
Catholic Charities: Server and Network Administration

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Catholic Charities: Project Proposal and Work Plan

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Catholic Charities: Project Proposal and Work Plan

Executive Summary

Here in this executive summary includes a concise, but complete, description of every point of our sponsor Catholic Charities, with a clear statement of their purpose, Catholic Charities' needs, how our team propose to satisfy those needs, our goals as a team, the risks involved, project work schedule, cost estimate of the project and the projected financial rewards.

Our vision is to ensure for the security and stability of their computers by building a server to balance the workload equally. This will allow for the organization to complete their tasks and share information in a timely manner, as well as develop consistency in data file management. Because the local organization is larger than just the one location in Tallahassee, the potential to share information with other Catholic Charities offices, such as the one in Pensacola, would be greatly beneficial to the organization.

- Our goal is to deliver the final product by April 13, 2008.
- Our objectives include providing network security, provide file sharing throughout the network, create a documented wiki of all procedures that occur on the site, update computers with up to date software, and install a server. (March 17, 2008)
- Our plan is to install a central copy of security software on the server and distribute client licenses to each of the computers on site. The wiki will document all progress, problems, and other information that we see pertinent to this project. This will allow Catholic Charities to see what we have completed, as well as allow the next group to pick up where we left off. (April 3, 2008)
- We will also make sure that all of the computers are up to date to continue to protect them from the latest security vulnerabilities. (March 27, 2008)

Since our sponsor has agreed to pay for the software licenses that are needed and we are working with a very low budget, we will be responsible for finding the necessary hardware that is required to complete our objectives. To finish, our group has come to the assumption that it should only take two to three weeks to gather the necessary resources to complete our objectives.

Alternative Solutions

In the event that our initial solution is unable to be implemented properly, we will attempt the following alternate solutions: Install Server without Microsoft Exchange and Install Server with File Sharing Capabilities Only.

We believe that the best alternative solution to implement, if our original solution happens to not work, would be to install a server without Microsoft Exchange. This is the best solution to use due to a variety of reasons. First, Walt has a great amount of experience setting up a server without Microsoft exchange. This is a great benefit because this will help reduce the amount of time it will take to implement this solution and help prevent errors from happening. This solution will still allow the server to distribute files and applications to client computers. Finally, this solution still allows our IT staff with the ability of administrative access to all client computers. We will be able to secure files so that only certain clients may access them.

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The purpose and anticipated start date is 2/11/08 and end date is 3/21/08. Results of this proposal should be achieved within the time frame submitted.

The total anticipated budget of this project is \$900: The Estimated Human Resources Costs amounts to \$800 - \$10 per hour for 80 hours and The Estimated Project Costs amounts to \$100 for Software installation. We will not incur additional hours without written prior approval. Software costs and other related fee estimates are summarized on the attached schedule.

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Introduction

The sponsor for our project is Catholic Charities of Northwest Florida. Their mission is to provide assistance to families and individuals by, "reducing poverty, support families, and empower communities." Our group's main priority is to ensure that every file at the site is secured and protected from any outside sources.

When our group first toured the project site we identified the business problem right away.

Our team identified the following problems:

- Files are currently not being backed up
- Local machines are vulnerable to attacks
- No universal administrator for each machine
- Currently impossible to restore data
- Users cannot share files

In terms of cost reduction the project will reduce the amount of money that is spent on licenses for anti-virus on each machine. Rather than buying each client computer a license, there will be one license for the server, which will distribute to each client computer.

The survival of Catholic Charities is of utmost importance. If the organization were to fail, many people in the community would be left without access to resources that are vital to their existence in the community. To this end, the project will be done to comply with government privacy laws. By completing this project, it will ensure that all client and internal documentation is protected from unauthorized use.

Our group will ensure that once the site has been secured and updated properly it will provide a solid growth for the company. It will allow for increased storage space, new technology with the use of a server, synchronization of information, and the prevention of data loss due to a disaster or unauthorized use. With the growth of this project will also involve increased responsibility and new concept that must be adopted by the employees. Our goal is to ensure for the seamless integration of this project into the workplace so that it minimizes the impact on the employee's daily activities.

It is important to solve this problem because Catholic Charities in Tallahassee would like to make sure that all of their client computers are safe from viruses, spam, and malware. By adding a server, it will address these needs, as well as allow for administrative access privileges and file sharing amongst the users.

The project solves the problem by allowing the computers to communicate with each other, while securing the system as well. When sensitive information is stored on one machine it can be better locked down than by storing bits of sensitive material across many local machines. The big-picture of the project is to allow for security and stability at Catholic Charities. We believe that it is important to ensure the confidentiality of their information, as well as their client's information. By implementing a secure server we will be able to accomplish the task.

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Our vision is to ensure for the security and stability of their computers by building a server to balance the workload equally. This will allow for the organization to complete their tasks and share information in a timely manner, as well as develop consistency in data file management. Because the organization is larger than just the one location in Tallahassee, the potential to share information with other Catholic Charities offices, such as the one in Pensacola, would be greatly beneficial to the organization.

Our goal is to deliver the final product by April 13, 2008.

Our objectives include:

- providing network security
- provide file sharing throughout the network
- create a documented wiki of all procedures that occur on the site
- Update computers with up to date software, and install a server.

Our plan is to install a central copy of security software on the server and distribute client licenses to each of the computers on site. The wiki will document all progress, problems, and other information that we see pertinent to this project. This will allow Catholic Charities to see what we have completed, as well as allow the next group to pick up where we left off. We will also make sure that all of the computers are up to date to continue to protect them from the latest security vulnerabilities.

Our project team is composed of four members who possess a variety of different skills. Everyone in our group specializes in user support, but we all have other specializations as well.

- Walt has gained his expertise from networking, server administration, and from creating professional documents.
- Andre specializes in web development, such as creating websites and maintaining web based applications.
- Matt has experience installing networks, maintaining databases, and creating websites.
- Jeff has experience using graphic design applications, such as Photoshop, as well as editing videos for projects.

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Objectives

Objectives for our project are:

1. Install a server preferably without Microsoft exchange. The server will be used for file sharing purposes and to back up client files. Our group plans to deliver this objective by the end of March.
2. Securing all client computers and the server with anti-virus software. We will be closing off certain ports and making the necessary security changes to ensure that no one but authorized users and administrators are allowed to log onto the server. The anti-virus software will be distributing to client computers through the server. Our deadline to meet this object is set to be April 7.
3. Our group plans to create a wiki that will document weekly progress at the site. This information will be used to provide our professor and project teams in the future with the progress we have made at the site. The deadline for this objective is at the end of the semester which is April 18.
4. Set up each client with their own folder on the server where they may upload files to. Each client folder will be used to transmit files to other clients that are authorized to view that folder. Each client will also be provided with their own login information. Our deadline for this objective will be April 7.

For each objective our group has established, all stakeholders involved with the project have agreed upon. Our group believes that there are two key components that each objective we have set should be measured. The first is that all employees should know how to use the new technology properly. Our group will give demonstrations to all employees to ensure that they know how to use the new technology properly. The second component is to make sure that each objective is error-free. Once, all employees know how to use the new technology that will be implanted and that technology is free of errors, then our group believes that each objective has been properly achieved. Lastly, our group believes that each objective that has been set will be achieved by the end of March 2008.

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Assumptions and Constraints

After our first tour of the site, our group has developed assumptions based on resource availability, the organizational structure at the site, and its technical capabilities. Due to the fact that we are working with a nonprofit organization, we will be working with a very low budget, meaning we will be responsible for finding the necessary hardware that is required to complete our objectives. However, since our sponsor has agreed to pay for the software licenses that are needed, we assume that we will only need to find hardware materials. Lastly, our group has come to the assumption that it should only take two to three weeks to gather the necessary resources to complete our objectives. We have arrived at this assumption based on the fact that Jeff has already acquired a server, which is the most important aspect of the project. It will only take a week to receive the anti-virus software once it is received. These two components comprise the majority of the materials required for the project, outside of downloadable software.

All of the on-site computers possess the ability to allow file sharing between them and can be networked properly to the server that will be implemented. We will not encounter any compatibility errors due to the fact that each computer is running windows XP. Our group also came to the assumption that the network equipment at the site is sufficient enough to implement a server. However, in the event that this is not the case, we will need to readjust our thinking and be able to modify the server to balance the workload since they do not have a T1 internet connection on site.

We will be outsourcing various parts of the project to external sources. Our group is dependent on Jeff's father providing us with a server to implement at the site. We are also dependant on our sponsor providing us with the necessary funding to purchase an anti-virus license for our server so that we may distribute the software to all the computers at the site. These sources must provide us with the necessary budget and hardware within the next few weeks; if they fail to do so within the time frame, our group cannot proceed in completing our objectives. In the event that our assumptions are proven false, our group will execute an alternate solution in order to achieve our objectives. The alternative to this is to enable file sharing between the users based on network settings and provide for an individual copy of the anti-virus software on each computer.

There are limitations that will have to be worked around, due to the lack of available funds, and reliance on external sources. Potential results of our restraints are- not being able to purchase some software licenses that may be needed to update the computers at the site, and the level of advanced software we can implement on the server. Our group will be limited on how great the processing speed, memory, and how much data the hard drive may hold with the server we implement.

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Alternative Solutions

In the event that our initial solution is unable to be implemented properly, we will attempt the following alternate solutions:

Install Server With Microsoft Exchange

One of the options that we have examined is to install Microsoft Exchange on the server. This would allow the users to be able to have their login information relate to their e-mail address, should it be ported over from the main office in Tallahassee.

This would be an effective solution because the mail would be handled locally and would not need to be accessed through the webmail application that they currently use on the website. This would also allow them to have their information saved on the server for mail settings.

The benefit for this would be that it would allow the next group to be able to pick up where we left off and be able to port their mail over. The constraint on this, however, is that one must know how to use and deploy Microsoft Exchange Server, which is not currently taught in a course at Florida State.

Install Server Without Microsoft Exchange

If we needed to install the server without the capabilities from Microsoft Exchange, we could allow the server to still function as a central file server with the ability to distribute applications, such as Symantec Corporate from one location. The server would then act as a means to share files and distribute security files from one location. In this scenario, the client computers would still load security definitions from a central location and allow files to be secured in one location, rather than multiple locations on all of the computers. In order to assure that the implementation of Exchange Server goes smoothly, Walt has purchased a book on how to deploy Exchange Server across a LAN. Walt is also familiar with using Exchange Server to setup client computers at his internship as well.

This solution would still be an effective solution and allow administrative access to all client machines on site, but it would exclude the benefits of Microsoft Exchange. The lost benefits include distribution of e-mails through Outlook 2003, e-mails not being backed up, and inability to retrieve e-mails via remote connection. Although this solution would still provide the primary benefits that we have outlined, it would not benefit Debra if she needed to retrieve an e-mail if she were out of the office and visiting the Panama City, Fort Walton Beach, or Pensacola office.

The benefit of this solution would be that the employees of Catholic Charities would not need to understand how to maintain an Exchange Server if there were a technical issue and we were not available to assist them. However, the benefits of Exchange Server outweigh not implementing it at all. As with the first alternative solution, there would be no impact on the overall cost because the software that we plan to use would be free of charge. The only cost that Catholic Charities would incur at this time is a onetime charge of \$85 for Symantec Corporate.

Install Server with File Sharing Capabilities Only

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In the event that we would need to forego installing any administrative access or Exchange Server, we could allow the server to serve as a central file server. The purpose of this would still allow the employees to share files amongst themselves. Therefore, we could backup all of the files from one location, rather than the employees using their own flash drives to backup information on each computer. This solution would still allow for administrative privileges to certain files and folders, yet it would allow access to 'public' folders as well. To ensure that this is our last resort, we will be sure to research our primary solution and deal with problems accordingly. This alternate solution is a "worst case scenario" and would only be implemented in the event that all else failed.

This solution would work by assigning specific folders on the server hard drive, where employees would store and access their files on a regular basis. Rather than saving them all locally on their hard drives, this solution would still allow them to store the files in a centralized location and allow one backup to be performed, rather than multiple backups per day.

This solution would still allow the employees to benefit from the changes that we would like to implement, but they would not be able to experience all of the benefits that we would like to bring to the company. Rather than their e-mail client, Outlook 2003, pulling their mail from the mail server locally, it would need to pull it down from Pensacola instead. This would hinder the speed of retrieval and thus slow down the overall business process if their mail servers were down. It would not cost us any more or any less to implement this solution because the software that we are using is available from MSDNAA free of charge.

Proposed Solution

We believe that the best alternative solution to implement, if our original solution happens to not work, would be to install a server without Microsoft Exchange. This is the best solution to use due to a variety of reasons. First, Walt has a great amount of experience setting up a server without Microsoft exchange. This is a great benefit because this will help reduce the amount of time it will take to implement this solution and help prevent errors from happening. This solution will still allow the server to distribute files and applications to client computers. Finally, this solution still allows our IT staff with the ability of administrative access to all client computers. We will be able to secure files so that only certain clients may access them.

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Work Breakdown Schedule

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Activity	Who?	Estimated Timeframe?	Dependencies?
1. Install Server	Group	2/11/08 - 2/21/08	-Time for group to meet as a whole.
A. Acquire computer components to build server	Jeff	2/11/08 - 2/13/08	-Jeff to gather the parts
B. Format drives	Jeff	2/13/08 - 2/13/08	-none
C. Install server software such as Microsoft Exchange	Walt	2/21/08 - 2/21/08	-Walt to install
D. Configure server licenses	Andre	2/21/08 - 2/21/08	-Andre to figure out licenses info
2. Server Administration	Group	2/14/08 - 4/11/08	
A. Set up administrative login accounts	Walt	3/6/08 - 3/6/08	-get password for sponsor
B. Security Configuration Wizard	Andre	3/6/08 - 3/6/08	-none
C. Firewall config (enable Windows Firewall)	Andre	3/6/08 - 3/6/08	-none
D. Install Symantec Corporate on server (deploy to client computers)	Matt	3/6/08 - 3/6/08	-CC to get licensed version
E. Secure folders on server for client use	Matt	3/6/08 - 3/6/08	-none
F. Ensure that all ports on the server are secured	Matt	3/6/08 - 3/6/08	-none
G. Setup file sharing for client computers	Walt	3/6/08 - 3/6/08	-ask sponsor for sharing rules
H. Secure all files that are sent to the server	Jeff	3/6/08 - 3/6/08	-get network security software
I. Perform weekly maintenance	Andre	2/28/08 - 4/11/08	-none
J. Perform Windows Update	Jeff	3/6/08 - 3/6/08	-none

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3. Registry and Group Policy fixes	Group	2/14/08 - 2/14/08	
A. Turn off File & Printer Sharing	Matt	2/14/08 - 2/14/08	-none
B. "Pwds = 7chars, must meet complexity reqs, account locks for 60 mins after 3 invalid attempts"	Matt	2/14/08 - 2/14/08	-ask sponsor for password info
C. "Log success/failure for all events except process tracking, directory service and privilege use (failure only)"	Matt	2/14/08 - 2/14/08	-none
D. "Removed Everyone, Power Users from Access this computer from the network, added Authenticated Users"	Matt	2/14/08 - 2/14/08	-none
E. "Only Administrators may shut down system, log on locally"	Matt	2/14/08 - 2/14/08	-none
F. Added IUSER to Deny log on locally	Andre	2/14/08 - 2/14/08	-none
G. Do not display last username = enabled	Andre	2/14/08 - 2/14/08	-none
H. "Restrict CD, floppy to locally logged-on user"	Andre	2/14/08 - 2/14/08	-none
I. Set logon message title and text	Jeff	2/14/08 - 2/14/08	-get sponsor option for text
J. Disable enumeration of SAM accts/Sam accts & shares	Jeff	2/14/08 - 2/14/08	-none
K. Do not allow storage of creeds or .NET passports	Jeff	2/14/08 - 2/14/08	-none
4. Users and Permissions	Group	2/14/08 - 2/14/08	
A. "Disable Administrator, Guest account"	Walt	2/14/08 - 2/14/08	-none
B. Create administrative accounts for Debra and IT Group	Jeff	2/14/08 - 2/14/08	-none
C. Removed all from C:\InetPub except Admins	Jeff	2/14/08 - 2/14/08	-none
D. Removed all perms from cmd and regedit but Admins	Andre	2/14/08 - 2/14/08	-none

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E. Configure RDP	Walt	2/14/08 - 2/14/08	-none
F. Assign IPs and configure network settings	Andre	3/6/08 - 3/6/08	-check current settings first
G. Install DNS Server	Andre	2/18/08 - 2/18/08	-none
5. Network Administration	Group	2/18/08 - 3/3/08	
A. Install and configure IIS	Walt	2/18/08 - 3/3/08	-check available networking resources
B. Set up Client/Server network architecture	Walt	3/21/08 - 3/21/08	-check available networking resources
C. Ensure that all computers are able to connect to the internet properly and maintain the network	Jeff	3/21/08 - 3/21/08	-none
D. Install patch cable	Andre	3/21/08 - 3/21/08	-none
E. Test outlets	Andre	3/21/08 - 3/21/08	-none
F. Ensure that all computers have file sharing capabilities with each other	Jeff	3/21/08 - 3/21/08	-none
G. Create shared folders on the server	Walt	3/21/08 - 3/21/08	-get sponsors to name their shared folders
H. Set permissions for folders	Walt	3/21/08 - 3/21/08	-folders must first be created
I. Deny access to administrative folders	Walt	3/21/08 - 3/21/08	-none

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Cost Estimate

Estimated Human Resources Costs:

Team Member	Role	Number of Hours	Cost Per Hour	Total Cost
Jeff	Systems Analyst	20	\$10	\$200
Andre	Project Manager	20	10	200
Walt	Systems Administrator	20	10	200
Matt	Network Administrator	20	10	200
		80	10	800

Estimated Project Costs:

Resource	Subtotal
Human Resources	0.00
Hardware :	0.00
Software	100.00
Other:	
Total Cost of Project:	100.00

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Ongoing Costs:

Resource	Subtotal
Human Resources	800.00
Hardware	0.00
Software	100.00
Other:	0.00
Total Cost of Project:	900.00

Project Team Contact Information

The Florida State University College of Information		
Name	Role	Contact Information
Walt Bower	System Administrator	wbb04d@fsu.edu Office: 850.222.8611 Cell: 850.502.7515 AIM: floridastatetech
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