Keystone Companies

Keystone Companies represents the first position where my talents would be employed in-house as opposed to serving other firms. Working with this company for three years during high school and continuing to provide services via Computer Tutor there after, it has been my responsibility to provide network administration and systems support for approximately 45 users. During my employment at Keystone, I have maintained five servers, two independent networks, and over 40 workstations. Side projects have consisted of developing a systems operations manual, researching palmtop computers for remote data entry, and joining two networks via a Wide Area Network connection.

When I first visited the Keystone in 1996, the company was a client of my former employer Computer MD. As a field engineer for Computer MD, it was my responsibility to repair minor problems at Keystone and diagnose larger difficulties. After resigning from Computer MD in 1997, Keystone was so pleased with my service while I was with Computer MD that they offered me employment as their network administrator.

Upon accepting the position, I initially became responsible for a Windows NT Server and a Novel Netware Server. Looking to improve their network efficiency, Keystone proceeded on my advice to remove the Novel server and replace the NT server with a Windows 2000 Server. Specifying this system on a budget of $30,000 it would be my responsibility to ensure the new machine would adequately provide the services our employees required. With the successful implementation of the new server, I was later given the responsibility to a deploy Citrix MetaFrame server. Now employing more powerful servers, Keystone's network became a bottleneck, as it could not provide enough bandwidth to the new systems. To resolve this difficulty, I replaced their 100-megabit hubs with two 100-megabit Cisco switches. Servers were then upgraded to Gigabit Ethernet to directly interface with the new switches. To increase Internet reliability, I also replaced their network modem with a fractional T1 connected to a Cisco router. With all network upgrades complete, network throughput was increased by 2,000%.

With the increased reliability of the new servers and network, I had more time available to pursue side projects such as the remote data entry project where Keystone employees would be empowered to make direct data entry from the field via palmtop computers. This project prescribed a computer small enough that it was easily transportable and a connectivity provider fast enough to make data entry live in real time. Complicated by a small budget, this project was the most challenging assignment I had encountered and required the combined use of all of my technological skills. After extensive research, the project was found to be unfeasible due to expense; however, it remains as an active project as prices for both equipment and connectivity continue to fall.

After completing high school, my role at Keystone transitioned from being an employee to becoming an outside consultant providing services through Computer Tutor. This change allowed me to continue to manage their systems as I prepared for college and they found a permanent replacement for my former position. When it came time for me to leave for college, it was agreed that Keystone was left in a better position than it was when I started and our companies continue to maintain an active relationship to this day.