Rohith Perumalla | 1/29/17

This past week I've been learning more about static routing and about how routers handle packets. The Internet spans across the entire globe, from America to Thailand to Antarctica, connecting all of us. To transfer data across this massive network there are variety of devices installed in critical locations; some of these devices include: routers, primary switches, core switches, servers, databases, and more. I learned about what routers were and what they did. Routers are devices that connect multiple networks and determine the fastest most trustworthy route for a packet to take to its destination. There are a few protocols routers use to determine the best path some like EIGRP and OSF; each of these protocols prioritize different factors like bandwidth and latency to determine the best route. Each routing method has a certain administrative distance; administrative distance uses metrics to describe the trustworthiness of a network in a numerical value (the larger a number is the greater distance it has and less trustworthy it is). Routers also use a routing table to determine a path for a packet; a routing table is table that shows a list of known networks, the best way to reach a host on that network, and other information about the path. But many times the network a host is trying to communicate isn't a nearby or local network that isn't in the routing table, in these situations routers either drop the packet or use a static route if configured. Static routes are paths configured for remote locations and need to be manually updated if the network changes. Static routes can also be configured to act as a default gateway for the router for packets that aren't in the routing table. Overall this week I've learned about the function of routers and static routes.