

# LAB WIFI RADIUS

**Course Name:** Ethical Hacking and Offensive Security(HOD401)

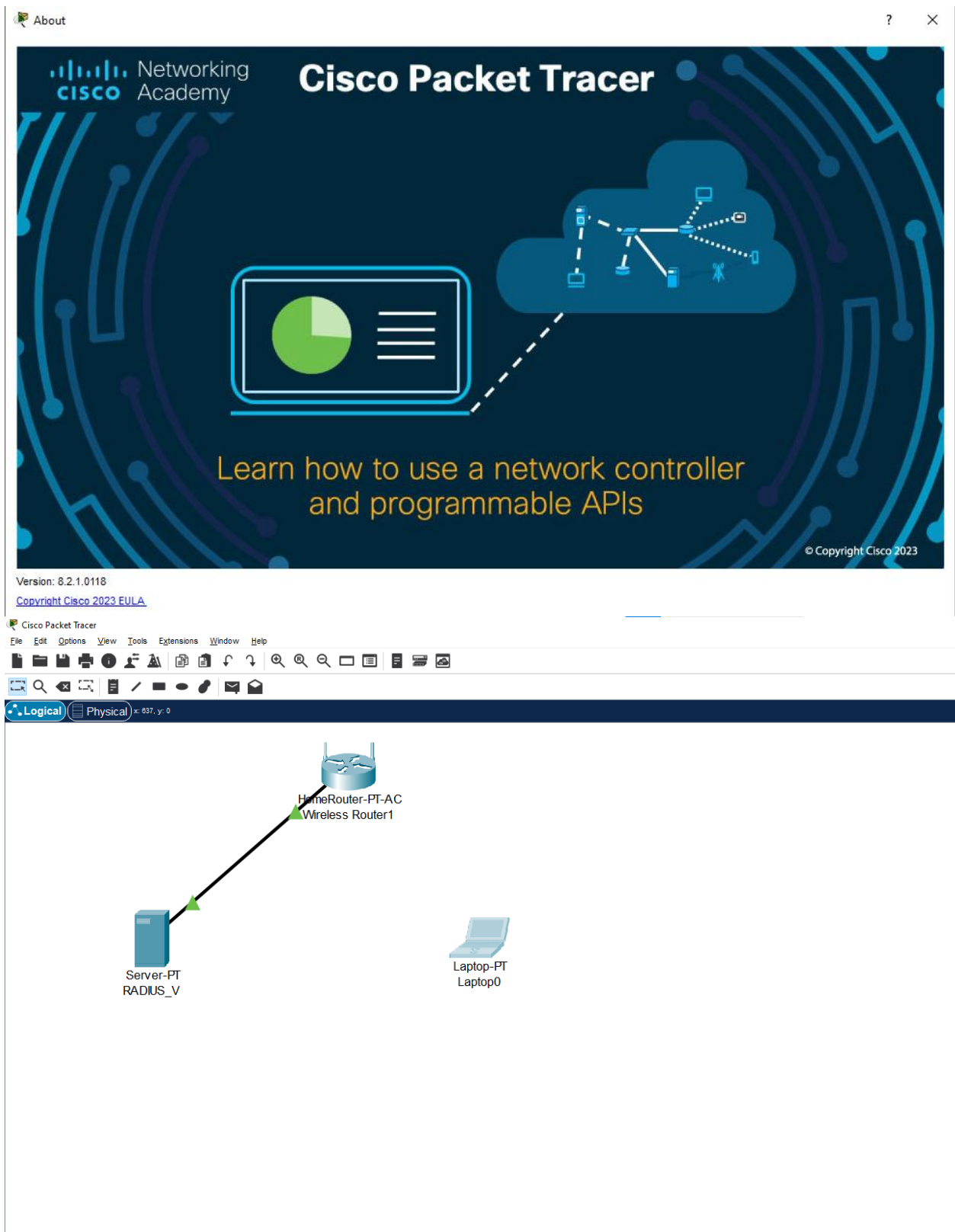
**Student Name:** Nguyễn Trần Vinh – SE160258

**Instructor Name:** Mai Hoàng Đình

**Lab Due Date:** 28/10/2023

I, Chuẩn bị

- Để demo bài lab này thì ta dùng phần mềm Packet tracer, các bạn nhớ dùng phiên bản mới nhất



II, Bước 1

## - Đặt IP cho RADIUS Server

The top screenshot shows a Cisco Packet Tracer network diagram. A Server-PT (RADIUS\_V) is connected to a HomeRouter-PT-AC (Wireless Router1). A Laptop-PT (Laptop0) is also present. The RADIUS\_V configuration window is open, showing the IP Configuration tab. The IPv4 Address is set to 192.168.0.5, Subnet Mask is 255.255.255.0, Default Gateway is 0.0.0.0, and DNS Server is 0.0.0.0. The IPv6 Configuration tab is also visible, showing the IPv6 Address as FE80::2D0:58FF:FE75:2E3A.

The bottom screenshot shows the same Cisco Packet Tracer network diagram. The Router\_V configuration window is open, showing the GUI tab. The Network Setup section is active, showing the IP Address as 192.168.0.1, Subnet Mask as 255.255.255.0, and DHCP Server settings. The DHCP Server is enabled, and the Start IP Address is 192.168.0.100. The Client Lease Time is set to 0 minutes. The Static DNS 1, 2, and 3 fields are all set to 0.0.0.0. The Vlan IDs section shows Internet as 10, VoIP as 20, and IoT as 30.

## III, Bước 2

Vào RADIUS Server, chọn tab Config, chọn mục AAA sẽ thấy phần cấu hình cho RADIUS. Các thông số được Setup như hình dưới, click vào dấu + để thêm

Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

Logical Physical x: 651, y: 76

HomeRouter-PT-AC  
Router\_V

Server-PT  
RADIUS\_V

Laptop-PT  
Laptop0

RADIUS\_V

Physical Config Services Desktop Programming Attributes

SERVICES

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

AAA

Service ☒ On ☐ Off Radius Port 1645

Network Configuration

Client Name Client IP Secret ServerType Radius

Client Name	Client IP	Server Type	Key	
1 LabRadiusV	192.168.0.1	Radius	touristradius	Add

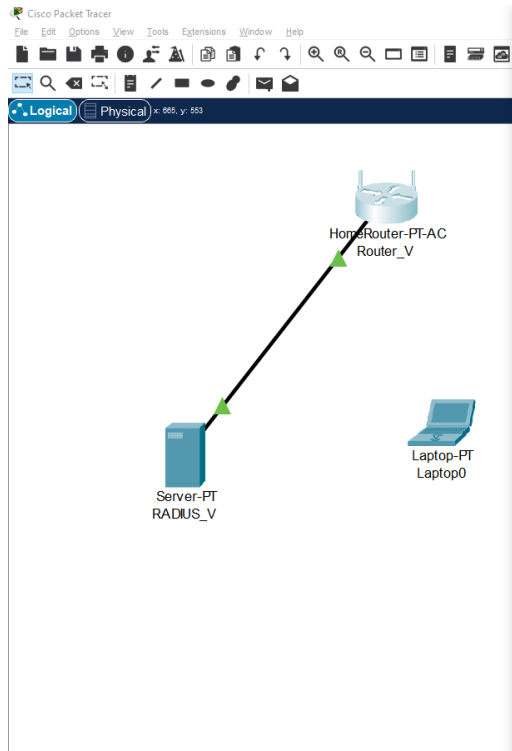
Save Remove

User Setup

Username Password

Username	Password	
1 radius	touristradius	Add

Save Remove



Router\_V

Physical Config GUI Attributes

Firmware Version: v0.9.7

Wireless Setup Wireless Security Access Restrictions Applications & Gaming Wireless In-Band Home Router HomeRouter-PT-AC Status

Basic Wireless Settings

2.4 GHz

Network Mode: Auto

Network Name (SSID): TouristV

SSID Broadcast: ☐ Enabled ☒ Disabled

Standard Channel: 1-2.412GHz

Channel Bandwidth: Auto

5 GHz - 2

Network Mode: Auto

Network Name (SSID): TouristV

SSID Broadcast: ☐ Enabled ☒ Disabled

Standard Channel: Auto

Channel Bandwidth: Auto

5 GHz - 1

Network Mode: Auto

Network Name (SSID): TouristV

SSID Broadcast: ☐ Enabled ☒ Disabled

Standard Channel: Auto

Channel Bandwidth: Auto

Help...

Router\_V

Physical Config **GUI** Attributes

Help...

**2.4 GHz**

Security Mode: WPA2 Enterprise

Encryption: TKIP

RADIUS Server: 192 . 168 . 0 . 5

RADIUS Port: 1645

Shared Secret: TouristV

Key Renewal: 3600 seconds

**5 GHz - 1**

Security Mode: WPA2 Enterprise

Encryption: TKIP

RADIUS Server: 192 . 168 . 0 . 5

RADIUS Port: 1645

Shared Secret: TouristV

Key Renewal: 3600 seconds

**5 GHz - 2**

Security Mode: WPA2 Enterprise

Encryption: TKIP

RADIUS Server: 192 . 168 . 0 . 5

RADIUS Port: 1645

Shared Secret: TouristV

Key Renewal: 3600 seconds

IV, Bước 3

Physical
Config
Desktop
Programming
Attributes

MODULES

WPC300N

PT-LAPTOP-NM-1AM

PT-LAPTOP-NM-1CE

PT-LAPTOP-NM-1CFE

PT-LAPTOP-NM-1CGE

PT-LAPTOP-NM-1FFE

PT-LAPTOP-NM-1FGE

PT-LAPTOP-NM-1W

PT-LAPTOP-NM-1W-A

PT-LAPTOP-NM-1W-AC

PT-LAPTOP-NM-3G/4G

PT-HEADPHONE

PT-MICROPHONE

Zoom In

Laptop\_V

Physical

Config

Desktop

Programming

Attributes

Link Information

Connect

Profiles

To connect to a network, select the profile name then click the **Connect** button. To create or edit a profile, use the menu bar at the bottom of the screen.

Profile	Wireless Network Name
Default	Default
<div>&lt;div&gt;</div>	

Connect

Site Information

Wireless Mode

Infrastructure

Wide Channel

Auto

Standard Channel

Auto

Security


Disable

Authentication

Auto

Connect

2.4GHz



Adapter is Inactive

New

Edit

Import

Export

Delete

Wireless-N

Notebook Adapter

Wireless Network Monitor v1.0

Model No. WPC300N

☐ Top



## Creating a Profile

### Wireless Mode

Please choose the Wireless Mode that best suits your needs.

☒ **Infrastructure Mode**

Select Infrastructure Mode if you want to connect to a wireless router or access point.

☐ **Ad-Hoc Mode**

Select Ad-Hoc Mode if you want to connect to another wireless device directly without using a wireless router or access point.

Please enter the wireless network name (SSID) for your wireless network.

The wireless network name is shared by all devices in a wireless network and is case-sensitive.

Wireless Network Name

[Back](#)[Next](#)**Wireless-N** Notebook Adapter

Wireless Network Monitor v1.0

Model No. **WPC300N**

## Creating a Profile

### Wireless Security - WPA2 Enterprise

Authentication	PEAP	Please select the authentication method that you use to access your network.
Login Name	radius	Enter the Login Name used for authentication.
Password	.....	Enter the Password used for authentication.
Server Name		Enter the Server Name used for authentication. <b>(Optional)</b>
Certificate	Trust Any	Please select the certificate used for authentication.
Inner Authen.	TOKEN CARD	Please select the inner authentication method used inside the PEAP tunnel.

[Back](#) | [Next](#)**Wireless-N** Notebook Adapter    Wireless Network Monitor v**1.11**    Model No. **WPC300N**

Physical Config **Desktop** Programming Attributes

## Confirm New Settings

### Profile Settings

<b>Wireless Network Name</b>	TouristV	<b>IP Address</b>	Auto
<b>Wireless Mode</b>	Infrastructure	<b>Subnet Mask</b>	Auto
<b>Network Mode</b>	Mixed Mode	<b>Default Gateway</b>	Auto
<b>Radio Band</b>	Auto	<b>DNS1</b>	Auto
<b>Wide Channel</b>	Auto	<b>DNS2</b>	
<b>Standard Channel</b>	Auto		
<b>Security</b>	WPA2 Enterprise		
<b>Authentication</b>	Auto		

Exit

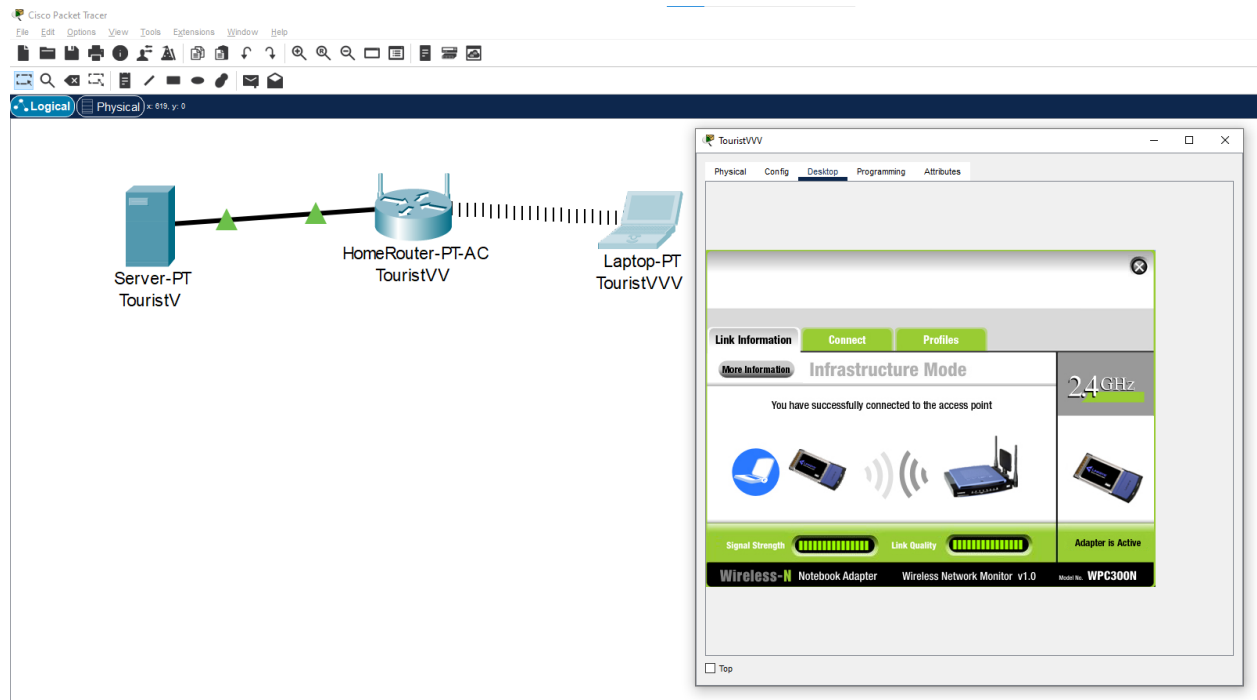
Back

Save

**Wireless-N** Notebook Adapter

Wireless Network Monitor v1.0

Model No. **WPC300N**



## Command Prompt

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

Bluetooth Connection:(default port)

Connection-specific DNS Suffix...:
Link-local IPv6 Address.....: ::
IPv6 Address.....: ::
IPv4 Address.....: 0.0.0.0
Subnet Mask.....: 0.0.0.0
Default Gateway.....: ::
                                0.0.0.0

Wireless0 Connection:

Connection-specific DNS Suffix...:
Link-local IPv6 Address.....: FE80::290:2BFF:FE02:EC10
IPv6 Address.....: ::
IPv4 Address.....: 192.168.0.100
Subnet Mask.....: 255.255.255.0
Default Gateway.....: ::
                                192.168.0.1

C:\>
```