CIT 223: Data Communication and Computer Network Lab
Assignment #02
Introduction to Packet Tracer Lab

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Published Date: May 14, 2024, Deadline Date: **May 24, 2024**

1 Introduction

Packet Tracer is a cross-platform visual simulation tool designed by Cisco Systems that allows users to create network topologies and imitate modern computer networks. The software allows users to simulate the configuration of Cisco routers and switches using a simulated command line interface. Packet Tracer makes use of a drag and drop user interface, allowing users to add and remove simulated network devices as they see fit. The software is mainly focused towards Cisco Networking Academy students as an educational tool for helping them learn fundamental CCNA concepts.

Cisco Packet Tracer is Cisco's simulation software. It can be used to create complicated network topologies, as well as to test and simulate abstract networking concepts. It acts as a playground for you to explore networking and the experience is very close to what you see in computer networks.

2 Lab Objectives

The objectives of the lab are:

1. To be able to use Cisco Packet Tracer for Network Simulations
2. To Study Network Devices (Repeater, Hub, Switch, Bridge, Router, Gateway) and explore network functionality with PDU.
   (a) Create a PDU in Simulation Mode.
   (b) Use PDU to simulate network architecture.

3 Methodology

1. Download Cisco Packet Tracer from `https://www.netacad.com/portal/resources/packet-tracer`.
2. Connect devices using suitable connection type.
3. Test PDU in simulation mode by drag-drop of different devices.

4 Lab Questions

Question 1

Use Packet Tracer to create a network topology using two endsystems.

Question 2

Use Packet Tracer to create a network topology using Switchand two endsystems.

Question 3

Use Packet Tracer to create a network topology using Switch, Server and two client endsystems.