CSE 438.2 REPORT

Submitted To:

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Submitted by:

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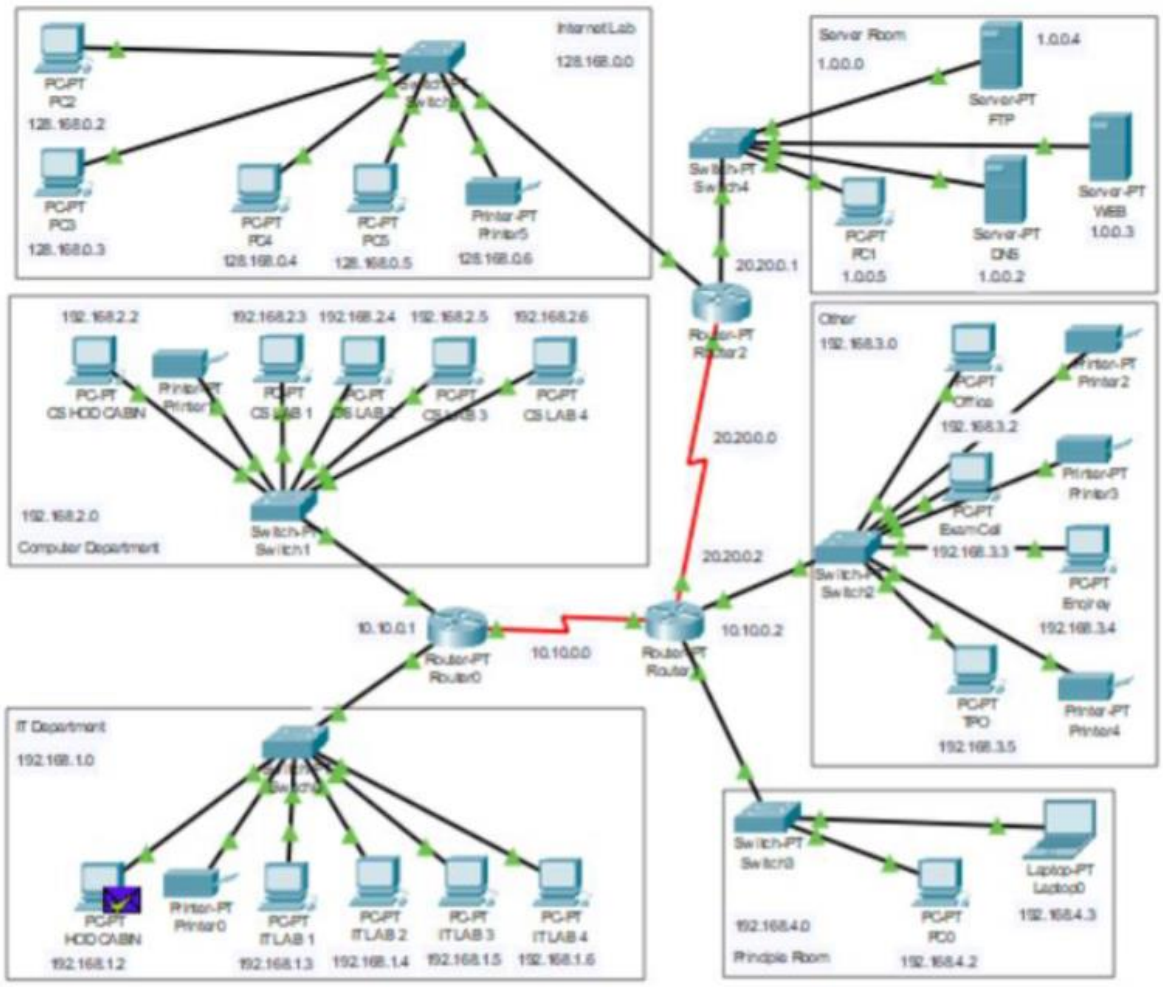
Introduction

The following hands-on assignment is a way to implement a fully functional network in Cisco Packet Tracer. The following group assignment is a way to implement the following network with all the necessary commands and descriptions.

Network Diagram



Commands and Descriptions

Internet Lab

First, we set up the internet lab network. We use 4 PCs and a printer connected to a switch.

We are given the default network address as 128.168.0.0

We set the IP addresses **statically** from the IP configuration section in Desktop.

Server Room

In this network, we have a FTP, WEB and DNS server. We also have a PC. All these devices are connected to a switch.

We are given the default network address as 1.0.0.0

We set the IP address for the PC **statically** from the IP configuration section in Desktop.

The IP address for the DNS server must also be assigned to all the devices.

The default gateway 1.0.0.1

From services section, we have to switch on the FTP settings for FTP server.

From services section, we have to switch on the HTTP settings and import an HTML file for WEB server.

From services section, we have to add and save the possible requests from the FTP and WEB server settings for DNS server. We can check this by going to the PC in another network. In desktop section, we can go to web browser and browse for the possible requests. If the browser connects, then the network is working properly.

Computer Department

In this network, we have four PCs and a Printer. All these devices are connected to a switch.

We set the IP addresses **statically** from the IP configuration section in Desktop.

We are given the default network address as 192.168.2.0

Other

In this network, we have four PCs and three Printers. All these devices are connected to a switch.

We set the IP addresses **statically** from the IP configuration section in Desktop.

We are given the default network address as 192.168.3.0

Other

In this network, we have four PCs and three Printers. All these devices are connected to a switch.

We set the IP addresses **statically** from the IP configuration section in Desktop.

We are given the default network address as 192.168.3.0

IT Department

In this network, we have five PCs and one Printer. All these devices are connected to a switch.

We set the IP addresses **statically** from the IP configuration section in Desktop.

We are given the default network address as 192.168.1.0

Principle Room

In this network, we have one PC and one laptop. All these devices are connected to a switch.

We set the IP addresses **statically** from the IP configuration section in Desktop.

We are given the default network address as 192.168.4.0

Configuring Routers

Router 0

First, we switch off the router from the physical section. Then we plug in the HWIC-2T module. Then, the router is switched on again.

From the Config Section:

This router is connected to three networks. (Internet Lab, Server Room and Router 0(1).

At 0/1 port, we set IP address as first address of internet lab (1.0.0.1)

At 0/0 port, we set IP address as first address of server room (192.168.0.1)

At 0/1/0 port we set IP address as address of the network formed with the connected router 0(1) (20.20.0.1)

Router 0(1)(1)

First, we switch off the router from the physical section. Then we plug in the HWIC-2T module. Then, the router is switched on again.

From the Config section:

This router is connected to three networks. (IT Department, computer department and Router 0(1).

At 0/1 port, we set IP address as first address of IT Department (192.168.1.1)

At 0/0 port, we set IP address as first address of computer department (192.168.2.1)

At 0/1/0 port we set IP address as address of the network formed with the connected router 0(1) (10.10.0.2)

Router 0(1)(1)

First, we switch off the router from the physical section. Then we plug in the HWIC-2T module. Then, the router is switched on again.

From the Config Section:

This router is connected to four networks. (Other, Principle Room, Router(0) and Router 0(1)(1).

At 0/1 port, we set IP address as first address of principle room (192.168.4.1)

At 0/0 port, we set IP address as first address of other (192.168.3.1)

At 0/1/0 port we set IP address as address of the network formed with the connected router 0 (20.20.0.2)

At 0/1/1 port we set IP address as address of the network formed with the connected router 0(1)(1) (10.10.0.2)

Final Network (Implemented in Cisco Packet Tracer)