In these weeks videos we learned components of Network Infrastructure. We also learned different network type from and differences between a LAN and a MAN and a WLAN. It is important to design a network before installing it because it allows you to find weak points and places that it could be compromised. It also allows for you to play around with it and have an idea or vision of what you need and to be better prepared and have a fast and efficient installation and network setup. In the video about network design, we learned that some things that we should include in network design is, talking to the person what the needs are and what the company does to know what they actually need, in other words, assess the current networking infrastructure. Next, you look into security when doing the networking diagrams so incorporating security early is better to do, but also looking at the environment and see if types of ventilation needed. You also need to analyze existing network documentation. You need to check for compatibility with existing network hardware, some places bandwidth could be a problem because older cat5 cables are running through the network that also includes checking operation system compatibility which means check to see if the software is not outdated or can still be run. Another thing you need to assess is wireless needs, whether or not you are going to run guest wireless. Also when it comes to ISP it might be better to have more than one internet service provider in case if one goes down, another one stays up but also looking into the last little distribution for example in the video it says,” from the basement to the office.” You want to make sure you are running separate connectivity where the ISP comes into the building all the way to where the office is at. When it comes to network documentation, you need a form like SolarWinds inventory form which takes care of inventory management. There are basically two types of documentation, physical and logic. In physical, documents the stuff you can actually look at, logical deals primarily with logical addresses, VLANS, and that type of networking stuff.