In this lab, we will investigate developing a network redesign request for proposal (RFP) for a small but expanding business. *Ashley’s Artistic Designs* recently secured two very lucrative long-term contracts to produce digital art for a successful Manga publisher and an emerging independent film producer. Ashley needs to expand her 4-person business with both additional employees and a more sophisticated and purpose-driven network. The existing office network more or less evolved with Ashley’s business over the past 3 years; its logical network design is shown below.

Network diagram of notional SOHO network used for reference in Network Redesign lab.  Diagram includes router connected to the Internet (external) and firewall (internal), with firewall further connected to a central switch which connects an internal network server, 4 desktops, a laptop, a tablet and VOIP phone as well as a wireless access device which may host multiple devices.

Description automatically generated

Ashley is considering using an RFP to bring in outside expertise to cost out and physically implement a network redesign. She has asked for your advice regarding her redesign/expansion. Along with the current state network diagram above, she shows you the following Needs Analysis.

Ashley’s Artistic Designs Network Redesign Needs Notes

* Digital Art Workstations for 8-10 illustrators (currently 4 aging, but acceptable PCs)
* Digital Art Software for 8-10 illustrators (currently 2 registered copies of CorelDraw 2018)
* 3-4 Workstations for Business Support (Contracts/Legal, Sales, Human Resources, etc.)
* Business Support software (Currently 1 copy of MS Office 2016)
* Long-term storage and backup for digital art designs
* Storage and protection of sensitive business and personnel data
* Digital Artist ready access to Internet resources and collaboration with each other
* Ability to connect wirelessly to network for visiting artists and field laptops/tablets
* VOIP capability for entire office
* Web Server to display and advertise designs
* Gigabit fiber optic connectivity throughout

To complete the assignment, **upload a Word (.docx) or Adobe (.pdf) file with answers to the questions below, as your submission to this assignment in Blackboard**.

1. Is Ashley’s redesign plan, with the above information, likely to benefit from an RFP? Why or why not?

**Yes, it is more likely to benefit from a RFP since the business is expanding and new facilities are needed to support 8-10 workstations.**

1. What additional information should be part of Ashley’s Needs Analysis?

**Additional information that should be included is background information such as overview of current networks and organizational profile and bidding process which includes bid evaluation criteria and time schedules for the bidding process.**

1. How might her redesign benefit from topics we have studied in this course such as network segmentation, VLANs or other techniques and technology?

**How her redesign might benefit from topics we have studied in this course such as network segmentation, VLANS or other techniques and technology is that she can improve on her RFP by making more specific notes in which it is more thorough and covers all parameters of what she needs and how she wants it done. She will have better understanding of what also vendors will be doing to her network.**