

Lab 7

Design a Network

Scenario

You have just been hired on as the network administrator for a mid-sized start-up company. You have been assigned the task of designing their network infrastructure. Management anticipates that at the main office in New York they will have 250 Windows XP machines, 200 Apple OS X machines, 5 file servers, and 2 web servers, one for the internal intranet and one for the publicly accessible company website. The Denver CO, branch will have 150 Windows Vista machines and 2 Linux application servers. Both branch LANs need to be connected by some type of WAN technology. Design a network for these machines to communicate. Your plan should include a combination of routers, hubs and switches. Make sure you have no more than 50 computers on an individual segment. Provide private IP addresses for the machines and specify what type of cabling you are using between nodes.

You can use whatever program you like to create the network map, OmniGraffle, Illustrator, Photoshop, MS Paint, etc, but the file you submit needs to be a .jpg file. You can use one icon to represent up to 50 machines. I don't care what icons you use, just make sure that you include a legend so I know what represents what. I'm not looking for perfection, I'm looking for understanding of the differences between the network hardware devices and an understanding of IP addressing. Don't freak out, just do your best.

Icon Sites

<http://www.iconlook.com/>

<http://www.iconfinder.net/>