

# **Jahangirnagar University**

**Department of Computer Science & Engineering**



**Course Code: CSE-402**

**Course Title: Computer Networking Laboratory**

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## Experiment No: 02

**Experiment Name:** Packet through router.

### Introduction:

In this experiment we will configure routers in between some networks to connect to further network via routing table where network and hop will be mentioned. When sending a packet this routers will recognize which hop to jump to send a packet.

### Description:

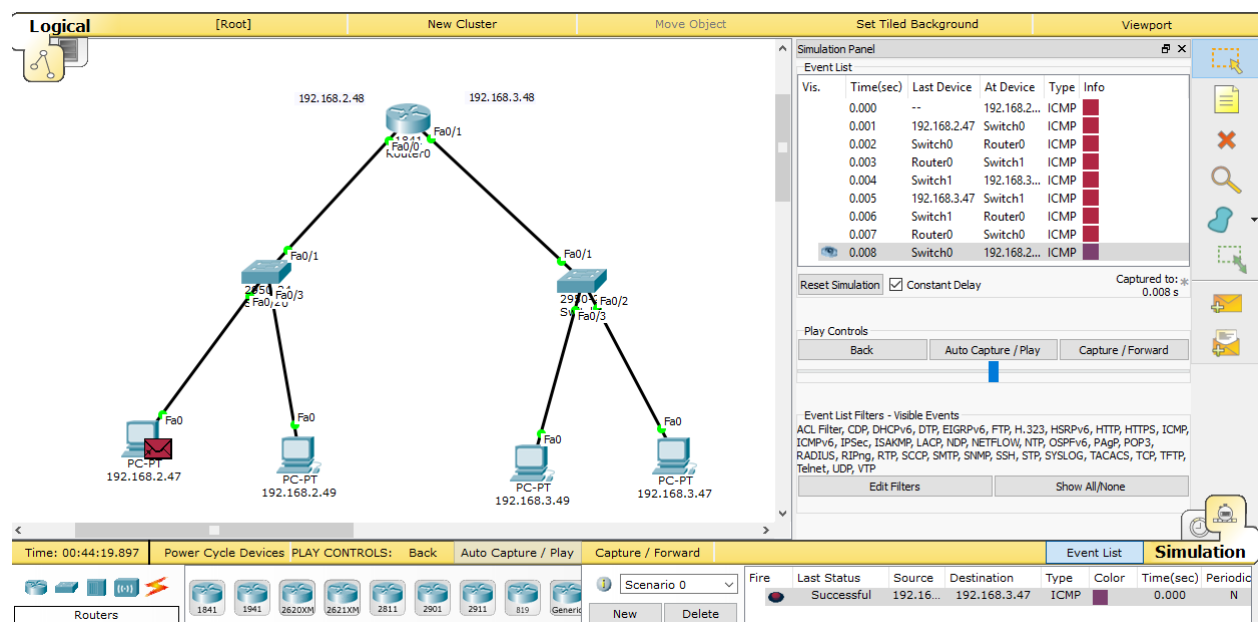
We used cisco packet tracer for simulation. Several computer devices are connected through the routers and different IP addresses were assigned to them. Then a packet is sent through them to check the characteristics of routers we created a hop table to access networks that are far from the routers to pass the packets.

### Simulation:

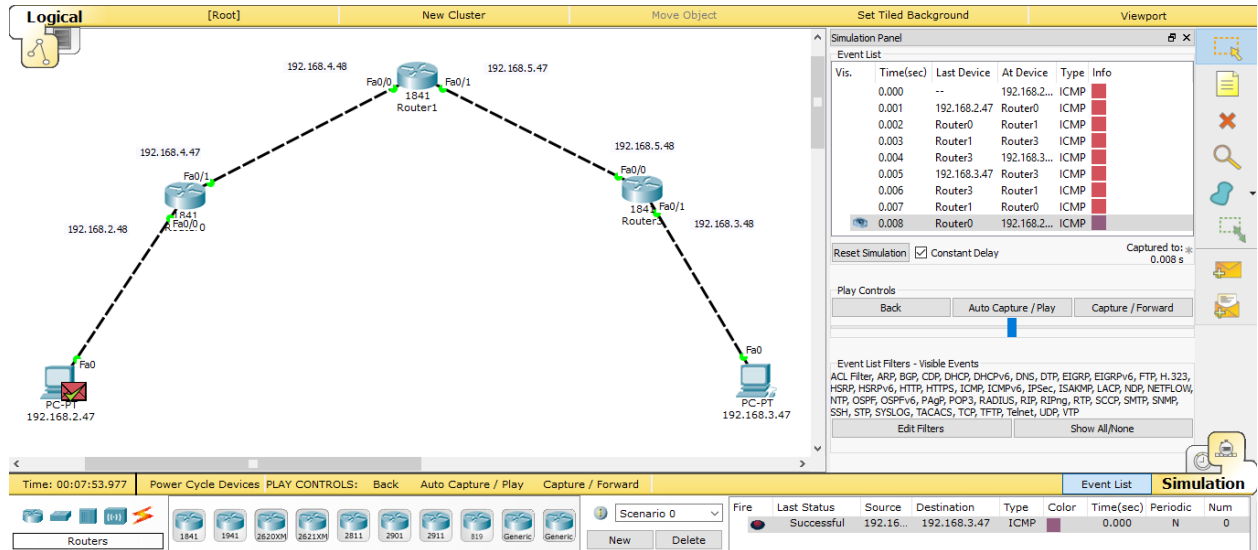
#### Router:

Routers are small electronic devices that join multiple computer networks together using either wired or wireless connections. In technical terms, a router is a Layer 3 network gate way device, meaning that it connects two or more networks and that the router operates at the network layer of the OSI model.

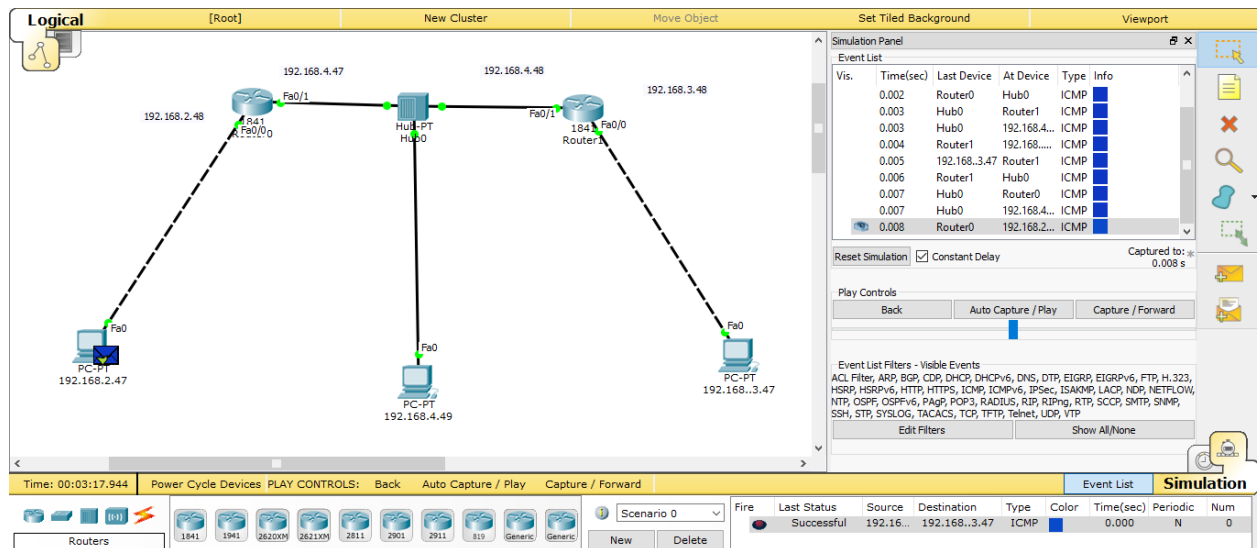
#### 1. One Router:



## 2. Multiple Router:



## 3. Multiple Router and Hub:



## Discussion:

We can see that the Routers send the packet the required path mentioned in the route table. People tend to get benefit from a router for through a packet to a different network. A router is better for connecting different networks. After using a router, we can easily use a hub, switch, PC for any other connection and for any other communication.