**Windows Server Deployment Proposal**

***Overview***
Each student will create a detailed, organized, unified technical solution given the scenario described below. The submission will be in a written format, with at least one diagram, and may include additional diagrams, charts or tables. The assignment is meant for students to enhance their mastery of the material and to provide a creative and realistic way in which to apply knowledge from this course.

***Scenario***
Worldwide Advertising, Inc. (referred to as “WAI”) has hired you as an IT consultant for implementing their Windows network infrastructure. WAI is a new advertising firm, and they are currently hiring staff, establishing two locations, and have a need to get their internal IT services configured. They do not yet have an IT staff, but when they do, the IT staff will take over all aspects of IT administration. You are required to supply WAI with a solution which describes the implementation and configuration of their core IT services. Cost is not a significant concern – WAI wishes to implement the “right” solution to fit their needs now and for the next 2-3 years.

There are several details about WAI which will have an impact on your choices:

* WAI will start with 90 employees, in the following departments:
	+ Executives (9 employees) – manage and run the company
	+ Accounts and Sales Department (15 employees) – perform market research and maintain accounts
	+ Creative, Media and Production Department (49 employees) – advertising
	+ Human Resources and Finances (12 employees) – perform HR and financial duties
	+ IT (5 employees) – manage IT for the company
	+ WAI will have two sites, one in Los Angeles and one in New York. Most staff will be located in LA, with at least 1 person from each of the departments above located in NY.
* Networking equipment is already in place for both sites. A secure tunnel (using IPSec) will be established between the two sites so that inter-site traffic will be securely tunneled over the Internet. You may make whatever other assumptions you wish about intra-and inter-site connectivity.
* Security mechanisms (e.g., firewalls, intrusion detection) will be handled separately, and there is no need to describe them.
* Some departments will want their data to remain private from other departments (e.g., Finances personnel will not want Production staff to see the company’s financial details). Your team may make assumptions about how data should be shared or kept private.
* Assumptions can be made regarding any information not included here; all assumptions should be identified, however.

***Topics to Cover***Your document should cover the content presented in the course. The outline below contains recommended points to cover. You are free to add other related information.

Describe the technical and business reasons for each choice, citing other resources as appropriate.

The Windows Server 2012 operating system should be used for all aspects of the solution.

The topics include:

*New Features of Windows Server 2012*

* Describe new features of Windows Server 2012 that WAI can take advantages of.

*Deployment and Server Editions*

* How many total servers are needed? Which roles will be combined?
* What edition of Windows will be used for each server (e.g., Standard, Datacenter)?
* Will Server Core be used on any servers?
* Where are each of the servers located (which of the two sites)?
* How will the servers be deployed? Manual or automated?

*Active Directory*

* Number of AD domains?
* Will there be any Read-Only Domain Controllers?
* How will the second site factor into domain controller placement? How will AD sites be configured?
* How will AD organizational units be organized (considering how group policy will be used and users will be organized)?

*DNS and DHCP*

* DHCP scope design (e.g., lease times, number of scopes, address range)
* Will a form of DHCP fault tolerance be implemented?
* Will DHCP reservations be used for servers?
* DNS namespace design (e.g., domain name(s) chosen, split DNS for Internet/intranet, zones)
* How will DNS be handled for the second site?

*Application Services*

* How will applications be deployed? If using Group Policy, what are the details on how Group Policy will be used to deploy the software? Which software applications will likely be needed?

*File and Printer Sharing*

* What shares might be needed?
* DFS Needed?
* How will quotas/FSRM be configures?

***Assignment Requirements***There are specific requirements for the assignment: The final submission should contain at least 6 pages’ worth of text written by the student (not counting title page, images, diagrams, tables, or quotations), but may be longer, not to exceed approximately 10 pages’ worth of student-supplied text. (With the required diagram, and other images, title page, etc., the final submission may end up being more than 10 pages in length.) It must be double-spaced, have 1-inch margins, and use 12-point Times New Roman or 10-point Arial/Helvetica font. A title page is required; APA format for the title page is optional.

* At least one diagram must be included (not counted towards the minimum length described above); this could be a diagram describing Active Directory components, DHCP/DNS design, file share hierarchy, or anything else that is worth displaying graphically to enhance the reader’s understanding of the proposal. Additional diagrams, images, or tables are welcome.
* The submission must cover all of the 6 major topics outlined above. Each choice should be explained with technical and business reasoning. The solution should be reasonably detailed. Additional topics may be covered as desired.
* The structure of the final submission is flexible. There is no specific format required, although it should be organized logically and represent a single, unified solution. It is likely that the format will include separate sections for each of the 6 topics required, as well as a summary.
* At least two non-textbook, non-LabSim, non-Wikipedia reference is required; preferably, this would be a “best practice” guide or similar content from Microsoft or an experienced provider of Microsoft solutions.
* Be sure to properly quote or cite any sources used. APA format is required for in-text citations and the list of works cited at the end. It is expected that you are already familiar with UMUC's "Policy on Academic Dishonesty and Plagiarism." It is available in the Academic Policies section of the Syllabus; there are also links in the Webliography. In its simplest form, if you are using text from a source, you must cite and/or quote it. If plagiarism is found, then there will be a penalty to the grade.