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ELEC 5220 - Lab 6  
11/16/21

**Exercise 1-1**

![Table

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![Graphical user interface, application

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![Graphical user interface, table

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**Setup Exercise 1-2**

![Table

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**Exercise 2-1**

Text

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Q1: Can host 1 ping host 2 and host3 successfully? Why or Why not?

**Yes, the host 1 can see both host 2 and 3 currently through the router.**

Q2: Can two subnets connect to each other? Briefly explain why host 1 or 2 can ping host 3 without static routing table?

**They can. Static routing (through routing entries) is used to define an exit point from the router when no other points are seen.**

**Exercise 2-2**

Text

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Pre-Firewall

Text

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Post-Firewall

Q3: Briefly explain why “Public” security zone can block the transmission from host 1 to host 2, host3? (the answer should be related to the policy used in the security zone).

**The "public" security zone doesn't work because host 2 and 3 are on the other side of the firewall from host 1.**

Q4: Which policy is used in your “nofirewall” security zone? How does it work?

**The policy we used in the "nofirewall" security zone was Many:1 NAPT. It simply makes host 1's IP an access point, so we can avoid the firewall block completely.**

**Exercise 2-1 Part 2**

Text

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Host 1🡪3 and Host 3 🡪1

Text

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Graphical user interface, text, application

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Q1: Consider the ping request packet on both hosts, what’s the source IP address? What’s the destination IP address? Are these two source IP addresses same with each other? Why?

**No they are not the same. This is due to not being routed through the NAT security zone, so host1 does not see all properties of host3 and vice versa.**

Host 1🡪2 and Host 2 🡪1

Graphical user interface, text, table

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Table, Excel

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Q2: Consider the ping request packet on both hosts, what’s the source IP address? What’s the destination IP address? Are these two source IP addresses same with each other? Why?

**They are the same. Because they are both being routed through the NAT.**

**Exercise 2-2 Part 2**

![Table

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![Graphical user interface

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Q3: Assume we want to configure the lab router’s routing table based on the network structure. Please show its static routing entries for host2 and host3.

**Did not get screenshots -- These would look similar to how the screenshots above look, however, it would be the destination, and mask of host 2 and of host 3.**