**Assignment 1: Network Diagram Report**

Due Week 7 and worth 100 points

You have been contracted to upgrade a small business from an ad-hoc wireless network to a serious infrastructure environment. The company wants to take the business to the next level and needs the infrastructure to support it. For this assignment, there are three parts: Business Profile Document, Network Diagram, and a Report to Leadership.

For the second part, you will need to create a simple network diagram to communicate your ideas to your client. There are many tools that can be used to create professional-looking network diagrams, but the most important part is demonstrating your knowledge of logical and physical topologies to communicate the process.

For example, Figure 1 is a diagram of the physical STAR network:

*Figure 1*

You could also represent the physical STAR network as seen in Figure 2:

*Figure 2*

Note that the graphic shown in Figure 2 could be a logical ring topology depending on your LAN requirements.

**Part 1 of 3: Business Profile Document**

* Create a fictional small business. The business can be of any industry of your choosing such as a small restaurant chain, a real estate office, an import/export business, etc. It is best to choose a business that you know, but feel free to branch out and do additional research if you are up for a challenge. At minimum, you will want to have the business name and the number of employees, workstations, servers, routers, switches, etc.
* Write a business profile that includes the name of the business and the number of employees, workstations, servers, routers, switches, and any other relevant information for the purpose of this report.
* It is suggested that you use Microsoft Word or OpenOffice to create your business profile document to complete Part 1.

**Part 2 of 3: Network Diagram**

* Create your network diagram and label it clearly. You can use any tool to create your visual for the network document, such as Visio, as long as the output file is a PDF or Office document. Remember, the priority is illustrating the network to your client. You are responsible for ensuring that the document you use can be opened easily by your professor.
* Review the suggestions and illustrated steps in [Network Diagram Creation Example](https://blackboard.strayer.edu/bbcswebdav/xid-149849358_4/xid-149849358_4) .

**Part 3 of 3: Report to Leadership**

* Create the following four (4) memos for the leadership in your company. Address the memos to the CIO and CEO. You can use standard MS Word documents to create the memos or you can use the email template in Word. Include the following in your report:
	+ **Memo 1:** Describe the hardware needed and include the brand, model number, cost, and the website with the information, including the price. Include a screen shot for clarity.
		- Workstations
		- Routers
		- Switches
		- CablingTools
		- Wall Outlets
		Zip Ties
		- Server Racks
		- Servers
		- Other
	+ **Memo 2:** Describe and explain the logical and physical topology you plan to use. Make sure that this matches what is shown in your diagram from Part 1. Thoroughly explain the reasoning for the choices you made.
	+ **Memo 3:** Outline an estimated time of completion for the project, including dates, times, people involved, and any other information needed for your specific project. Be thorough in your outline to leadership.
	+ **Memo 4:** Identify the phases that you might use and include an explanation for why these phases should be used. Phases to consider are research, proposal, purchasing, planning, implementing, etc. (Build from what you have learned in other classes to make this decision.)

Use professional business communication language in all of your correspondence and make sure that you have left no questions unanswered for the leadership team. Being able to communicate your ideas and plans thoroughly is an important aspect of your job. Although there is no specific page count or word count, be thorough and explain each area fully. Do your best to anticipate and answer any questions the CIO or CEO may have for you and your department.

Your assignment must follow these formatting requirements:

* This course requires use of new Strayer Writing Standards (SWS). The format is different than other Strayer University courses. Please take a moment to review the SWS documentation for details.
* Be typed, double spaced, using Times New Roman font (size 12), with one-inch margins on all sides; citations and references must follow SWS or school-specific format. Check with your professor for any additional instructions.
* Include a cover page containing the title of the assignment, the student's name, the professor's name, the course title, and the date. The cover page and the reference page are not included in the required assignment page length.

The specific course learning outcomes associated with this assignment are:

* Maintain network devices to promote continued functionality.