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NAT and DHCP Lab

1/23/24

Q2.1: DORA stands for Discover, Offer, Request, Acknowledge. Its used to give a host an ip address.

Q2.2: PC-1: 192.168.1.11 PC-2: 192.168.1.12

Q2.3: Jan 23 2024 08:23 PM for both

Q3.1: Port Address Translation is meant by the keyword “overflow”. This means that the router is now able to handle the translation of multiple internal IP addresses to a single external Ip address

Q3.2: Inside Local: 8.8.8.8

Inside Global: 192.168.122.118

Outside Local: 192.168.122.118

Outside Global: 192.168.1.11

Q3.3: The router knew what to use for the inside global address from the NAT ACL configuration. The command used was: ip nat inside source list 1 interface e0/0 overload

By going through this lab I have learned that troubleshooting is your best friend. Throughout this lab I came to many roadblocks and being able to go through and troubleshoot the device and making sure each device is connected to the correct port is crucial. By being able to troubleshoot and get to the root of the problem will make building these networks a lot easier. Without looking through the lecture slides and building on knowledge from the lecture I wouldn’t have been able to make it through this lab. Going through the lecture to understand what makes these components work together and how they communicate on the lowest levels. By understanding things like the OSI model I can see what makes these networks work together. By also learning the cisco commands I can learn how to connect the networks that I built. Learning the commands will allow for a better understanding of networking and troubleshooting.

By logically going through and building from the ground up is important. Jumping around from different steps won’t work. Starting from the bottom and working your way through step by step will give you the best understanding of what is occurring in the network and how it is working. Not getting angry because something went wrong will change the game. If something isn’t working retrace your steps and go through it step by step. This will help to better understand the process and not getting frustrated.