

Network 2710 Project

Create the following in Packet Tracer. Document your network and include both physical and logical network Diagrams. Upload document with Packet Tracer File into Brightspace along with second document showing proof that it works. Program Routers by use of Browser, switches by console then SSH. Show this in proof document.

Network

ABC Company has two sites, a manufacturing plant in Amherst and an office in Burnside. You need to set up both offices. Another company will join the sites by VPN but for this exercise you can join the sites by a router. You just need to build the network on each site. The phone systems will have an Avaya IP Office with digital and analog phones, so you do not need to worry about phones. A security company is taking care of Alarms and Cameras. Just Join WAN Ports of Routers together with a Ethernet Cable.

Burnside

1 Wire closet / Server Room which contains the following:

Server Room (RM 101)

1 DHCP, DNS and File Server (Named ABCDC1)

Network is a 10.10.1.0 /24 Network

Gateway will be set to 10.10.1.254

DHCP, DNS and File Server will have an address of 10.10.1.20

DNS should have a record pointing to Webpage (See webserver Below)

1 Webserver (Named ABCWebSRV)

Webserver will have an IP Address of 10.10.1.21

(Test that you can hit Webpage by Name from a PC)

1 Home Router (Named R1B101)

LAN will be set to the Gateway address from above

DHCP Turned off, DHCP off Server above

Will broadcast a wireless SID of ABCnet

WAN will be set to 172.16.252.10 /16 Gateway will be 172.16.252.8

1 2960 Switch (Named SW1B101)

The switch will have an address of 10.10.1.1

Have security Banner, and turn on SSH for network management.

Turn on Sticky ports for ports connected to PCs.

Each Room will have a PC and there shown be 1 Laptop joined to the Wireless.

The Naming Convention will be ABCWS## (Example ABCBWS01), Laptop (ABCLT##)

Amherst Site (Manufacturing Plant)

1 Building with 2 Wiring Closets. One is a server room; one is a wiring closet.

Server Room 115

1 DHCP, DNS and File Server (Named ABCDC2)

Network is a 10.10.2.0 /24 Network

Gateway will be set to 10.10.2.254

DHCP, DNS and File Server will have an address of 10.10.2.20

1 2960 Switch (Named SW2A115)

The switch will have an address of 10.10.2.1

Have security Banner, and turn on SSH for network management.

Turn on Sticky ports for ports connected to PCs.

1 Home Router (R2A115)

LAN will be set to the Gateway address from above

DHCP Turned off, DHCP off Server above

Will broadcast a wireless SID of ABCnet

WAN will be set to 172.16.252.12 /16 Gateway will be 172.16.252.8

Wiring Closet (RM 137)

1 2960 Switch (Named SW3A137)

The switch will have an address of 10.10.2.2

Each Room will have a PC and there shown be 1 Laptop joined to the Wireless.

The Naming Convention will be ABCWS## (Example ABCAWS##) (Laptop ABCLT##)