

NPS LAB EXPERIMENT-5

Configuration of Encapsulation dot 1Q using cisco packet tracer.

Step 1: Open cisco packet tracer and drag 1 Router, 2 pc's ,1 switch & connect them through the automatic cable.

PC0 to Switch0(FastEthernet 0/2)

PC1 to Switch0 (FastEthernet 0/3)

PC2 to Switch0 (FastEthernet 0/4)

Router0 to Switch1 (FastEthernet 0/1)

PC0 ip address:10.0.0.2, default gateway:10.0.0.1

PC1 ip address:20.0.0.2, default gateway:20.0.0.1

PC2 ip address:30.0.0.2, default gateway:30.0.0.1

Step 2: Open the cli in the Router and then type the following commands

en

config

int f0/2

switch access vlan 1

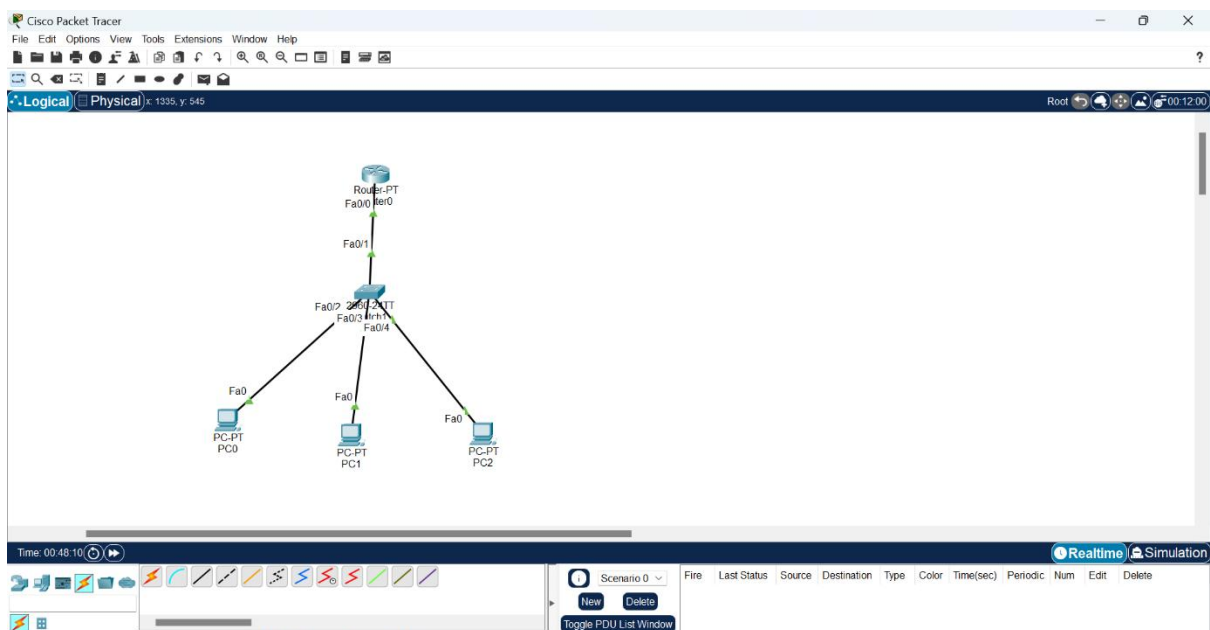
ip address 10.0.0.1

switch mode trunk

switchport trunk encapsulation dot1q.

exit

Step 4: observe the result in the command prompt and save the file.



Router0

Physical Config CLI Attributes

IOS Command Line Interface

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
Router(config-if)#
Router(config-if)#int f0/0.1
Router(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet0/0.1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0.1, changed state to up
Router(config-subif)#en
% Ambiguous command: "en"
Router(config)#
Router(config)#int f0/0.1
Router(config-subif)#encapsulation dot1Q 2
Router(config-subif)#net
% Invalid input detected at '^' marker.
Router(config-subif)#net|
% Invalid input detected at '^' marker.
Router(config-subif)#ip address 10.0.0.1 255.0.0.0
Router(config-subif)#int f0/0.2
Router(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet0/0.2, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0.2, changed state to up
Router(config-subif)#encapsulation dot1
Router(config-subif)#encapsulation dot1Q 3
Router(config-subif)#ip address 20.0.0.1 255.0.0.0
Router(config-subif)#int f0/0.3
Router(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet0/0.3, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0.3, changed state to up
Router(config-subif)#encapsulation dot1Q 4
Router(config-subif)#ip address 30.0.0.1 255.0.0.0
Router(config-subif)#
Router(config-subif)#exit
*****
```

Copy Paste

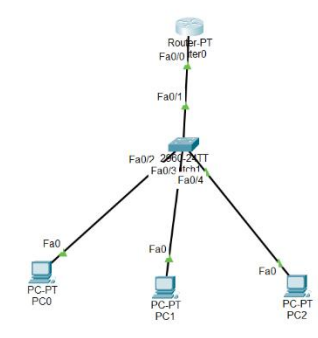
Top

Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

Logical Physical 137, y 268

Root 16:49:00



Time: 00:33:38 Realtime Simulation

Automatically Choose Connection Type

78°F Mostly cloudy

ENG IN

12:05 08-09-2024