

## Experiment No. 5

Aim: Build a simple network topology and configure it for static routing protocol using packet tracer. Setup a network and configure it for IP addressing, subnetting, masking.

### Theory:

- • CISCO Packet Tracer as the name suggests, is a tool built by CISCO. This tool provides a network simulation to practice simple and complex networks.
- The main purpose of CISCO packet tracer is to help students learn the principles of networking with hands-on experience as well as develop CISCO technology specific skills.

### ○ • WORKSPACE For CISCO Packet Tracer

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#### 1. Logical

⇒ The logical workspace shows the logical network topology that is built by the user.

- It displays the connecting, planning and clustering of virtual network devices.

#### 2. Physical

⇒ In the physical workspace, we can see the physical implementation of the logical network.

- It also shows how the network devices such as switches, routers and hosts are connected in a real network topology.

### • Features of CISCO Packet Tracer.

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1) CISCO packet tracer supports the multi-user system that allows any user to connect in different topologies across different computer networks. By using this, the teacher assigns different tasks to different students.

2) We can also remove the capabilities of the CISCO packet tracer with the help of an API. This feature is also provided by the CISCO packet tracer.

We can also remove the special feature like accessibility, gaming, assessment delivery and interaction with the real-world from the CISCO packet tracer.

3) We can also simulate the configuration related to routers, and this can be accessed anywhere.

4) We can access this configuration with unlimited devices.

5) It also provides a self-paced and interactive environment.



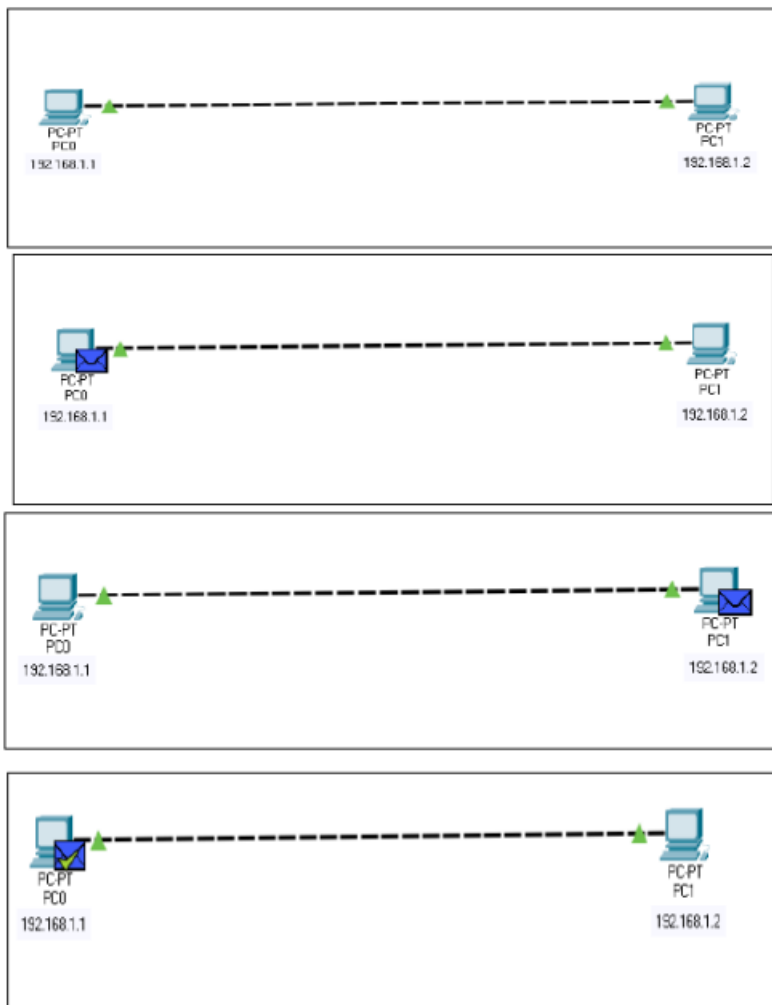
- 6) The enhanced physical mode transports you to a virtual lab where you can simulate cabling devices on a rack. Refresh key skills such as device placement, on-device power switching, device port-to-port cabling, troubleshoot, and more.
- 7) The network controller allows you a centralized dashboard to see the network's state, instantly discover and diagnose issue and push configuration changes to all managed devices at once, whether you use its Web GUI or its APIs.

(A)

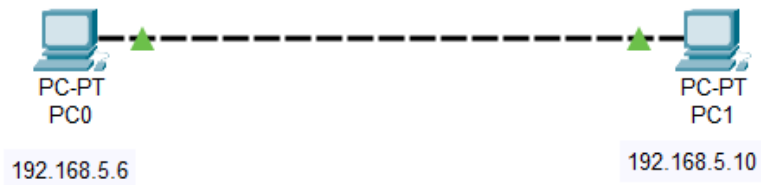
Factor 3

Output:

**PC to PC**



### Connection Between Two End Devices



### Connection Using Switch

