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ISDS 4120

Hands-On Assignment #5

CHAPTER 8

1. I would recommend that NDAS upgrade their T1 circuits to T3 circuits. The current T1 circuits provide a data rate of 1.544 Mbps while T3 circuits would provide a data rate of 44.736 Mbps. The textbook says that because of this high data rate, T3 circuits are becoming very popular among corporate networks. The current facilities would be adequate because T3 circuits are not that much larger than T1 circuits, physically speaking.

2. There are several factors that go into deciding whether a MAN would be effective in a given city. First, what is the distance between the LANs that you want to connect? IEEE standards say that 20-25km is the max distance for a MAN. What is the volume of data being sent between LANS? Does the city have MAN capabilities? And finally, think about security. Extending the network opens up more opportunities for the network to be compromised.

3. Both external and internal hacking potential increase as a network expands. If NDAS goes global then there are more chances for black hat hackers to attack as well as potential for an angry employee to do something malicious to the network. More employees also means there are more chances for an employee to lose (or have stolen) an unencrypted company computer or phone that contains sensitive information.

CHAPTER 9

1. I would recommend that NDAS use wireless Internet access. Wireless will be cheaper (less maintenance than other options) and easier for the company to use. Wireless makes it easier to organize the office because you don’t have to worry about desk placement near the modem(s). This also offers increased mobility within the office because employees can be anywhere in the office and access their documents, which also leads to the ability for increased collaboration.

2. In-house website building is very costly both in money and time. NDAS would need to find their own team to build and maintain the site. The same can be said about the second method where NDAS would still have to manage the website and its content. The third option is the best approach because NDAS can hire professionals to create and maintain their website. Odds are this will result in a better website. NDAS doesn’t want to make a mistake with their website because of how important digital advertising is in the current market. It will be worth it to outsource the entire website.