

Acknowledgements:

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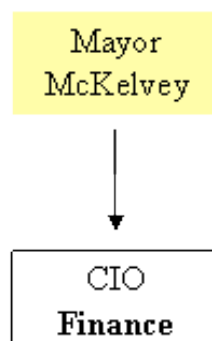
Introduction:

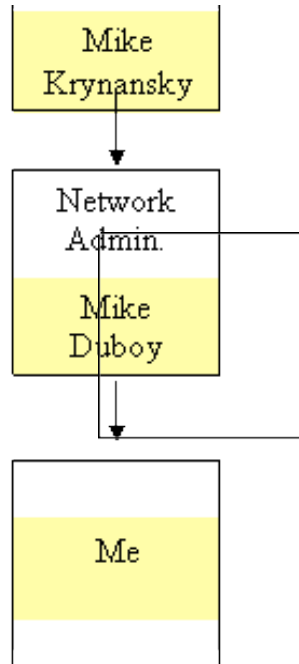
When making my decision to pursue BSAS in Computer Information Systems, I knew that during my education I wanted to learn all I could about the discipline and furthermore, gain experience through an internship program so all I have learned will come to life. With one more semester left at Youngstown State University, the internship gave me the extra knowledge, understanding and value to a well rounded education.

Agency Description:

City Of Youngstown

Organization Chart:





Position Description:

- Assist Network administrator with the implementation of a new server as well as day to day maintenance and troubleshooting.
- Help desk assistance – hardware and software support

Internship Experiences:

Prior to starting the internship, I really didn't know much about networking because as a CIS major I applied myself more to programming. I applied for the network intern position because I wanted to be more 'well rounded' with the networking concepts and the server/client relationship. Throughout this experience I have learned how to install and implement many roles on Windows Server 2003, including DHCP, DNS, WINS, Domain controllers, Proxy and web cache through ISA server, and Exchange Server.

Most days are new adventures as I work on a variety of new tasks. Some of my experiences are illustrated below.

9-24-2003

Orientation:

- I was shown the network at both the physical and software level.
- Created a network user ID and password for myself and set permissions.
- Went though the Domain structure
- Introduced to the all departments and how they physically relate to the network structure.

9-26-2003

- Installed a new printer in the Parks department
- Was taught how to perform a full and incremental backup of the network.

9-29-2003

- Implemented Full and incremental backup

10-1-2003

- Installed windows Server 2003 on test system
- Installed Microsoft ISA Server 2000 on test system

10-3-2003

- Research configuration for ISA Server. Comparing current proxy server setting on current Windows NT Server to that of the Server 2003 test server.

10-6-2003

- Schedule Network Backup.
- Research ISA server configuration.

10-8-2003

- Configure ISA Server on test machine

10-10-2003

- Configure ISA server on test machine

10-15-2003

- Install and configure ISA server on real machine
- Set up a test group of clients to use ISA Server

10-20-2003

- Backup the network
- Wrote a database for all internet e-mail accounts and updated the database with current users.

10-22-2003

- Experienced a problem with the new ISA Server and the content filter. ISA did not acknowledge the content filers group policies. Solution: Added ISA as a workstation for basic filtering.

10-24-2003

- Installed printer in the Parks department.

10-27-2003

- Changed a hard drive and installed an operating system on a down computer

11-3-2003

- Problem with anti-virus server software

- Reinstalled the Symantec console for server
- 11-5-2003
- Updated Internet E-mail database
- 11-7-2003
- Assisted in adding a new WINS server on the new Server 2003 machine. Problem with replication.
- 11-10-2003
- Researched licensing for new server
 - Installed 'emergency shut down' software on new server
- 11-12-2003
- Installed Exchange Server on test system
 - Troubleshoot printer problem, Solution: printer was connected to a switchbox that went bad.
- 11-14-2003
- Upgraded a hub in the finance department to a switch. Problem: port 24 was configured for a crossover
- 11-17-2003
- Schedule Network Backup
- 11-19-2003
- Did analysis on backup files. Changed settings in ArcServ so temporary internet files would not backup when running the network backup
- 11-21-2003
- Changed a Monitor in the cashiers office
- 11-24-2003
- Network backup
 - Tested old computers in workshop to determine if we would keep them as backup PCs
- 11-26-2003
- Research and determine how many Exchange Server licenses needed purchased
- 11-28-2003
- Research Exchange Server licensing information and policies
- 12-1-2003
- Schedule network backup
 - Install client anti-virus software on 2 machines
- 12-5-2003
- Install 2 new monitors in Parks department

Discussion:

Q. How has this experience affected me?

A. My internship at the City of Youngstown was a positive

Experience and affected me in a positive way. It helped me understand how a 'real world' network is composed and maintained on a day to day basis and furthermore, I understand the importance of a Network Administrator in today's business environment.

Q. What have I learned in addition to the technical knowledge?

A. In addition to technical knowledge, I learned the importance of

preparing, testing and understanding a task or problem before putting it in to production. Even though time constraints are tagged on to many tasks, preparing and testing can actually move things along much quicker and help avoid detrimental mistakes when putting a job into production. At the City of Youngstown, I was shown to test and configure the new ISA Server on a test machine. This allowed us to assess any problems or questions during installation and configuration. We worked out all the kinks and quirks during this stage so when it came time to install on the 'real' Server, we had full understanding of all the issues we would face and ultimately had few problems.(as an aside I did say "few problems", because another thing I learned is that there are always problems at some point.)

Q. What were my strengths and weaknesses during this experience?

A. I feel my greatest weakness was my lack of knowledge in

networking and networking concepts. My concentration at Y.S.U. has been programming and the concepts behind applications and Information Systems, so stepping into an intern situation under a Network Administrator I felt intimidated by all the new concepts thrown at me at such a short time. On the flip side, I feel my greatest strengths are adaptability and enthusiasm to solve problems and learn new concepts. I feel the internship allowed me to

my strengths and enable a positive and productive experience for myself and the employer.

Q. What are my future learning objectives?

A. At this point I plan on gradating in the spring and search for employment in programming applications, information systems, or web sites. I also plan on learning independently as well as prepare for a graduate program.

Q. Has this experience helped me determine what areas of CIS I would like to concentrate in after graduation?

A. No. I feel this experience has intrigued me to learn more and have a broader understanding of many aspects of CIS. There are so many things that interest me, furthermore; I feel, at this point, it is premature for me to concentrate on one or two aspects of CIS. In short I feel it is important for me to continue learning all I can and keep my options open.

Conclusion:

In conclusion, I feel the current internship experience has been a positive experience in helping me understand the networking side of CIS and the complexities and importance of networks in today's business environment. Again I would like to thank all at Youngstown State University who continue reaching out to businesses and agencies and, furthermore; continuing and administering the intern program so myself and others can gain valuable knowledge and experience. I also would like to again thank those at the City of Youngstown for giving me the opportunity to contribute.

