**Assignment 2**

**(100 points)**

**Instructions:** This is an **individual** assignment. Use the blackboard to submit your word file with answers on the due date (no hard copies please). Late submissions will receive a zero grade.

1. **Network Media:**

Part of being a network administrator is working with its hardware. It’s important to know the differences in media and devices as they relate to cost, performance, scalability, etc. Most network administrators work with limited budgets, a litany of user requests, and somewhat unrealistic expectations from upper management. They need to know what requests they can accommodate and at what cost.

In this project you will search the Web for certain pieces of commonly used hardware. Then you will copy the image you find, record the cost, and note the specification requested (e.g. speed rating). You may only need to visit a couple of sites to get the information. This project will give you an idea of the general costs associated with commonly used networking equipment.

1. Open the word processing program (e.g. Microsoft Word, Open Office Writer, etc.).
2. Create the following tables with the same media, image, price, and rated speed columns.
3. For each of the media listed below find the associated image, price, and speed rating by searching the Internet.
4. Complete the table below with images, price, and speed ratings you obtained in your search.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S. No** | **Media** | **Image** | **Price** | **Rated Speed** |
| 1. | Cat 5e cable |  | $6.99 | 10/100 Mb/s |
| 2. | Cat 6 cable |  |  |  |
| 3. | Cat 7 cable |  |  |  |
| 4. | Multi-mode ST patch cable(fiber) |  |  |  |
| 5. | Multi-mode SC patch cable(fiber) |  |  |  |
| 6. | Single-mode patch cable(fiber) |  |  |  |
| 7. | 802.11g wireless router |  |  |  |
| 8. | 802.11n wireless router |  |  |  |

 Table 1: Network Media

1. For each of the media listed below find the associated image and price by searching the web.
2. Complete the table below with the images and prices you obtained in your search.

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No** | **Media** | **Image** | **Price** |
| 1. | RJ45 connector |  | $0.99 |
| 2. | SVGA cable |  |  |
| 3. | UPS(Uninterruptable Power Supply) |  |  |
| 4. | Cisco 24-port+ switch |  |  |
| 5. | Cisco 24-port+ router |  |  |
| 6. | Blade server(any) |  |  |
| 7. | SAN(Storage Area Network) |  |  |
| 8. | 19’’ Rack Enclosure(any) |  |  |
| 9. | Wiring diagram for Cat5 cable |  | NA |
| 10. | Wiring diagram for Cat5 cross-over cable |  | NA |

 Table 2: Network Equipment

**Thought Questions:**

1. Which website had most of the media listed above?
2. Were there a variety of Cisco routers/switches for you to choose from? Why?
3. Do hardware purchases or salaries for IT workers demand a greater share of the total cost of the ownership of the IT infrastructure at a typical medium sized company? Why?
4. Is it less expensive for companies to install wireless or wired networks? Why?