

Midterm Exam

Due: Monday, November 2nd.

You are to design a corporate IP Intranet and Extranet architecture.

Specifications for the Company are:

- 1 Six “campus” semi-autonomous centers form the core of the company.
- 2 Four of the campus centers are the business centers containing mainly desktops and small servers. They each have approximately 12 separate buildings in each center and average 4 floors in each building
- 3 The other 2 centers are engineering centers and contain more and higher performance computers and computational systems. They each have approximately 20 separate buildings in each center and average 2 floors in each building.
- 4 There are approximately 6,000 employees in the company.

Criteria for the network include, but are not limited to, the following:

- 1 Implement and discuss any Layer 1 thru 5 procedures you believe the corporate network should have, including, but not limited to, Routing protocols, addressing (VLAN/Subnet/etc.) and Intrusion Prevention Systems.
- 2 Costs associated with the project are to be constrained as much as possible. (you should have a detailed cost analysis of your project in your design)
- 3 Service life, maintenance, and expandability/upgradeability should all be considered/discussed.
- 4 A complete network topology should be diagrammed and discussed in general and be included in the pricing/budget... Specific equipment brands, models, feature-sets, etc. should all be itemized into the hierarchy and purpose.
- 5 One “branch” of your topology that has a Router as it’s root, should be discussed in detail and include IOS configuration examples for that Router showing topics discussed in class so far. (Routing protocol, VLANs, etc.)

Please work on your design independently, without help of others in or outside of the course. Please include a signed copy of this sheet as the cover for your completed project when handed in.

Honor Code

I agree to a code of silence and honesty related to the implicit and explicit information of this project. I certify that I have not discussed the project, implicitly and explicitly, with anyone (even non-members of the course) until after the regular scheduled Due Date (Nov. 02, 2009 @ 6:00PM). I understand that by breaking the above agreement, I will be subject to academic review and possible expulsion from the University of Delaware.

Name (Print) _____ Date _____

(Signature)