

IT 315

Hands-On #7

192.168	96.238	100.41	140.222	80.239	62.115	62.115	62.115
130.156	130.156	130.156	204.153	128.112	128.112	128.112	

The above diagram reads left to right and is the first two octets which are the network and the subnet of each IP address used to reach www.net.princeton.edu. We can see that when it reached a reoccurring network and subnet the following network ID or the host ID was the only distinguishing factor. Therefore, we can assume that it reached a network with multiple routers and multiple subnets.

128.112	128.112	128.112	204.153	172.96	172.96	163.253	163.253
163.253	163.253	163.253	64.57	200.143	170.79	170.79	170.79
170.79	200.145	200.145	200.145				

We can see that when comparing these two trace routes, there are substantially more hops for the second one. This is due to the top-level domain. The first website we reached was .edu, while the second was .br, which indicates that it is a Brazilian website. As a result, it took 15 more hops to reach its destination.

When comparing both of these diagrams, we can observe that the last three hops of the first diagram and the first three hops of the second diagram are the same. This means that the packet we sent used the same router to reach its destination, which is also evident from the number 12 on the first diagram and the number 4 on the second diagram.