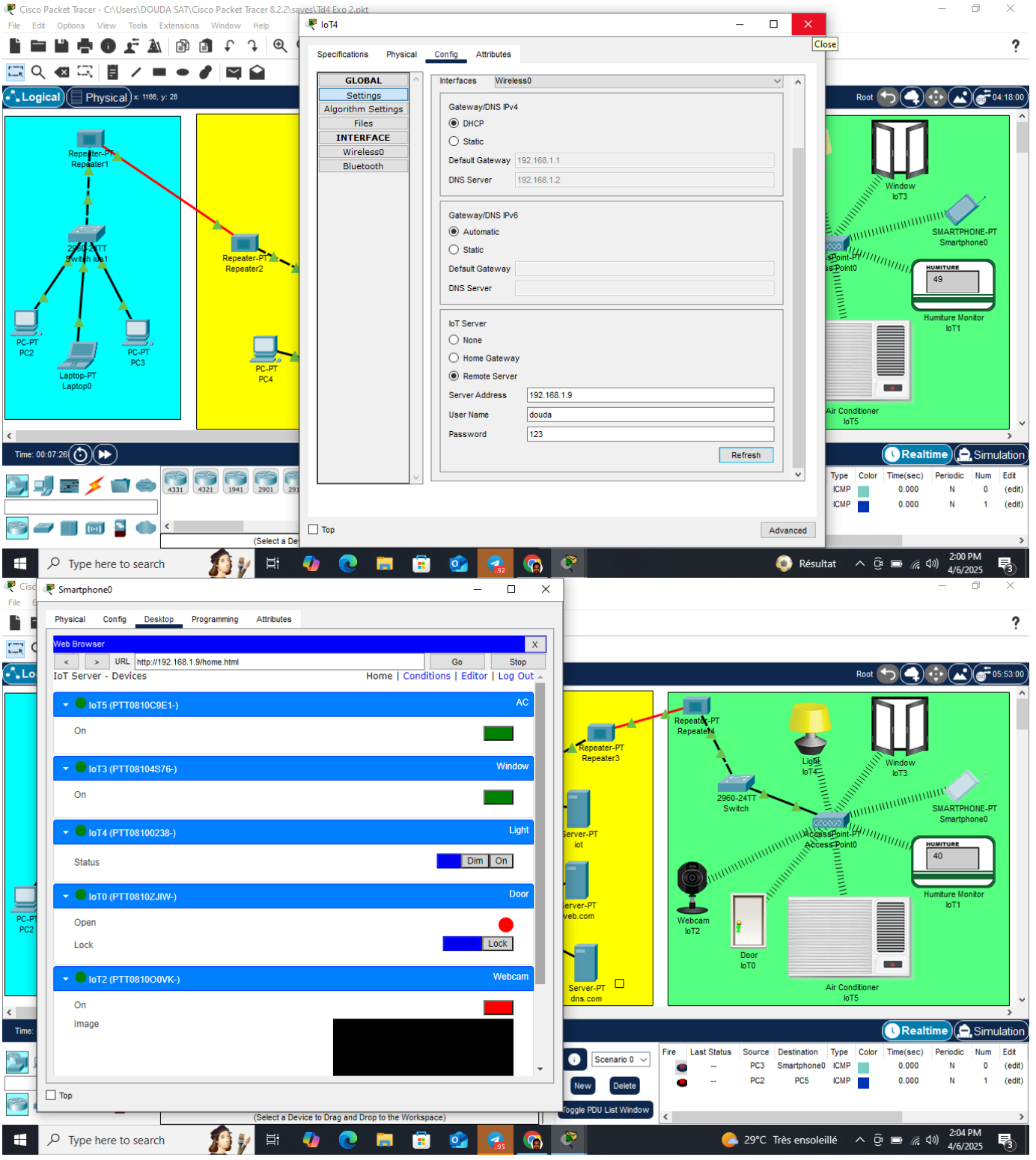

Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 2.pkt
File Edit Options View Tools Extensions Window Help
Logical Physical x: 1102, y: 121
Root 02:50:00
IoT5
Specifications Physical Config Attributes
GLOBAL
Settings
Algorithm Settings
Files
INTERFACE
Wireless0
Bluetooth
Interfaces Wireless0
Gateway/DNS IPv4
DHCP
Static
Default Gateway 192.168.1.1
DNS Server 192.168.1.2
Gateway/DNS IPv6
Automatic
Static
Default Gateway
DNS Server
IoT Server
None
Home Gateway
Remote Server
Server Address 192.168.1.9
User Name douda
Password 123
Connect
Top
Advanced
Repeater-PT Repeater1
2960-24TT Switch idle1
Repeater-PT Repeater2
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
PC-PT PC4
Window IoT3
SMARTPHONE-PT Smartphone0
Humiture Monitor IoT1
Air Conditioner IoT5
Time: 00:04:56
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
ICMP 0.000 N 0 (edit)
ICMP 0.000 N 1 (edit)
Type here to search
UV élevés
1:57 PM 4/6/2025

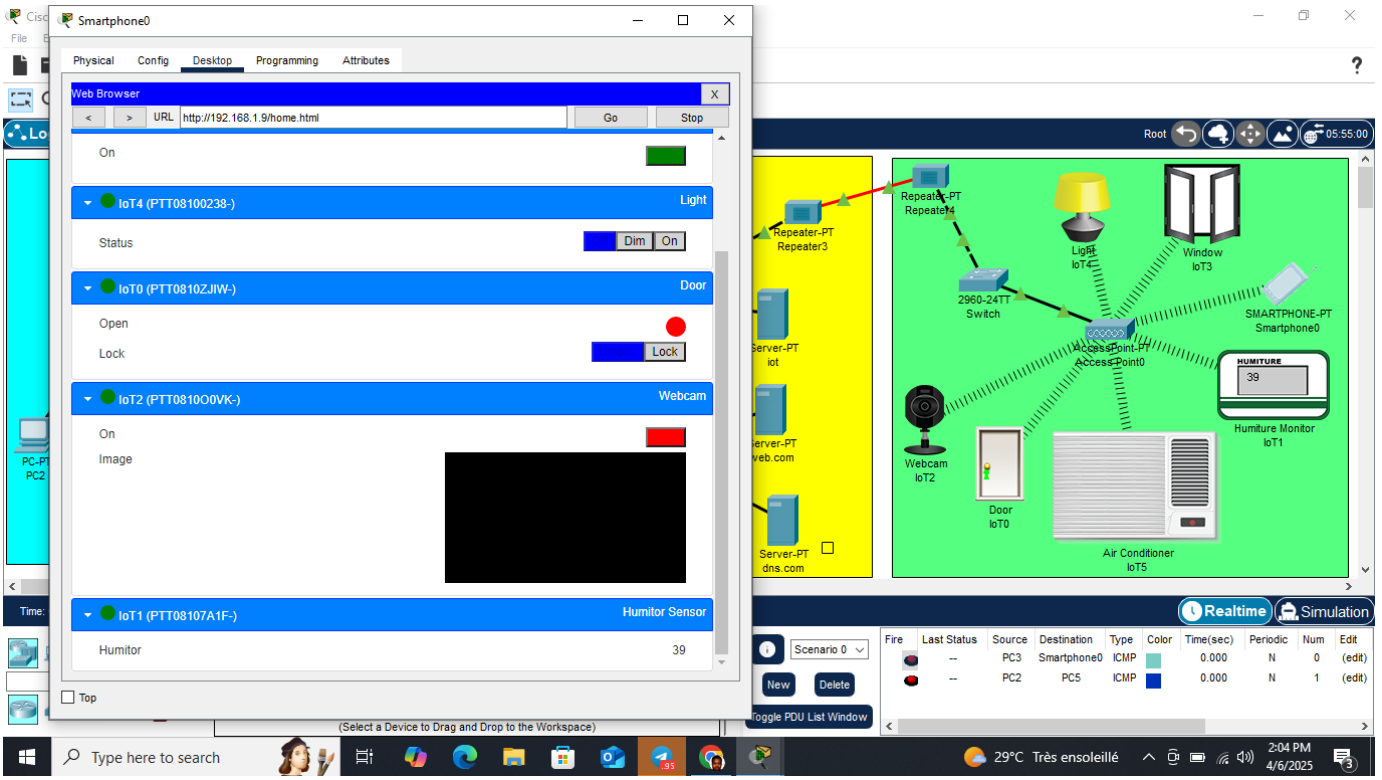

Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 2.pkt
File Edit Options View Tools Extensions Window Help
Logical Physical x: 1102, y: 121
Root 02:56:30
IoT5
Specifications Physical Config Attributes
GLOBAL
Settings
Algorithm Settings
Files
INTERFACE
Wireless0
Bluetooth
Interfaces Wireless0
Gateway/DNS IPv4
DHCP
Static
Default Gateway 192.168.1.1
DNS Server 192.168.1.2
Gateway/DNS IPv6
Automatic
Static
Default Gateway
DNS Server
IoT Server
None
Home Gateway
Remote Server
Server Address 192.168.1.9
User Name douda
Password 123
Refresh
Top
Advanced
Repeater-PT Repeater1
2960-24TT Switch idle1
Repeater-PT Repeater2
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
PC-PT PC4
Window IoT3
SMARTPHONE-PT Smartphone0
Humiture Monitor IoT1
Air Conditioner IoT5
Time: 00:05:07
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
ICMP 0.000 N 0 (edit)
ICMP 0.000 N 1 (edit)
Type here to search
UV élevés
1:57 PM 4/6/2025

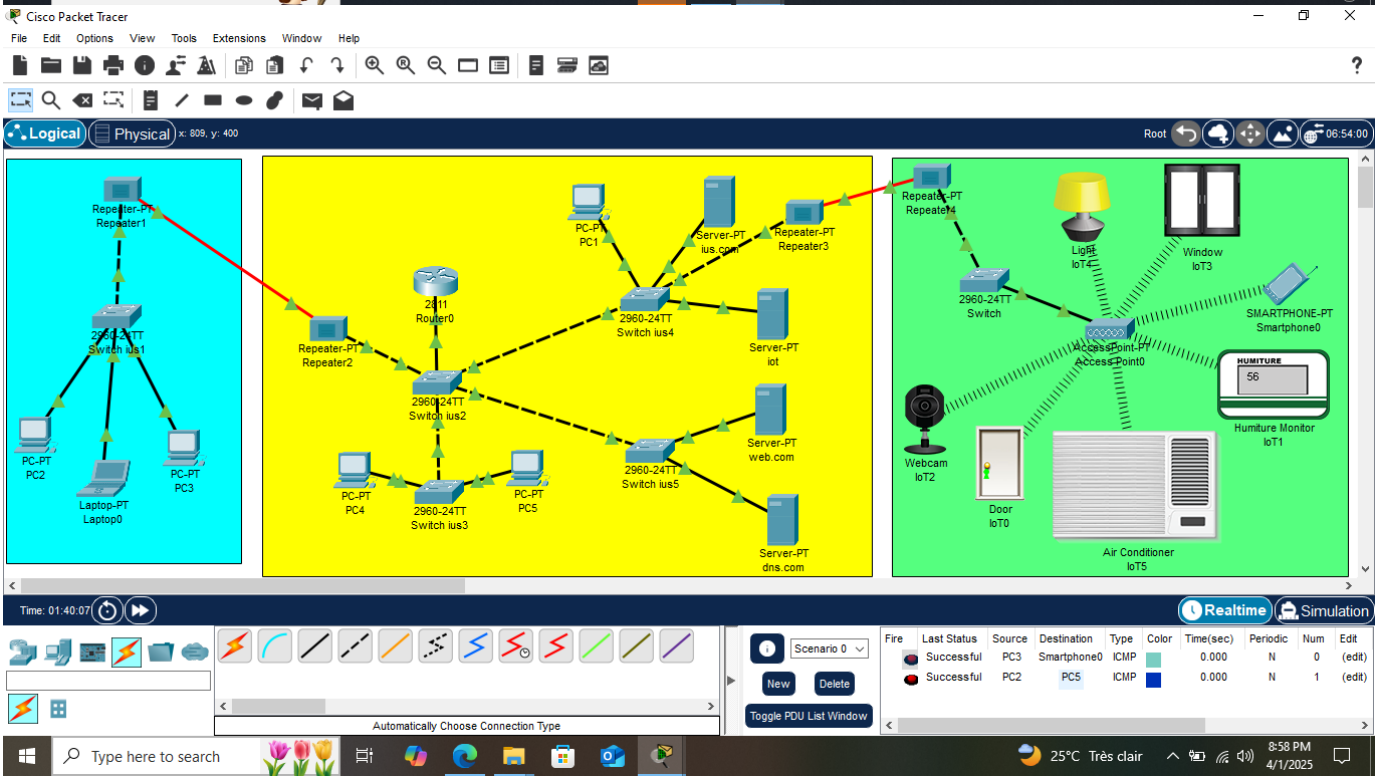

Smartphone0
Physical
Config
Desktop
Programming
Attributes
Web Browser
URL
http://192.168.1.9/home.html
Go
Stop
IoT Server - Devices
Home | Conditions | Editor | Log Out
IoT5 (PTT0810C9E1-)
AC
On
Top
(Select a Device to Drag and Drop to the Workspace)
Repeater-PT
Repeater4
Repeater-PT
Repeater3
Light
IoT4
Window
IoT3
2960-24TT
Switch
SMARTPHONE-PT
Smartphone0
Access Point-PT
Access Point0
HUMITURE
54
Humiture Monitor
IoT1
Webcam
IoT2
Door
IoT0
Air Conditioner
IoT5
Server-PT
iot
Server-PT
dns.com
Root
03:16:00
Realtime
Simulation
Scenario 0
New
Delete
Toggle PDU List Window
Fire
Last Status
Source
Destination
Type
Color
Time(sec)
Periodic
Num
Edit
PC3
Smartphone0
ICMP
0.000
N
0
(edit)
PC2
PC5
ICMP
0.000
N
1
(edit)
Type here to search
UV élevés
1:58 PM
4/6/2025

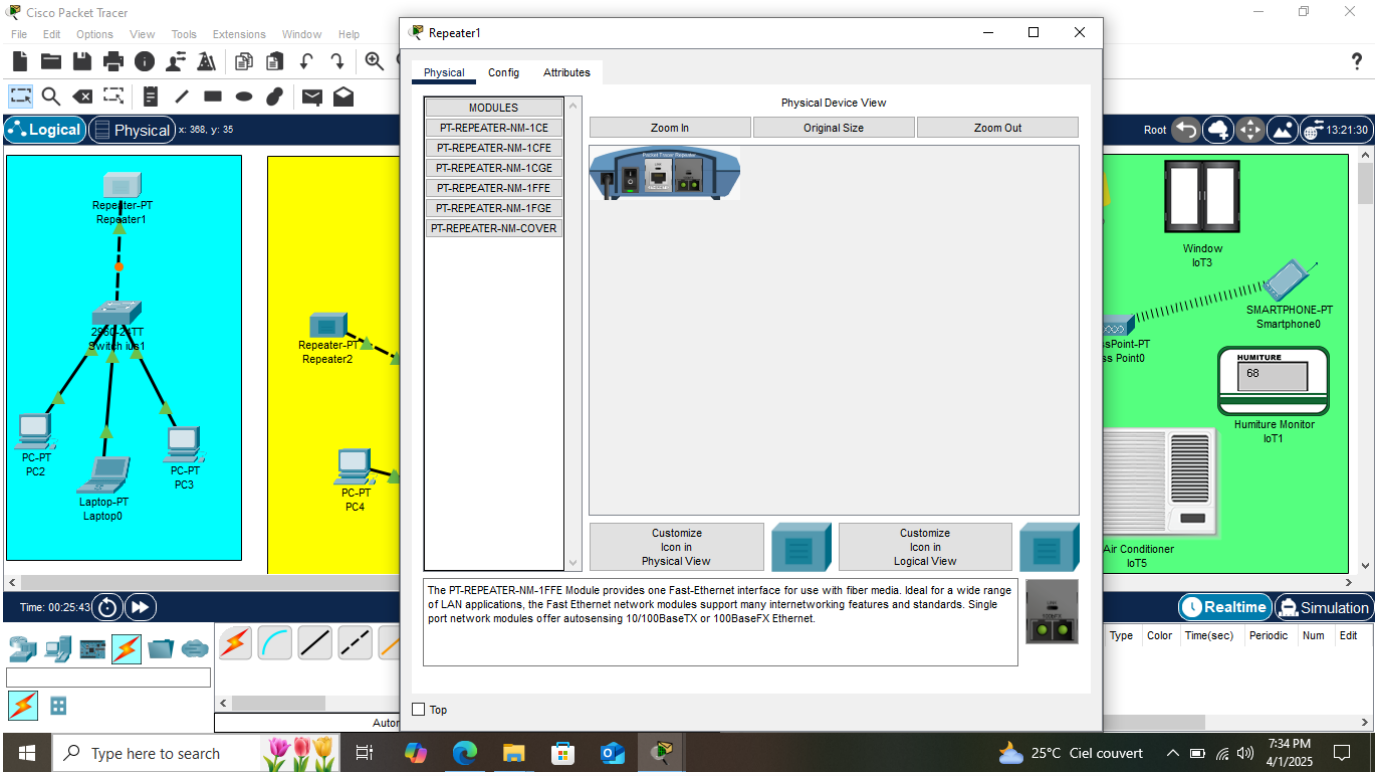

Smartphone0
Physical
Config
Desktop
Programming
Attributes
Web Browser
URL
http://192.168.1.9/home.html
Go
Stop
IoT Server - Devices
Home | Conditions | Editor | Log Out
IoT5 (PTT0810C9E1-)
AC
On
Top
(Select a Device to Drag and Drop to the Workspace)
Repeater-PT
Repeater4
Repeater-PT
Repeater3
Light
IoT4
Window
IoT3
2960-24TT
Switch
SMARTPHONE-PT
Smartphone0
Access Point-PT
Access Point0
HUMITURE
55
Humiture Monitor
IoT1
Webcam
IoT2
Door
IoT0
Air Conditioner
IoT5
Server-PT
iot
Server-PT
dns.com
Root
03:17:30
Realtime
Simulation
Scenario 0
New
Delete
Toggle PDU List Window
Fire
Last Status
Source
Destination
Type
Color
Time(sec)
Periodic
Num
Edit
PC3
Smartphone0
ICMP
0.000
N
0
(edit)
PC2
PC5
ICMP
0.000
N
1
(edit)
Type here to search
UV élevés
1:58 PM
4/6/2025

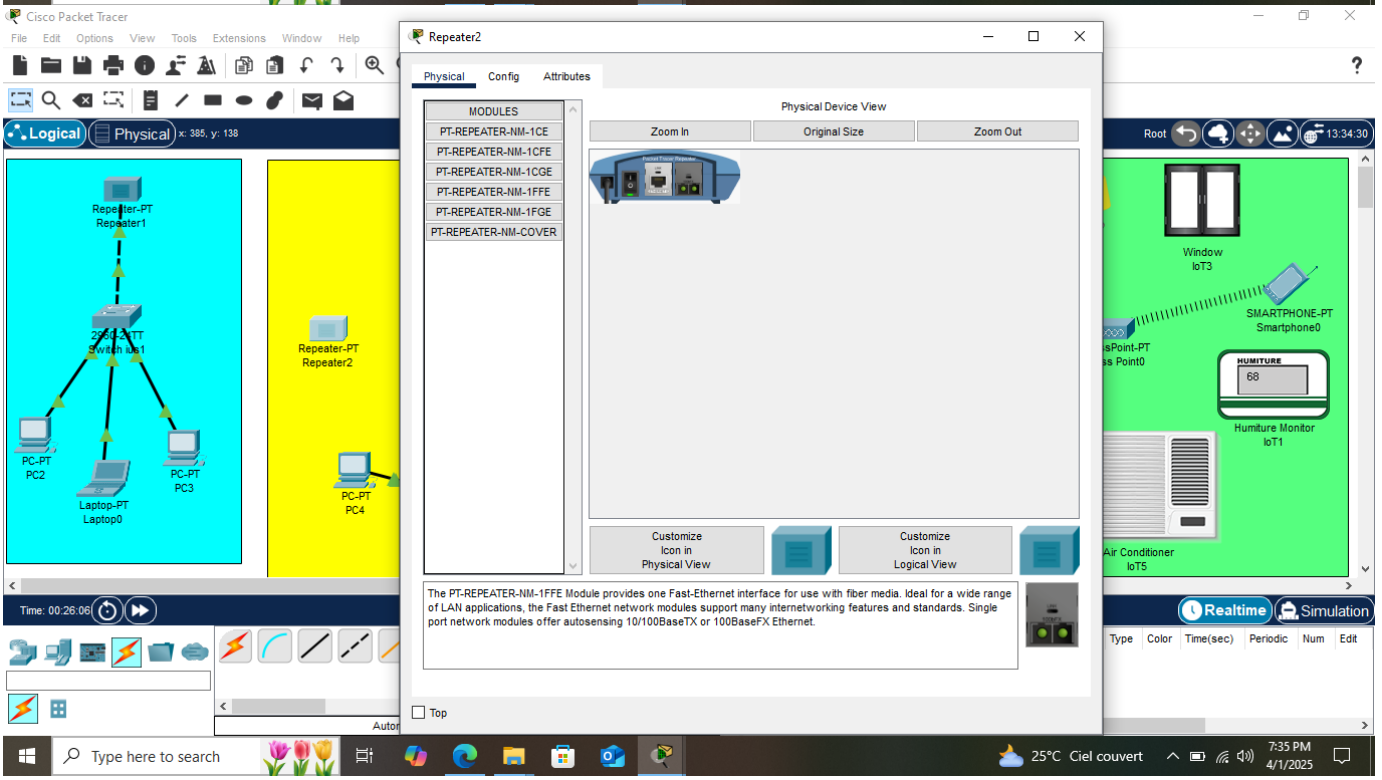

Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 2.pkt
File Edit Options View Tools Extensions Window Help
Logical Physical x: 1148, y: 95
Root 03:39:30
Repeater-PT Repeater1
2960-24TT Switch ide1
Repeater-PT Repeater2
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
PC-PT PC4
Window IoT3
SMARTPHONE-PT Smartphone0
Humiture Monitor IoT1
Air Conditioner IoT5
Time: 00:06:21
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
ICMP 0.000 N 0 (edit)
ICMP 0.000 N 1 (edit)
IoT3
Specifications Physical Config Attributes
GLOBAL
Settings
Algorithm Settings
Files
INTERFACE
Wireless0
Bluetooth
Interfaces Wireless0
Gateway/DNS IPv4
DHCP
Static
Default Gateway 192.168.1.1
DNS Server 192.168.1.2
Gateway/DNS IPv6
Automatic
Static
Default Gateway
DNS Server
IoT Server
None
Home Gateway
Remote Server
Server Address 192.168.1.9
User Name douda
Password 123
Refresh
Top
Advanced
Type here to search
UV élevés
1:59 PM 4/6/2025
Smartphone0
Physical Config Desktop Programming Attributes
Web Browser
URL http://192.168.1.9/home.html
Go Stop
IoT Server - Devices
Home | Conditions | Editor | Log Out
IoT5 (PTT0810C9E1-) AC
On
IoT3 (PTT08104S76-) Window
On
Top
Repeater-PT Repeater3
Repeater-PT Repeater4
Light IoT4
2960-24TT Switch
Access Point-PT Access Point0
Webcam IoT2
Door IoT0
Server-PT iot
Server-PT dns.com
Scenario 0
New
Delete
Toggle PDU List Window
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit
PC3 Smartphone0 ICMP 0.000 N 0 (edit)
PC2 PC5 ICMP 0.000 N 1 (edit)
(Select a Device to Drag and Drop to the Workspace)
Résultat
1:59 PM 4/6/2025

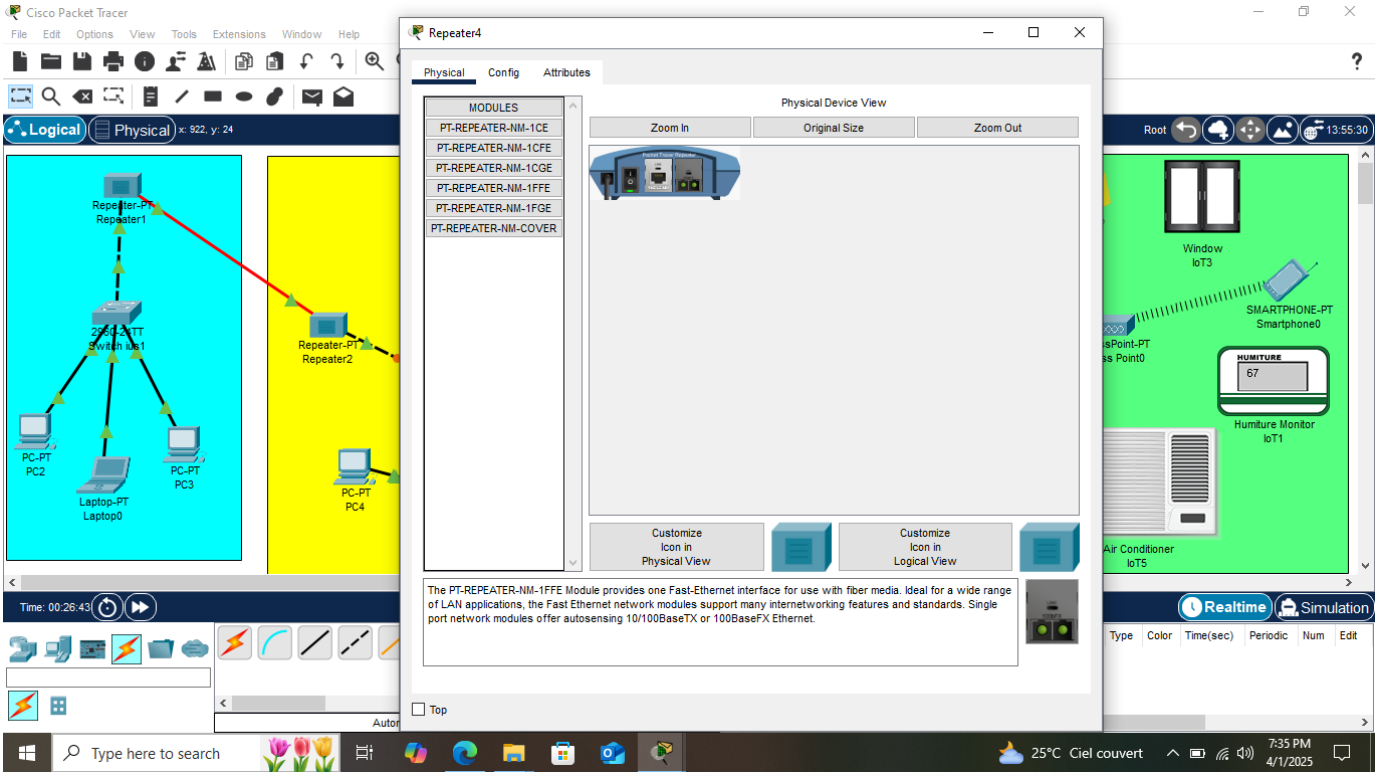

Cisco Packet Tracer - C:\Users\DOUDA SAT\Cisco Packet Tracer 8.2.2\saves\Td4 Exo 2.pkt
IoT4
Specifications
Physical
Config
Attributes
GLOBAL
Settings
Algorithm Settings
Files
INTERFACE
Wireless0
Bluetooth
Interfaces
Wireless0
Gateway/DNS IPv4
DHCP
Static
Default Gateway
192.168.1.1
DNS Server
192.168.1.2
Gateway/DNS IPv6
Automatic
Static
Default Gateway
DNS Server
IoT Server
None
Home Gateway
Remote Server
Server Address
192.168.1.9
User Name
douda
Password
123
Refresh
Top
Advanced
Close
Logical
Physical
Repeater-PT
Repeater1
Repeater-PT
Repeater2
2960-24TT
Switch1
PC-PT
PC2
PC-PT
PC3
Laptop-PT
Laptop0
PC-PT
PC4
Window
IoT3
SMARTPHONE-PT
Smartphone0
Humiture Monitor
IoT1
Air Conditioner
IoT5
Realtime
Simulation
Smartphone0
Physical
Config
Desktop
Programming
Attributes
Web Browser
URL
http://192.168.1.9/home.html
Go
Stop
IoT Server - Devices
Home | Conditions | Editor | Log Out
IoT5 (PTT0810C9E1-)
AC
On
IoT3 (PTT08104S76-)
Window
On
IoT4 (PTT08100238-)
Light
Status
Dim
On
IoT0 (PTT0810ZJIW-)
Door
Open
Lock
IoT2 (PTT0810O0VK-)
Webcam
On
Image
Top
(Select a Device to Drag and Drop to the Workspace)
Repeater-PT
Repeater3
Repeater-PT
Repeater4
Light
IoT4
2960-24TT
Switch
Access Point-PT
Access Point0
Webcam
IoT2
Door
IoT0
Server-PT
iot
Server-PT
dns.com
Scenario 0
New
Delete
Toggle PDU List Window
Fire
Last Status
Source
Destination
Type
Color
Time(sec)
Periodic
Num
Edit
PC3
Smartphone0
ICMP
0.000
N
0
(edit)
PC2
PC5
ICMP
0.000
N
1
(edit)
Type here to search
Résultat
2:00 PM
4/6/2025
29°C Très ensoleillé
2:04 PM
4/6/2025

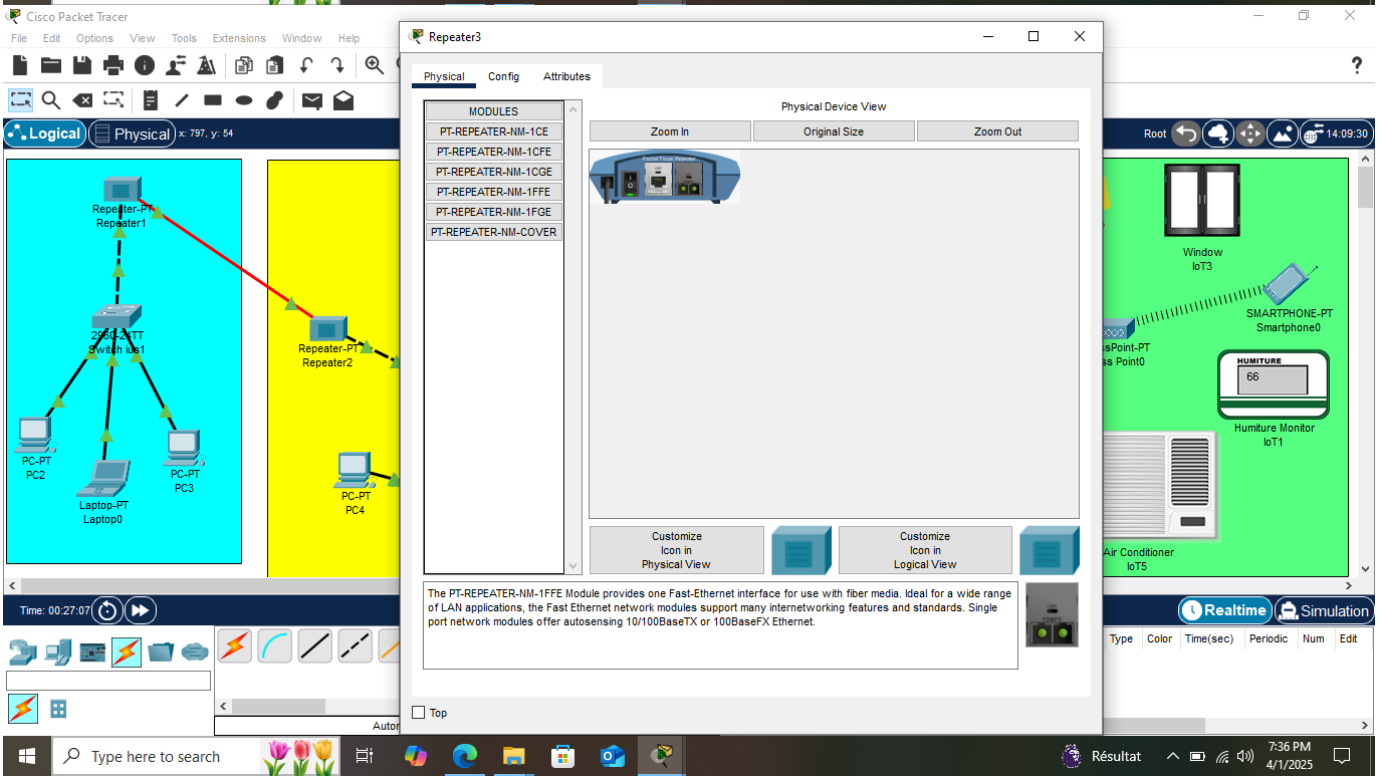

Smartphone0
Physical
Config
Desktop
Programming
Attributes
Web Browser
URL
http://192.168.1.9/home.html
Go
Stop
On
IoT4 (PTT08100238-)
Light
Status
Dim
On
IoT0 (PTT0810ZJIW-)
Door
Open
Lock
IoT2 (PTT0810O0VK-)
Webcam
On
Image
IoT1 (PTT08107A1F-)
Humitor Sensor
Humitor
39
Top
(Select a Device to Drag and Drop to the Workspace)
Root
05:55:00
Repeater-PT
Repeater3
Repeater-PT
Repeater4
Light
IoT4
Window
IoT3
2960-24TT
Switch
SMARTPHONE-PT
Smartphone0
Access Point-PT
Access Point0
HUMITURE
39
Humiture Monitor
IoT1
Webcam
IoT2
Door
IoT0
Air Conditioner
IoT5
Server-PT
iot
Server-PT
web.com
Server-PT
dns.com
PC-PT
PC2
Realtime
Simulation
Scenario 0
New
Delete
Toggle PDU List Window
Fire
Last Status
Source
Destination
Type
Color
Time(sec)
Periodic
Num
Edit
PC3
Smartphone0
ICMP
0.000
N
0
(edit)
PC2
PC5
ICMP
0.000
N
1
(edit)
Type here to search
29°C Très ensoleillé
2:04 PM
4/6/2025

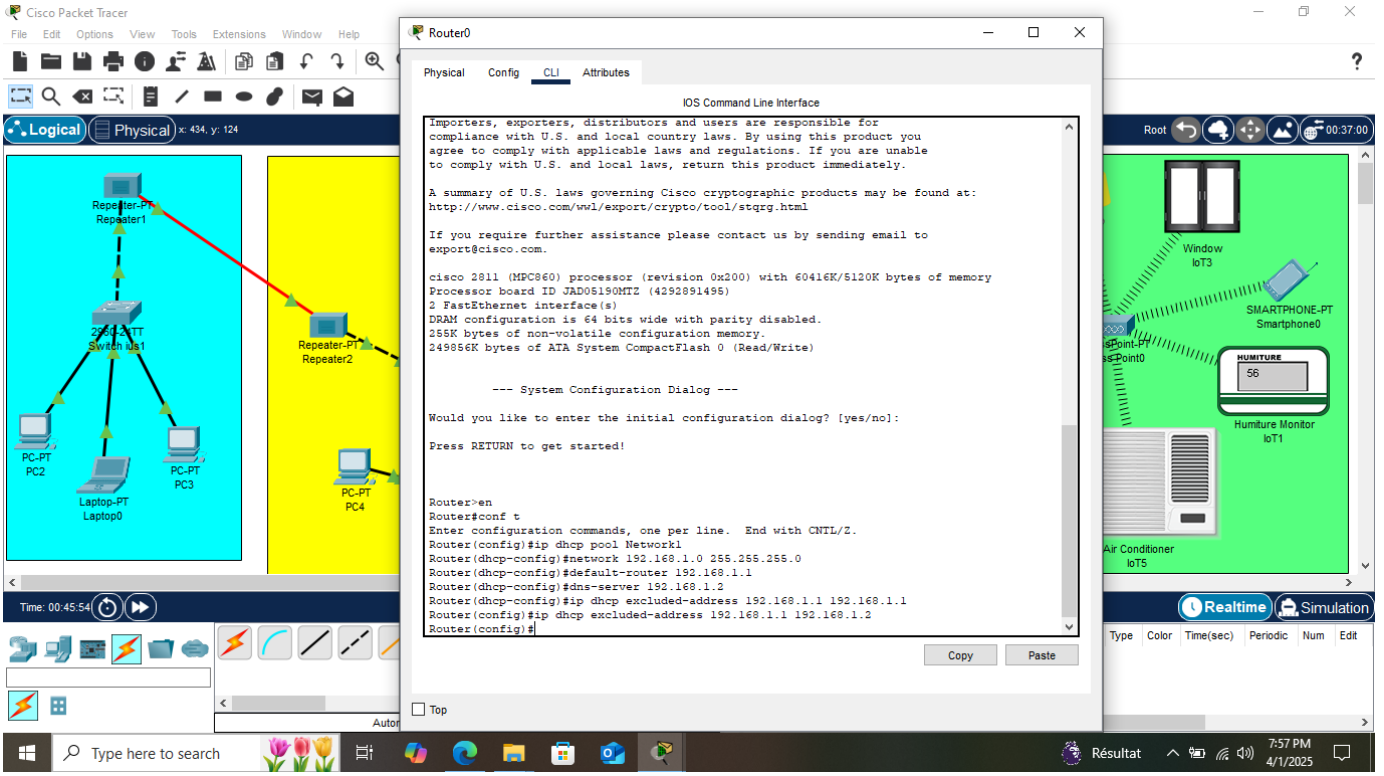

Cisco Packet Tracer
File
Edit
Options
View
Tools
Extensions
Window
Help
Logical
Physical
x: 809, y: 400
Root
06:54:00
Repeater-PT
Repeater1
2960-24TT
Switch ius1
PC-PT
PC2
Laptop-PT
Laptop0
PC-PT
PC3
2811
Router0
Repeater-PT
Repeater2
2960-24TT
Switch ius2
PC-PT
PC1
Server-PT
ius.com
Repeater-PT
Repeater3
2960-24TT
Switch ius4
Server-PT
iot
Server-PT
web.com
2960-24TT
Switch ius5
PC-PT
PC4
2960-24TT
Switch ius3
PC-PT
PC5
Server-PT
dns.com
Repeater-PT
Repeater4
Light
IoT4
Window
IoT3
2960-24TT
Switch
SMARTPHONE-PT
Smartphone0
Access Point-PT
Access Point0
HUMITURE
56
Humiture Monitor
IoT1
Webcam
IoT2
Door
IoT0
Air Conditioner
IoT5
Time: 01:40:07
Realtime
Simulation
Scenario 0
New
Delete
Toggle PDU List Window
Fire
Last Status
Source
Destination
Type
Color
Time(sec)
Periodic
Num
Edit
Successful
PC3
Smartphone0
ICMP
0.000
N
0
(edit)
Successful
PC2
PC5
ICMP
0.000
N
1
(edit)
Automatically Choose Connection Type
Type here to search
25°C Très clair
8:58 PM
4/1/2025

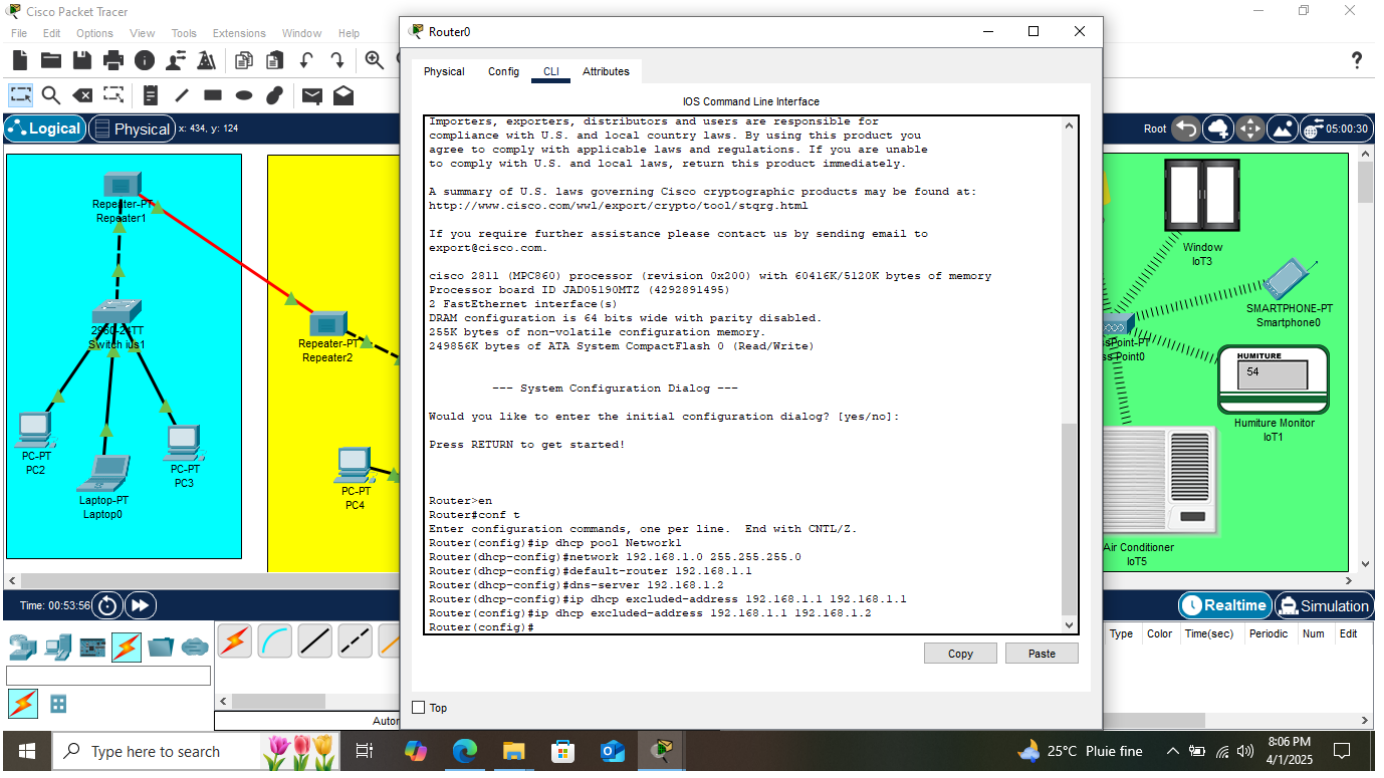

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 368, y: 35
Root 13:21:30
Repeater1
Physical Config Attributes
MODULES
PT-REPEATER-NM-1CE
PT-REPEATER-NM-1CFE
PT-REPEATER-NM-1CGE
PT-REPEATER-NM-1FFE
PT-REPEATER-NM-1FGE
PT-REPEATER-NM-COVER
Physical Device View
Zoom In
Original Size
Zoom Out
Customize Icon in Physical View
Customize Icon in Logical View
The PT-REPEATER-NM-1FFE Module provides one Fast-Ethernet interface for use with fiber media. Ideal for a wide range of LAN applications, the Fast Ethernet network modules support many internetworking features and standards. Single port network modules offer autosensing 10/100BaseTX or 100BaseFX Ethernet.
Top
Repeater-PT Repeater1
Repeater-PT Repeater2
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
PC-PT PC4
Window IoT3
SMARTPHONE-PT Smartphone0
HUMITURE 68
Humiture Monitor IoT1
Air Conditioner IoT5
Time: 00:25:43
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
Type here to search
25°C Ciel couvert
7:34 PM 4/1/2025

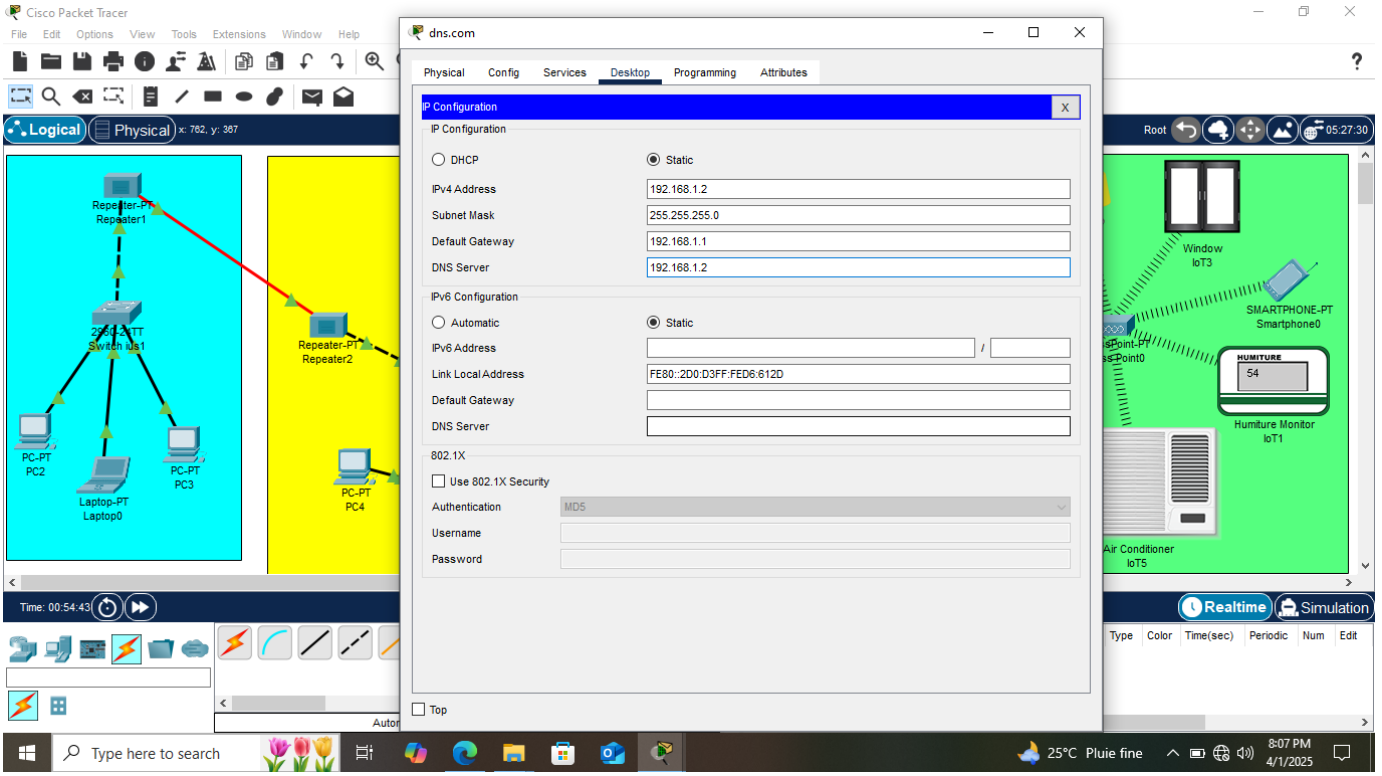

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 385, y: 138
Root 13:34:30
Repeater2
Physical Config Attributes
MODULES
PT-REPEATER-NM-1CE
PT-REPEATER-NM-1CFE
PT-REPEATER-NM-1CGE
PT-REPEATER-NM-1FFE
PT-REPEATER-NM-1FGE
PT-REPEATER-NM-COVER
Physical Device View
Zoom In
Original Size
Zoom Out
Customize Icon in Physical View
Customize Icon in Logical View
The PT-REPEATER-NM-1FFE Module provides one Fast-Ethernet interface for use with fiber media. Ideal for a wide range of LAN applications, the Fast Ethernet network modules support many internetworking features and standards. Single port network modules offer autosensing 10/100BaseTX or 100BaseFX Ethernet.
Top
Repeater-PT Repeater1
Repeater-PT Repeater2
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
PC-PT PC4
Window IoT3
SMARTPHONE-PT Smartphone0
HUMITURE 68
Humiture Monitor IoT1
Air Conditioner IoT5
Time: 00:26:06
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
Type here to search
25°C Ciel couvert
7:35 PM 4/1/2025

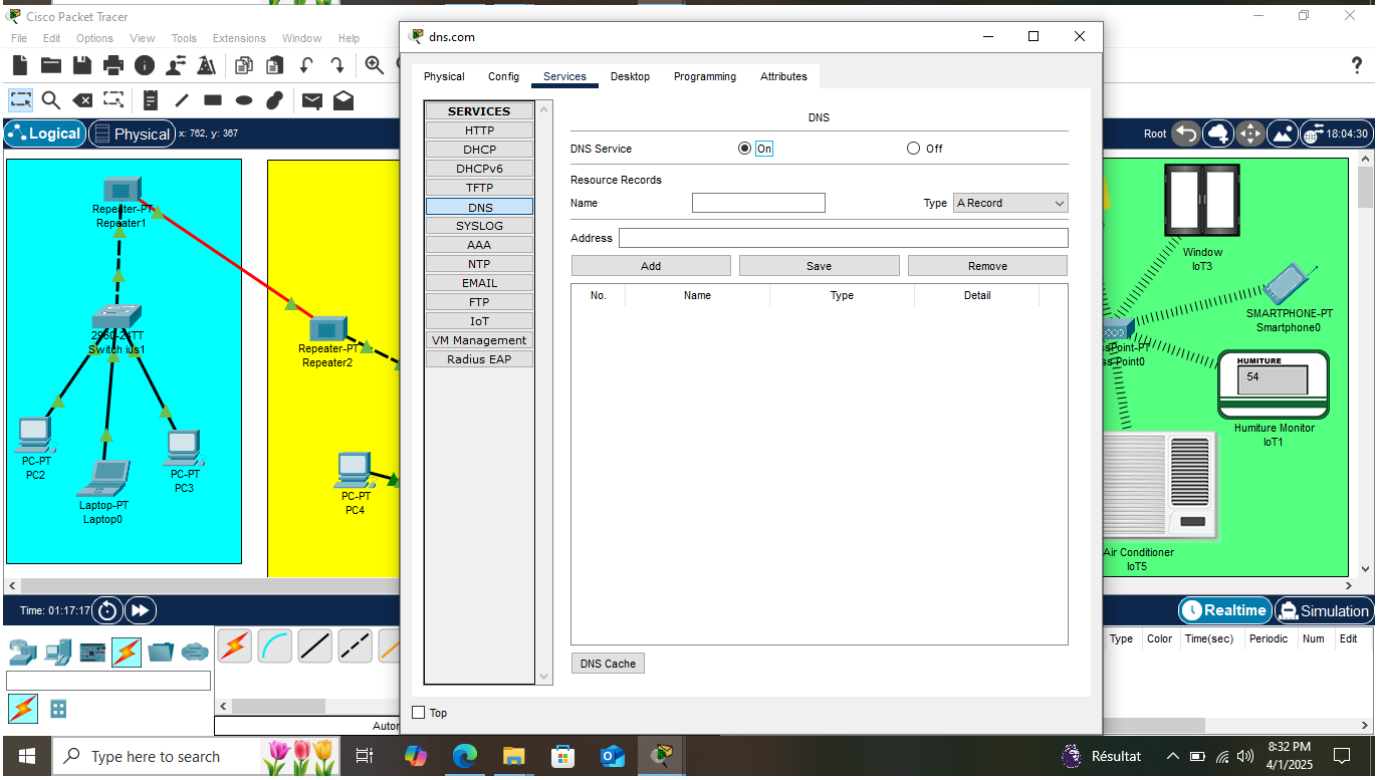

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 922, y: 24
Root 13:55:30
Repeater4
Physical Config Attributes
MODULES
PT-REPEATER-NM-1CE
PT-REPEATER-NM-1CFE
PT-REPEATER-NM-1CGE
PT-REPEATER-NM-1FFE
PT-REPEATER-NM-1FGE
PT-REPEATER-NM-COVER
Physical Device View
Zoom In
Original Size
Zoom Out
Customize Icon in Physical View
Customize Icon in Logical View
The PT-REPEATER-NM-1FFE Module provides one Fast-Ethernet interface for use with fiber media. Ideal for a wide range of LAN applications, the Fast Ethernet network modules support many internetworking features and standards. Single port network modules offer autosensing 10/100BaseTX or 100BaseFX Ethernet.
Top
Repeater-PT Repeater1
2950-24TT Switch0
Repeater-PT Repeater2
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
PC-PT PC4
Window IoT3
SMARTPHONE-PT Smartphone0
HUMITURE 67
Humiture Monitor IoT1
Air Conditioner IoT5
Time: 00:26:43
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
Type here to search
25°C Ciel couvert
7:35 PM 4/1/2025

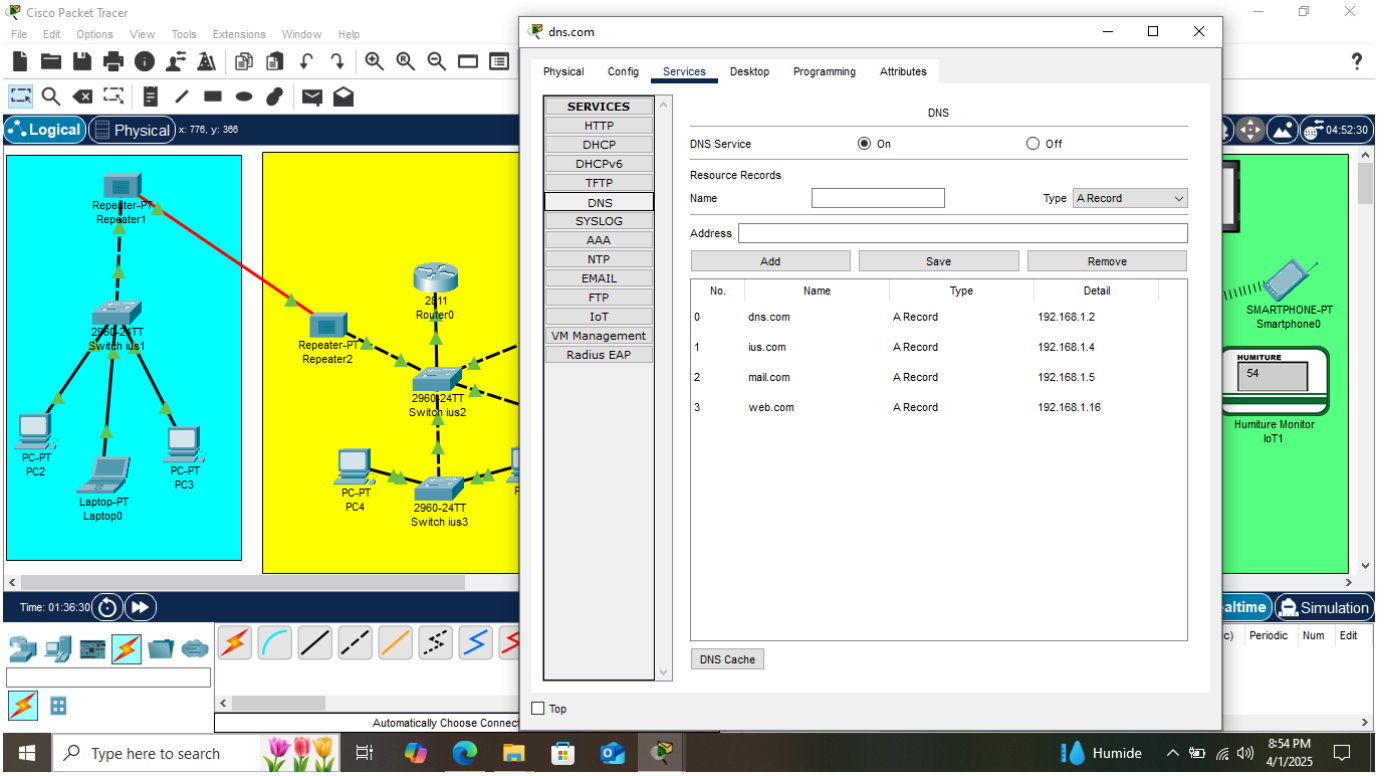

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 797, y: 54
Root 14:09:30
Repeater3
Physical Config Attributes
MODULES
PT-REPEATER-NM-1CE
PT-REPEATER-NM-1CFE
PT-REPEATER-NM-1CGE
PT-REPEATER-NM-1FFE
PT-REPEATER-NM-1FGE
PT-REPEATER-NM-COVER
Physical Device View
Zoom In
Original Size
Zoom Out
Customize Icon in Physical View
Customize Icon in Logical View
The PT-REPEATER-NM-1FFE Module provides one Fast-Ethernet interface for use with fiber media. Ideal for a wide range of LAN applications, the Fast Ethernet network modules support many internetworking features and standards. Single port network modules offer autosensing 10/100BaseTX or 100BaseFX Ethernet.
Top
Repeater-PT Repeater1
2950-24TT Switch0
Repeater-PT Repeater2
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
PC-PT PC4
Window IoT3
SMARTPHONE-PT Smartphone0
HUMITURE 66
Humiture Monitor IoT1
Air Conditioner IoT5
Time: 00:27:07
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
Type here to search
Résultat
7:36 PM 4/1/2025

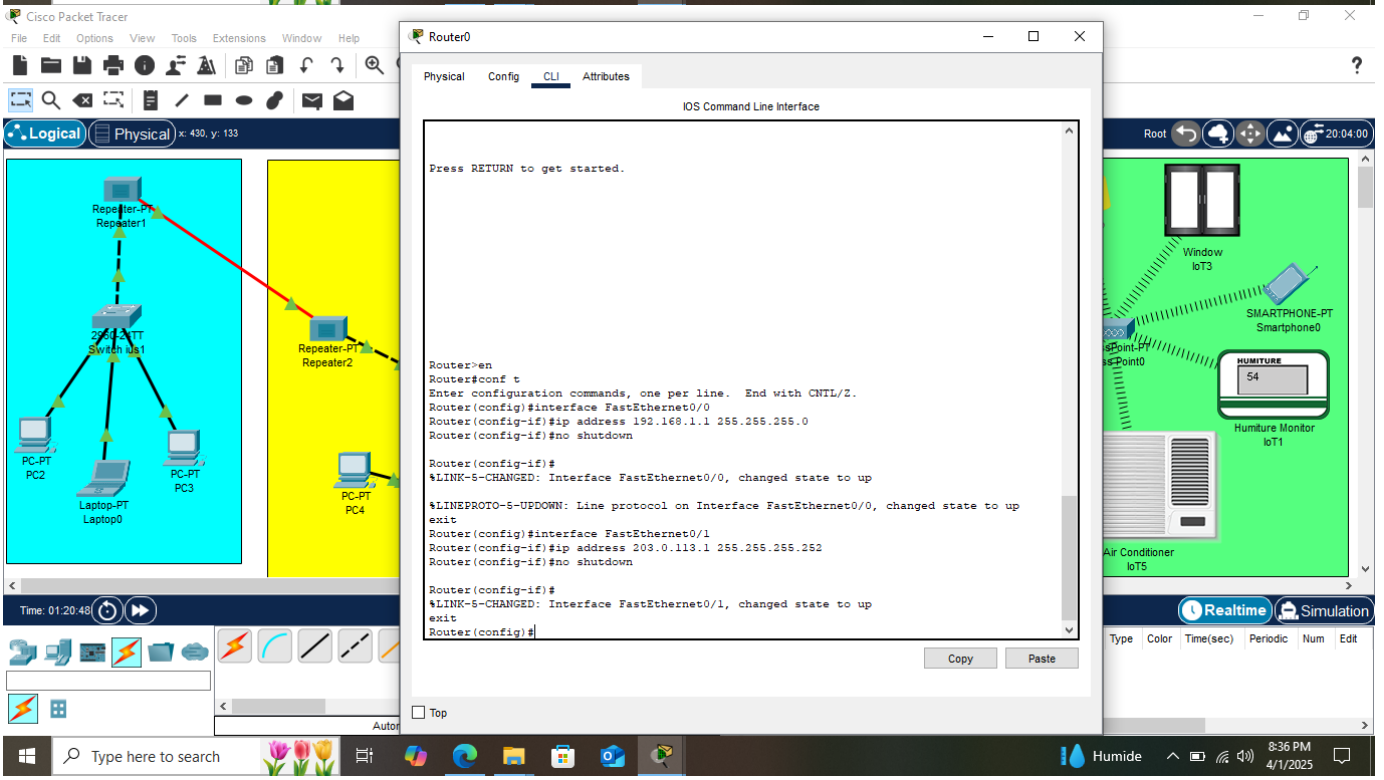

Cisco Packet Tracer
Router0
Physical
Config
CLI
Attributes
IOS Command Line Interface
Importers, exporters, distributors and users are responsible for
compliance with U.S. and local country laws. By using this product you
agree to comply with applicable laws and regulations. If you are unable
to comply with U.S. and local laws, return this product immediately.
A summary of U.S. laws governing Cisco cryptographic products may be found at:
http://www.cisco.com/wwl/export/crypto/tool/stqrg.html
If you require further assistance please contact us by sending email to
export@cisco.com.
cisco 2811 (MPC860) processor (revision 0x200) with 60416K/5120K bytes of memory
Processor board ID JAD05190MTZ (4292891495)
2 FastEthernet interface(s)
DRAM configuration is 64 bits wide with parity disabled.
255K bytes of non-volatile configuration memory.
249856K bytes of ATA System CompactFlash 0 (Read/Write)
--- System Configuration Dialog ---
Would you like to enter the initial configuration dialog? [yes/no]:
Press RETURN to get started!
Router>en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip dhcp pool Network1
Router(dhcp-config)#network 192.168.1.0 255.255.255.0
Router(dhcp-config)#default-router 192.168.1.1
Router(dhcp-config)#dns-server 192.168.1.2
Router(dhcp-config)#ip dhcp excluded-address 192.168.1.1 192.168.1.1
Router(config)#ip dhcp excluded-address 192.168.1.1 192.168.1.2
Router(config)#
Copy
Paste
Top
Repeater-PT
Repeater1
2960-24TT
Switch ds1
Repeater-PT
Repeater2
PC-PT
PC2
PC-PT
PC3
Laptop-PT
Laptop0
PC-PT
PC4
Window
IoT3
SMARTPHONE-PT
Smartphone0
HUMITURE
56
Humiture Monitor
IoT1
Air Conditioner
IoT5
Logical
Physical
Root
Realtime
Simulation
Type
Color
Time(sec)
Periodic
Num
Edit
Type here to search
Résultat
7:57 PM
4/1/2025

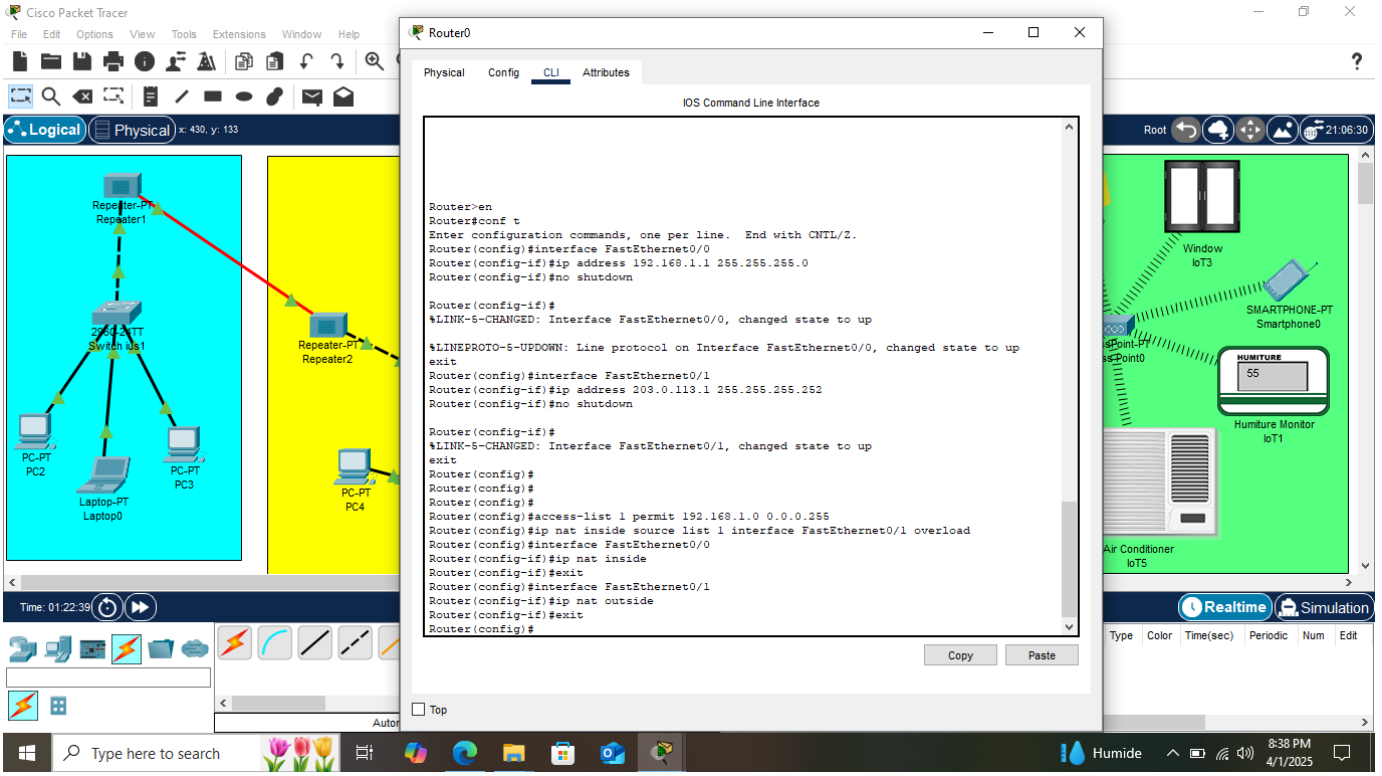

Cisco Packet Tracer
Router0
Physical
Config
CLI
Attributes
IOS Command Line Interface
Importers, exporters, distributors and users are responsible for
compliance with U.S. and local country laws. By using this product you
agree to comply with applicable laws and regulations. If you are unable
to comply with U.S. and local laws, return this product immediately.
A summary of U.S. laws governing Cisco cryptographic products may be found at:
http://www.cisco.com/wwl/export/crypto/tool/stqrg.html
If you require further assistance please contact us by sending email to
export@cisco.com.
cisco 2811 (MPC860) processor (revision 0x200) with 60416K/5120K bytes of memory
Processor board ID JAD05190MTZ (4292891495)
2 FastEthernet interface(s)
DRAM configuration is 64 bits wide with parity disabled.
255K bytes of non-volatile configuration memory.
249856K bytes of ATA System CompactFlash 0 (Read/Write)
--- System Configuration Dialog ---
Would you like to enter the initial configuration dialog? [yes/no]:
Press RETURN to get started!
Router>en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip dhcp pool Network1
Router(dhcp-config)#network 192.168.1.0 255.255.255.0
Router(dhcp-config)#default-router 192.168.1.1
Router(dhcp-config)#dns-server 192.168.1.2
Router(dhcp-config)#ip dhcp excluded-address 192.168.1.1 192.168.1.1
Router(config)#ip dhcp excluded-address 192.168.1.1 192.168.1.2
Router(config)#
Copy
Paste
Top
Repeater-PT
Repeater1
2960-24TT
Switch ds1
Repeater-PT
Repeater2
PC-PT
PC2
PC-PT
PC3
Laptop-PT
Laptop0
PC-PT
PC4
Window
IoT3
SMARTPHONE-PT
Smartphone0
HUMITURE
54
Humiture Monitor
IoT1
Air Conditioner
IoT5
Logical
Physical
Root
Realtime
Simulation
Type
Color
Time(sec)
Periodic
Num
Edit
Type here to search
25°C Pluie fine
8:06 PM
4/1/2025

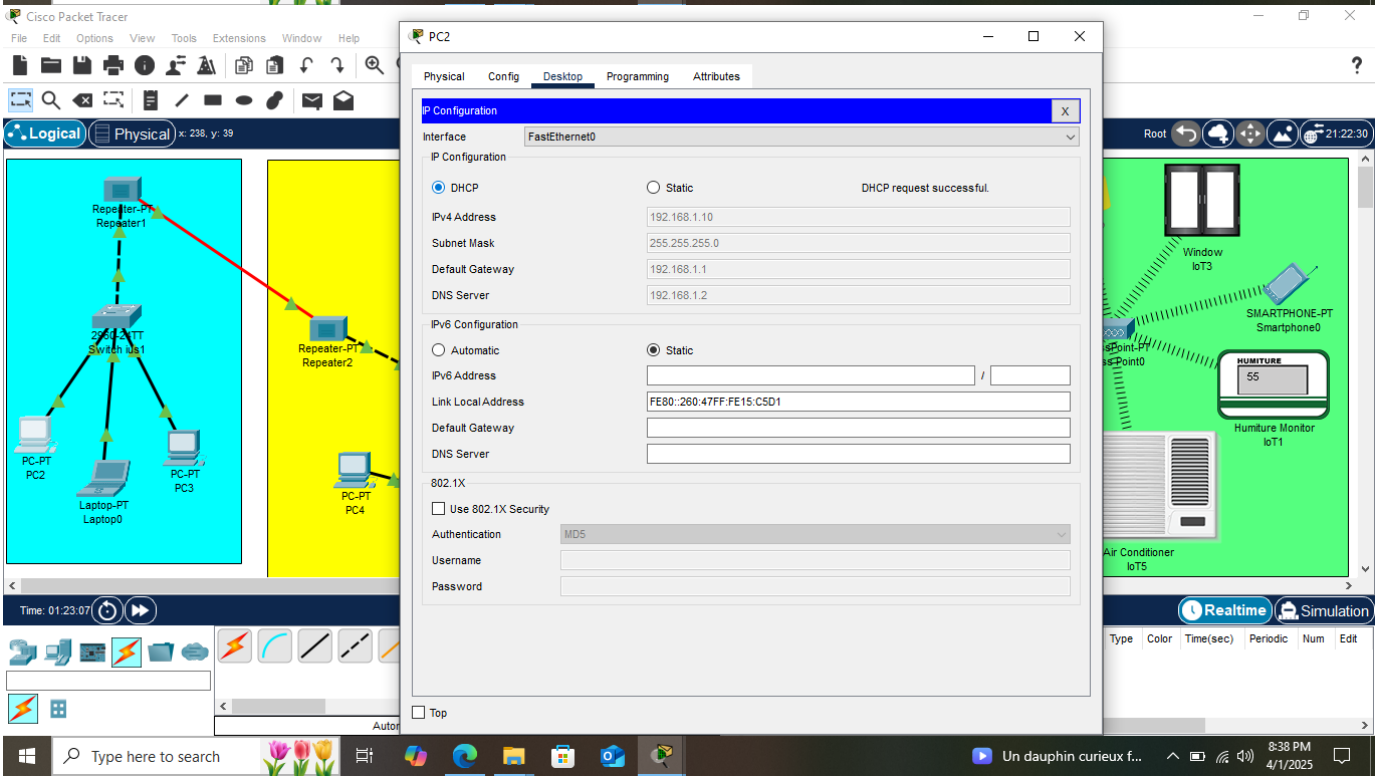

Cisco Packet Tracer
dns.com
Physical
Config
Services
Desktop
Programming
Attributes
IP Configuration
DHCP
Static
IPv4 Address
192.168.1.2
Subnet Mask
255.255.255.0
Default Gateway
192.168.1.1
DNS Server
192.168.1.2
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::2D0:D3FF:FED6:612D
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top
Repeater-PT Repeater1
Repeater-PT Repeater2
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
PC-PT PC4
Window IoT3
SMARTPHONE-PT Smartphone0
Humiture Monitor IoT1
Air Conditioner IoT5
Realtime
Simulation
Type here to search
25°C Pluie fine
8:07 PM
4/1/2025

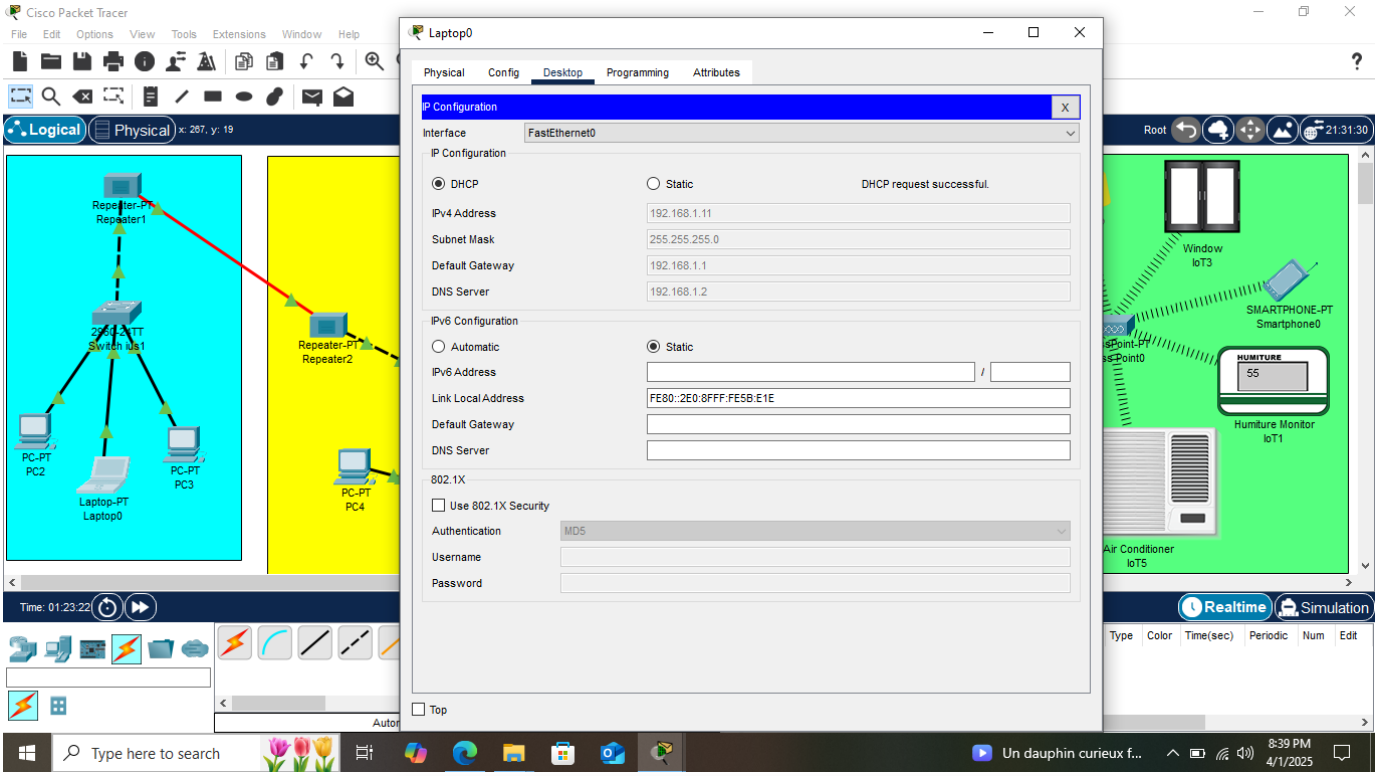

Cisco Packet Tracer
dns.com
Physical
Config
Services
Desktop
Programming
Attributes
SERVICES
HTTP
DHCP
DHCPv6
TFTP
DNS
SYSLOG
AAA
NTP
EMAIL
FTP
IoT
VM Management
Radius EAP
DNS
DNS Service
On
Off
Resource Records
Name
Type
A Record
Address
Add
Save
Remove
No.
Name
Type
Detail
DNS Cache
Top
Repeater-PT Repeater1
Repeater-PT Repeater2
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
PC-PT PC4
Window IoT3
SMARTPHONE-PT Smartphone0
Humiture Monitor IoT1
Air Conditioner IoT5
Realtime
Simulation
Type here to search
Résultat
8:32 PM
4/1/2025

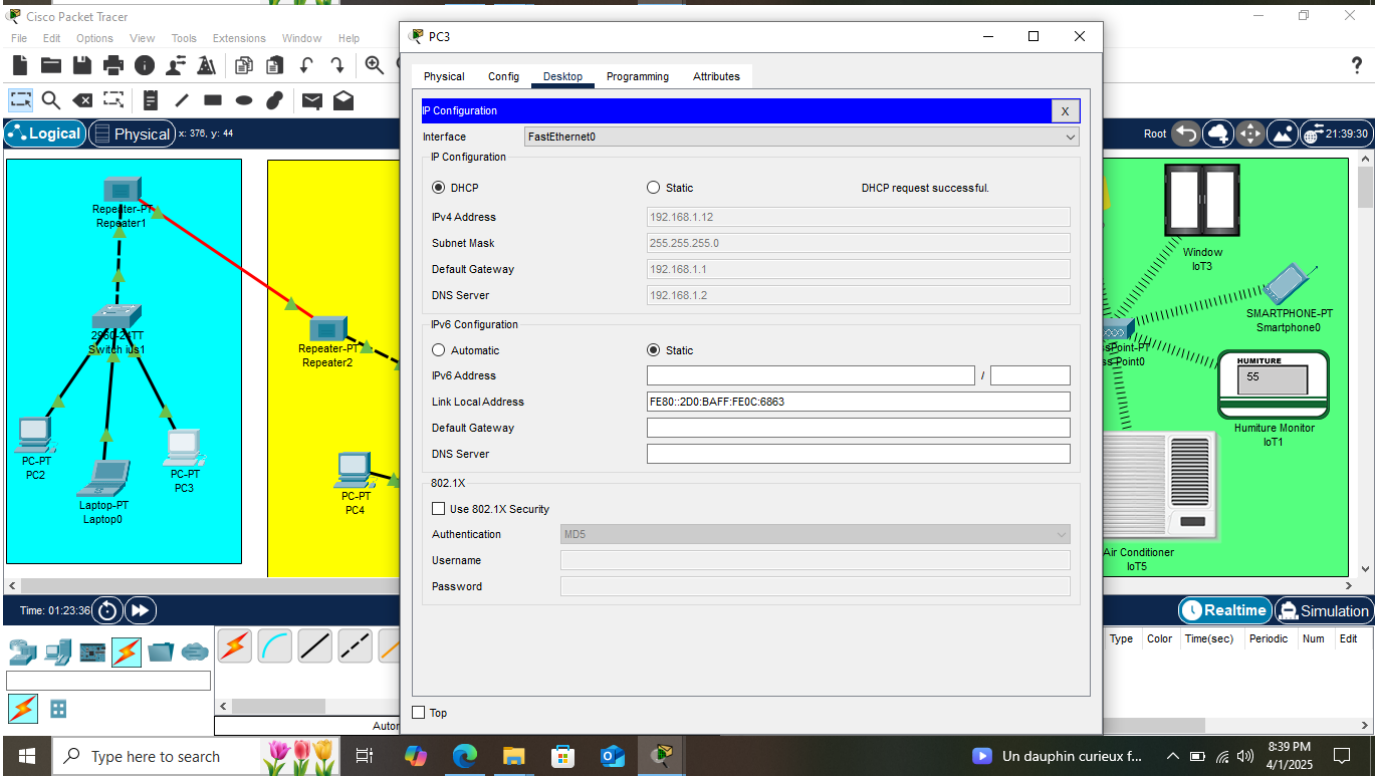

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 776, y: 366
Repeater-PT Repeater1
2960-24TT Switch ius1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Repeater-PT Repeater2
2811 Router0
2960-24TT Switch ius2
PC-PT PC4
2960-24TT Switch ius3
Time: 01:36:30
Automatically Choose Connec
dns.com
Physical Config Services Desktop Programming Attributes
SERVICES
HTTP
DHCP
DHCPv6
TFTP
DNS
SYSLOG
AAA
NTP
EMAIL
FTP
IoT
VM Management
Radius EAP
DNS
DNS Service On Off
Resource Records
Name
Type A Record
Address
Add Save Remove
No. Name Type Detail
0 dns.com A Record 192.168.1.2
1 ius.com A Record 192.168.1.4
2 mail.com A Record 192.168.1.5
3 web.com A Record 192.168.1.16
DNS Cache
Top
04:52:30
SMARTPHONE-PT Smartphone0
HUMITURE 54
Humiture Monitor IoT1
Realtime Simulation
Periodic Num Edit
Type here to search
Humide
8:54 PM 4/1/2025

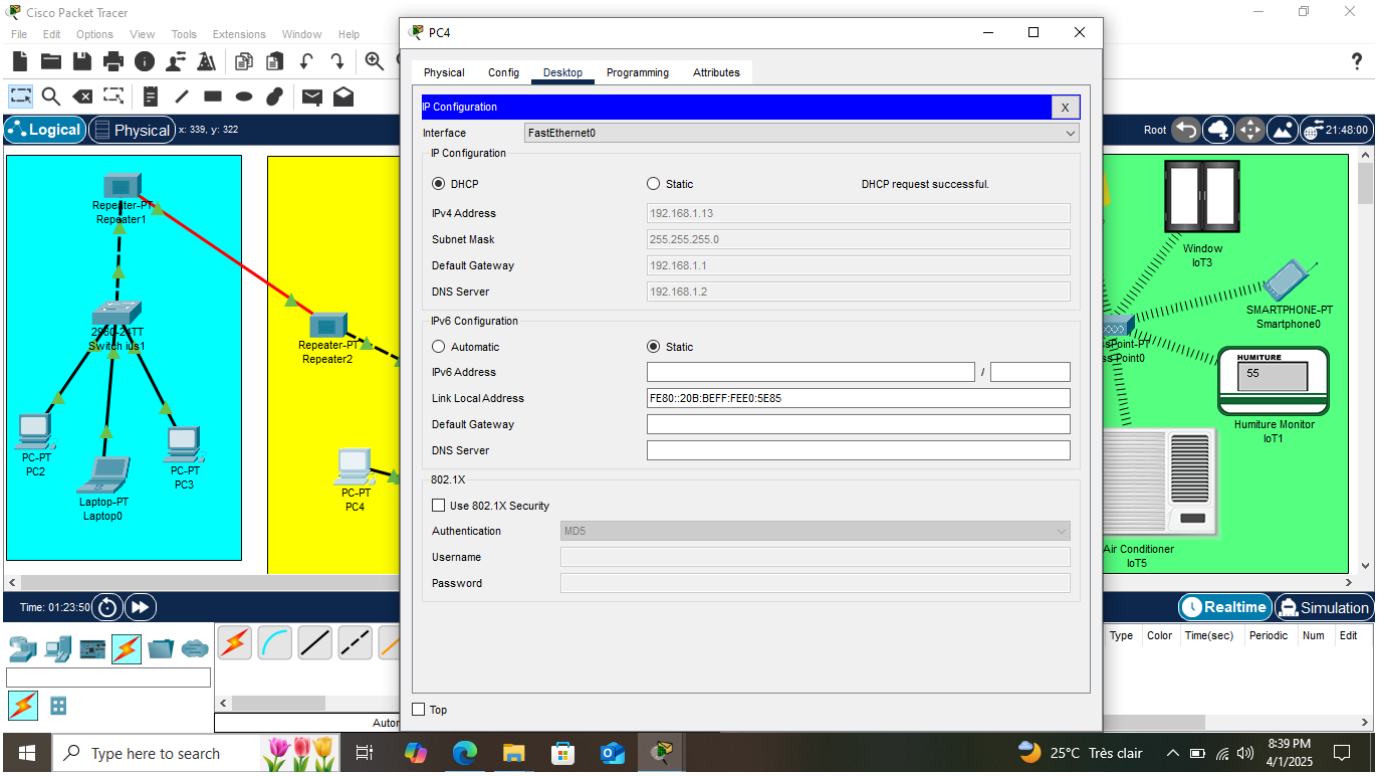

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 430, y: 133
Repeater-PT Repeater1
2960-24TT Switch ius1
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
Repeater-PT Repeater2
PC-PT PC4
Time: 01:20:48
Router0
Physical Config CLI Attributes
IOS Command Line Interface
Press RETURN to get started.
Router>en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#no shutdown
Router(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
exit
Router(config)#interface FastEthernet0/1
Router(config-if)#ip address 203.0.113.1 255.255.255.252
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
exit
Router(config)#
Copy Paste
Top
Root
20:04:00
Window IoT3
SMARTPHONE-PT Smartphone0
Humiture Monitor IoT1
Air Conditioner IoT5
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
Type here to search
Humide
8:36 PM 4/1/2025

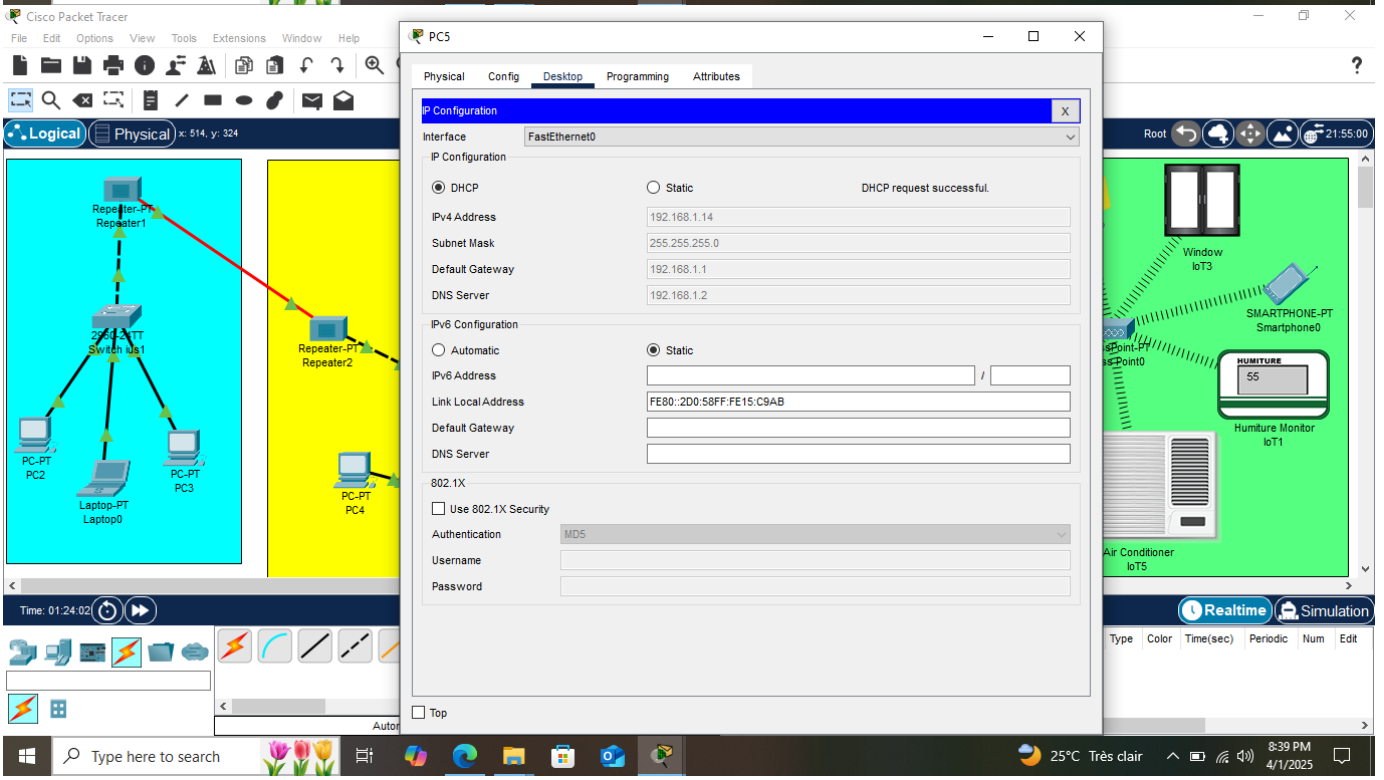

Cisco Packet Tracer
Router0
Physical
Config
CLI
Attributes
IOS Command Line Interface
Router>en
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
exit
Router(config)#interface FastEthernet0/1
Router(config-if)#ip address 203.0.113.1 255.255.255.252
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
exit
Router(config)#
Router(config)#
Router(config)#
Router(config)#access-list 1 permit 192.168.1.0 0.0.0.255
Router(config)#ip nat inside source list 1 interface FastEthernet0/1 overload
Router(config)#interface FastEthernet0/0
Router(config-if)#ip nat inside
Router(config-if)#exit
Router(config)#interface FastEthernet0/1
Router(config-if)#ip nat outside
Router(config-if)#exit
Router(config)#
Copy
Paste
Top
Repeater-PT Repeater1
2960-24TT Switch ds1
Repeater-PT Repeater2
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
PC-PT PC4
Window IoT3
SMARTPHONE-PT Smartphone0
Humiture Monitor IoT1
Air Conditioner IoT5
Realtime
Simulation
Type here to search
Humide
8:38 PM
4/1/2025

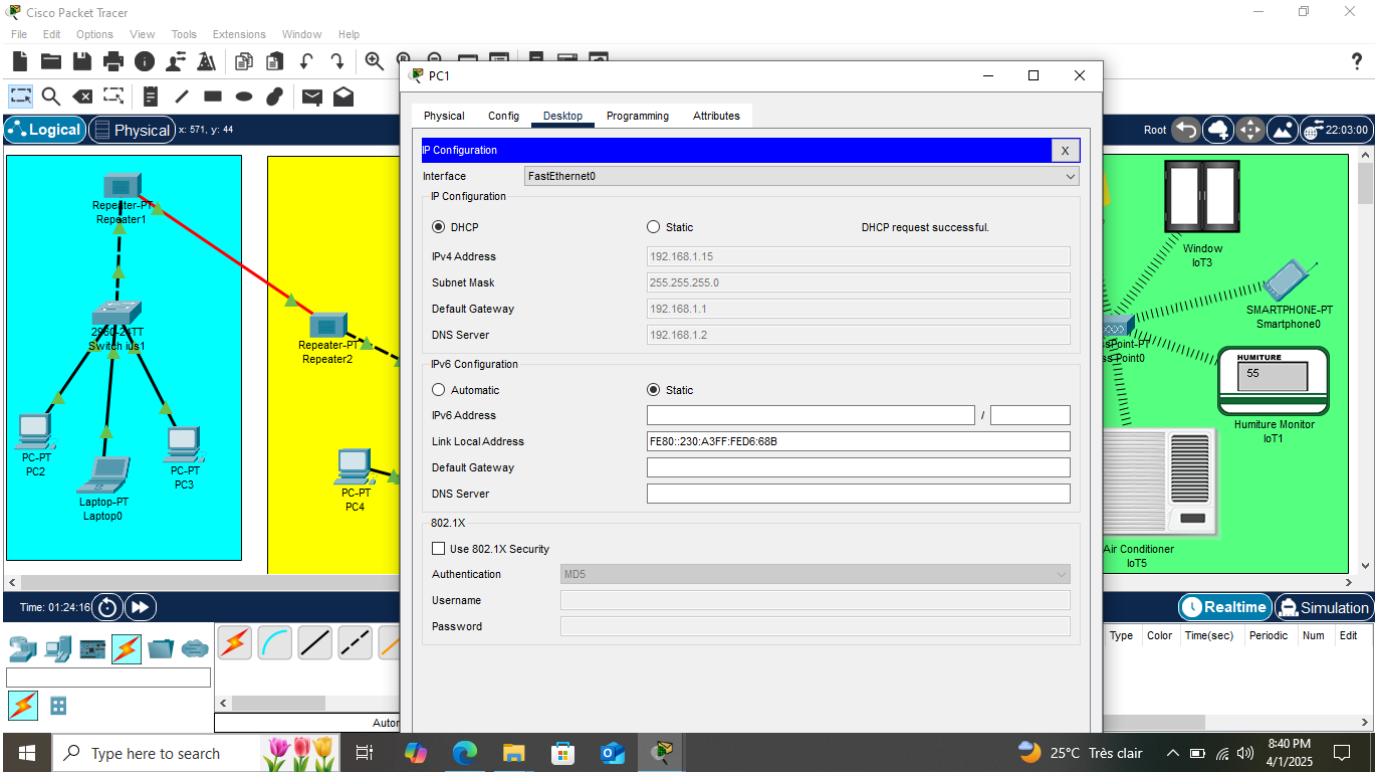

Cisco Packet Tracer
PC2
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
IP Configuration
DHCP
Static
DHCP request successful.
IPv4 Address
192.168.1.10
Subnet Mask
255.255.255.0
Default Gateway
192.168.1.1
DNS Server
192.168.1.2
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::260:47FF:FE15:C5D1
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top
Repeater-PT Repeater1
2960-24TT Switch ds1
Repeater-PT Repeater2
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
PC-PT PC4
Window IoT3
SMARTPHONE-PT Smartphone0
Humiture Monitor IoT1
Air Conditioner IoT5
Realtime
Simulation
Type here to search
Un dauphin curieux f...
8:38 PM
4/1/2025

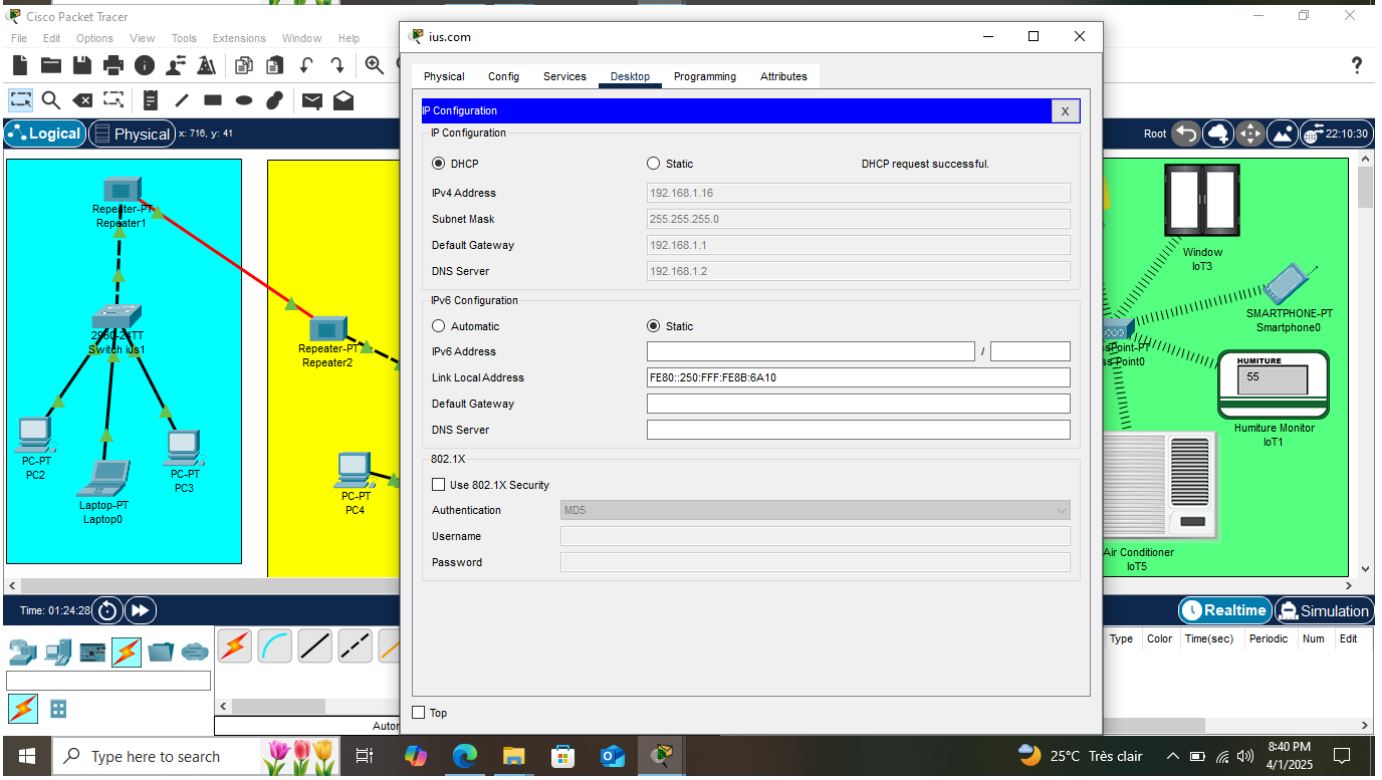

Cisco Packet Tracer
Laptop0
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
DHCP request successful.
IPv4 Address
192.168.1.11
Subnet Mask
255.255.255.0
Default Gateway
192.168.1.1
DNS Server
192.168.1.2
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::2E0:8FFF:FE5B:E1E
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top
Repeater-PT
Repeater1
Repeater-PT
Repeater2
PC-PT
PC2
PC-PT
PC3
PC-PT
PC4
Laptop-PT
Laptop0
Window
IoT3
SMARTPHONE-PT
Smartphone0
Humiture Monitor
IoT1
Air Conditioner
IoT5
Realtime
Simulation
Type
Color
Time(sec)
Periodic
Num
Edit
Type here to search
Un dauphin curieux f...
8:39 PM
4/1/2025

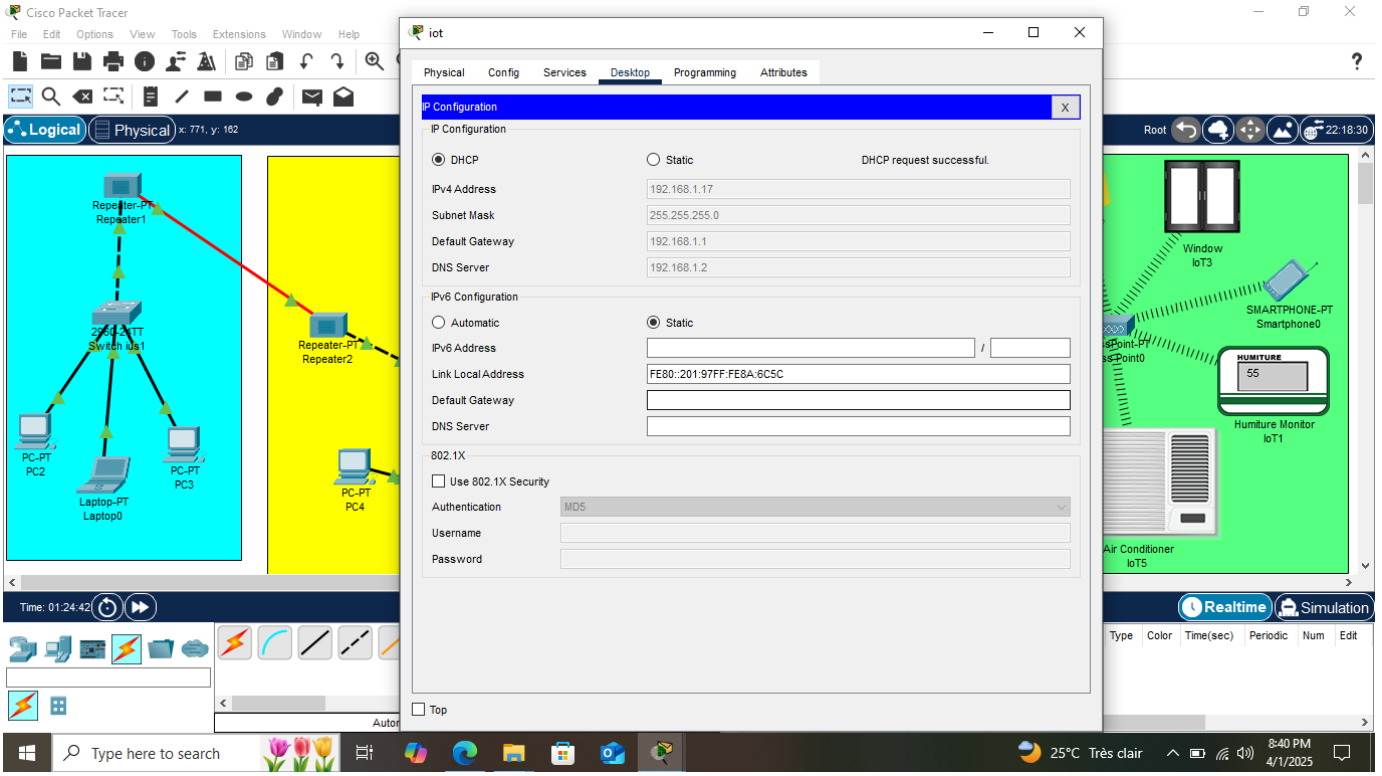

Cisco Packet Tracer
PC3
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
DHCP request successful.
IPv4 Address
192.168.1.12
Subnet Mask
255.255.255.0
Default Gateway
192.168.1.1
DNS Server
192.168.1.2
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::2D0:BAFF:FE0C:6863
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top
Repeater-PT
Repeater1
Repeater-PT
Repeater2
PC-PT
PC2
PC-PT
PC3
PC-PT
PC4
Laptop-PT
Laptop0
Window
IoT3
SMARTPHONE-PT
Smartphone0
Humiture Monitor
IoT1
Air Conditioner
IoT5
Realtime
Simulation
Type
Color
Time(sec)
Periodic
Num
Edit
Type here to search
Un dauphin curieux f...
8:39 PM
4/1/2025

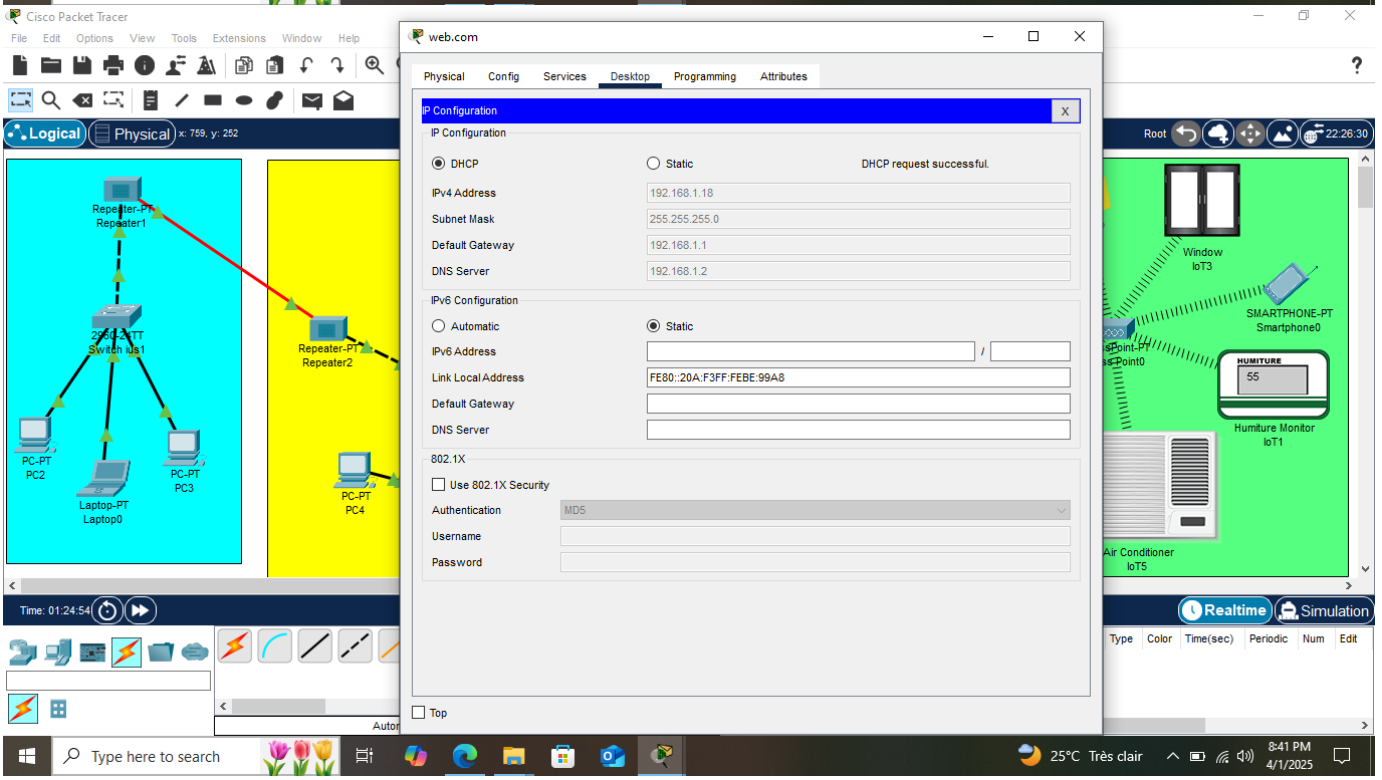

Cisco Packet Tracer
PC4
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
DHCP request successful.
IPv4 Address
192.168.1.13
Subnet Mask
255.255.255.0
Default Gateway
192.168.1.1
DNS Server
192.168.1.2
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::20B:BEFF:FEE0:5E85
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top
Repeater-PT
Repeater1
Repeater-PT
Repeater2
PC-PT
PC2
PC-PT
PC3
Laptop-PT
Laptop0
PC-PT
PC4
Window
IoT3
SMARTPHONE-PT
Smartphone0
Humiture Monitor
IoT1
Air Conditioner
IoT5
Realtime
Simulation
Type
Color
Time(sec)
Periodic
Num
Edit
Type here to search
25°C Très clair
8:39 PM
4/1/2025

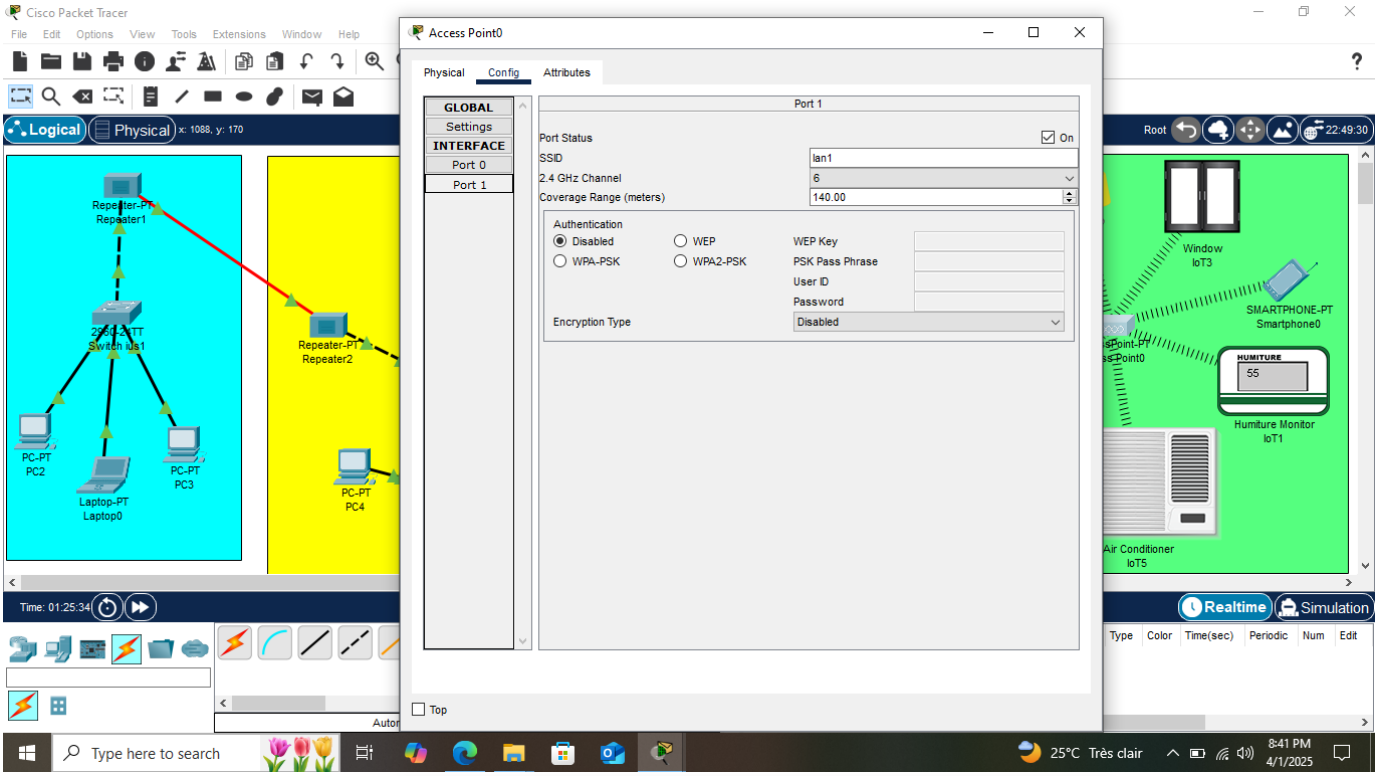

Cisco Packet Tracer
PC5
Physical
Config
Desktop
Programming
Attributes
IP Configuration
Interface
FastEthernet0
DHCP
Static
DHCP request successful.
IPv4 Address
192.168.1.14
Subnet Mask
255.255.255.0
Default Gateway
192.168.1.1
DNS Server
192.168.1.2
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::2D0:58FF:FE15:C9AB
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top
Repeater-PT
Repeater1
Repeater-PT
Repeater2
PC-PT
PC2
PC-PT
PC3
Laptop-PT
Laptop0
PC-PT
PC4
Window
IoT3
SMARTPHONE-PT
Smartphone0
Humiture Monitor
IoT1
Air Conditioner
IoT5
Realtime
Simulation
Type
Color
Time(sec)
Periodic
Num
Edit
Type here to search
25°C Très clair
8:39 PM
4/1/2025

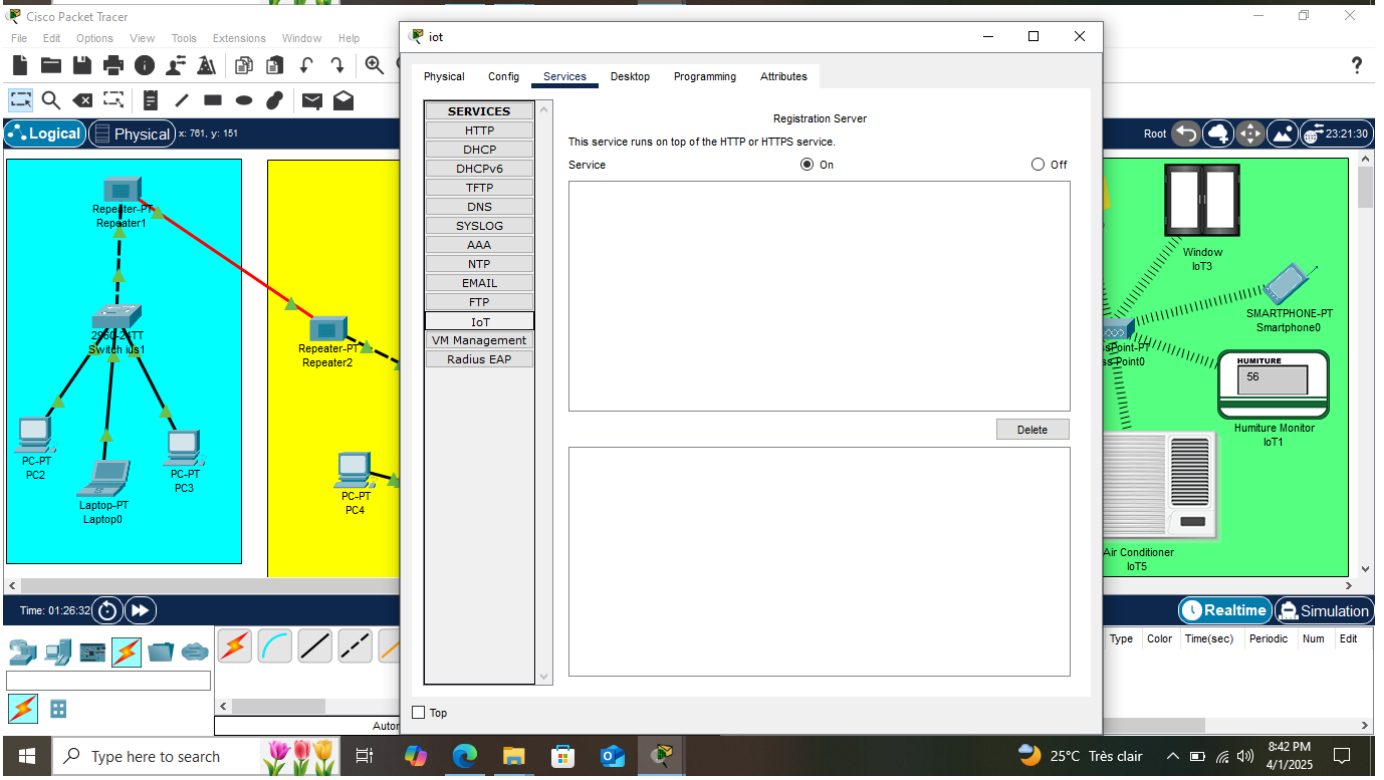

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 571, y: 44
Root 22:03:00
PC1
Physical Config Desktop Programming Attributes
IP Configuration
Interface FastEthernet0
IP Configuration
DHCP Static DHCP request successful.
IPv4 Address 192.168.1.15
Subnet Mask 255.255.255.0
Default Gateway 192.168.1.1
DNS Server 192.168.1.2
IPv6 Configuration
Automatic Static
IPv6 Address
Link Local Address FE80::230:A3FF:FED6:68B
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Repeater-PT Repeater1
2950-24TT Switch us1
Repeater-PT Repeater2
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
PC-PT PC4
Window IoT3
SMARTPHONE-PT Smartphone0
Humiture Monitor IoT1
Air Conditioner IoT5
Time: 01:24:16
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
Type here to search
25°C Très clair
8:40 PM 4/1/2025

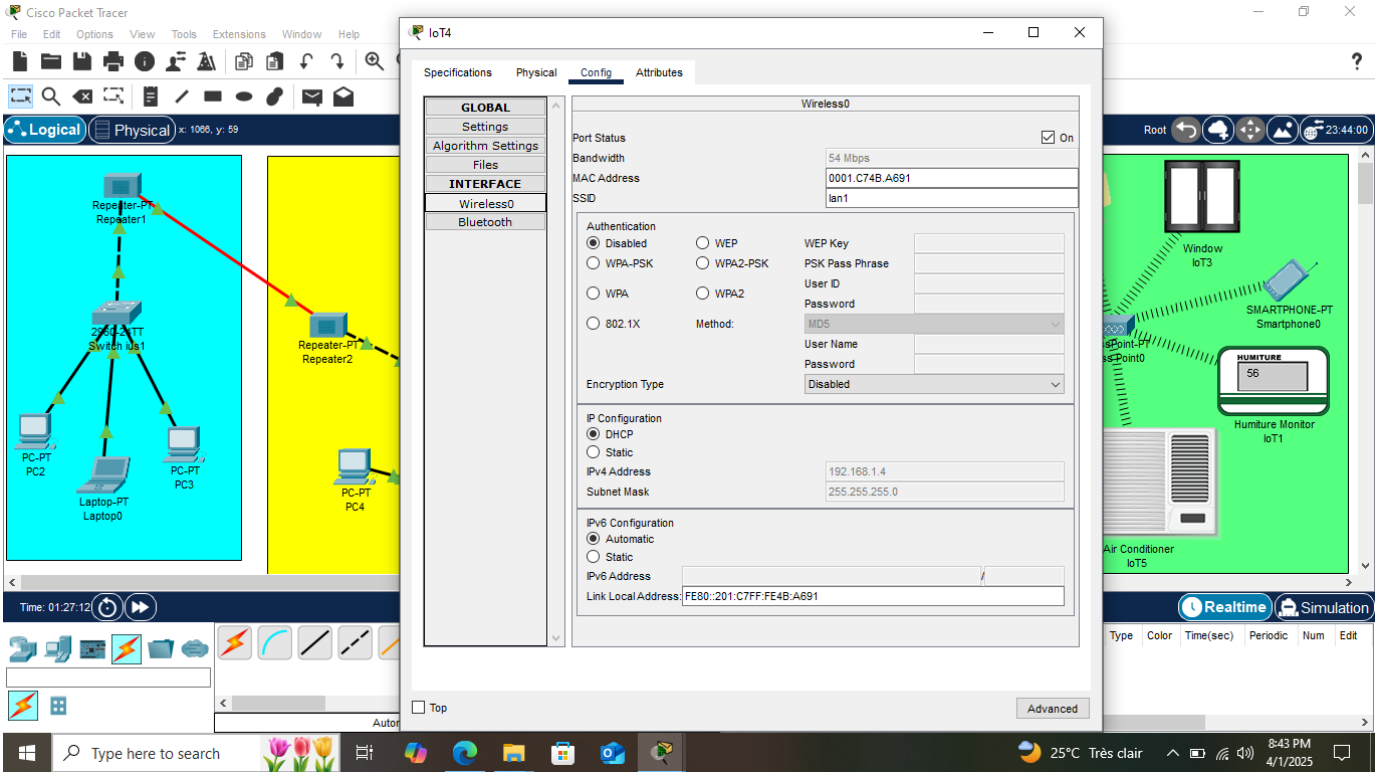

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 716, y: 41
Root 22:10:30
ius.com
Physical Config Services Desktop Programming Attributes
IP Configuration
IP Configuration
DHCP Static DHCP request successful.
IPv4 Address 192.168.1.16
Subnet Mask 255.255.255.0
Default Gateway 192.168.1.1
DNS Server 192.168.1.2
IPv6 Configuration
Automatic Static
IPv6 Address
Link Local Address FE80::250:FFF:FE8B:6A10
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Top
Repeater-PT Repeater1
2950-24TT Switch us1
Repeater-PT Repeater2
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
PC-PT PC4
Window IoT3
SMARTPHONE-PT Smartphone0
Humiture Monitor IoT1
Air Conditioner IoT5
Time: 01:24:28
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
Type here to search
25°C Très clair
8:40 PM 4/1/2025

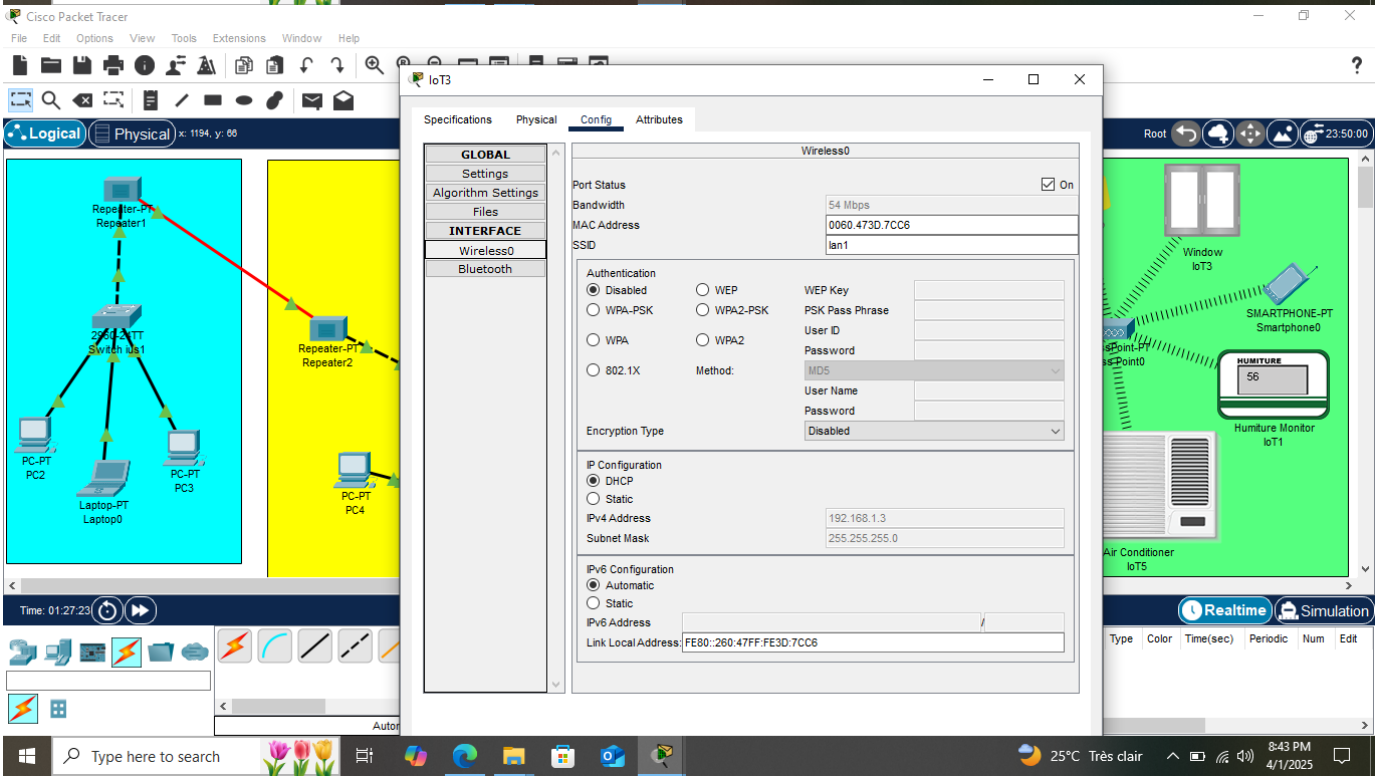

Cisco Packet Tracer
iot
Physical
Config
Services
Desktop
Programming
Attributes
IP Configuration
DHCP
Static
DHCP request successful.
IPv4 Address 192.168.1.17
Subnet Mask 255.255.255.0
Default Gateway 192.168.1.1
DNS Server 192.168.1.2
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address FE80::201:97FF:FE8A:6C5C
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Top
Logical
Physical
Root
Repeater-PT Repeater1
Repeater-PT Repeater2
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
PC-PT PC4
Window IoT3
SMARTPHONE-PT Smartphone0
Humiture Monitor IoT1
Air Conditioner IoT5
Realtime
Simulation
Type here to search
25°C Très clair
8:40 PM
4/1/2025

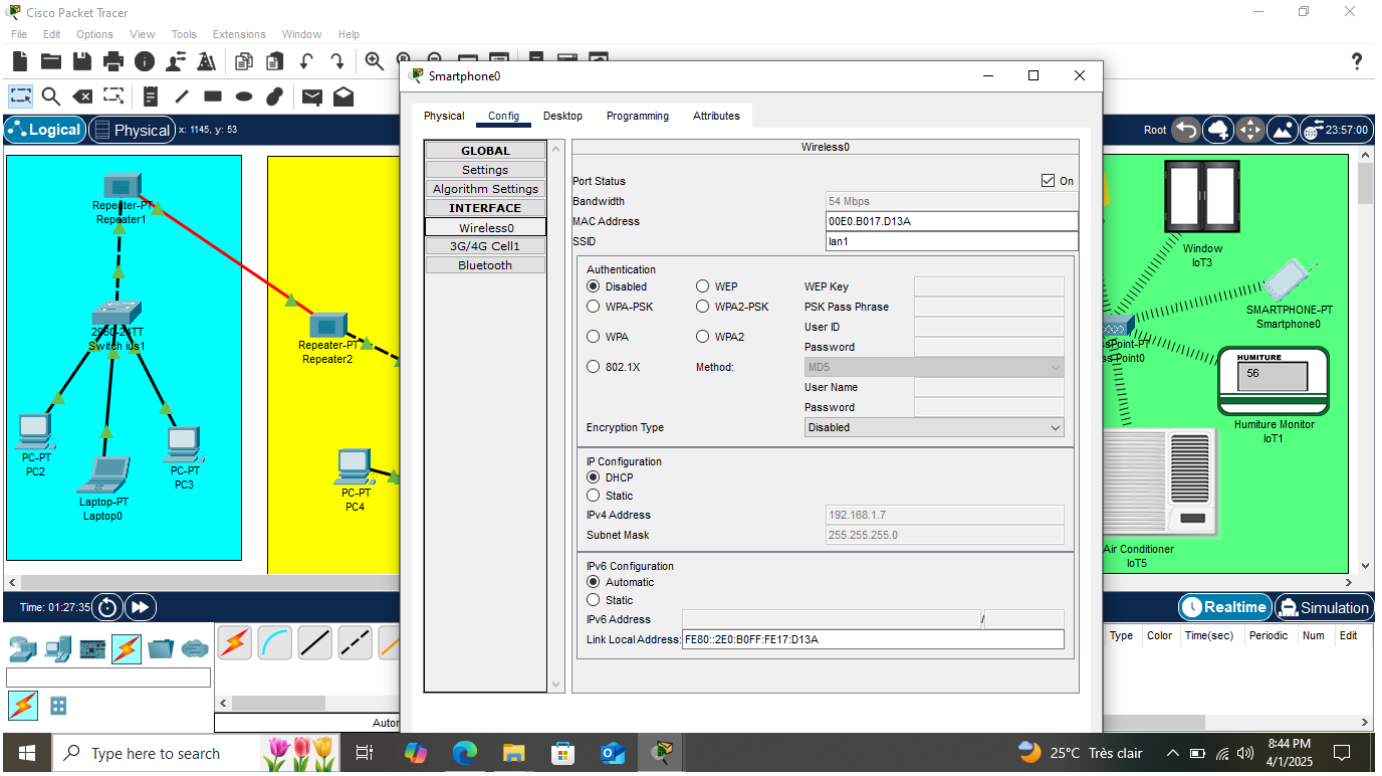

Cisco Packet Tracer
web.com
Physical
Config
Services
Desktop
Programming
Attributes
IP Configuration
DHCP
Static
DHCP request successful.
IPv4 Address 192.168.1.18
Subnet Mask 255.255.255.0
Default Gateway 192.168.1.1
DNS Server 192.168.1.2
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address FE80::20A:F3FF:FEBE:99A8
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Username
Password
Top
Logical
Physical
Root
Repeater-PT Repeater1
Repeater-PT Repeater2
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
PC-PT PC4
Window IoT3
SMARTPHONE-PT Smartphone0
Humiture Monitor IoT1
Air Conditioner IoT5
Realtime
Simulation
Type here to search
25°C Très clair
8:41 PM
4/1/2025

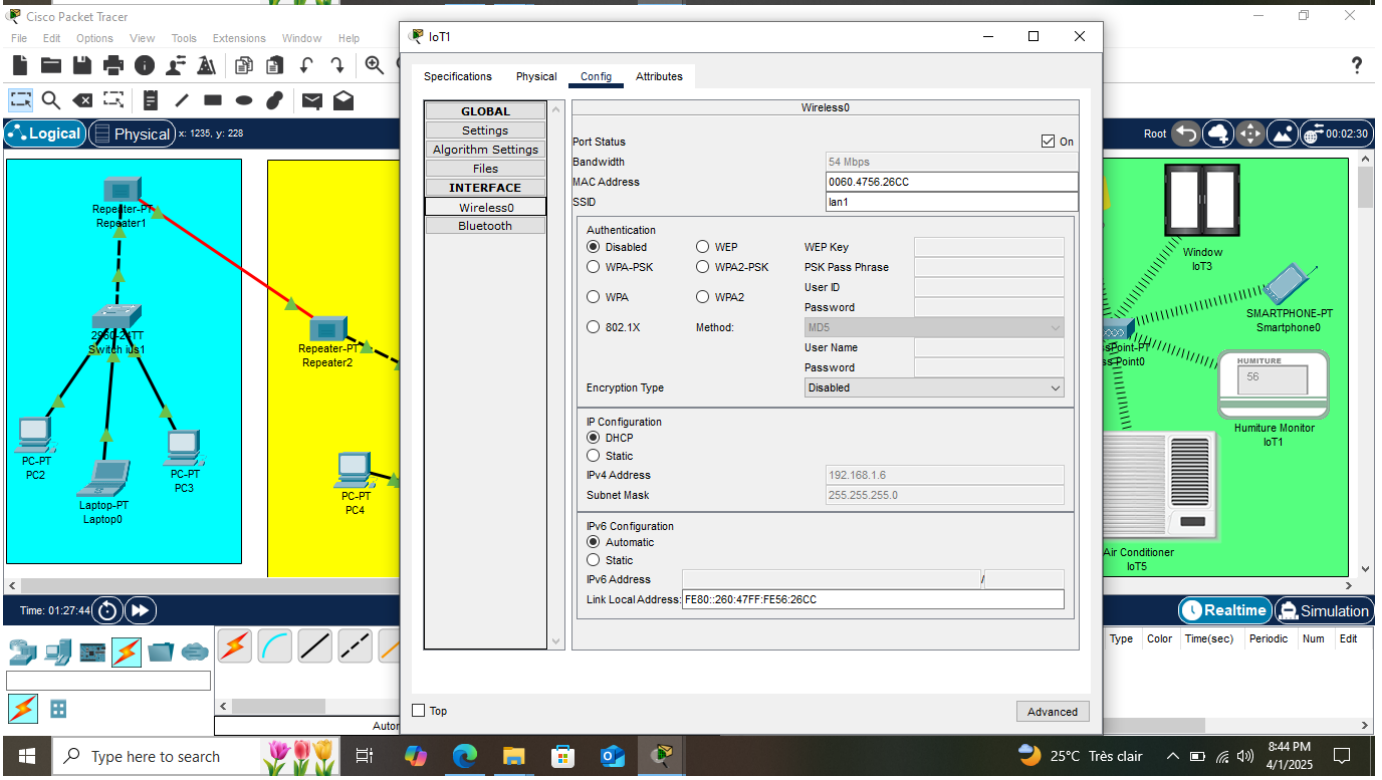

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 1088, y: 170
Root 22:49:30
Access Point0
Physical Config Attributes
GLOBAL
Settings
INTERFACE
Port 0
Port 1
Port 1
Port Status
On
SSID
lan1
2.4 GHz Channel
6
Coverage Range (meters)
140.00
Authentication
Disabled
WEP
WPA-PSK
WPA2-PSK
WEP Key
PSK Pass Phrase
User ID
Password
Encryption Type
Disabled
Top
Repeater-PT Repeater1
2960-24TT Switch us1
Repeater-PT Repeater2
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
PC-PT PC4
Window IoT3
SMARTPHONE-PT Smartphone0
HUMITURE 55
Humiture Monitor IoT1
Air Conditioner IoT5
Time: 01:25:34
Realtime
Simulation
Type Color Time(sec) Periodic Num Edit
Type here to search
25°C Très clair
8:41 PM 4/1/2025

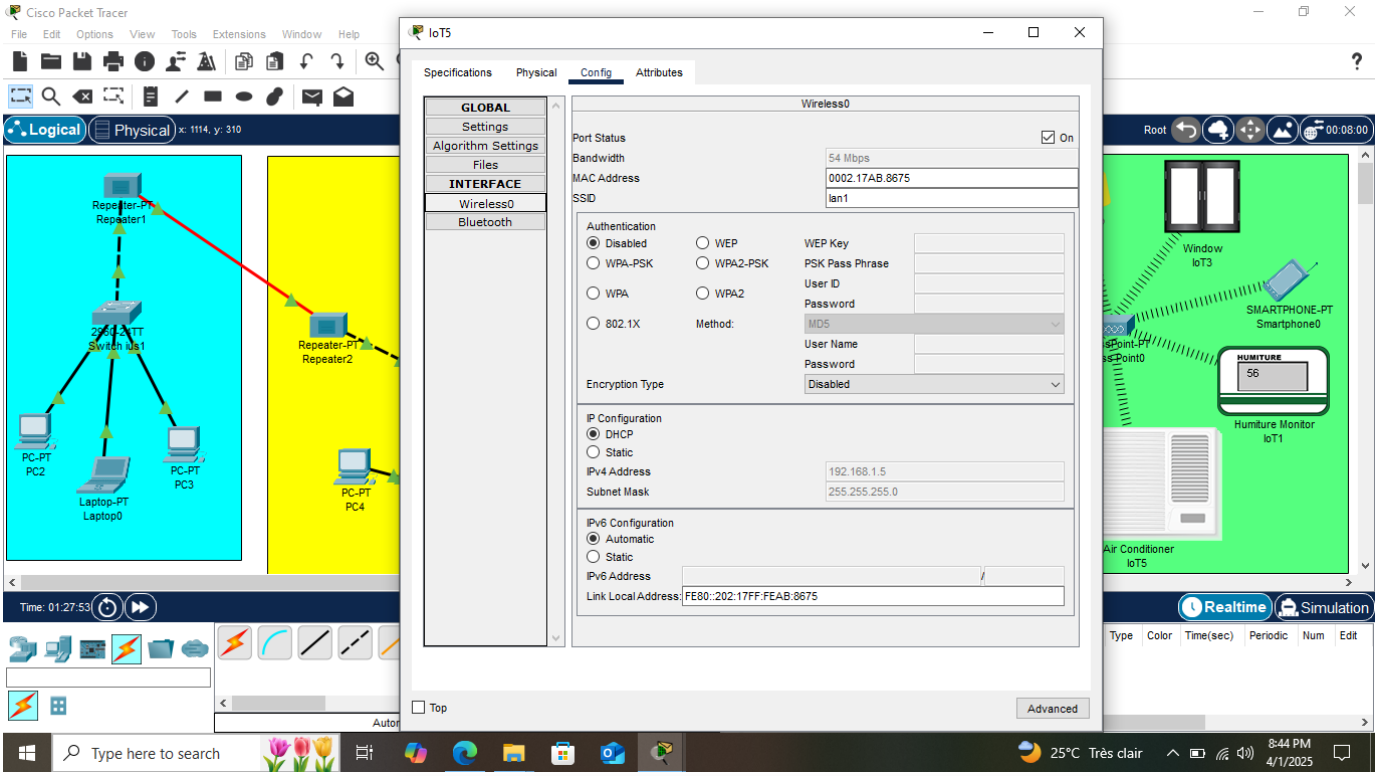

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 761, y: 151
Root 23:21:30
iot
Physical Config Services Desktop Programming Attributes
SERVICES
HTTP
DHCP
DHCPv6
TFTP
DNS
SYSLOG
AAA
NTP
EMAIL
FTP
IoT
VM Management
Radius EAP
Registration Server
This service runs on top of the HTTP or HTTPS service.
Service
On
Off
Delete
Top
Repeater-PT Repeater1
2960-24TT Switch us1
Repeater-PT Repeater2
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
PC-PT PC4
Window IoT3
SMARTPHONE-PT Smartphone0
HUMITURE 56
Humiture Monitor IoT1
Air Conditioner IoT5
Time: 01:26:32
Realtime
Simulation
Type Color Time(sec) Periodic Num Edit
Type here to search
25°C Très clair
8:42 PM 4/1/2025

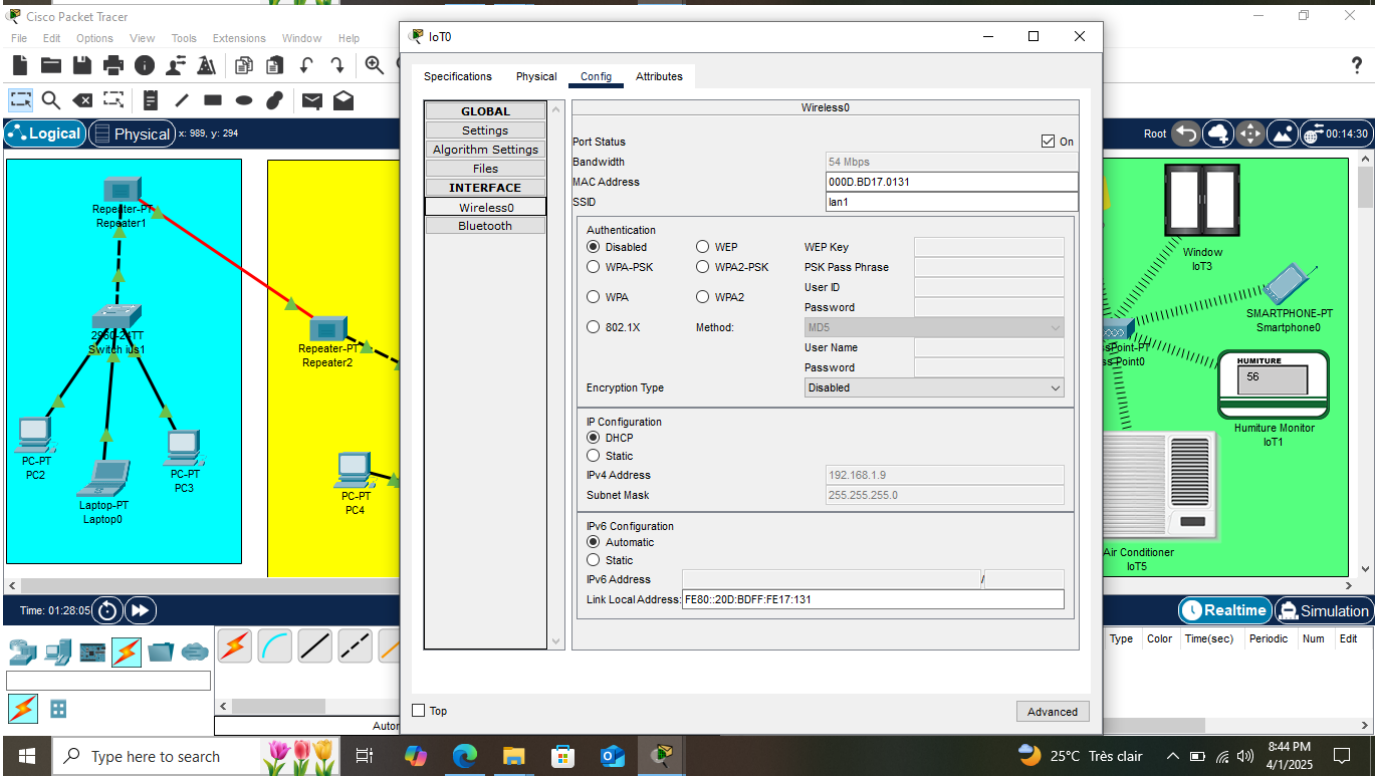

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 1066, y: 59
Root 23:44:00
IoT4
Specifications Physical Config Attributes
GLOBAL
Settings
Algorithm Settings
Files
INTERFACE
Wireless0
Bluetooth
Wireless0
Port Status On
Bandwidth 54 Mbps
MAC Address 0001.C74B.A691
SSID lan1
Authentication
Disabled WEP
WPA-PSK WPA2-PSK
WPA WPA2
802.1X
WEP Key
PSK Pass Phrase
User ID
Password
Method: MD5
User Name
Password
Encryption Type Disabled
IP Configuration
DHCP
Static
IPv4 Address 192.168.1.4
Subnet Mask 255.255.255.0
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address FE80::201:C7FF:FE4B:A691
Top
Advanced
Repeater-PT Repeater1
2960-24TT Switch ds1
Repeater-PT Repeater2
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
PC-PT PC4
Window IoT3
SMARTPHONE-PT Smartphone0
Humiture Monitor IoT1
Air Conditioner IoT5
Time: 01:27:12
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
Type here to search
25°C Très clair
8:43 PM 4/1/2025

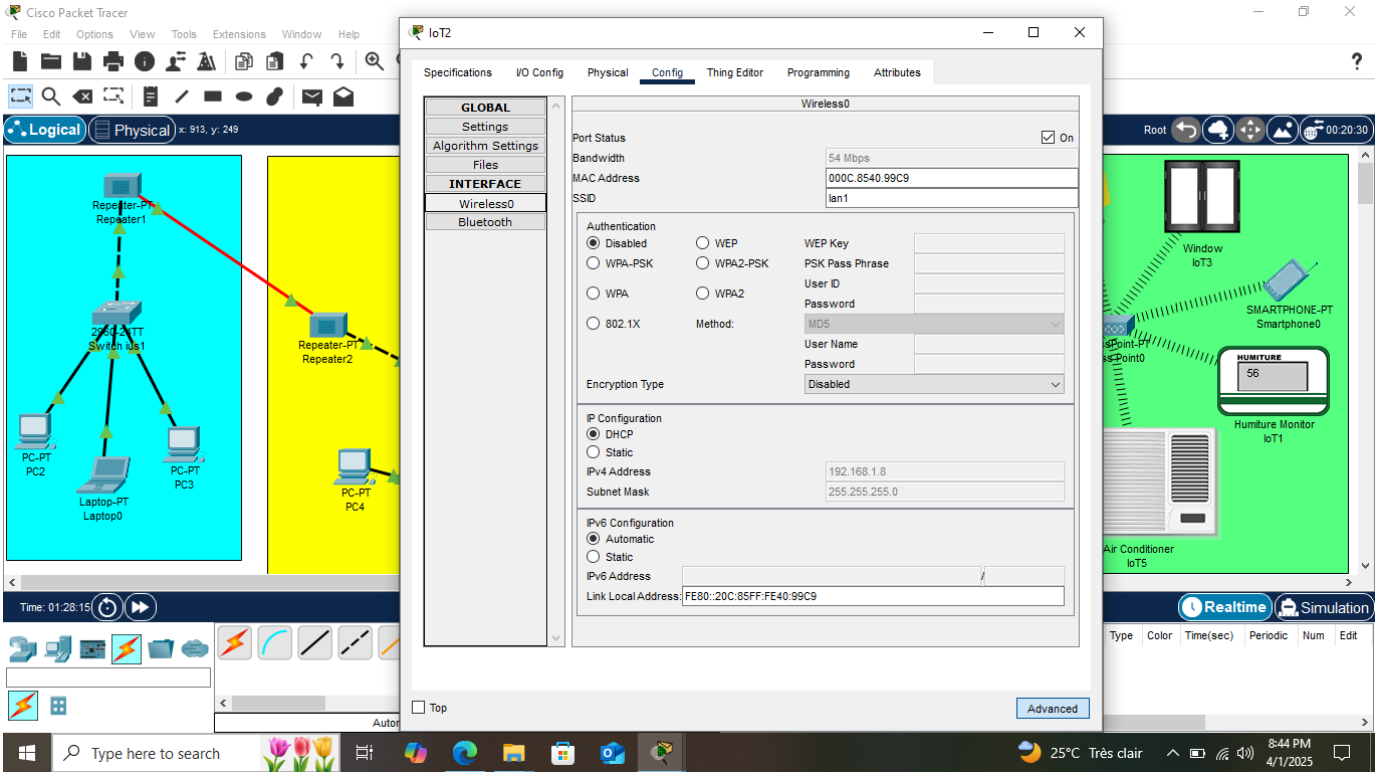

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical x: 1194, y: 66
Root 23:50:00
IoT3
Specifications Physical Config Attributes
GLOBAL
Settings
Algorithm Settings
Files
INTERFACE
Wireless0
Bluetooth
Wireless0
Port Status On
Bandwidth 54 Mbps
MAC Address 0060.473D.7CC6
SSID lan1
Authentication
Disabled WEP
WPA-PSK WPA2-PSK
WPA WPA2
802.1X
WEP Key
PSK Pass Phrase
User ID
Password
Method: MD5
User Name
Password
Encryption Type Disabled
IP Configuration
DHCP
Static
IPv4 Address 192.168.1.3
Subnet Mask 255.255.255.0
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address FE80::260:47FF:FE3D:7CC6
Repeater-PT Repeater1
2960-24TT Switch ds1
Repeater-PT Repeater2
PC-PT PC2
PC-PT PC3
Laptop-PT Laptop0
PC-PT PC4
Window IoT3
SMARTPHONE-PT Smartphone0
Humiture Monitor IoT1
Air Conditioner IoT5
Time: 01:27:23
Realtime Simulation
Type Color Time(sec) Periodic Num Edit
Type here to search
25°C Très clair
8:43 PM 4/1/2025

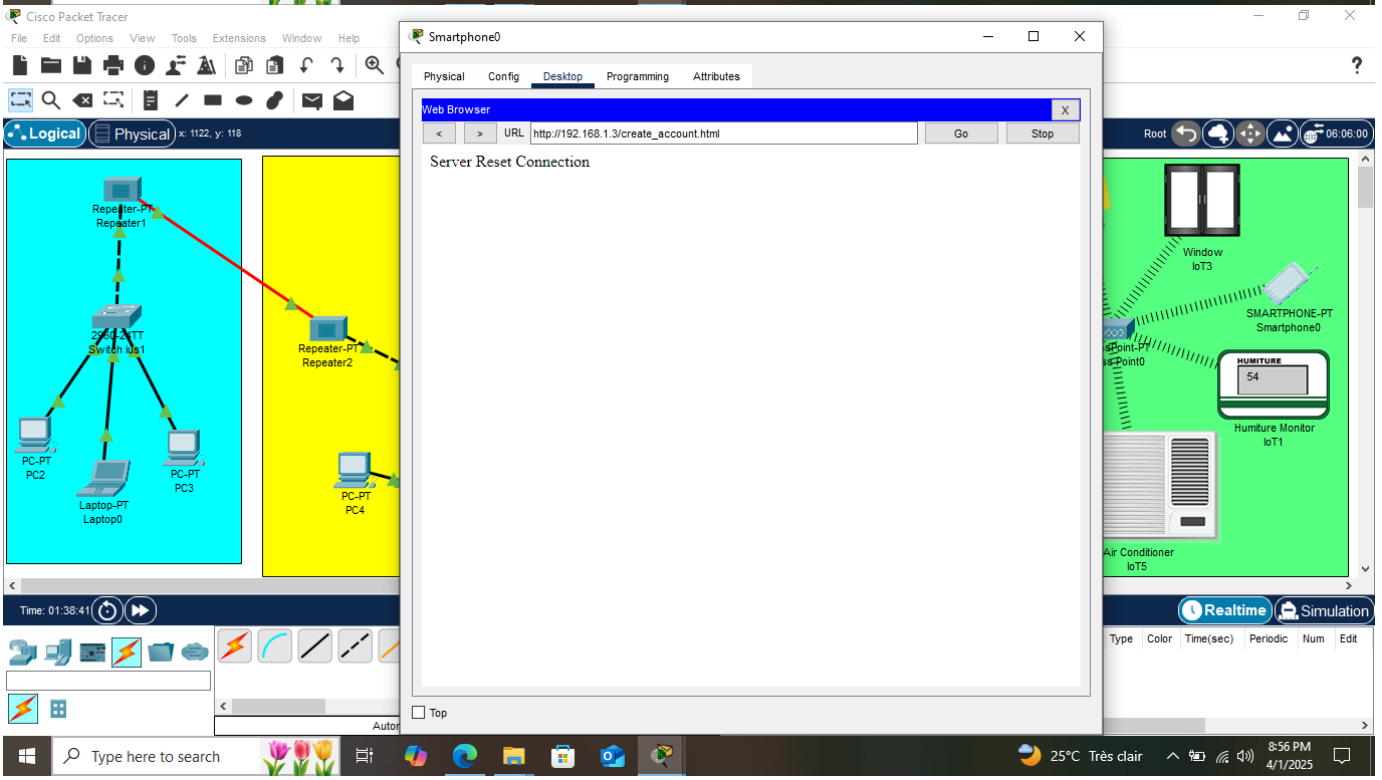

Cisco Packet Tracer
Smartphone0
Physical
Config
Desktop
Programming
Attributes
GLOBAL
Settings
Algorithm Settings
INTERFACE
Wireless0
3G/4G Cell1
Bluetooth
Wireless0
Port Status
On
Bandwidth
54 Mbps
MAC Address
00E0.B017.D13A
SSID
lan1
Authentication
Disabled
WEP
WPA-PSK
WPA2-PSK
WPA
WPA2
802.1X
Method:
MD5
WEP Key
PSK Pass Phrase
User ID
Password
User Name
Password
Encryption Type
Disabled
IP Configuration
DHCP
Static
IPv4 Address
192.168.1.7
Subnet Mask
255.255.255.0
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::2E0:B0FF:FE17:D13A
Logical
Physical
Root
Repeater-PT
Repeater1
Repeater-PT
Repeater2
PC-PT
PC2
PC-PT
PC3
Laptop-PT
Laptop0
PC-PT
PC4
Window
IoT3
SMARTPHONE-PT
Smartphone0
Humiture Monitor
IoT1
Air Conditioner
IoT5
Realtime
Simulation
Type
Color
Time(sec)
Periodic
Num
Edit
Time: 01:27:35
Type here to search
25°C Très clair
8:44 PM
4/1/2025

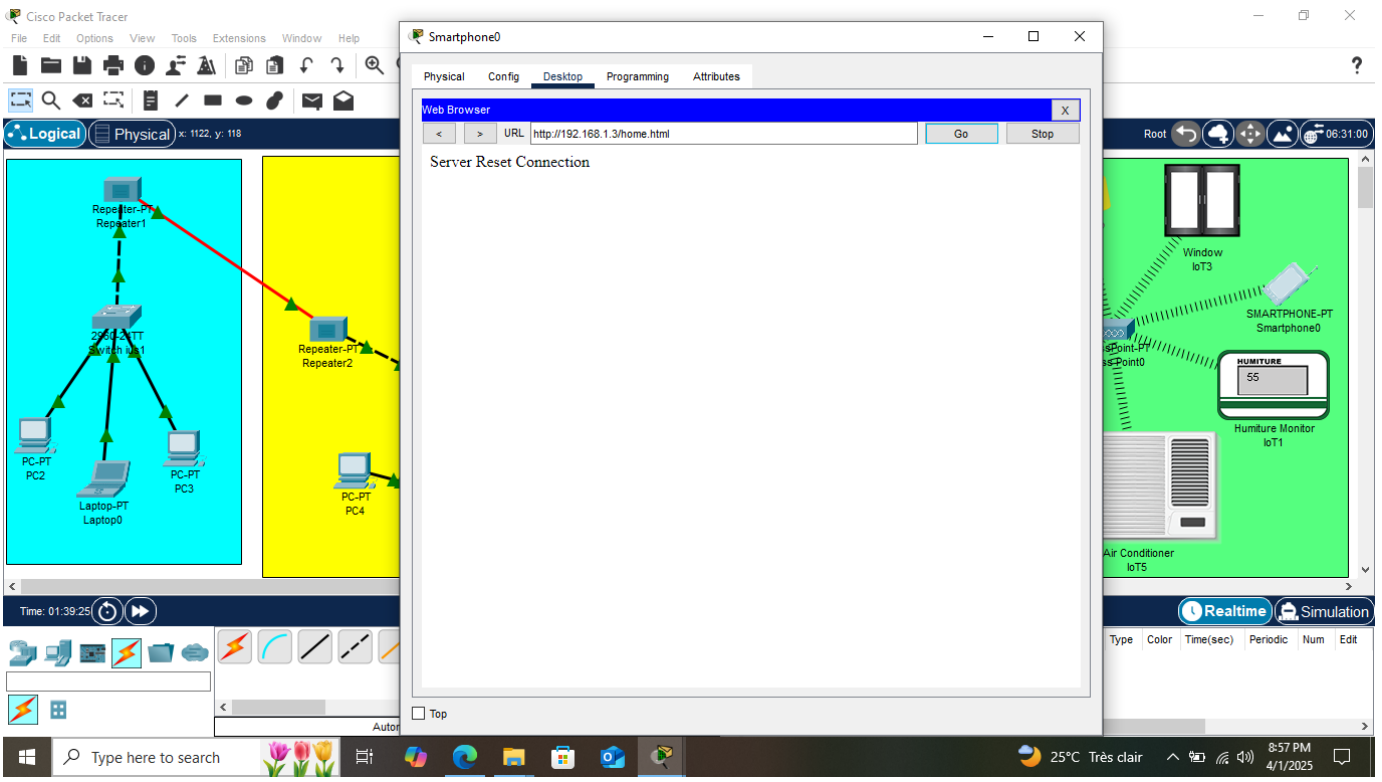

Cisco Packet Tracer
IoT1
Specifications
Physical
Config
Attributes
GLOBAL
Settings
Algorithm Settings
Files
INTERFACE
Wireless0
Bluetooth
Wireless0
Port Status
On
Bandwidth
54 Mbps
MAC Address
0060.4756.26CC
SSID
lan1
Authentication
Disabled
WEP
WPA-PSK
WPA2-PSK
WPA
WPA2
802.1X
Method:
MD5
WEP Key
PSK Pass Phrase
User ID
Password
User Name
Password
Encryption Type
Disabled
IP Configuration
DHCP
Static
IPv4 Address
192.168.1.6
Subnet Mask
255.255.255.0
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::260:47FF:FE56:26CC
Top
Advanced
Logical
Physical
Root
Repeater-PT
Repeater1
Repeater-PT
Repeater2
PC-PT
PC2
PC-PT
PC3
Laptop-PT
Laptop0
PC-PT
PC4
Window
IoT3
SMARTPHONE-PT
Smartphone0
Humiture Monitor
IoT1
Air Conditioner
IoT5
Realtime
Simulation
Type
Color
Time(sec)
Periodic
Num
Edit
Time: 01:27:44
Type here to search
25°C Très clair
8:44 PM
4/1/2025


Cisco Packet Tracer
IoT5
Specifications
Physical
Config
Attributes
GLOBAL
Settings
Algorithm Settings
Files
INTERFACE
Wireless0
Bluetooth
Wireless0
Port Status
On
Bandwidth
54 Mbps
MAC Address
0002.17AB.8675
SSID
lan1
Authentication
Disabled
WEP
WPA-PSK
WPA2-PSK
WPA
WPA2
802.1X
Method:
MD5
WEP Key
PSK Pass Phrase
User ID
Password
User Name
Password
Encryption Type
Disabled
IP Configuration
DHCP
Static
IPv4 Address
192.168.1.5
Subnet Mask
255.255.255.0
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::202:17FF:FEAB:8675
Top
Advanced
Logical
Physical
Root
Repeater-PT
Repeater1
2960-24TT
Switch ds1
Repeater-PT
Repeater2
PC-PT
PC2
PC-PT
PC3
Laptop-PT
Laptop0
PC-PT
PC4
Window
IoT3
SMARTPHONE-PT
Smartphone0
HUMITURE
56
Humiture Monitor
IoT1
Air Conditioner
IoT5
Realtime
Simulation
Type
Color
Time(sec)
Periodic
Num
Edit
Type here to search
25°C Très clair
8:44 PM
4/1/2025


Cisco Packet Tracer
IoT0
Specifications
Physical
Config
Attributes
GLOBAL
Settings
Algorithm Settings
Files
INTERFACE
Wireless0
Bluetooth
Wireless0
Port Status
On
Bandwidth
54 Mbps
MAC Address
000D.BD17.0131
SSID
lan1
Authentication
Disabled
WEP
WPA-PSK
WPA2-PSK
WPA
WPA2
802.1X
Method:
MD5
WEP Key
PSK Pass Phrase
User ID
Password
User Name
Password
Encryption Type
Disabled
IP Configuration
DHCP
Static
IPv4 Address
192.168.1.9
Subnet Mask
255.255.255.0
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::20D:BDFF:FE17:131
Top
Advanced
Logical
Physical
Root
Repeater-PT
Repeater1
2960-24TT
Switch ds1
Repeater-PT
Repeater2
PC-PT
PC2
PC-PT
PC3
Laptop-PT
Laptop0
PC-PT
PC4
Window
IoT3
SMARTPHONE-PT
Smartphone0
HUMITURE
56
Humiture Monitor
IoT1
Air Conditioner
IoT5
Realtime
Simulation
Type
Color
Time(sec)
Periodic
Num
Edit
Type here to search
25°C Très clair
8:44 PM
4/1/2025


Cisco Packet Tracer
IoT2
Specifications
I/O Config
Physical
Config
Thing Editor
Programming
Attributes
GLOBAL
Settings
Algorithm Settings
Files
INTERFACE
Wireless0
Bluetooth
Wireless0
Port Status
On
Bandwidth
54 Mbps
MAC Address
000C.8540.99C9
SSID
lan1
Authentication
Disabled
WEP
WPA-PSK
WPA2-PSK
WPA
WPA2
802.1X
Method:
MD5
WEP Key
PSK Pass Phrase
User ID
Password
User Name
Password
Encryption Type
Disabled
IP Configuration
DHCP
Static
IPv4 Address
192.168.1.8
Subnet Mask
255.255.255.0
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::20C:85FF:FE40:99C9
Top
Advanced
Logical
Physical
Root
Repeater-PT
Repeater1
Repeater-PT
Repeater2
PC-PT
PC2
PC-PT
PC3
Laptop-PT
Laptop0
PC-PT
PC4
Window
IoT3
SMARTPHONE-PT
Smartphone0
HUMITURE
56
Humiture Monitor
IoT1
Air Conditioner
IoT5
Realtime
Simulation
Type
Color
Time(sec)
Periodic
Num
Edit
Time: 01:28:15
Type here to search
25°C Très clair
8:44 PM
4/1/2025


Cisco Packet Tracer
Smartphone0
Physical
Config
Desktop
Programming
Attributes
Web Browser
URL
http://192.168.1.3/create_account.html
Go
Stop
Server Reset Connection
Top
Logical
Physical
Root
Repeater-PT
Repeater1
Repeater-PT
Repeater2
PC-PT
PC2
PC-PT
PC3
Laptop-PT
Laptop0
PC-PT
PC4
Window
IoT3
SMARTPHONE-PT
Smartphone0
HUMITURE
54
Humiture Monitor
IoT1
Air Conditioner
IoT5
Realtime
Simulation
Type
Color
Time(sec)
Periodic
Num
Edit
Time: 01:38:41
Type here to search
25°C Très clair
8:56 PM
4/1/2025



Conclusion

Ce TD m’a permis de mieux comprendre le rôle de la NAT dans la gestion des adresses IP et l’accès à Internet. J’ai également appris à intégrer des dispositifs IoT dans un réseau Cisco, en configurant leur connectivité et en testant leur interopérabilité. Ces compétences sont essentielles pour concevoir des réseaux modernes, notamment dans les domaines de la domotique et des villes intelligentes.