CCNA Mega Lab

It is very important to complete as many practice labs you can find, because if you are like me reading and taking practice test are not enough to prepare you for the real exam. You need to get some real experience configuring, verifying and troubleshooting routing and switching networks. This lab has been designed to give you real hands on experience configuring Cisco routers and switches.

In this lab we will use Cisco’s Packet Tracer to configure a network consisting of five routers and six switches employing technologies such as Frame Relay, PPP, Network Address Translation (NAT), Access Control List (ACL), Virtual Local Area Network (VLAN), Ether Channel, and routing protocols as well as reviewing basic router and switch configuration, addressing and subnetting.

# Learning Objectives:

* Review basic router and switch configuration.
* Configure Frame Relay.
* Configure PPP serial communication
* Configure Chap authentication.
* Configure NAT.
* Configure VLANs.
* Configure Ether Channel.
* Configure ACLs.
* Configure VLAN Trunking.

I will not be providing detailed step by step instruction on configuring this lab. I have provided the final configuration but you should try to complete the lab on your own and use the accompanying configurations to check your solution.

Configure the lab as shown in the network diagram with the following requirements:

## HQ-1

* Vlan Sales Hosts only allowed communication with Customer Database & Sales Server.
* Vlan Accounting Hosts only allowed communication with Customer Database, Accounts Server & HBR Host.
* Vlan Shipping Hosts only allowed communication with Customer Database, Shipping Server & SBR Host.
* Vlan HR Hosts only allowed communication with HR Server.
* Telnet & SSH only allow 192.168.1.2

## NORTH

* Account Host only allowed communication with Customer Database, Accounts Server & Accounts Vlan Hosts.
* Telnet & SSH only allow 192.168.1.2

## SOUTH

* Shipping Host only allowed communication with Customer Database, Shipping Server & Shipping Vlan Hosts.
* Telnet & SSH only allow 192.168.1.2

## HQ-2

* Telnet & SSH only allow 192.168.1.2