

ĐẠI HỌC QUỐC GIA TP.HCM
TRƯỜNG ĐẠI HỌC KHOA HỌC TỰ NHIÊN
KHOA CÔNG NGHỆ THÔNG TIN



BÁO CÁO MÔN HỌC

- Đề tài

ĐỒ ÁN THỰC HÀNH – CISCO PACKET TRACER

➤ Môn học: Mạng máy tính

➤ Thực hiện:

NGUYỄN THÀNH SƯU

MSSV: 1712736

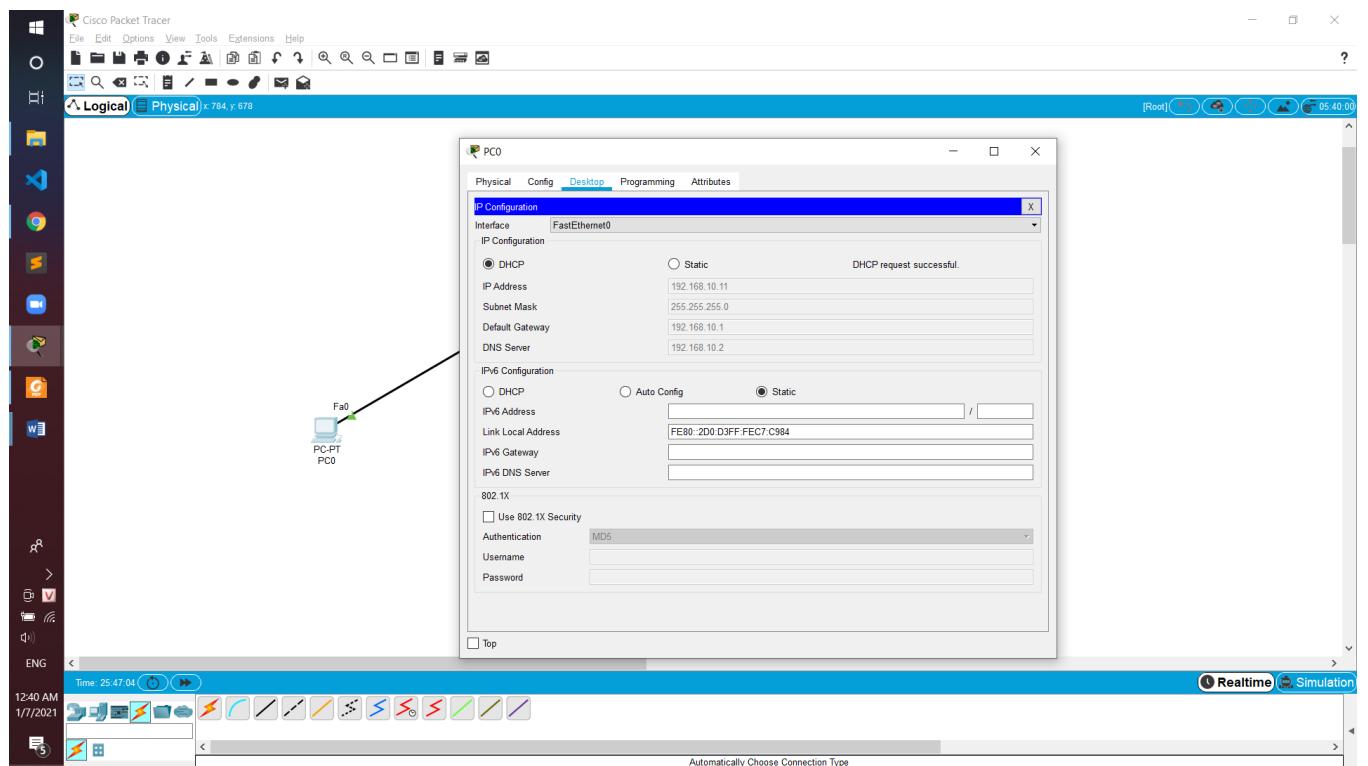
➤ Lớp: 19CTT3

➤ GVHD: LÊ HÀ MINH

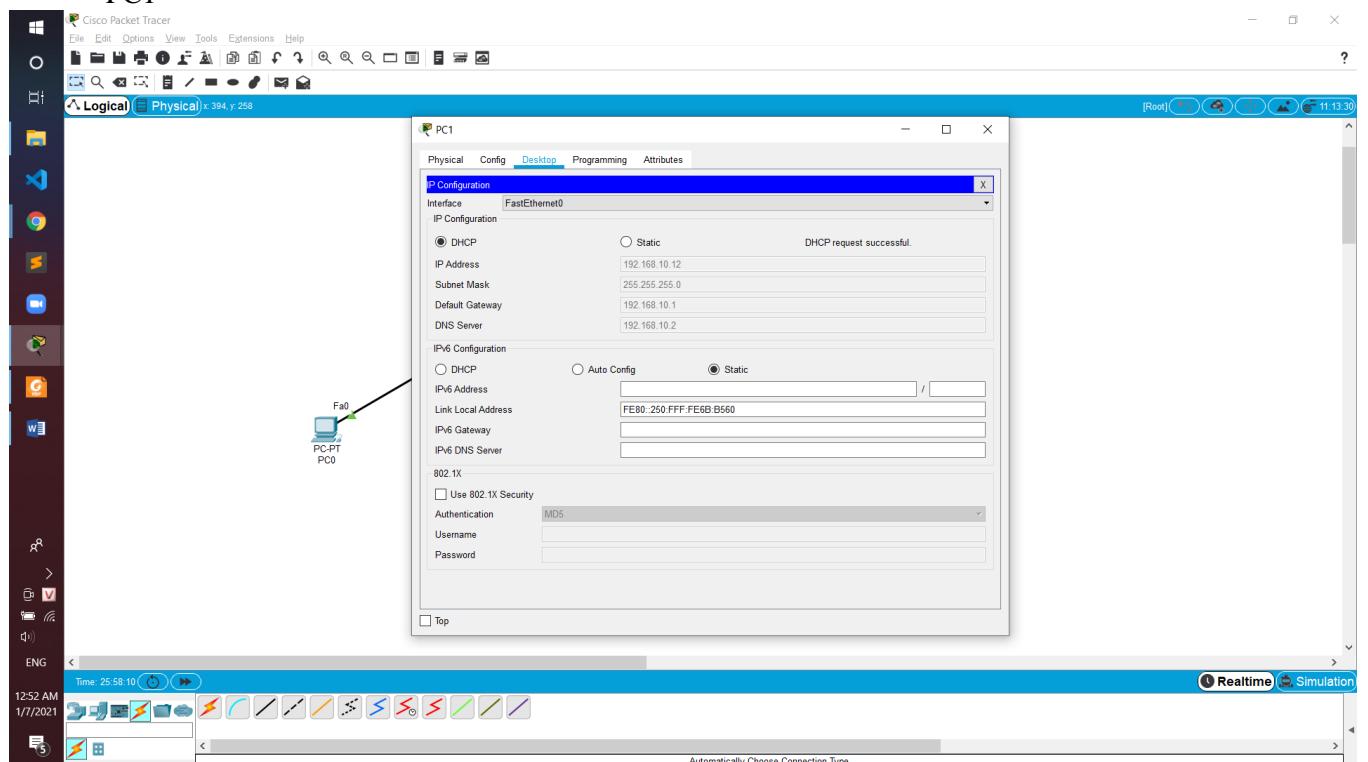
LAB01. DHCP configuration on CISCO router

Kết quả sau khi cấu hình

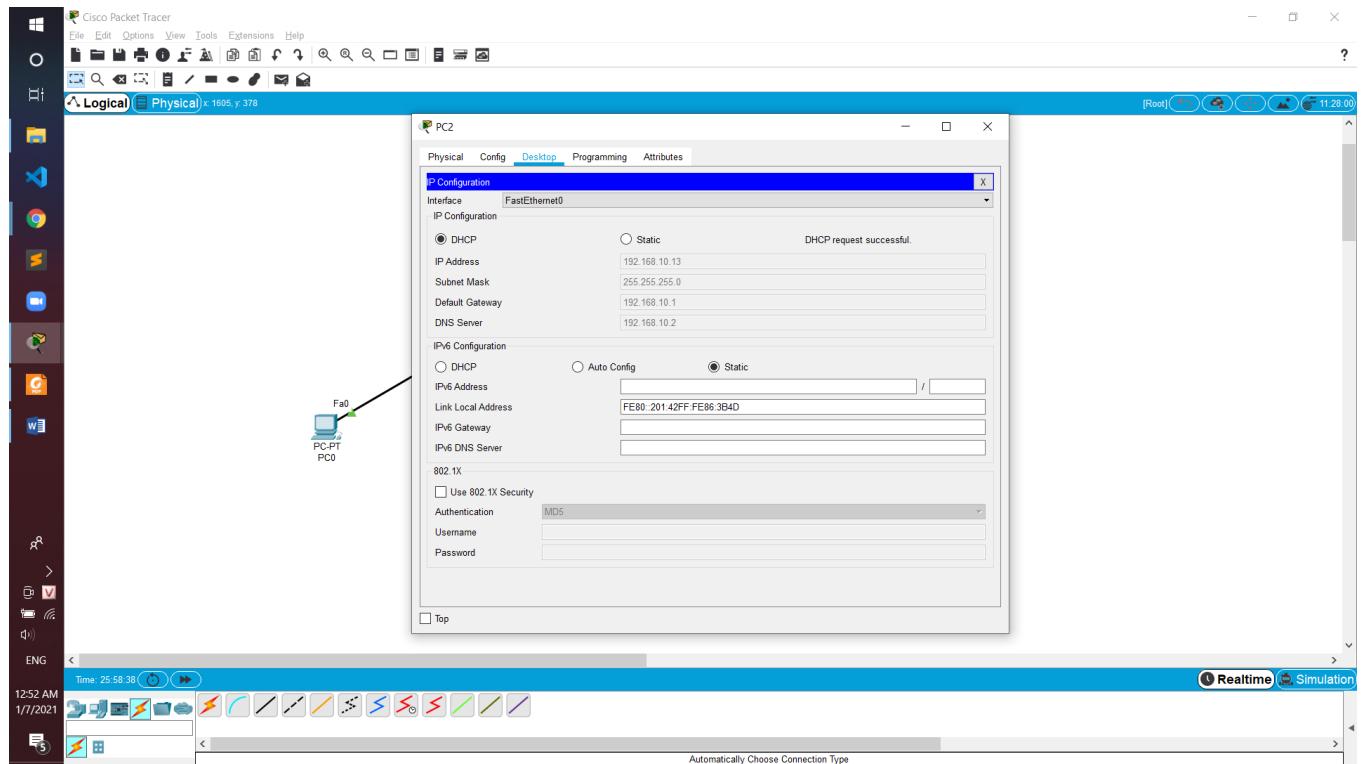
- PC0



- PC1



- PC2



Then, please answer the following questions:

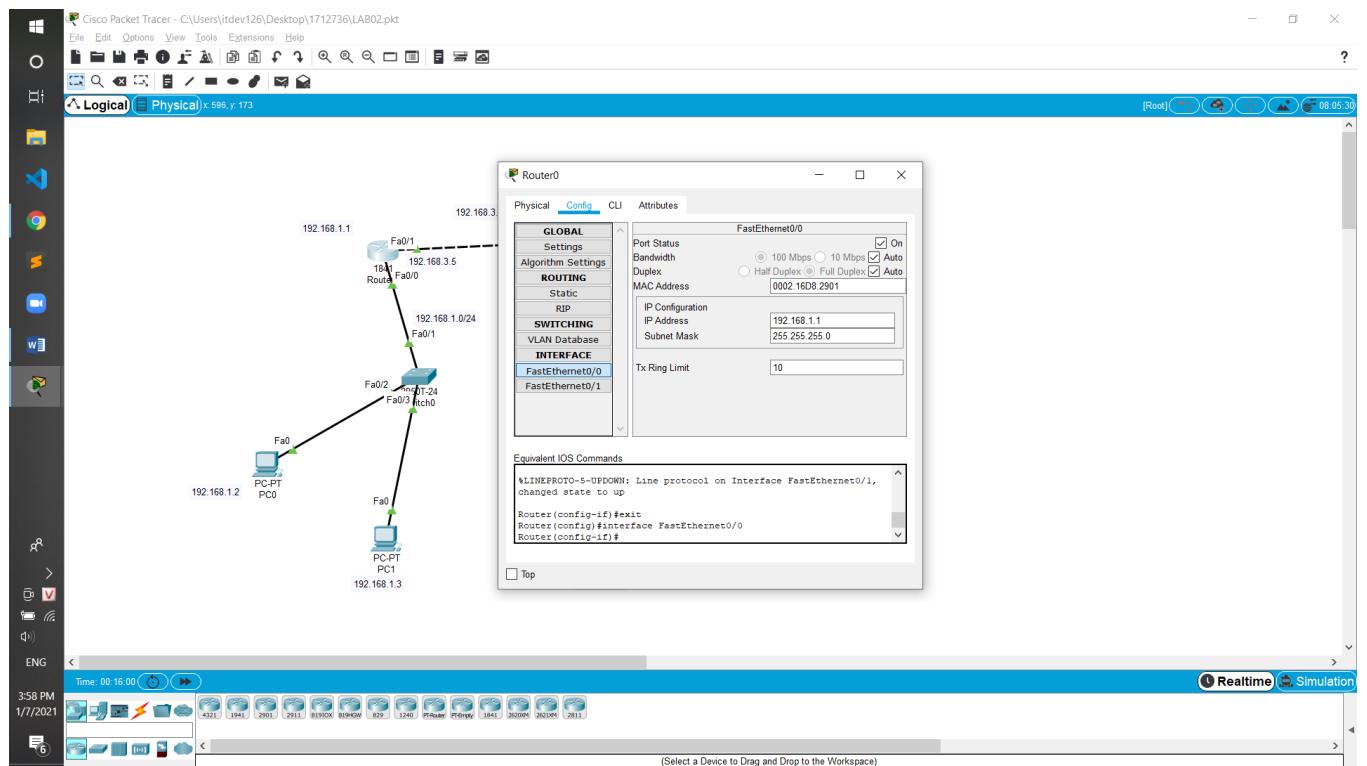
1. What is the IP addresses of PC0, PC1, PC2 which were acquired from DHCP?
 - PC0: 192.168.10.11
 - PC1: 192.168.10.12
 - PC2: 192.168.10.13
2. What is the gateway addresses of PC0, PC1, PC2?
 - PC0: 192.168.10.1
 - PC1: 192.168.10.1
 - PC2: 192.168.10.1
3. Which server is the DNS server for PC0, PC1, PC2
 - PC0: 192.168.10.2
 - PC1: 192.168.10.2
 - PC2: 192.168.10.2

Bảng đánh giá mức độ hoàn thành LAB01

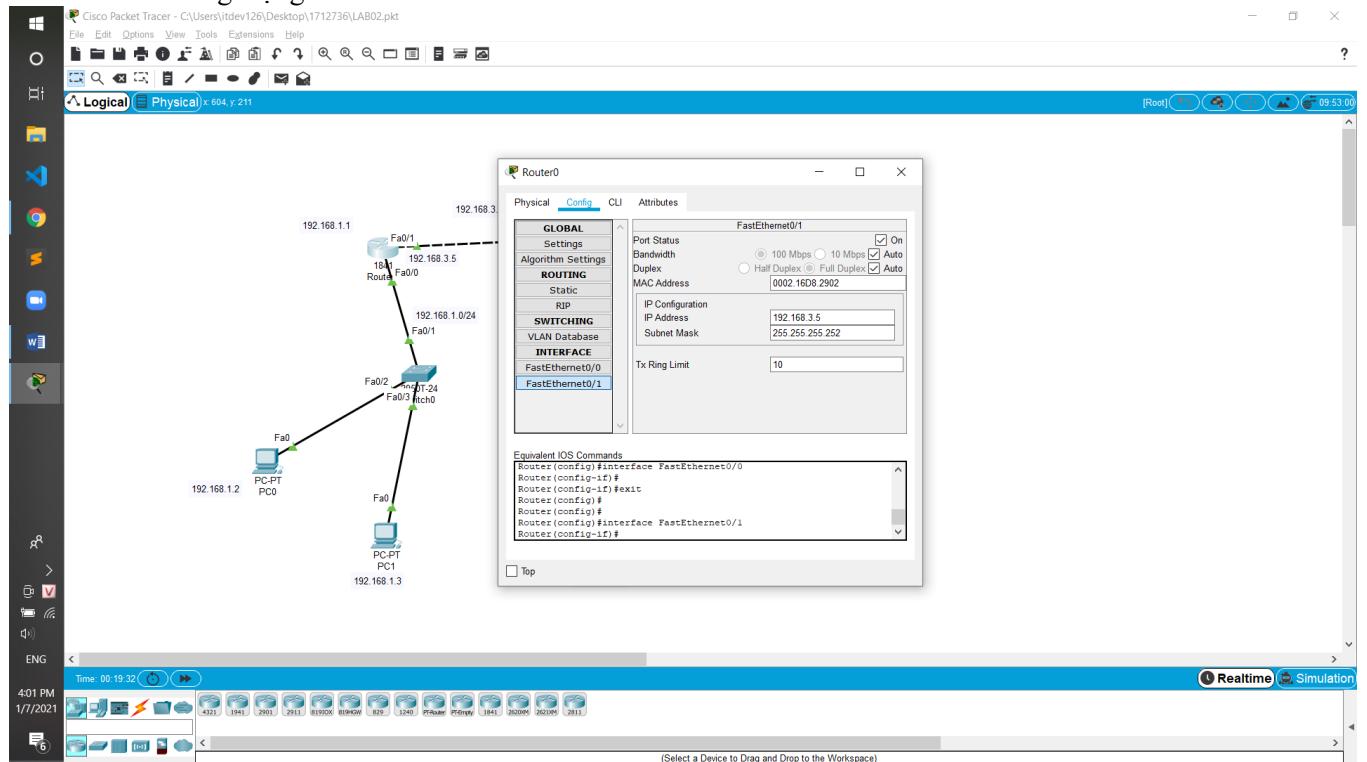
STT	Yêu cầu	Mức độ hoàn thành
1	What is the IP addresses of PC0, PC1, PC2 which were acquired from DHCP?	100%
2	What is the gateway addresses of PC0, PC1, PC2?	100%
3	Which server is the DNS server for PC0, PC1, PC2	100%

LAB02. Static routing implementation

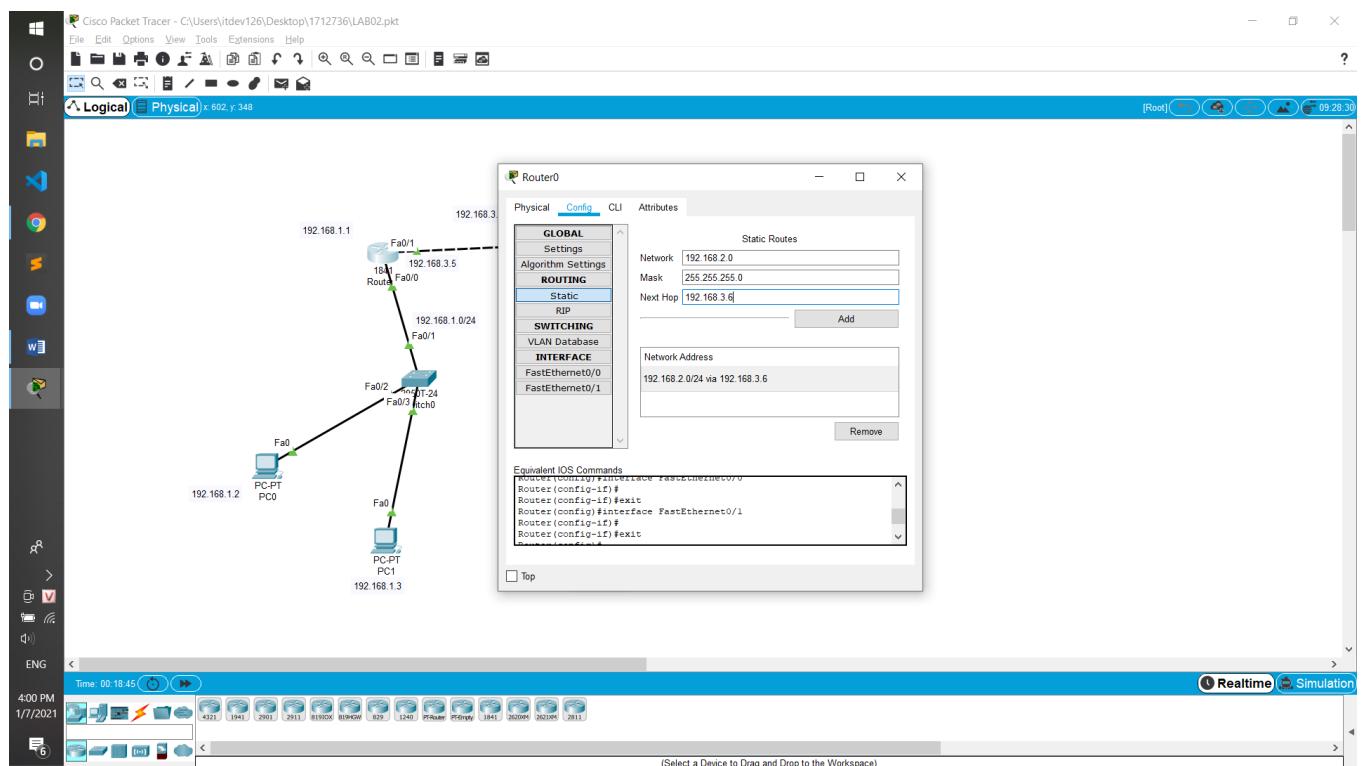
Cấu hình IP đường mạng Fa0/0 của Router0



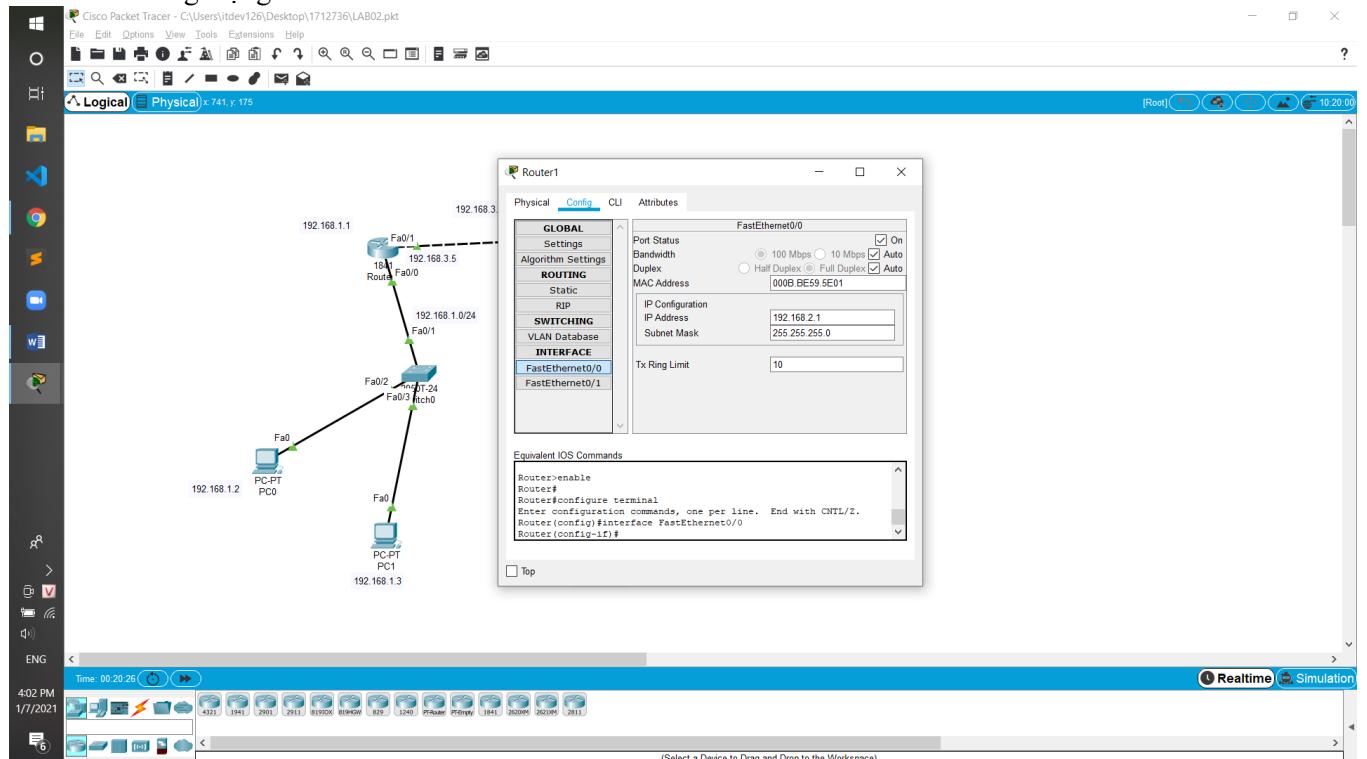
Cấu hình IP đường mạng Fa0/1 của Router0



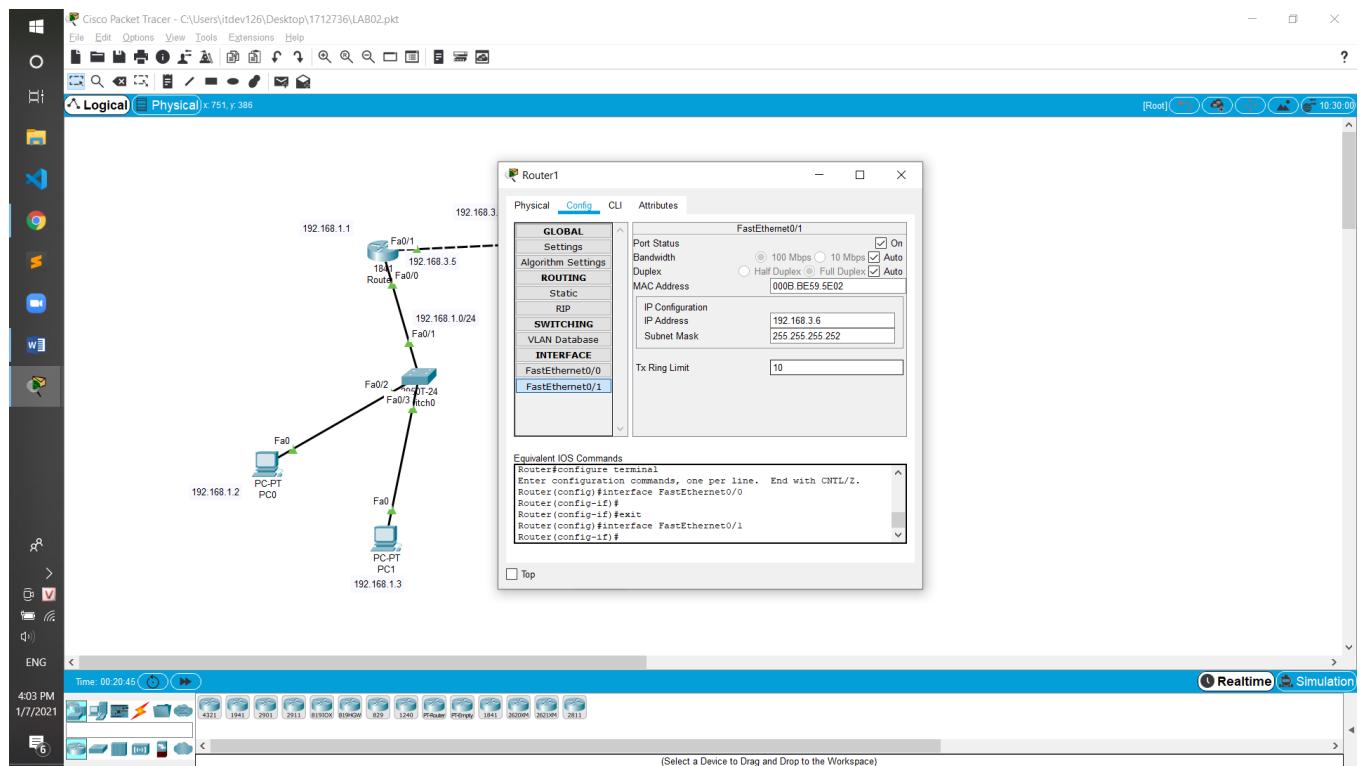
Cấu hình định tuyến tĩnh Router0



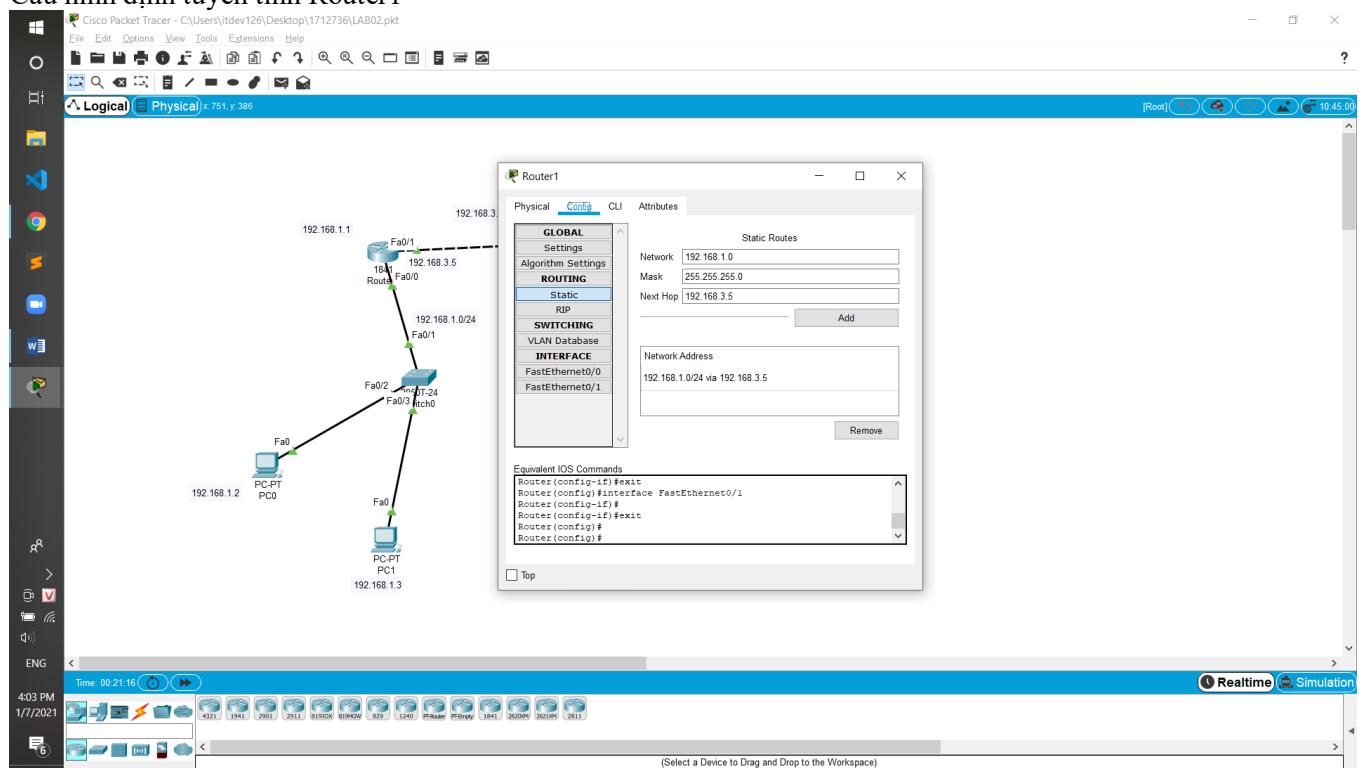
Cáu hình đường mạng Fa0/0 của Router1



Cáu hình đường mạng Fa0/1 của Router1

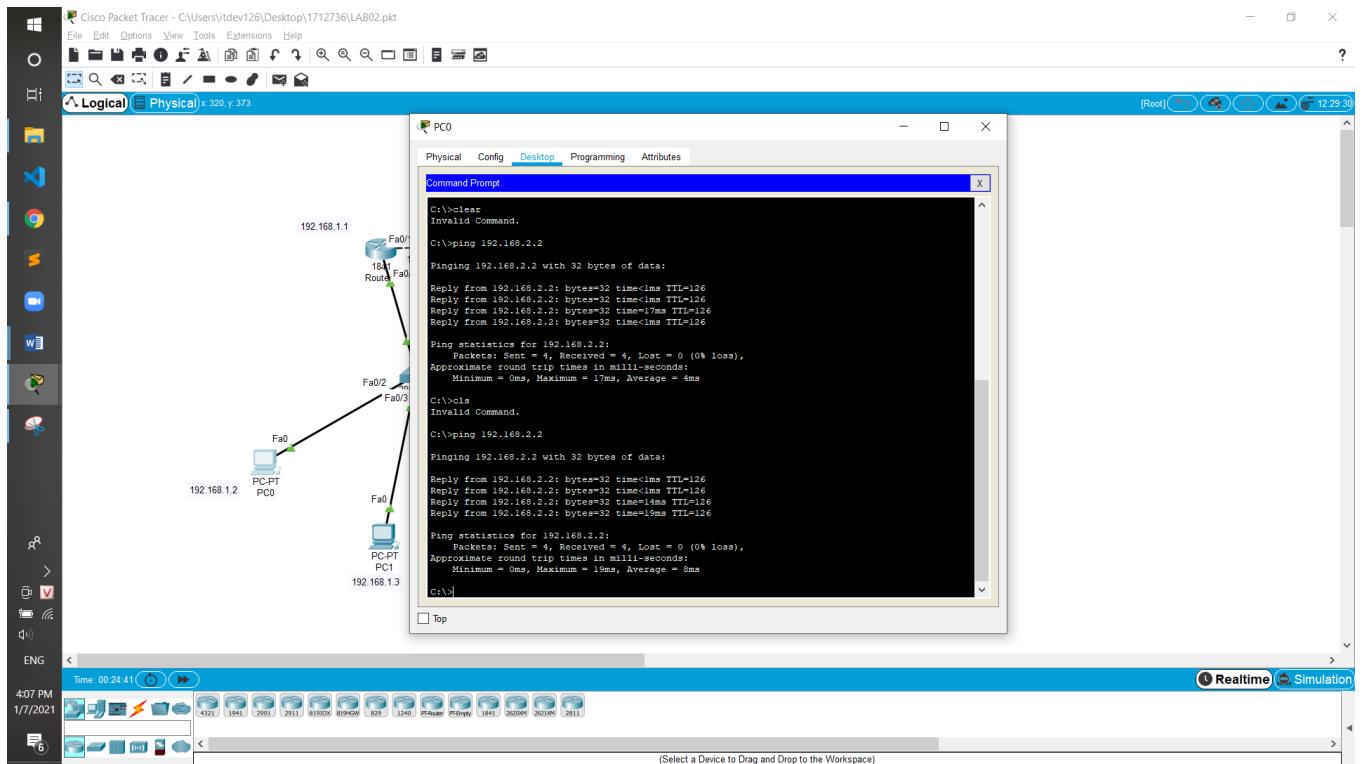


Cáu hình định tuyến tĩnh Router1

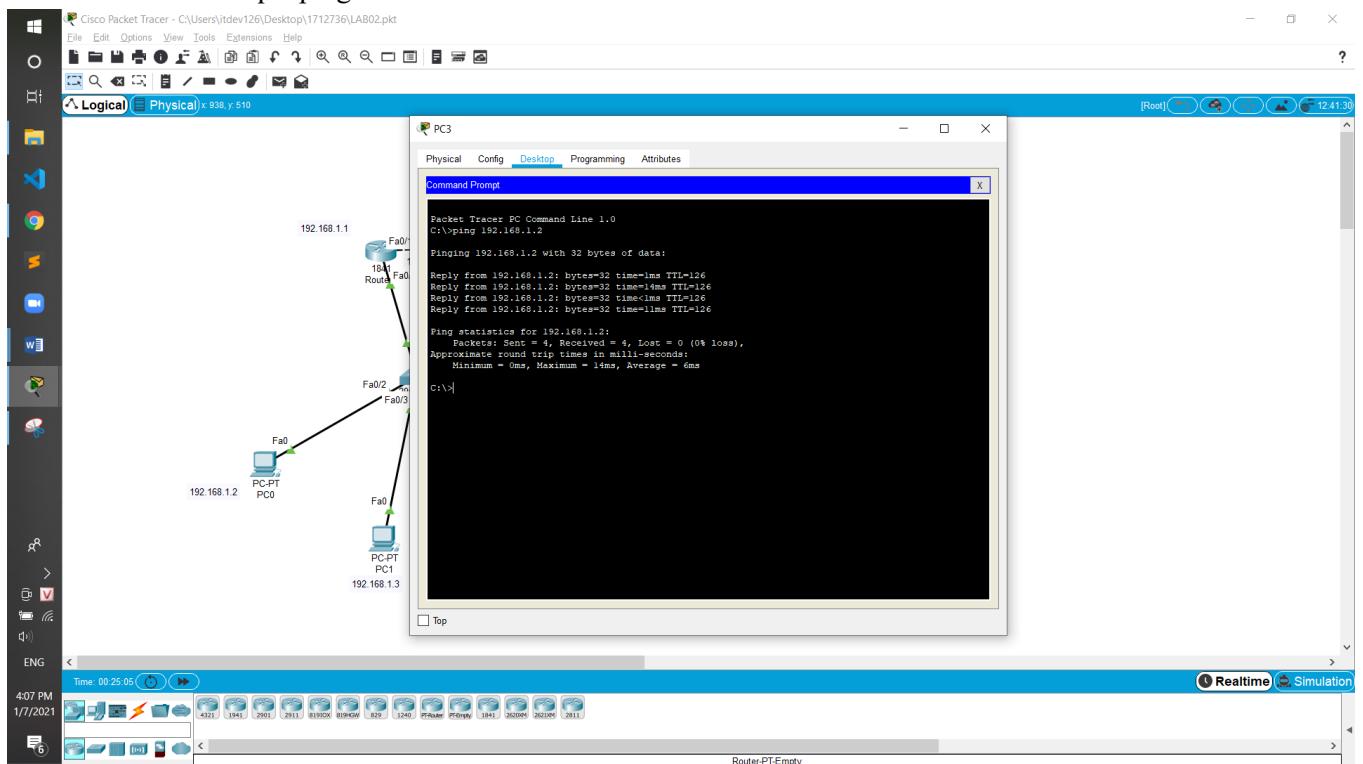


Please answer the following questions:

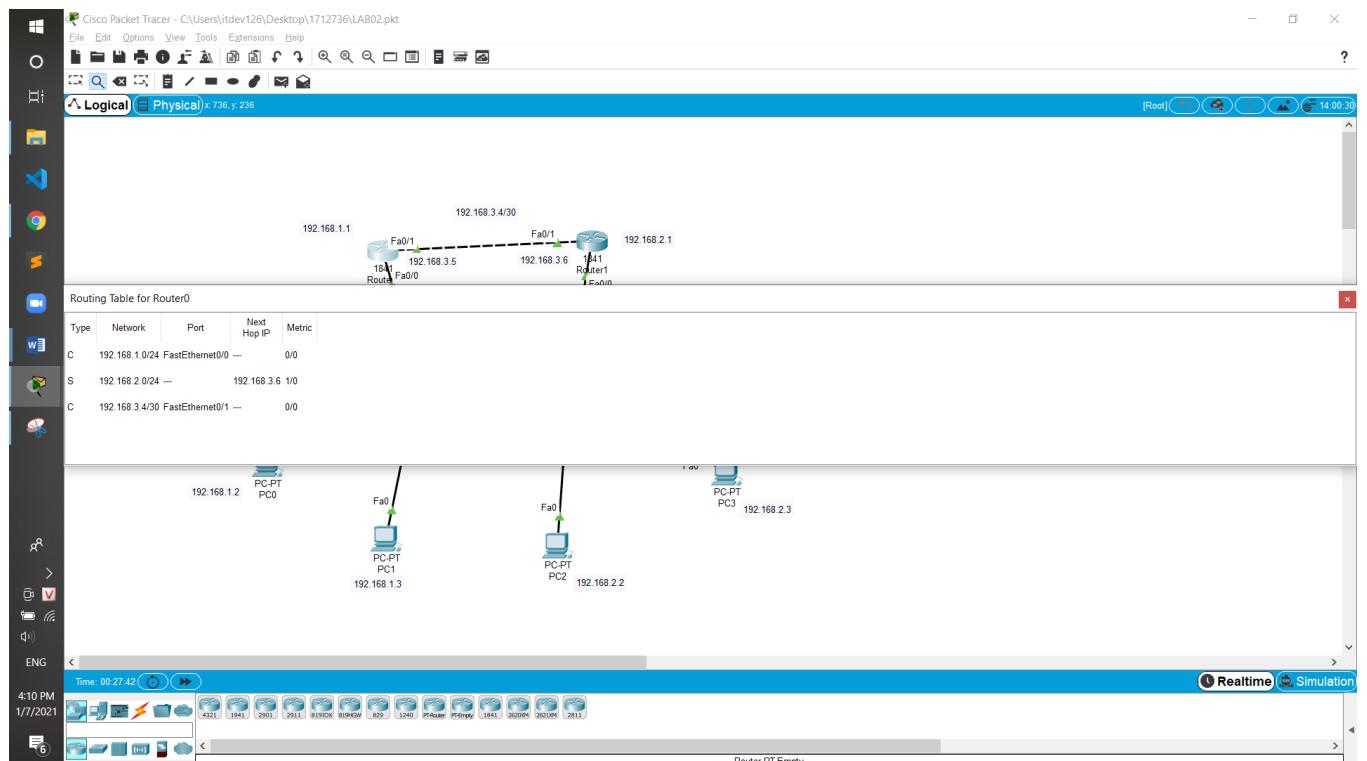
1. Execute ping commands and take screenshots the ping result between PC0 and PC2, PC3 and PC1
 - o Kết quả ping từ PC0 đến PC2



○ Kết quả ping từ PC3 đến PC1

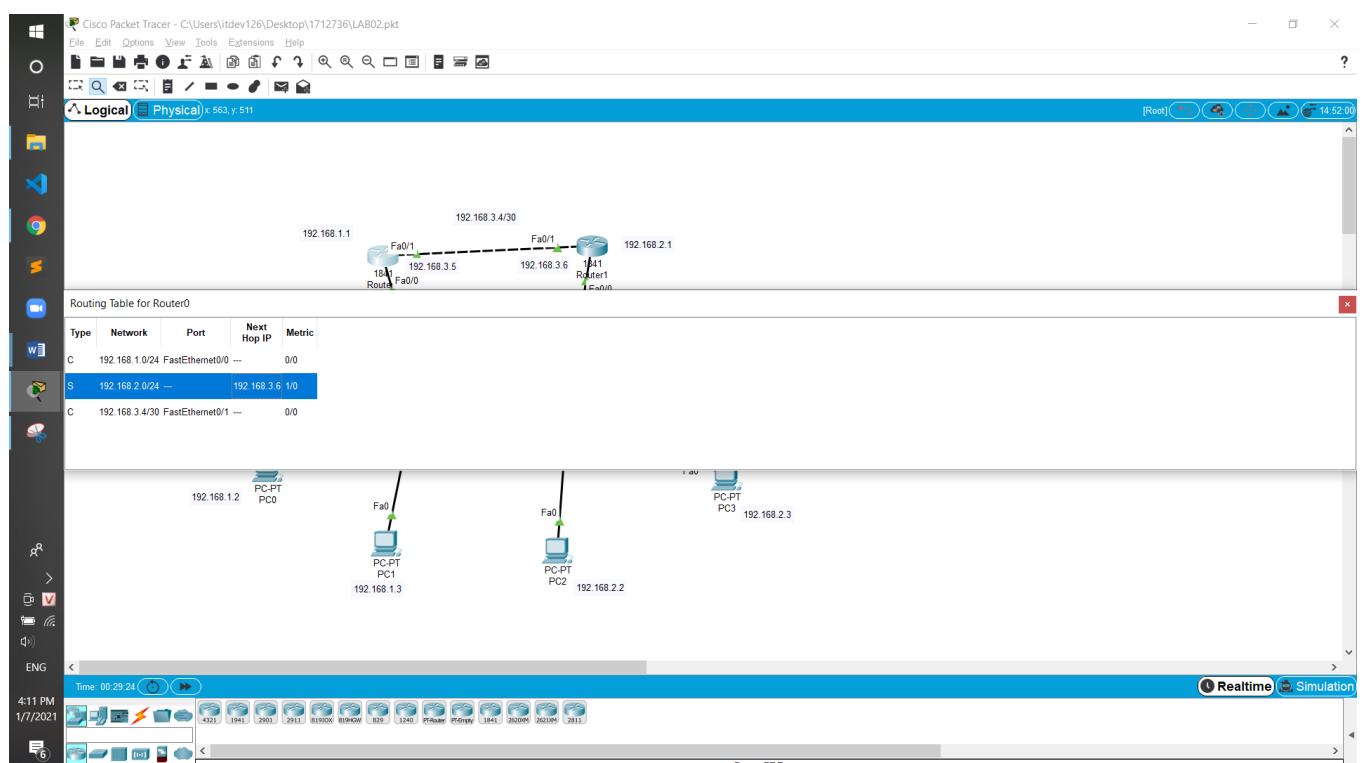


2. Show the routing table of the router R0 (can use command or GUI to get the routing table).



3. Which line in the routing table is configured by static route? What is the administrative distance (AD) and the metric of the static route?

- Metric là 1
- AD là 0
- Line in the routing table is configured by static route



Bảng đánh giá mức độ hoàn thành LAB02

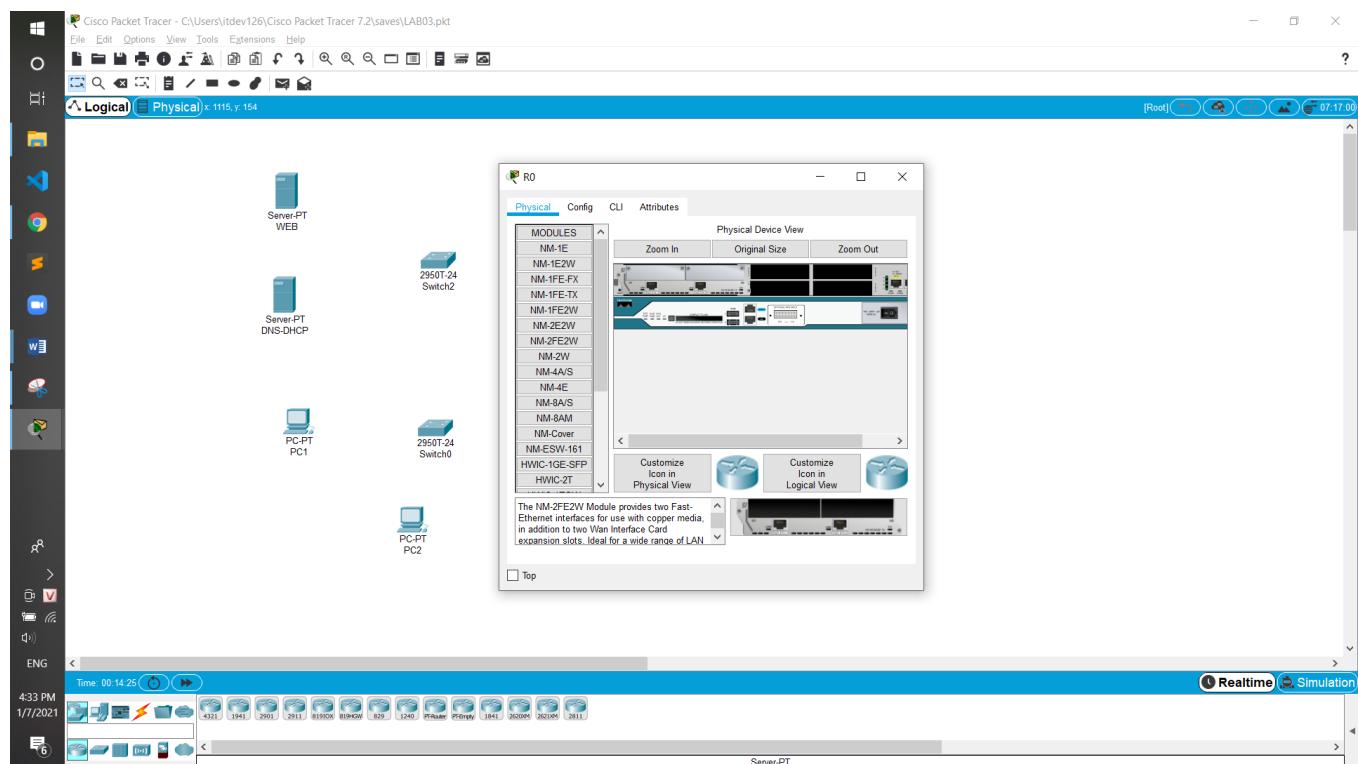
STT	Yêu cầu	Mức độ hoàn thành
1	Execute ping commands and take screenshots the ping result between PC0 and PC2, PC3 and PC1	100%
2	Show the routing table of the router R0 (can use command or GUI to get the routing table).	100%
3	Which line in the routing table is configured by static route? What is the administrative distance (AD) and the metric of the static route?	100%

LAB03. Implement the basic building network topology

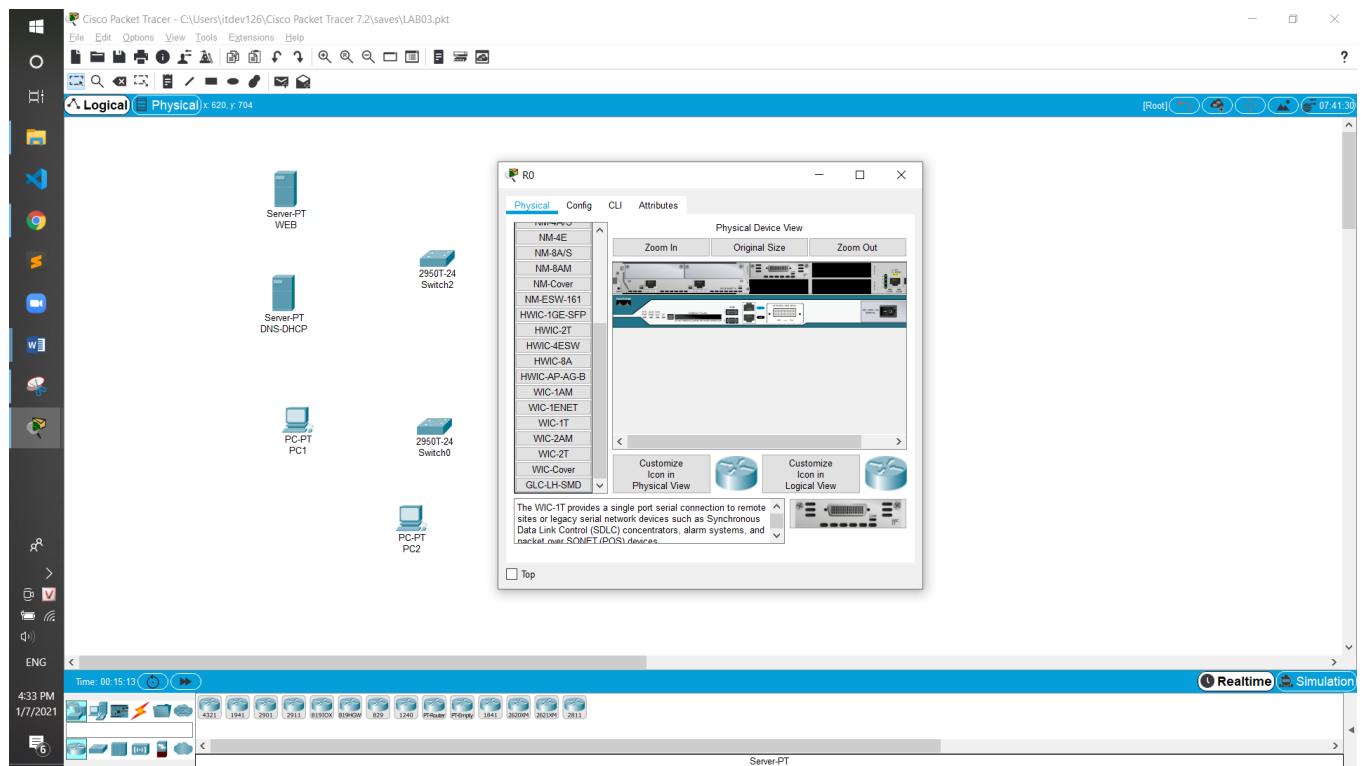
Tiến hành thêm modules vào Routers

- R0

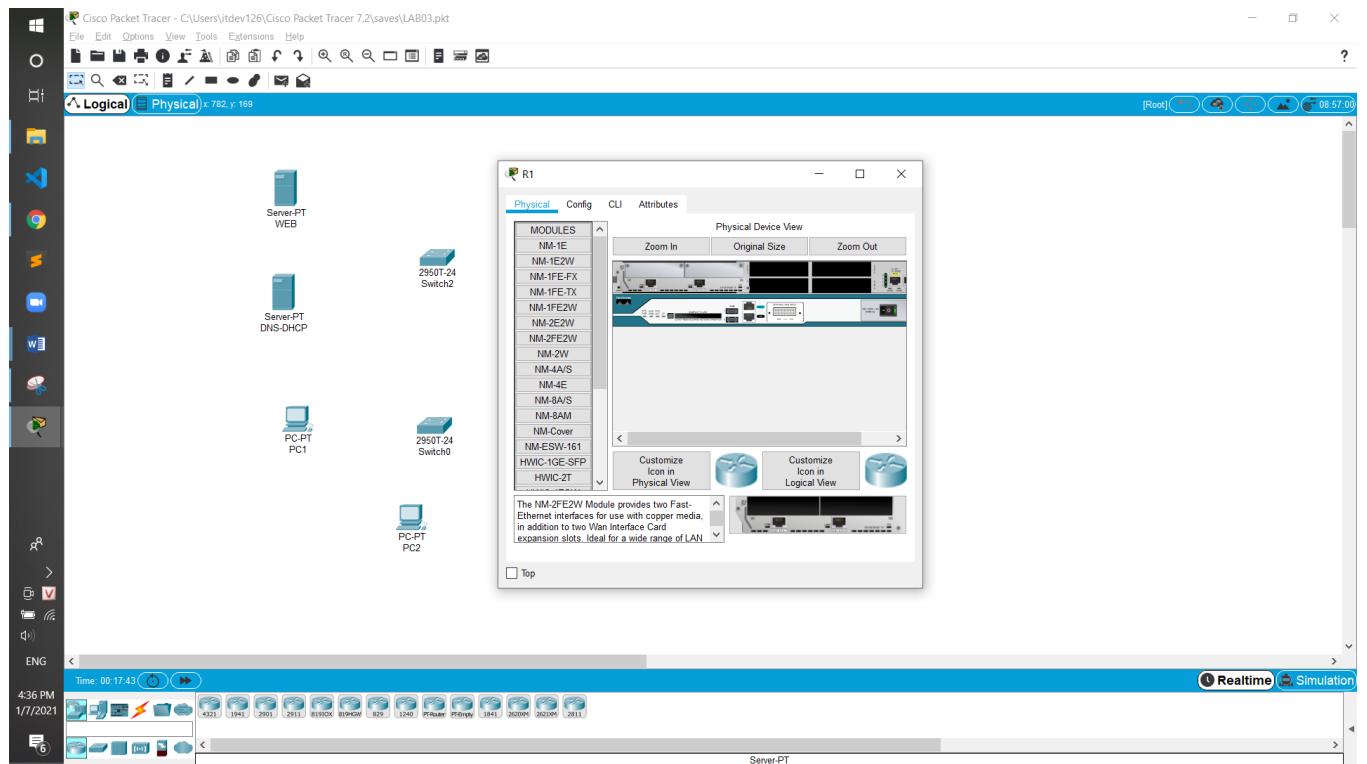
NM-2FE2W



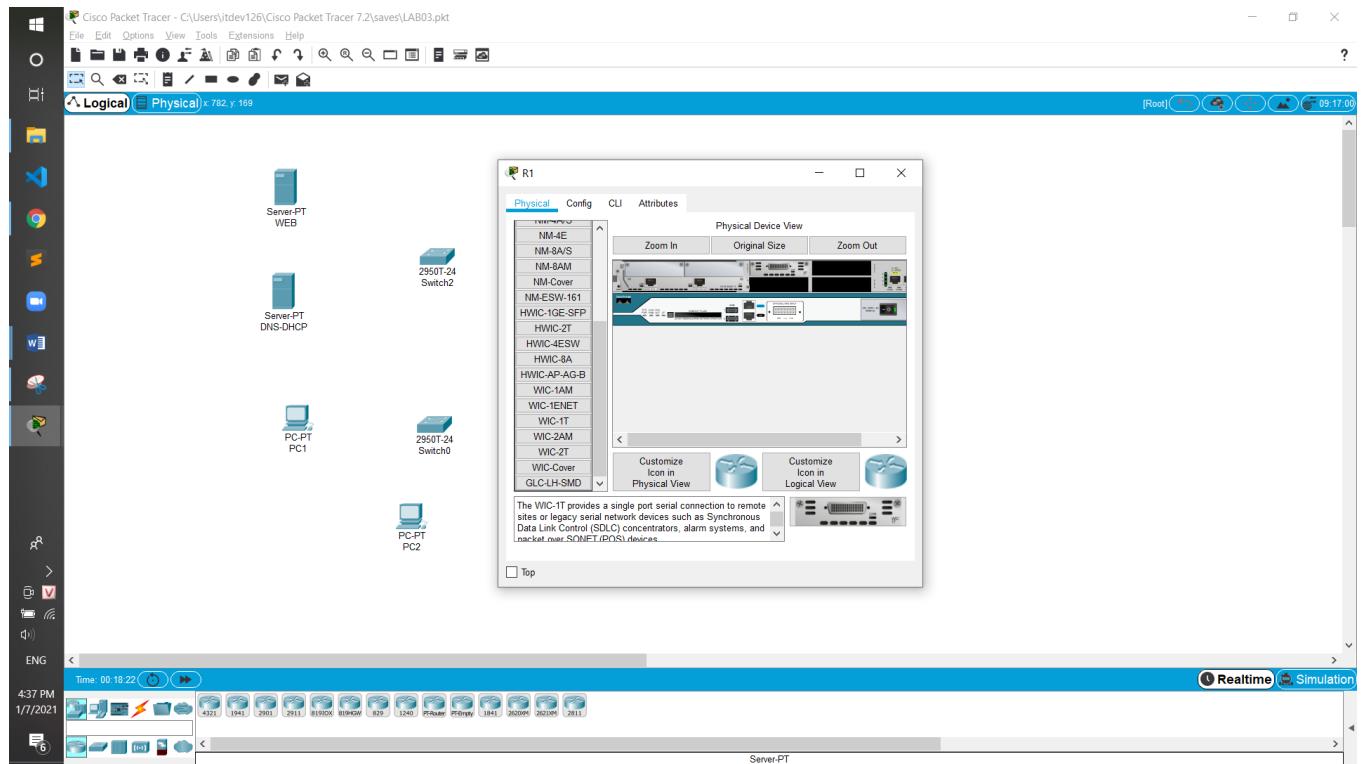
WIC-1T



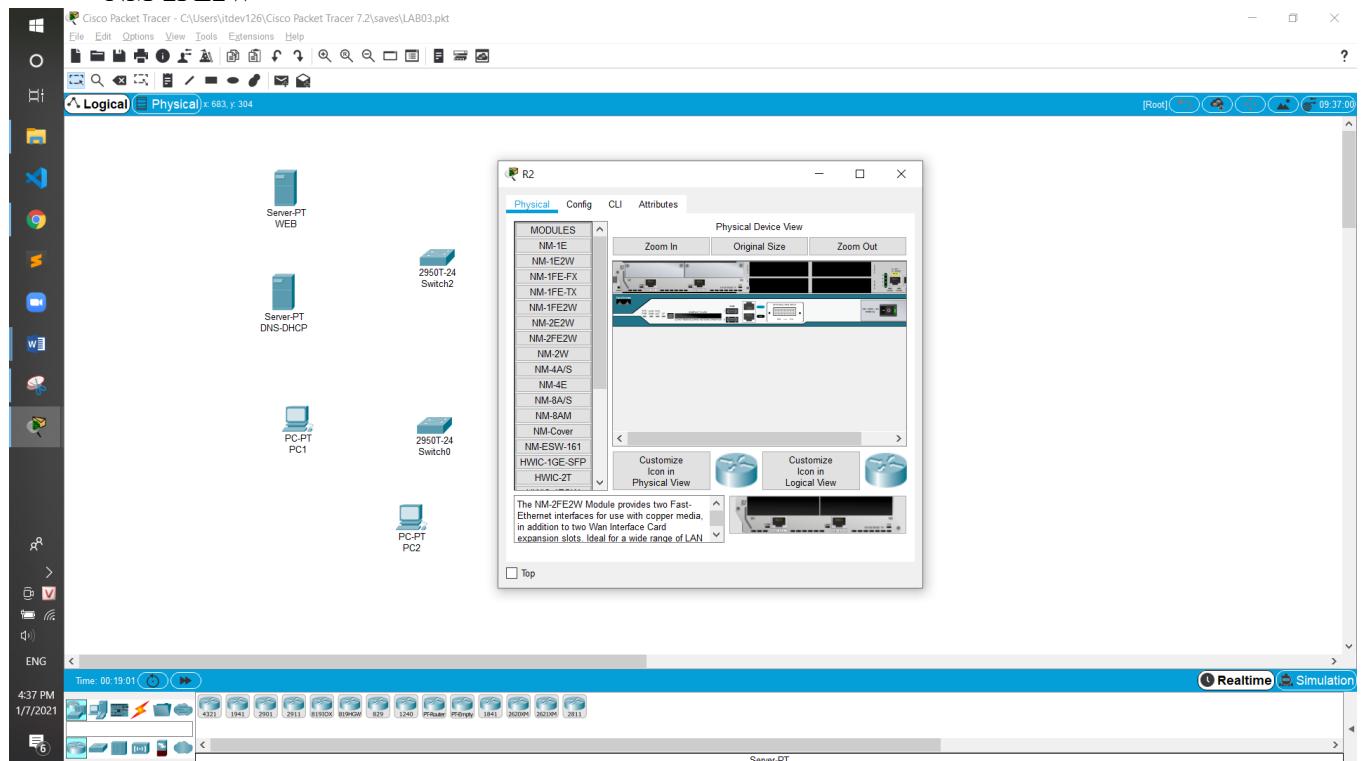
- R1 NM-2FE2W



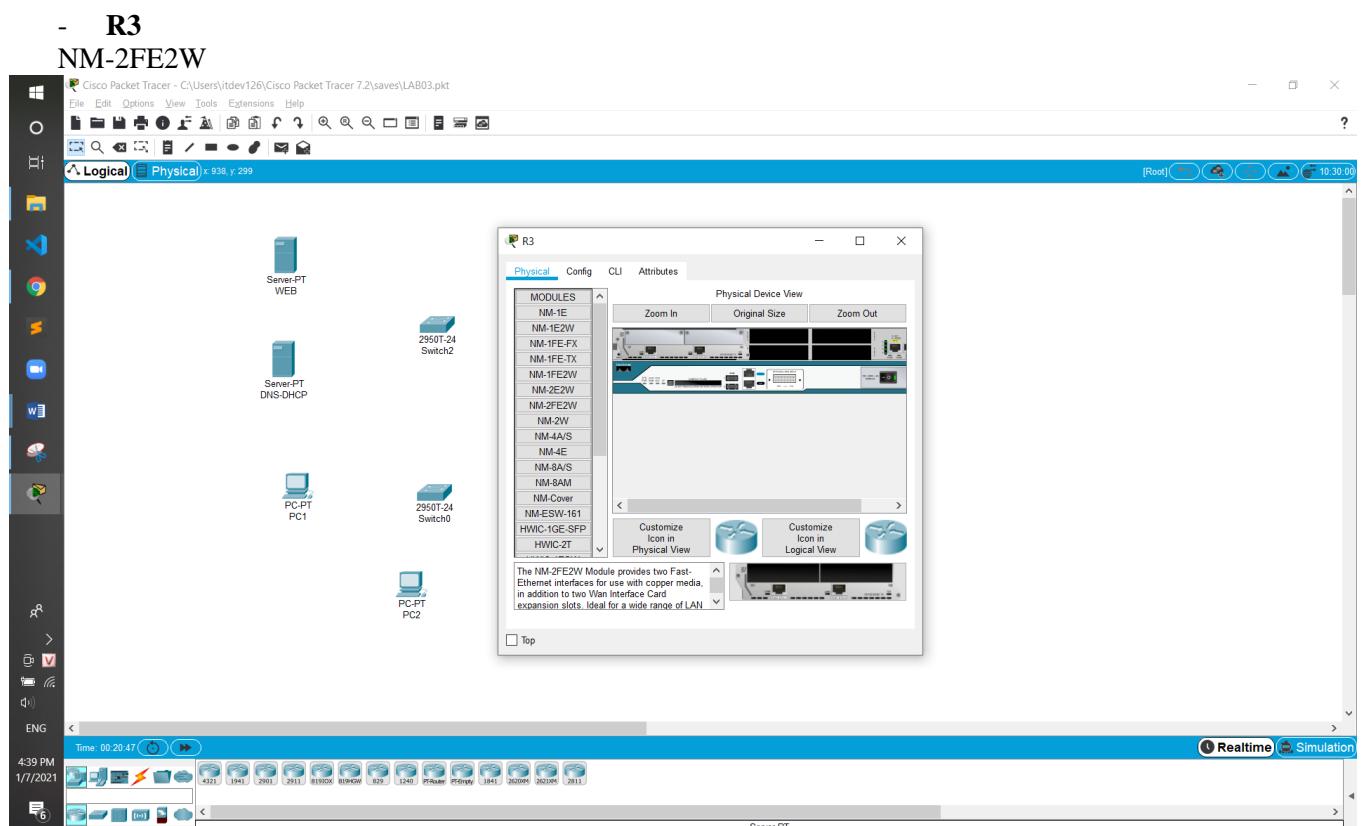
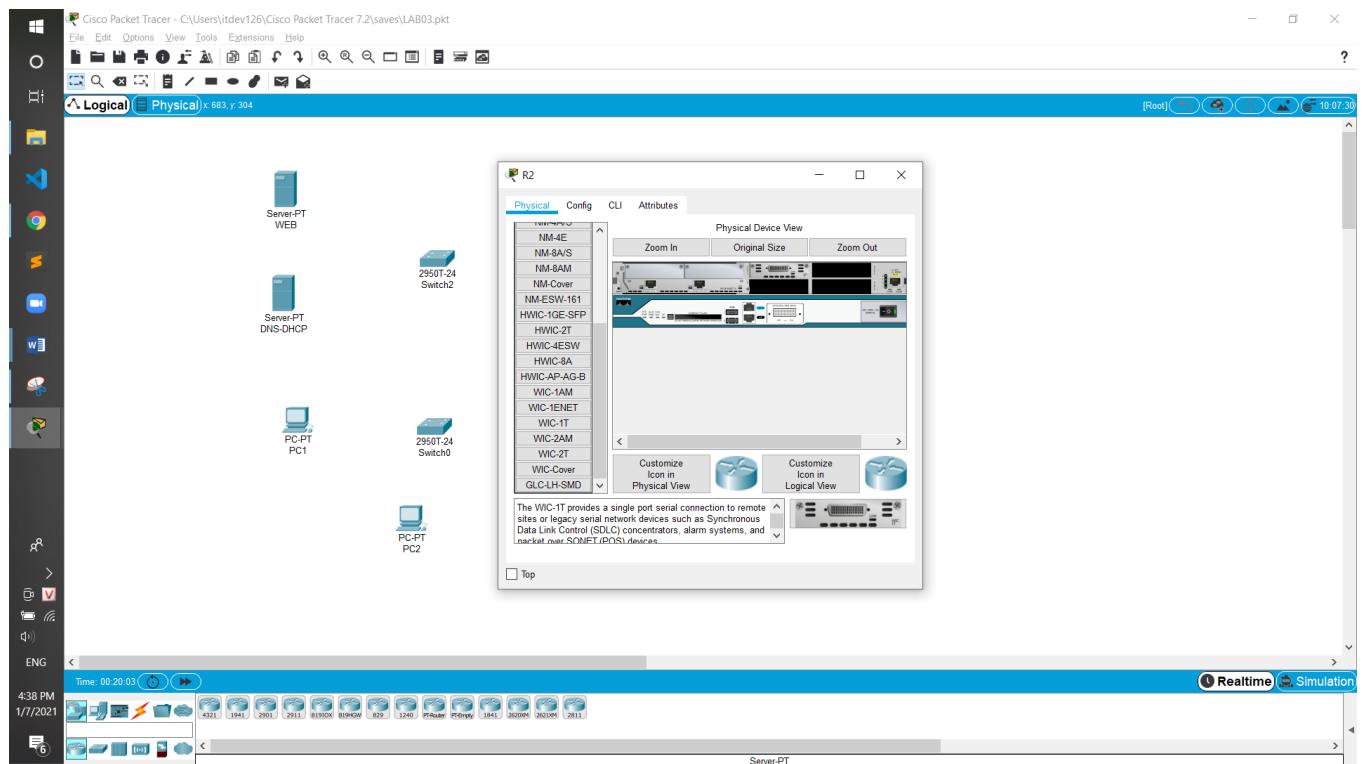
WIC-1T



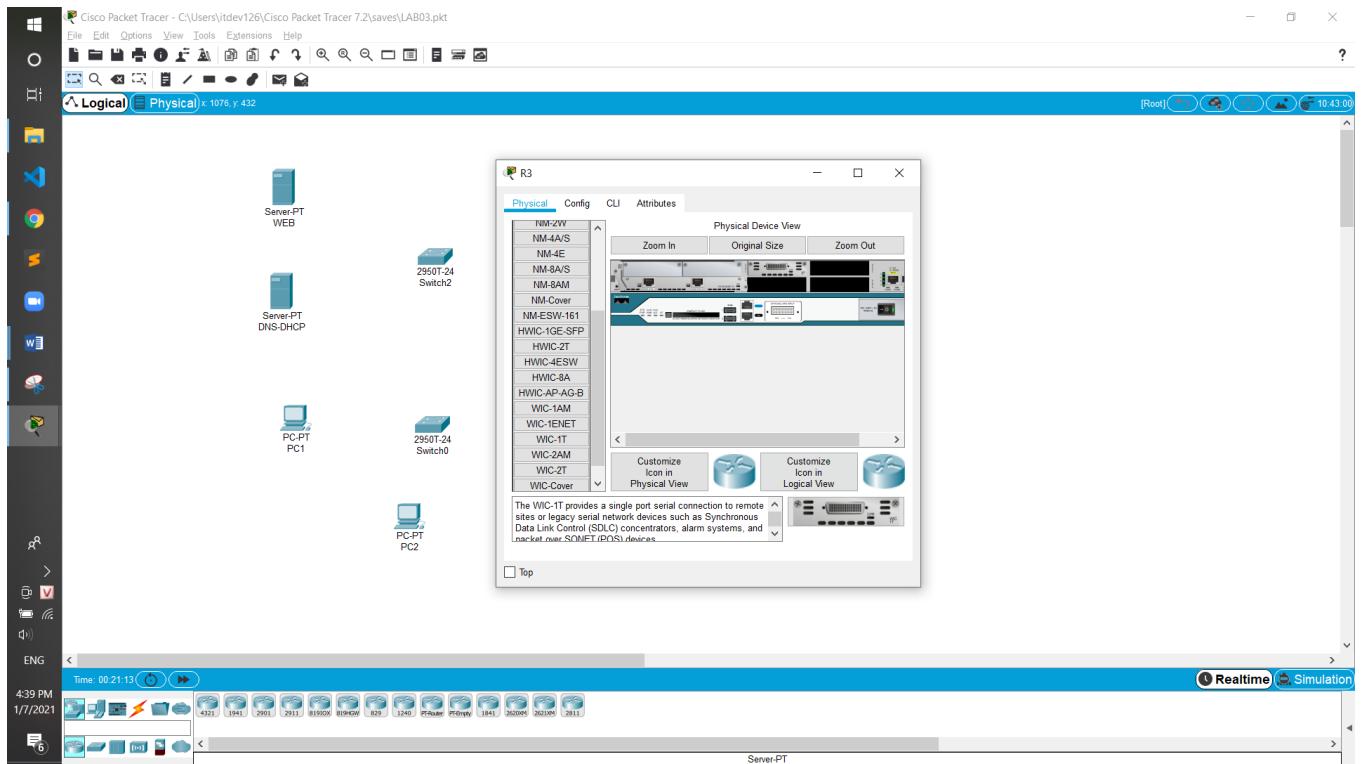
R2 NM-2FE2W



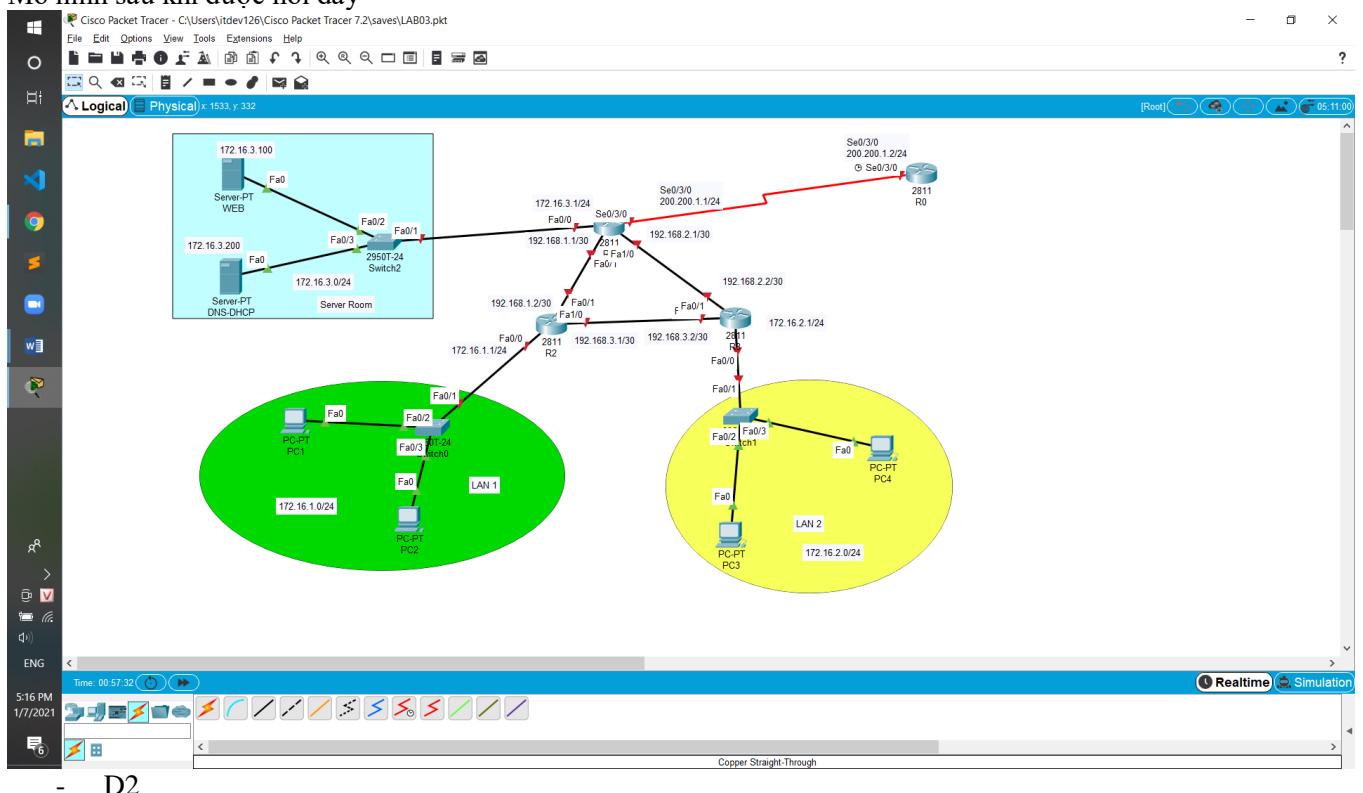
WIC-1T



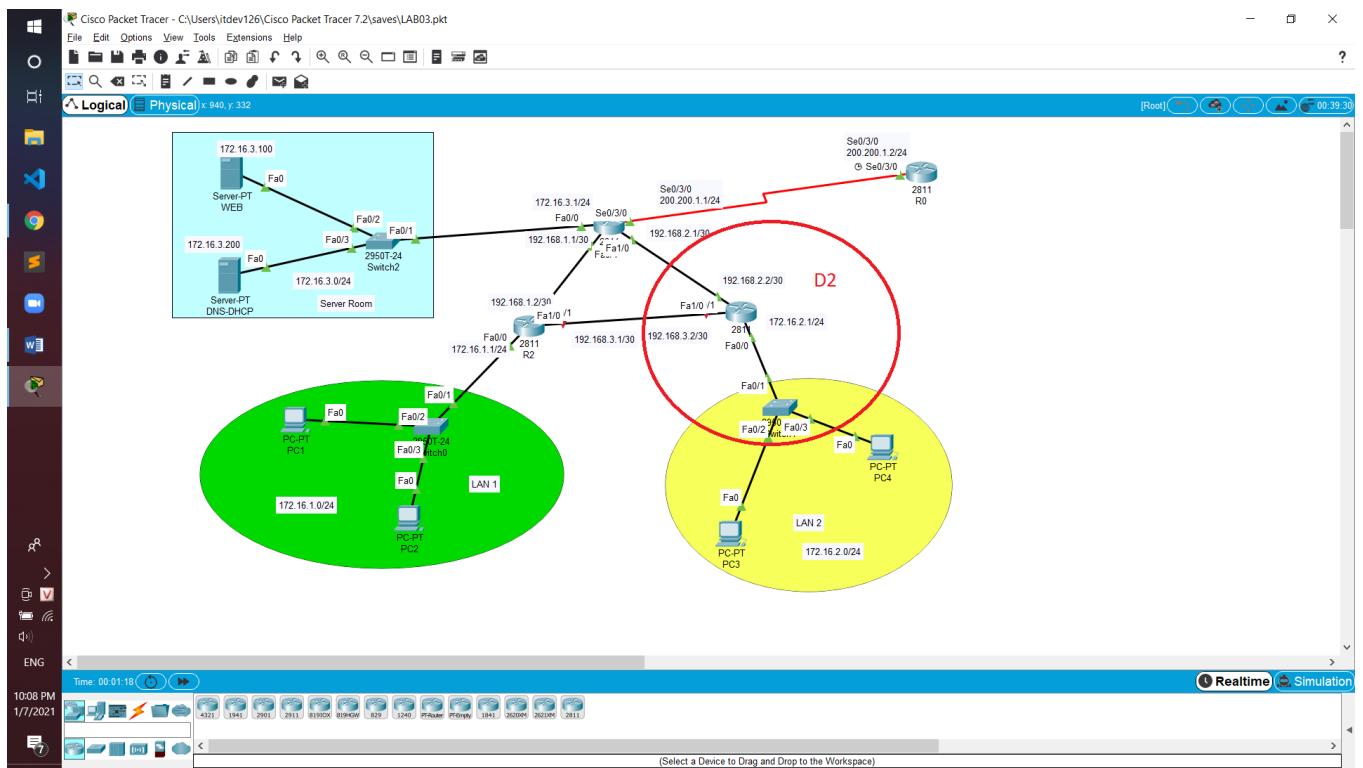
WIC-1T



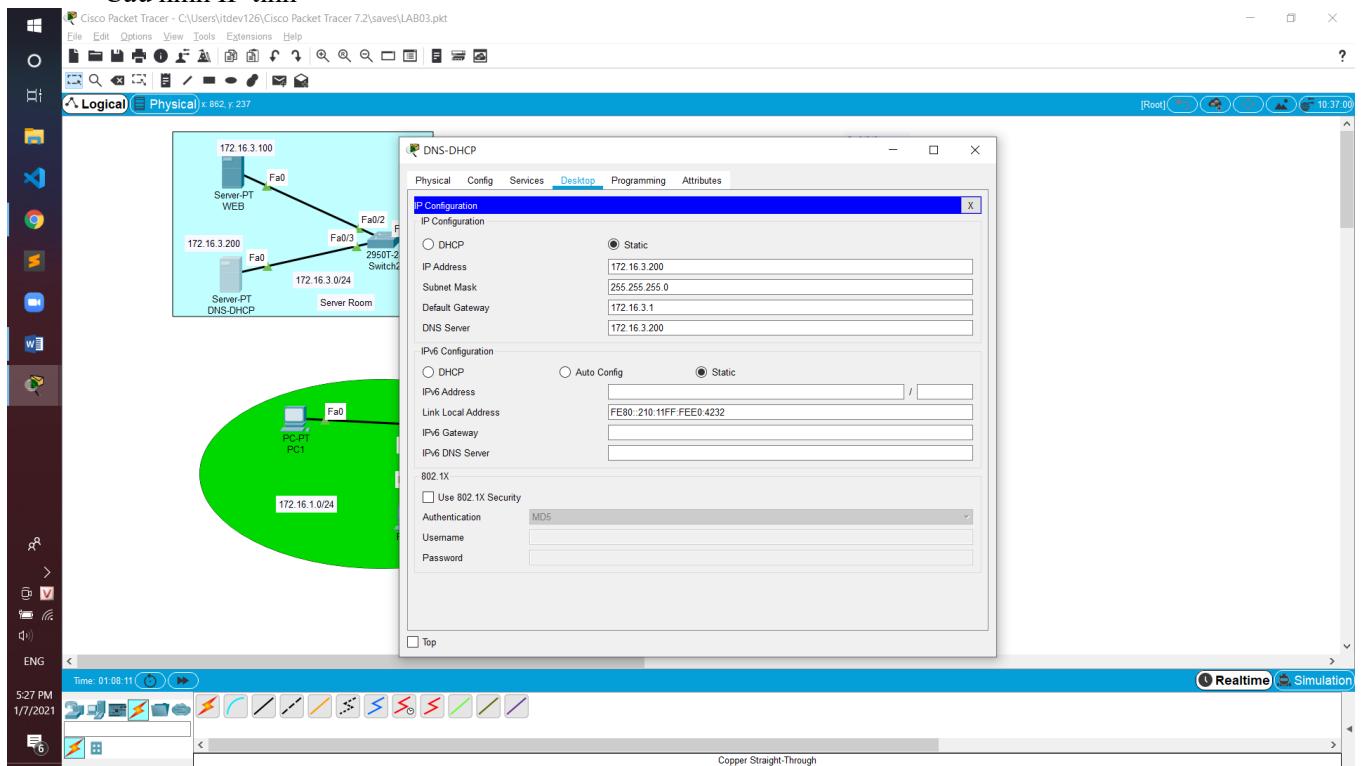
Mô hình sau khi được nối dây



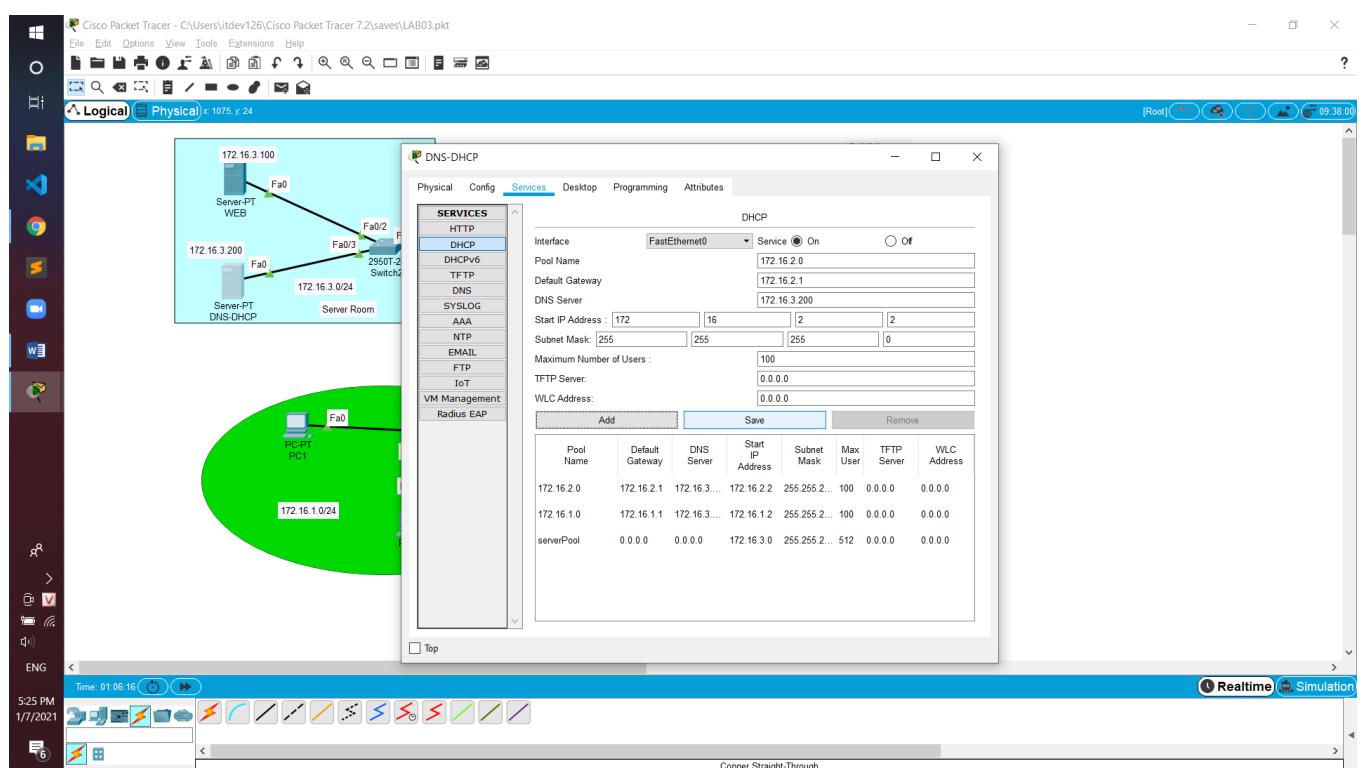
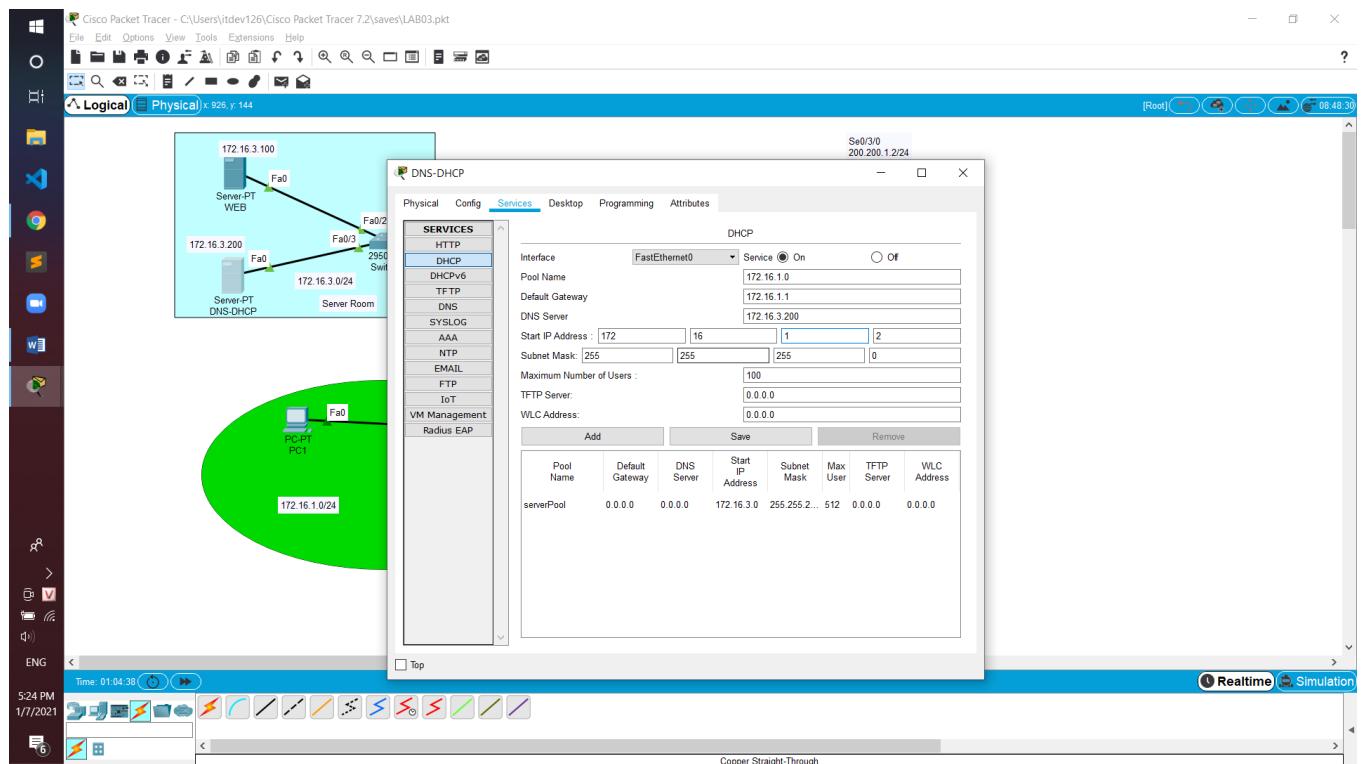
D2



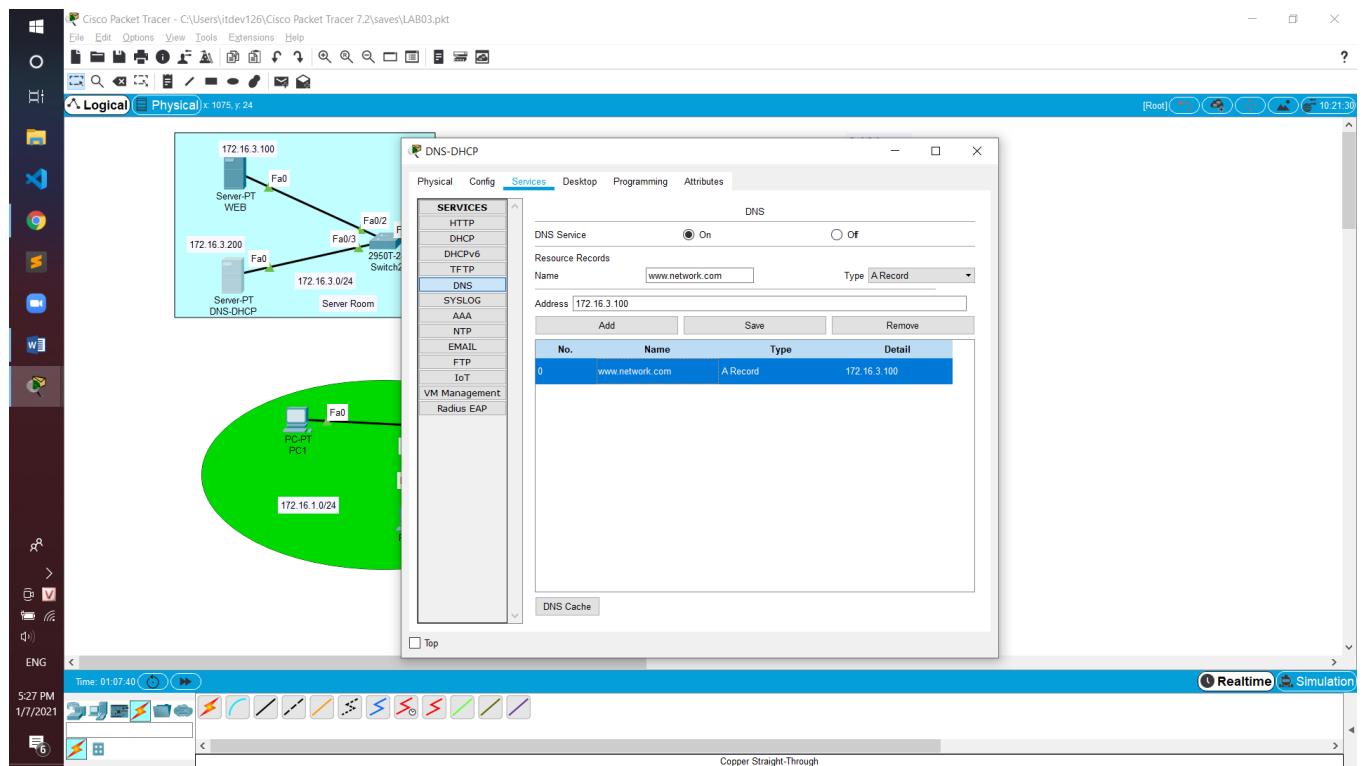
Cấu hình IP tĩnh



Cấu hình DHCP service

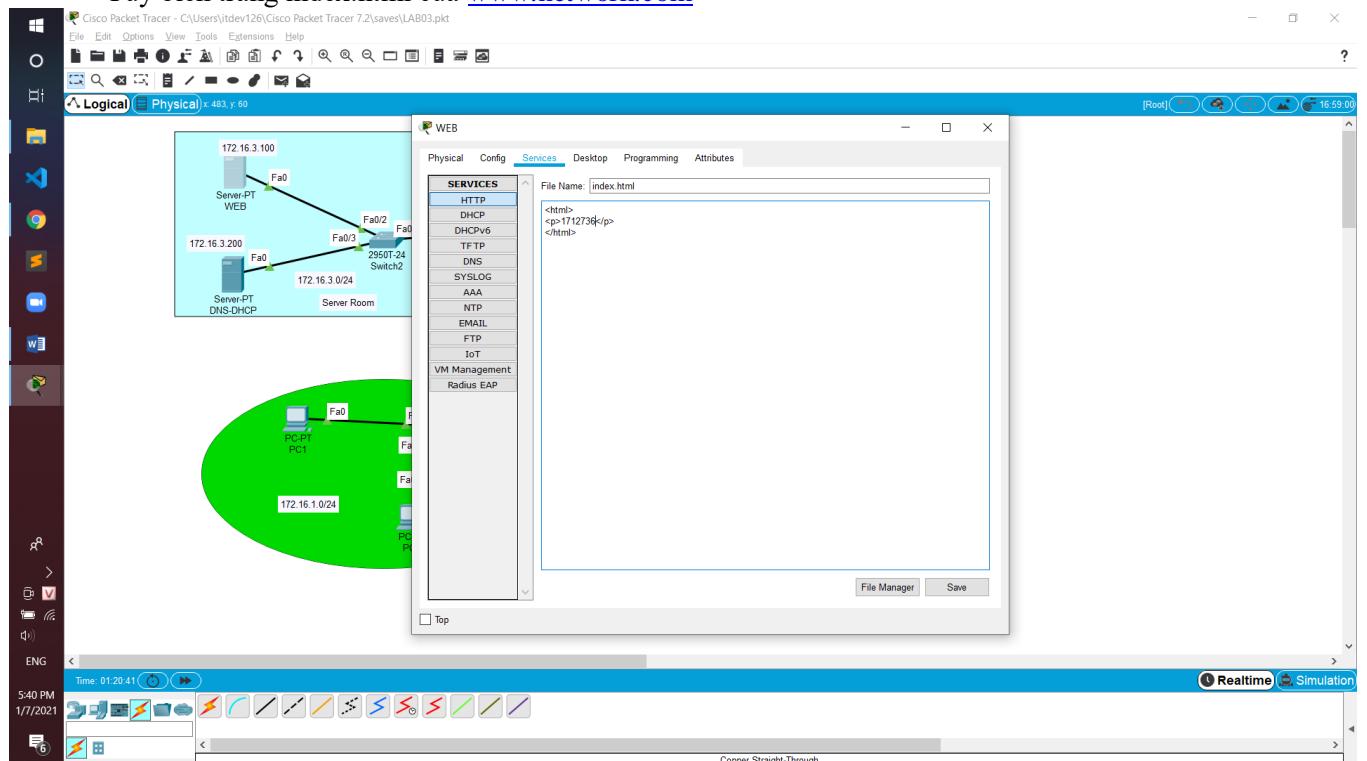


- Cấu hình DNS service

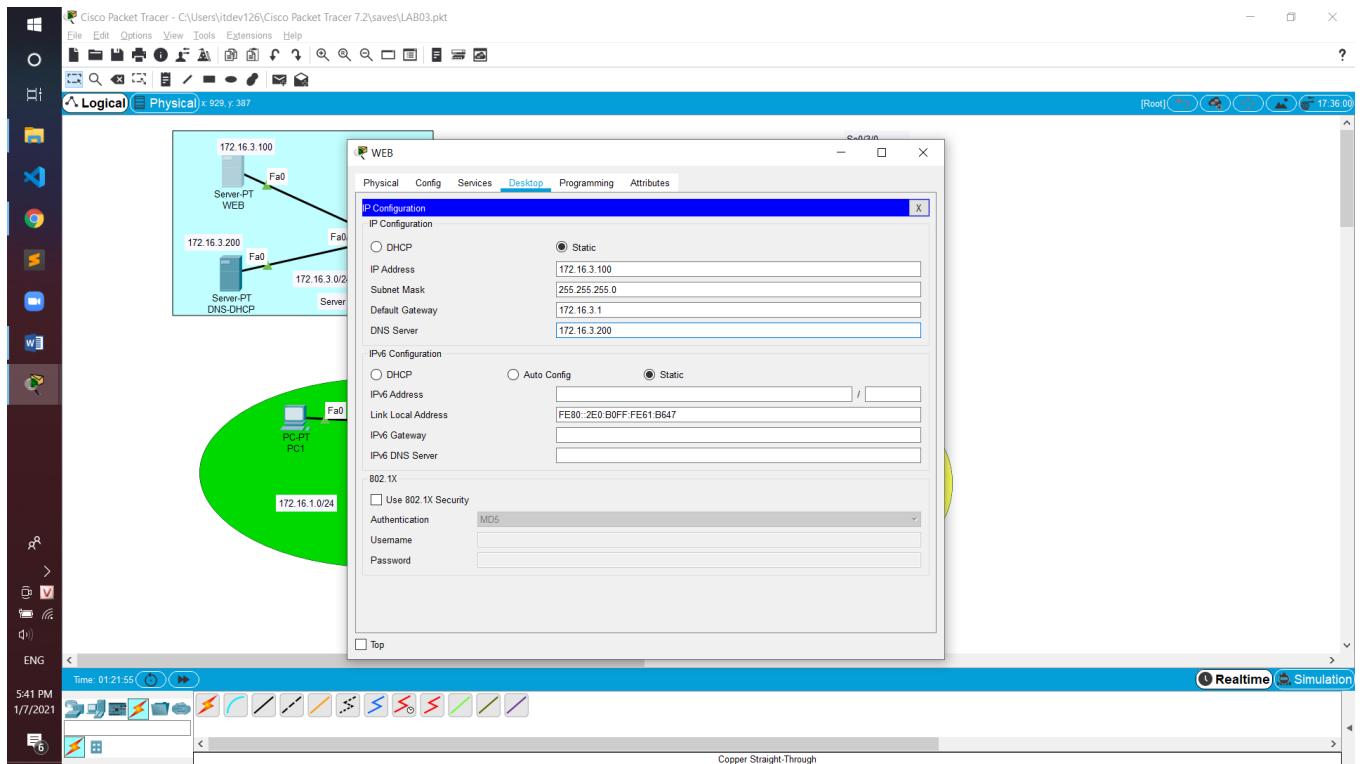


Cấu hình WEB

- Tùy biến trang index.html của www.network.com



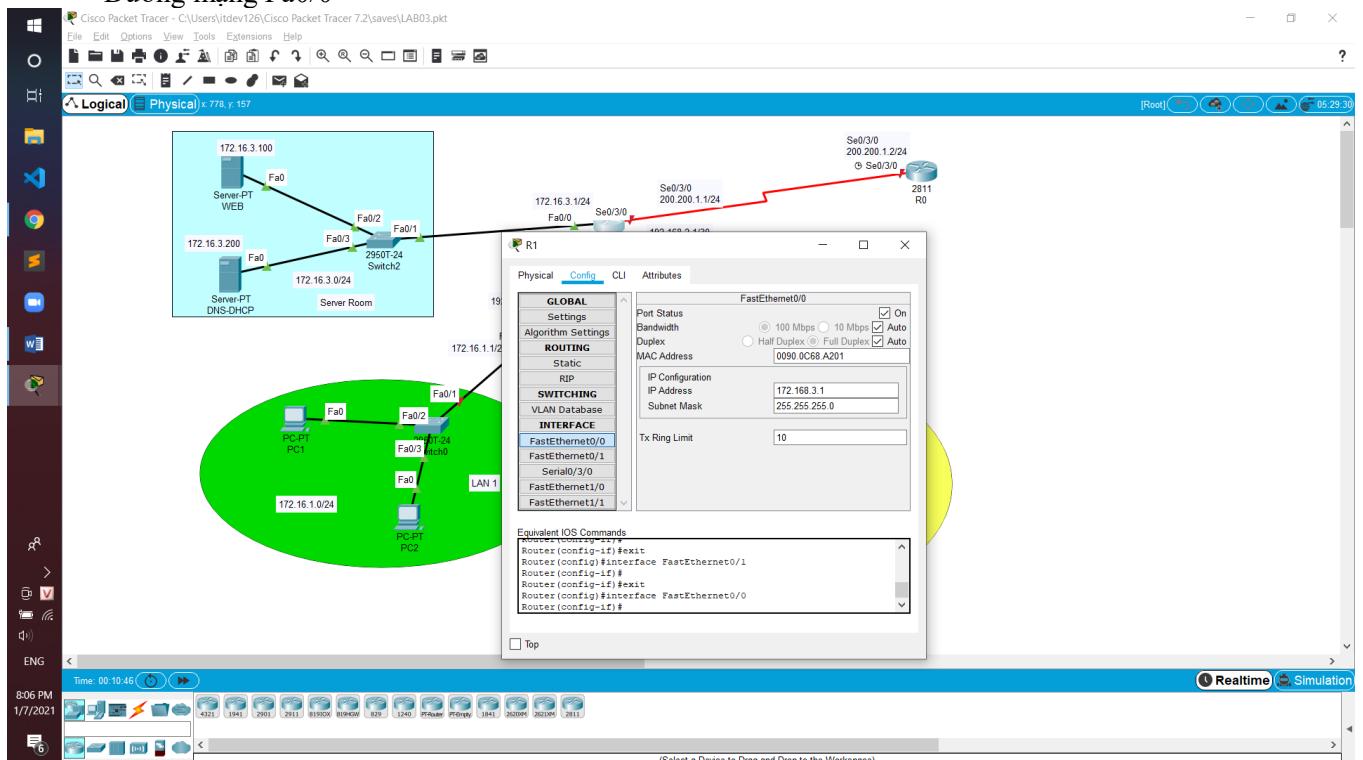
- Cấu hình IP tĩnh



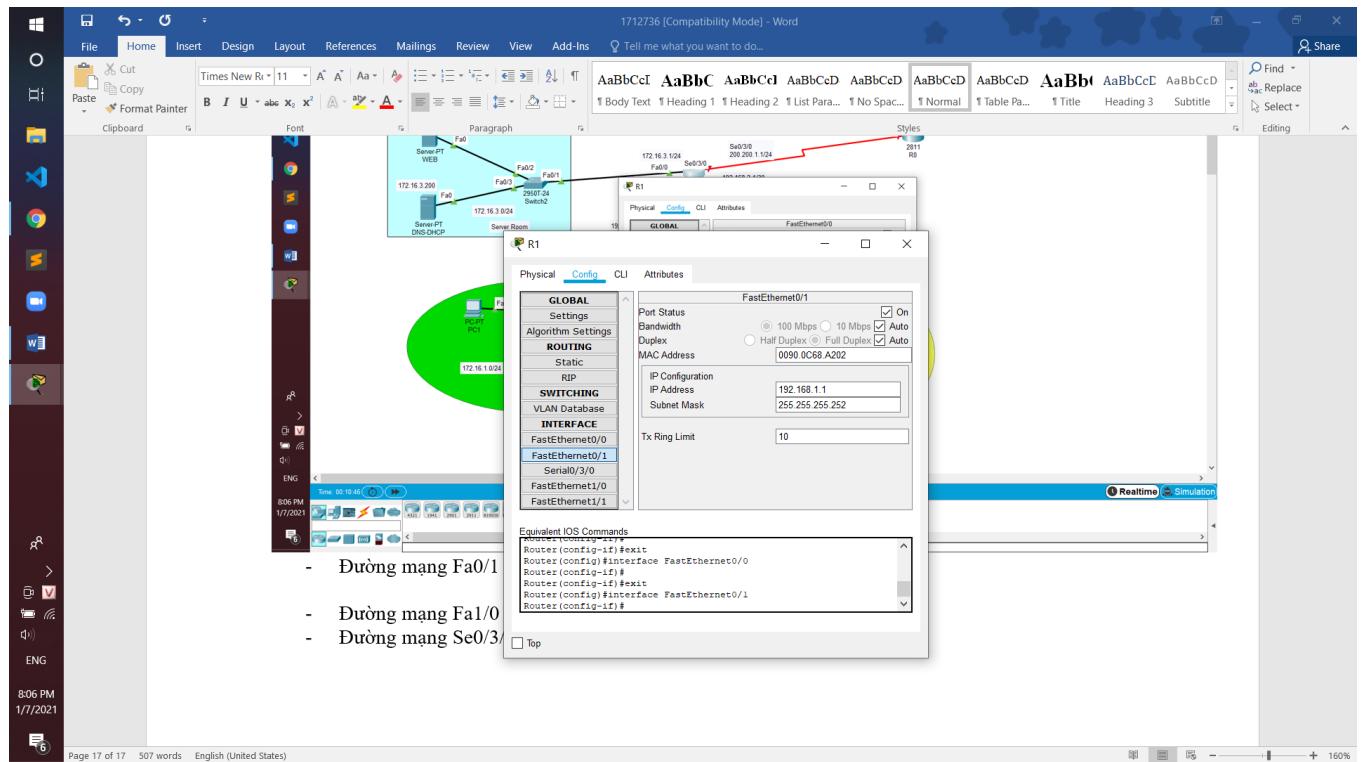
Cấu hình cho các Router

Router R1

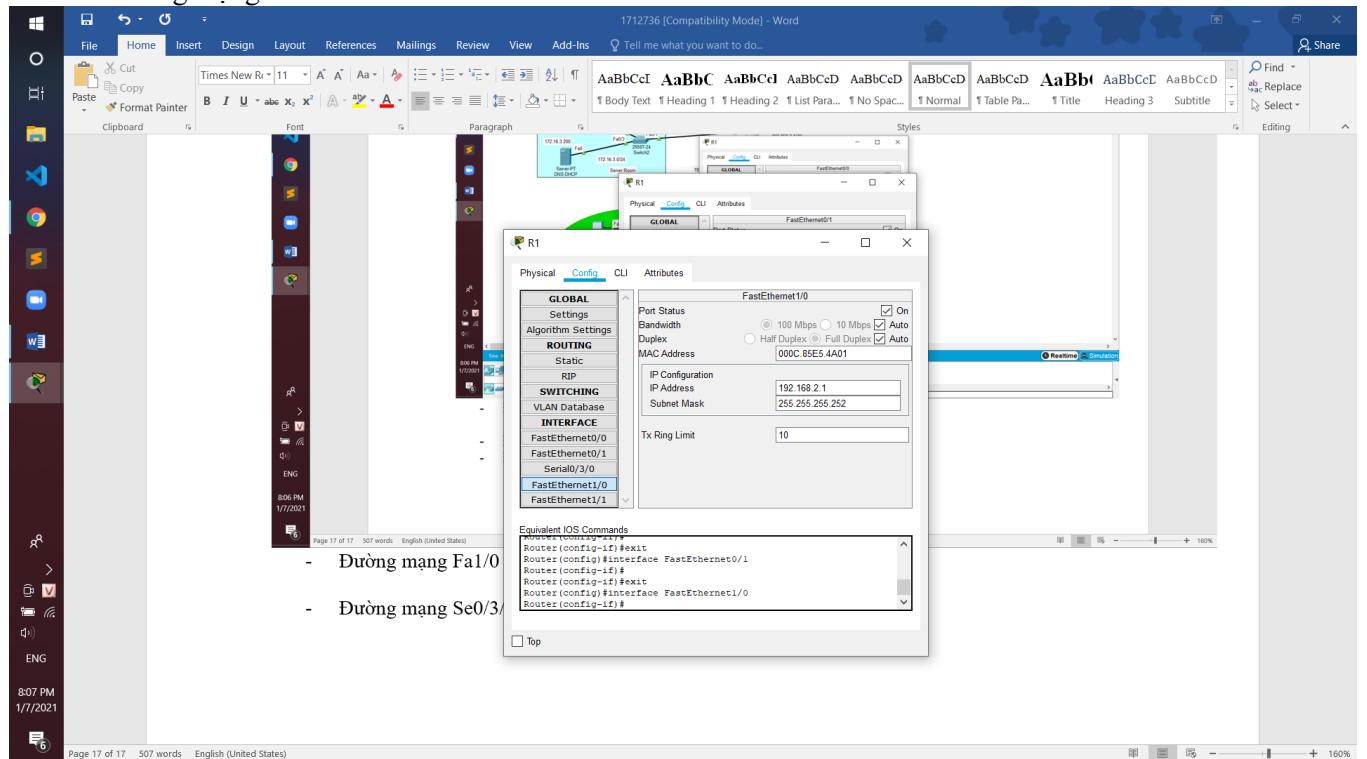
- Đường mạng Fa0/0



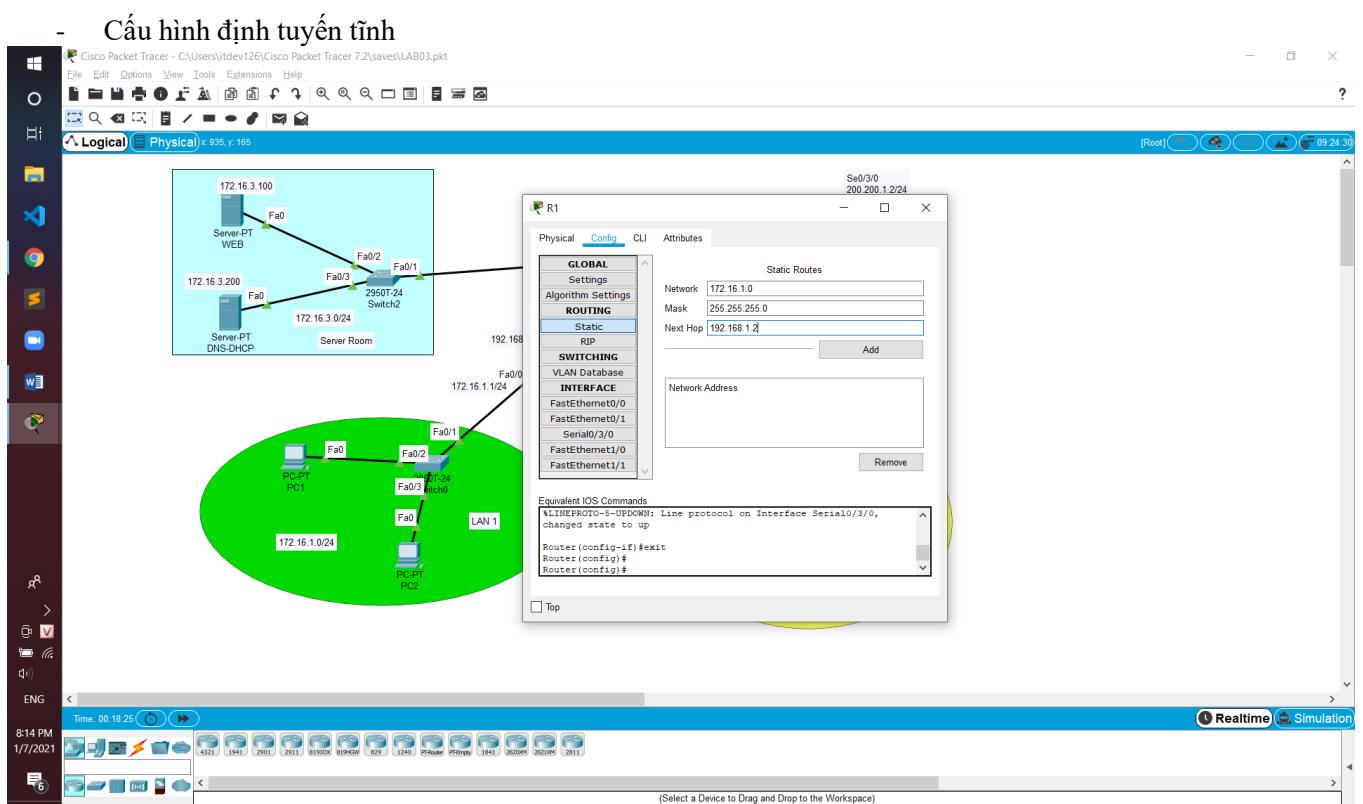
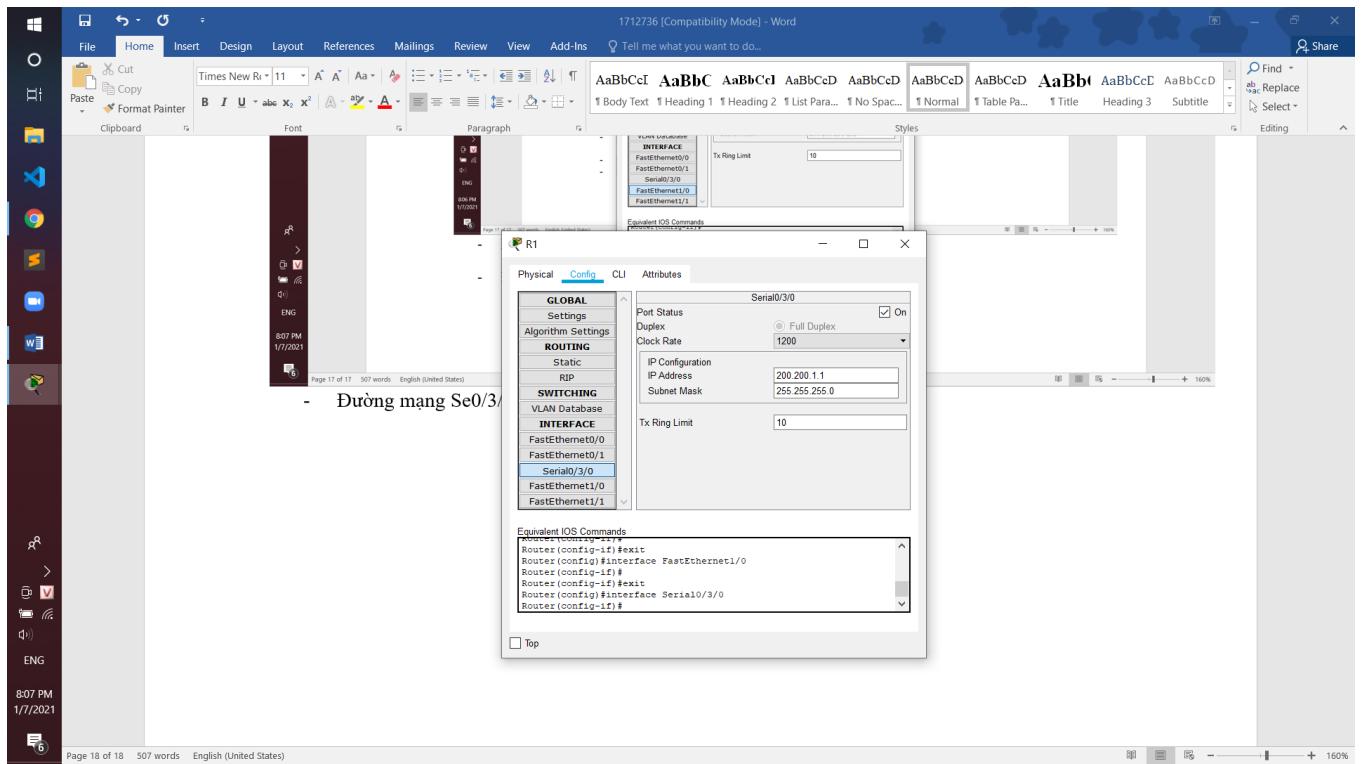
- Đường mạng Fa0/1

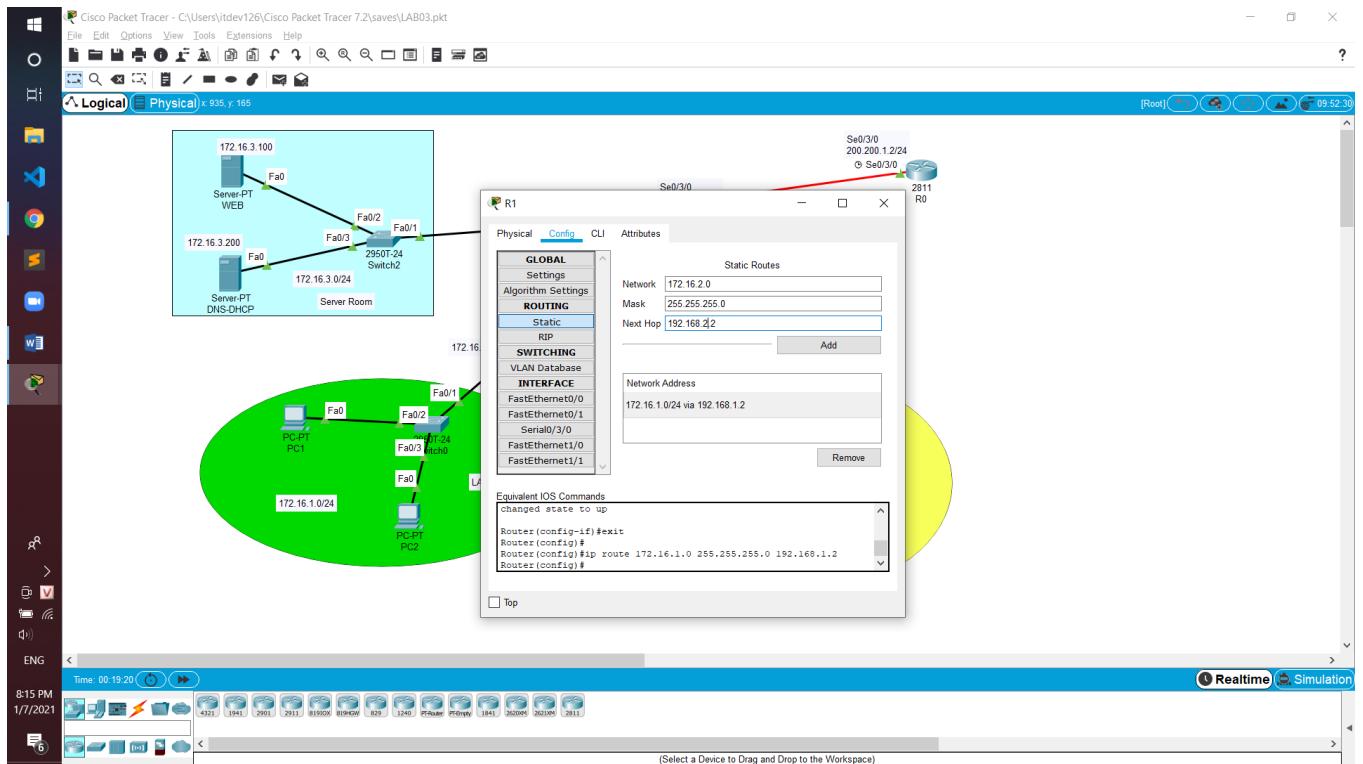


- Đường mạng Fa1/0

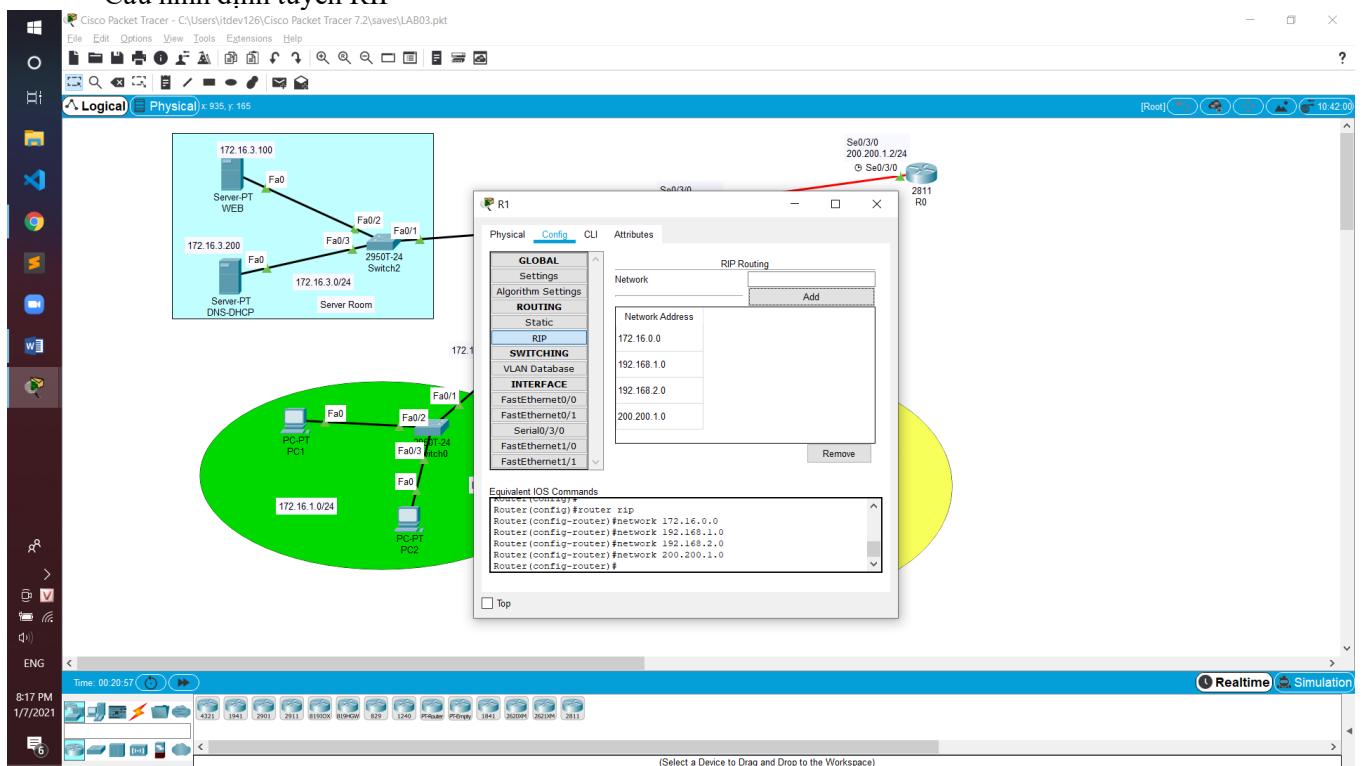


- Đường mạng Se0/3/0





Cáu hình định tuyến RIP



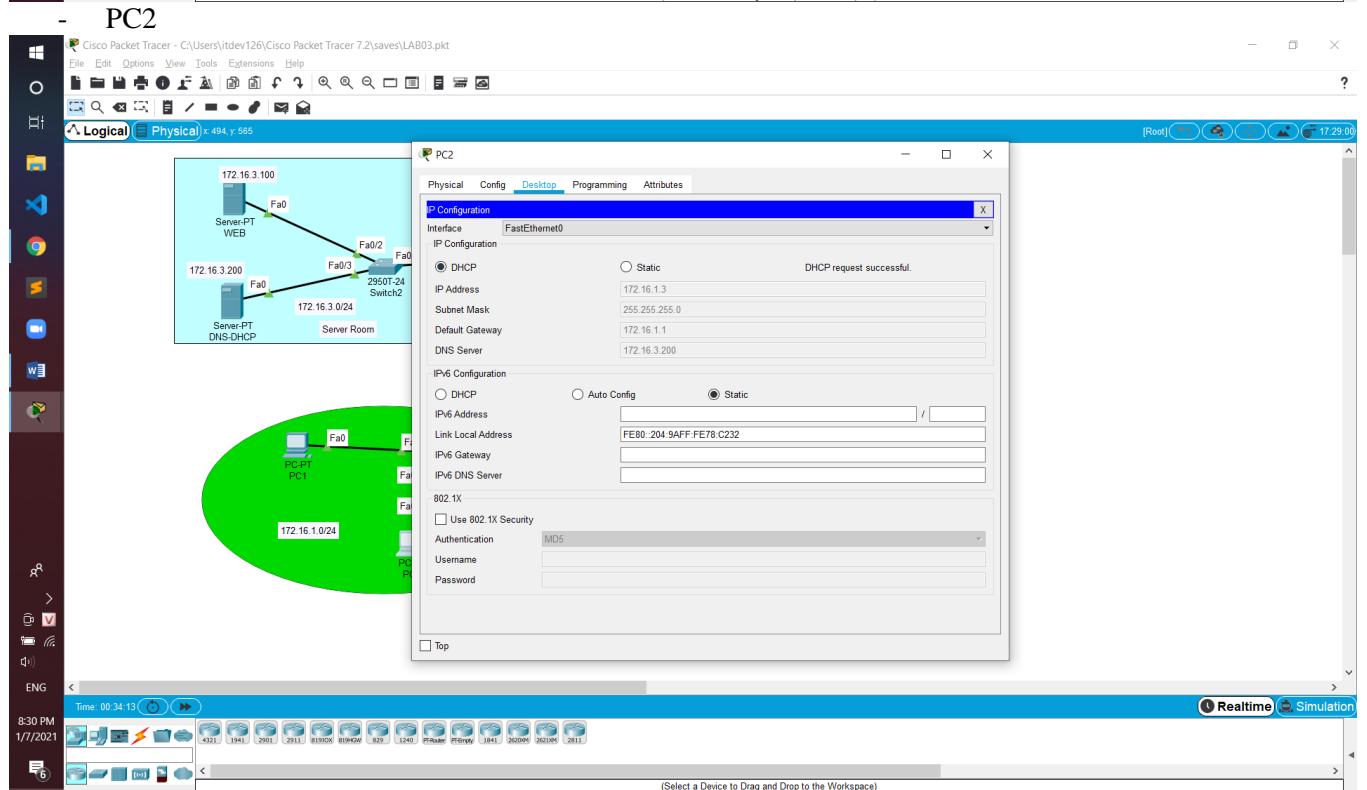
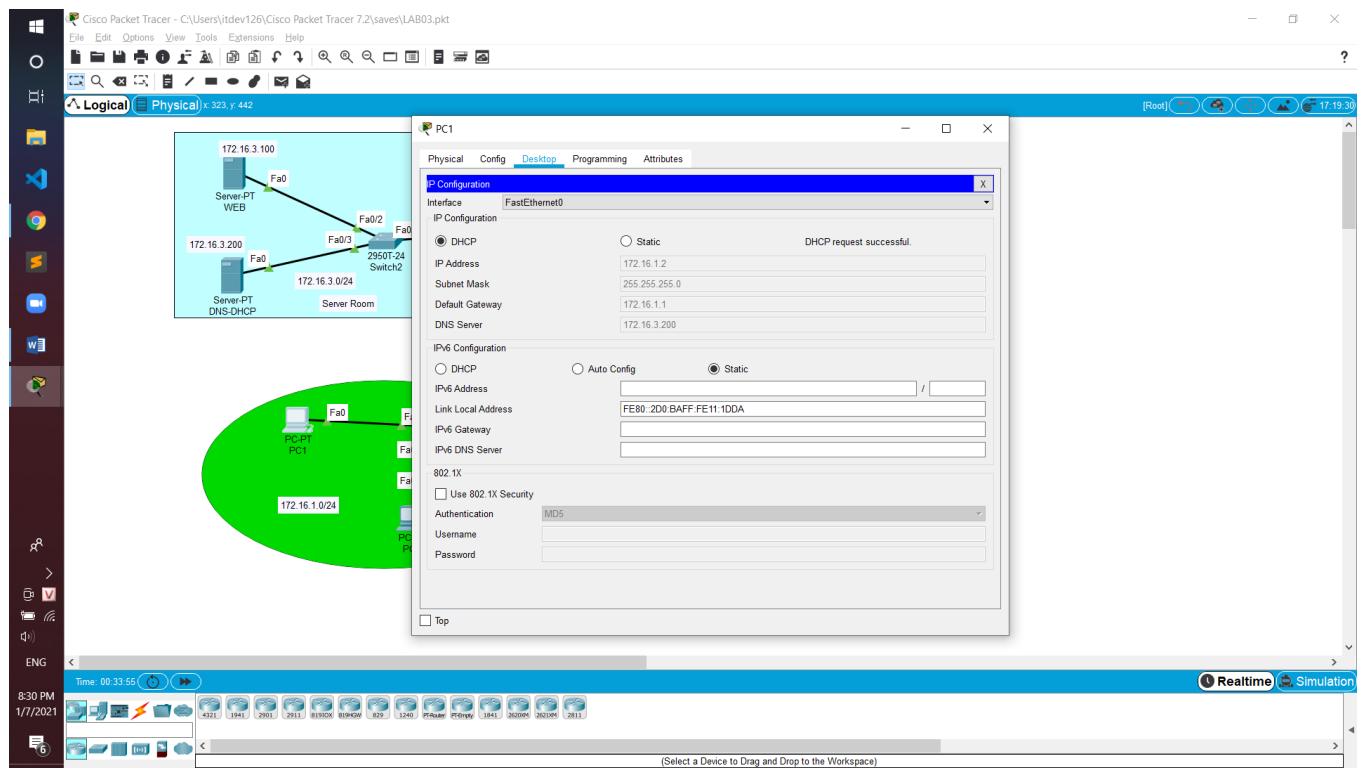
Cáu hình dhcp

```
Router(config)#ip dhcp pool netB
Router(dhcp-config)#network 172.16.3.0 255.255.255.0
Router(dhcp-config)#lease 1 4d 12h
```

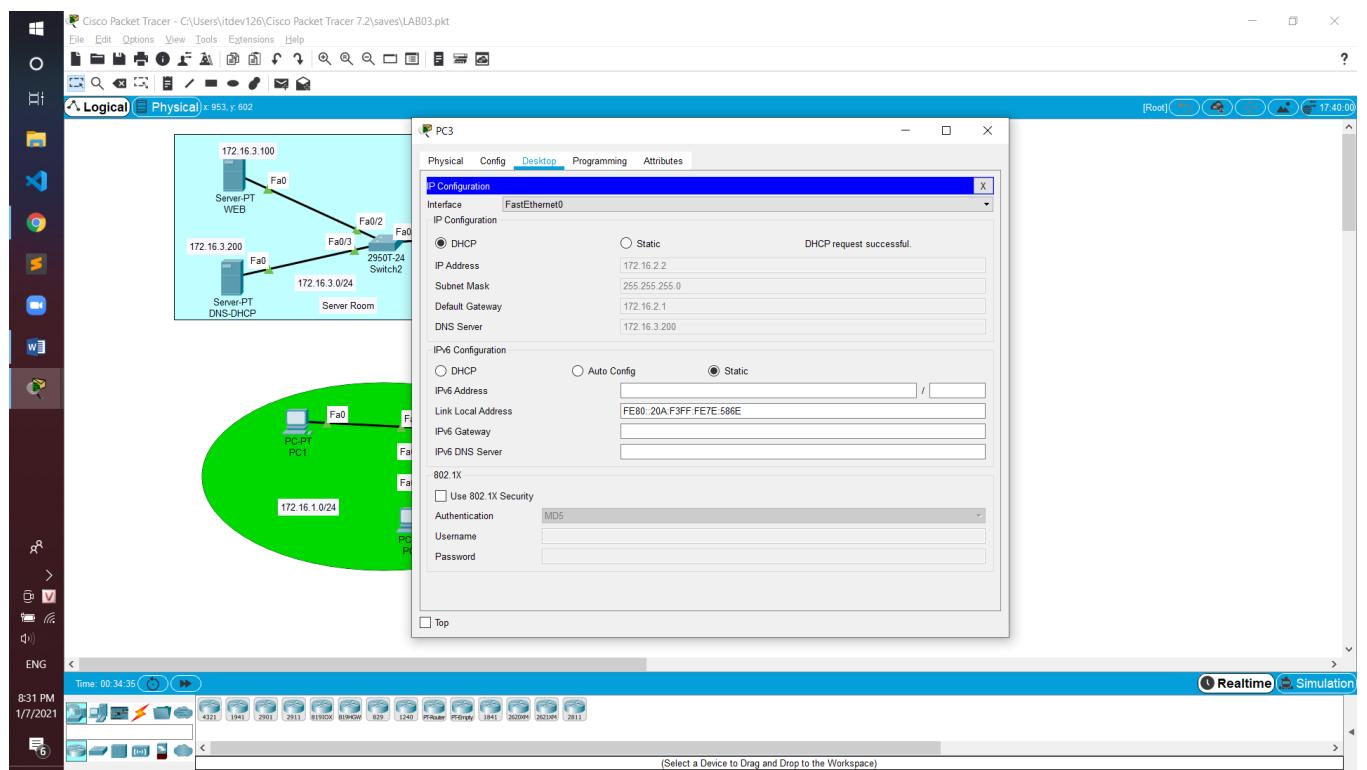
⇒ Làm tương tự với các Router còn lại là R0, R2, R3

Địa chỉ IP trả về các máy con

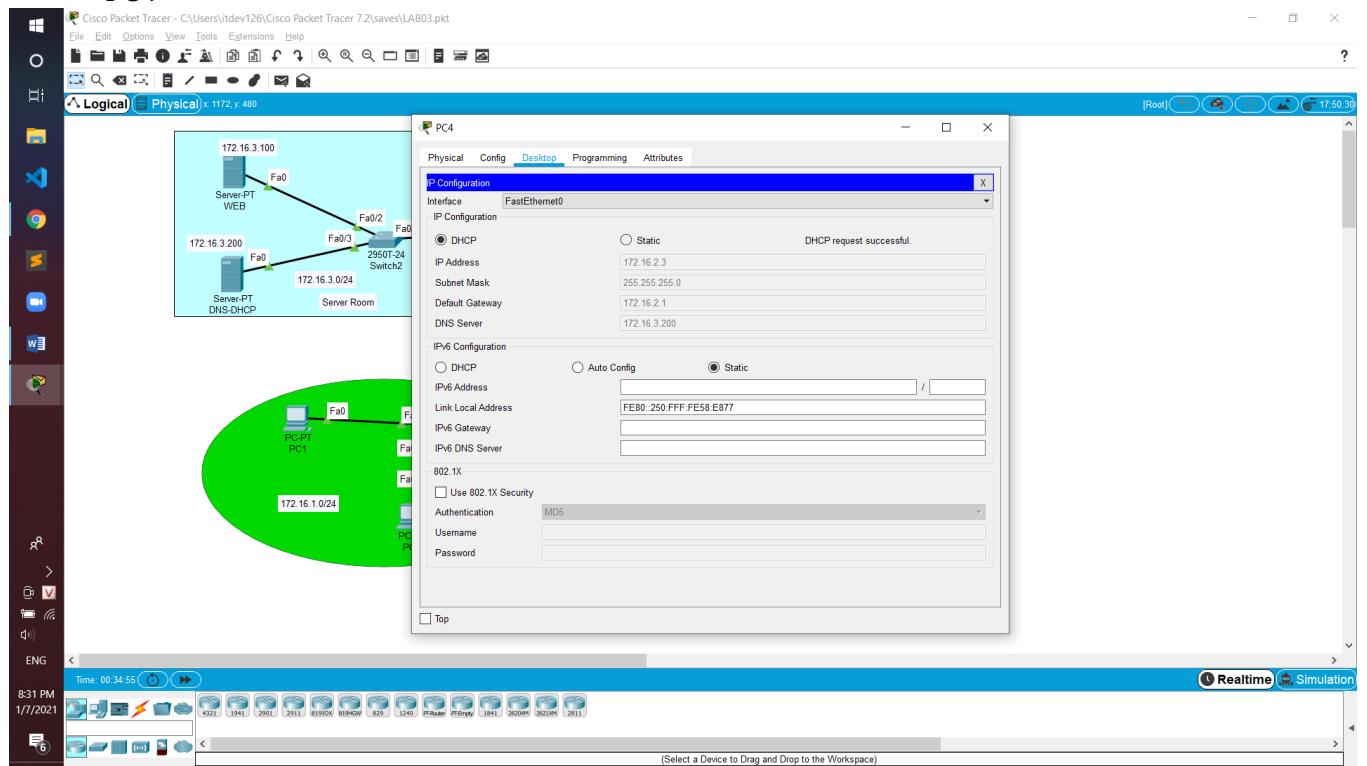
- PC1



- PC3



PC4



Kết quả ping từ PC1 tới PC3

```

Fa0/1 C:\>ping 172.16.1.2

Pinging 172.16.1.2 with 32 bytes of data:

Reply from 172.16.1.2: bytes=32 time=4ms TTL=128
Reply from 172.16.1.2: bytes=32 time=1ms TTL=128
Reply from 172.16.1.2: bytes=32 time=1ms TTL=128
Reply from 172.16.1.2: bytes=32 time=2ms TTL=128

Ping statistics for 172.16.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 4ms, Average = 2ms

```

Kết quả ping từ PC2 tới PC4

```

Fa0/1 C:\>ping 172.16.2.2

Pinging 172.16.2.2 with 32 bytes of data:

Reply from 172.16.2.2: bytes=32 time=1ms TTL=128
Reply from 172.16.2.2: bytes=32 time<1ms TTL=128
Reply from 172.16.2.2: bytes=32 time<1ms TTL=128
Reply from 172.16.2.2: bytes=32 time<1ms TTL=128

Ping statistics for 172.16.2.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

```

Bảng đánh giá mức độ hoàn thành LAB03

Số thứ tự	Yêu cầu	Mức độ hoàn thành
1	Determine the “Device Type” of devices D1 and D2 in the “Device Table” and in the diagram to finish the network topology	100%
2	Configure the DNS server and Web server for www.network.com and test to access it via a browser.	100%
3	Configure the DHCP server to assign the IP addresses to PC1, PC2, PC3, PC4	100%
4	Execute ping command and take screenshots about the ping result from PC1 to PC3, PC4 to PC2	100%
5	Access the web pages at http://www.network.com address via web browser of PC1, PC3	0%