**Network Design Proposal**

**Summary**

The state office of education in Maryland was given funding in order to design and implement a network topology to serve the main office of education and two if its school district offices. The report begins by stating general guidelines and design decisions that were made during the planning phase of development. Some main focal points of the network are: secure service, integration and update, versatile information processing collaboration, and stability. Certain assumptions about the environment of the network are stated and the network’s intended users clarified. The report then states data that has been observed, such as bandwidth usage for the existing LAN, and current storage requirements based on the existing LAN. This data is used to project estimations on requirements of the new network topology, factoring in the upgraded hardware in software, to draw conclusions about bandwidth and storage capacity of the network that is being designed. Next, Diagrams of proposed Network architecture are displayed, each subnet having detailed information included such as: outgoing WAN connections, and detailed hardware specifications. A complete list of inventory that will be used for the projected network is listed in bullet format, including price and quantity of each item that will be included in the network architecture. Finally, financial reports are generated and included within the report that include: Cost Analysis, Benefit Analysis, and a cost-benefit ratio in order to give granular details on necessary accounting information pertaining to the potential network build.

**Evaluation**

One of the aspects of the paper that seemed to be adequately designed is the report’s overall flow. The fact that the paper starts of by stating the general problem and situation in which the proposed network will be deployed gives readers the scope of the project in a general sense. A simple introduction to the current situation, network scope, and overall proposed objectives of the network provides a humble yet precise insight into its design. Further into the report, the focus moves from general to specific, ex: Data types, data sources, number of users, etc. The flow from general to specific allows the reader of the report to become adequately attuned to the intentions of the deployment team as a whole.

Another aspect of the report that jumped off the page, was the abundance of topological drawings of various design implementations of the proposed network. By incorporating visual aids to the report, this aspect allows readers to view what words cannot convey as effectively: the actual layout of the network. The diagrams are broken down into each LAN segment for the proposed network, and each device within the diagram is clearly labeled. The presence of basic functionality of various pieces of equipment, for example, the fact that a switch is labeled as having 12 ports, and allows a 10/100 mbps transfer rate provides readers with specific information in a visual context.

The third aspect that was appealing to me was the fact that the final portion of the report contained specific details on every piece of machinery, cabling, and infrastructure equipment. The overall granularity of this portion of the report was very effective at conveying necessary attributes of each item including: price, availability, performance, and maintenance. This library of inventory’s granularity provided readers with an in-depth view of prices and possible areas of cutting or increasing costs within the budget. The library of data also ties nicely into the accounting reports at the very end of the report, showing where the total cost estimates are derived from.

One area of possible improvement within the article lies in the way in which the visual diagrams of each LAN segment were created. I believe that it is important to have detail of every LAN environment within the proposed topology, yet what is lacking is an overall picture of the entire physical topology. It may be difficult for readers of the proposal to envision each topology in the grand scheme of things, the only attribute of each providing support for a grand picture being lines drawn to represent the edge of the network. An easy fix to this dilemma would be to include a topology diagram of the entire network, perhaps labeling each site or LAN, but not providing any more detail, as the individual LAN diagrams have compensated for such necessary attributes.

Another area that did not seem up to par was the accounting report entitled “Benefit Analysis”. It appears as if these categories are vague and lack supporting information to back the cost benefits of each category. Perhaps more detailed documentation and supporting evidence is required for such claims as saving an estimated 4,000 dollars a year, based on the factor of “Decreased Anxiety”. These figures seem to have been drawn from thin air, and without grounds to stand on, hold little value.

**“Preparing a High Impact Consultant’s Report”**

**Summary**

The report begins by defining common types of security consultant reports, elaborating on the consultant’s role in each of these reports. The report then hones in on one particular type of security report: the Security Assessment report. After a brief overview of the main purpose of the security assessment report, the “Anatomy” of a security assessment report is dissected. In this section, parts of the report are explained and elaborated on in terms of grammatical standards, optional portions (such as a cover photo on the outside cover), and the overall purpose of each section. This section is very specific in how the report is supposed to flow, each section clearly defined ad optional parameters in each section stated. The next portion of the report deals with general writing tips dealing with the overall writing style of the report. Some of the headings that give the reader insight into proper styling are: Understand the Importance of the Report, Consider who will be reading the report, Start writing early, write simply and clearly, define unfamiliar terms and concepts, use terms consistently, and use photos and charts to enhance your report. Each section is very specific in what is considered proper form when writing a Security Assessment report, such as stating the maximum file size (2 MB) for storage due to the file most likely being distributed electronically to many peers. The overall content of each heading mixes “hard” and “soft” skills in the context of writing the report. Hard skills pertaining to actual content of the report such as: including diagrams, keeping terms simple, steps for outlining the report, and how to make facts in your report a more powerful statement. The Soft skills that are listed are concerned with the human side of the report such as: knowing that the report directly reflects your skills and knowledge, considering all the people that my read your report, possibility of report becoming a legal document, and necessity of having your paper professionally reviewed. Overall this report serves as a very useful source of information for a person looking to write a Security Assessment report; incorporating a clear definition of the general idea behind a Security Assessment report, as well as providing granular, specific, and helpful information concerning the content of the report as well as tips for an effective writing strategy.