

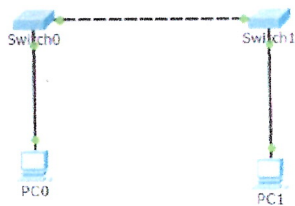
IFT 266 Introduction to Network Information Communication Technology (ICT)

Lab 5 Implement Basic Switch Connectivity

After you complete each step, put an 'x' in the completed box or answer the open question

Create the following network topology on Packet Tracer with the addressing scheme provided

For this lab, you can use the 2960 switch



Addressing Table

Device	Interface	Address	Subnet Mask
PC0	Ethernet0	192.168.1.10	255.255.255.0
PC1	Ethernet0	192.168.1.20	255.255.255.0
Switch0	VLAN1	192.168.1.1	255.255.255.0
Switch1	VLAN1	192.168.1.2	255.255.255.0

Part 1: Perform a Basic Configuration on Switch 1 and Switch 2

1. Configure Switch 1 with a hostname "Castle"

Enter the command here Switch>en, Switch# configure terminal,
Switch# hostname castle

2. Configure "Castle" with the console and privileged EXEC mode passwords

Enter the commands that will apply the password to the console port here

Castle(config)# line console 0
Castle(config-line)# password cisco
Castle(config-line)# login
Castle(config-line)#

Enter the privileged EXEC secret password command here Castle(config)# enable password password

3. Verify the password configurations for Castle

How can you verify that both passwords were configured correctly?

Show running - config

4. Configure an MOTD banner. Use an appropriate banner text to warn unauthorized access

Enter the command here Castle(config)# banner motd % No Unauthorized Access %

5. Save the configuration file to NVRAM.

Enter the command here Castle#Copy run Start

Repeat Steps 1 to 5 for Switch 2 which we will name "Beckett"

Completed ☒

Part 2: Configure the PCs

Based on the information provided in the addressing table, setup both PCs with their addresses and subnet masks.

Completed ☒

Part 3: Configure the Switch Management Interface

Configure Castle with an IP address.

Switches can be used as plug-and-play devices. This means that they do not need to be configured for them to work. Switches forward information from one port to another based on MAC addresses.

If this is the case, why would we configure it with an IP address?

They must be configured w/ IP address to reach switches remotely

Enter the following commands to configure Castle with an IP address.

```
Castle# configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Castle(config)# interface vlan 1
Castle(config-if)# ip address 192.168.1.253 255.255.255.0
Castle (config-if)# no shutdown
```

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up

```
Castle (config-if)#
Castle (config-if)# exit
Castle #
```

Why do you enter the **no shut** command?

prevents ports from being disabled or shutdown

Repeat the same steps to configure Beckett (the other switch) with an IP address.

Completed ☒

Verify the IP address configuration on Castle and Beckett

Use the show ip interface brief command to display the IP address and status of all the switch ports and interfaces. You can also use the show running-config command.

Completed ☐

Save configurations for Castle and Beckett to NVRAM.

Which command is used to save the configuration file in RAM to NVRAM?

copy run start

Part 4: Verify network connectivity

Network connectivity can be verified using the ping command.

It is very important that connectivity exists throughout the network.

Corrective action must be taken if there is a failure.

Ping Castle and Beckett from PC1 and PC2

Attach screenshots of your successful pings!
(enough screenshots to show me it works)