CISCO Packet Tracer

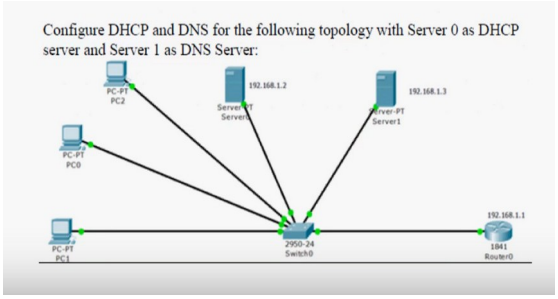
In each computer, four pieces of information are normally needed:

- The IP address of the computer
- The subnet mask of the computer
- The IP address of a router (gateway)
- The IP address of a name server

These four pieces of information can be restored in a configuration file and accessed by the computer during the bootstrap process.

Connect and configure the different devices as per the requirement and label each of them appropriately.

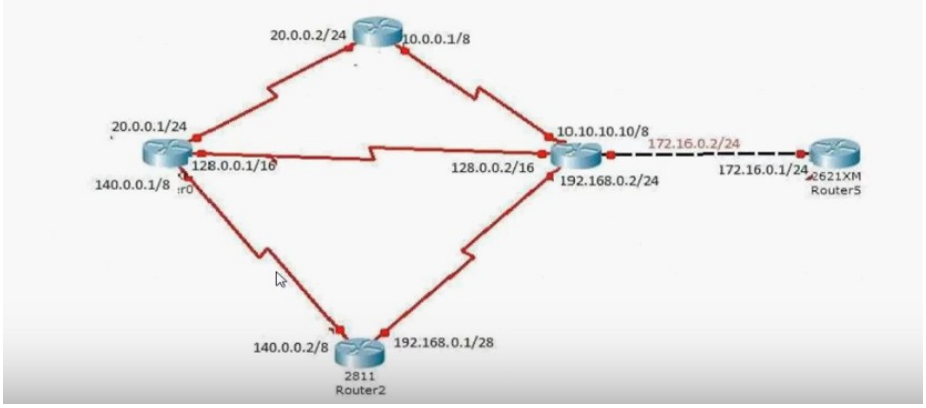
Let us design the network first with proper labels along with ip address to the router and server only.



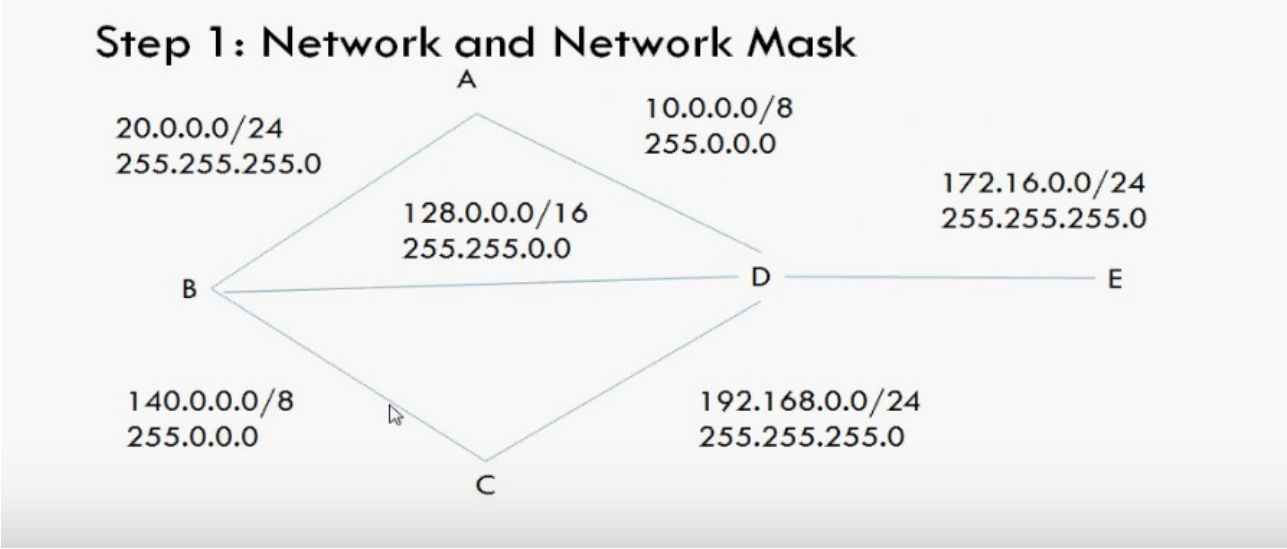
- Configure S1 as the DHCP server. Go to the config tab, select the DHCP button.
- Turn on the service by clicking the radio button.
- Modify the existing serverpool to meet your requirements
- Gateway will be the router IP address i.e. 192.168.1.1
- Assign the DNS server address I.e 192.168.1.3
- Assign the start IP address as 192.168.1.4 as the three addresses are already been used for the router and two servers.
- Assign the number of users you want to assign addresses. I've left it to the defaults.
- Click the save button
- For every Machine select the desktop tab-→ IP configuration → from the two radio buttons select DHCP wand wait for some time.
- All the necessary details will be filled up via DHCP request. If you have noticed the gateway is the one which we have specified in DHCP and DNS address is also the one which we have specified in DHCP.
- From any of the machines select browser and type in the IP address 192.168.1.2 thats of our DHCP server. As you can see we got a web page in the browser.
- Now we would be assigning a domainname to this address and configure it in our DNS server.
- For DNS move to the second server in the config tab select the DNS button.
- Switch on the DNS service by clicking the radio button.
- Add a domain name inside the record, type in the address and click add. Similarly, I will assign another domain name to our DNS server.
- To verify everything let us modify the HTML content that is being generated by selecting the HTTP button on both the sever.
- Test Everything!

Instructor: Sabahat Ijaz

Routing Information Protocol



Step1:
Find all the different networks we have to create this could be also found for each connectionusing the network mask.



I am going to use the drawn diagram as it makes life easier to know which router belongs to which network and we require it for performing RIP Practical!

Step2:
Place a 2621XM router. Click on it and switch off router. Add a component NM-2FE2W switch on the router again. Copy this router and paste it on the interface.

As given to us in the topology.
Now take a PDU and check if it is delivered from one network to another say from A to E.
So, we have to configure it using RIP to know about the existing network.

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Your Task:
OSPF, RIP, FTP, TELNET, Email.