



Future College
University of Engineering Department
Computer Technologies

Lab

Simulators

Lecture 1: **Designing a Simple Network**

By: Eng. Yakeen Salam

Computer simulators

The concept of computer network simulation technology, which is widely used in communications and computer network research, is based on creating a model to know the behavior of real computer networks or networks that one wants to implement in the future.

This is done on a computer screen using a computer program such as Cisco Backpack Tracer.

To Create a Simple network, we need:

Step:

1. Router.
2. Switch.
3. 2 PC.
4. Connection cable(Auto).

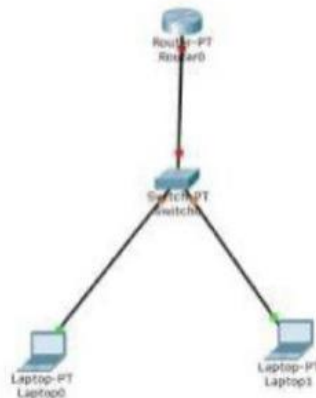
comprehensive networking technology teaching and learning program that provides a unique combination of realistic simulation, visual experiments, assessment, activity authoring capabilities, and opportunities for multi-user collaboration and competition. Packet Tracer's innovative features will help students and teachers collaborate,

solve problems, and learn concepts in an engaging and lively social environment. Some Advantages of Packetlt allows students to design, build, configure and troubleshoot complex networks using virtual machines.

Router Configuration

Step-1(Designed Network topology)

1. Connect FastEthernet0 port of PC0 with FastEthernet0/0 port of Router using a copper straight-through cable.
2. Connect FastEthernet0 port of PC1 with FastEthernet0/1 port of Router using a copper straight-through cable.



Discussion:

Design two simple networks using a router, 2 switches, and 4 PC.