Infrastructure Projects and Services

Accomplishment:

New CARS firewall, providing increased performance and reliability for access to student information system.

Supporting Info:

Old firewall was an 8 year old desktop class machine, and parts availability was an issue, as was speed of the supported network interfaces. New firewall is an embedded appliance, with high speed interfaces and a cold spare on site.

Accomplishment:

WAN Upgrade from slow frame relay to full T1, increased speed, reduced costs.

Supporting Info:

Previous WAN architecture was primarily 56kbps frame relay. New WAN architecture consists of full T1 connectivity at each remote site. Since student/class access to the Internet and other educational resourcs is via this connection, this had a direct impact on the usability of network resources at remote sites

Accomplishment:

Campus Firewall Upgrade, providing increased speed and redundancy

Supporting Info:

Old campus firewall was a single Cisco PIX, and it represented a single point of failure for Campus connectivity and remote site VPN tunneling. Upgraded to two faster PIX firewalls, set up in a failover mode, increasing capacity, performance and reliability.

Accomplishment:

Client based VPN for smaller sites

Supporting info:

Very small remote offices were unable to access the student information system directly, making it cumbersome to register students and perform other student-related tasks. Implementing the

client-based VPN allowed us to use available inexpensive connectivity to provide access to the student information system.

Accomplishment:

New email servers to improve performance and reliability

Supporting info:

Upgraded the two existing email servers to newer, faster servers to support increased student usage. Added two additional servers to spread load and to support increased numbers of student users.

Accomplishment:

Implemented email anti-spam/virus solution

Supporting info:

Added an appliance-based virus and spam filtering solution to email architecture. This solution filters harmful virus traffic and reduces the amount of spam received, making email safer and more readily usable.

Accomplishment:

Provided technical support in setting up web hosting for student-run newspaper with an outside provider

Supporting Info:

The Webster student-run newspaper, The Journal, has an online presence. They needed specialized hosting features that Webster doesn't provide as a matter of course. Researched options and migrated the Journal website to a third party provider who is able to accomodate their needs. http://www.webujournal.com/

Accomplishment:

Implemented wireless connectivity to popular locations on campus.

Supporting Info:

Provided wireless network connectivity for student use in the Library, the University Center, the Pool area and Clubhouse of the student apartment complex, the Quad area, common areas in Sverdrup and in the Old Post Office.

Accomplishment:

Assisted in design and implementation of highly reliable Data Centers

Supporting Info:

A highly available Data Center environment was necessary to provide reliable access to email, web services, Internet access, student information systems and online learning environments. Webster built out one such Data Center in 2004 and another in 2006 to accommodate new initiatives.

Accomplishment:

Provided web content caching for popular websites at no cost to the institution

Supporting Info:

Researched and implemented a local Akamai cluster, which provides for a faster user experience when visiting websites accelerated by Akamai. Examples include Reuters, Yahoo, Adobe, the BBC and Apple Computer. http://www.akamai.com/

Accomplishment:

Provided Internet streaming for student-run radio station

Supporting Info:

Student-run radio station, The Galaxy, is a part of the School of Communications and provides experience for those students. http://www.webster.edu/galaxy/

Accomplishment:

Provided reliable campus network connectivity for residential students.

Supporting Info:

Webster has an apartment complex and two new dormitories, all for residential students. Provided dedicated internal subnets for each dorm and each building in the apartment complex so that students could access network resources.

Accomplishment:

Provided fast, reliable Internet connectivity for the campus.

Supporting Info:

Webster had a single T1 for Internet connectivity. As usage increased, that was upgraded to multiple T1s, then upgraded to a full T3 connection. In early 2007, we augmented that T3 with a second 20mbps connection to another provider, and dedicated that connection solely to Internet access for residential students.

Accomplishment:

Implemented web-based email access for students, faculty and staff.

Supporting Info:

Provided a way for students, faculty and staff to access their email accounts from anywhere they could find an Internet connection. http://webmail.webster.edu/

Accomplishment:

Implemented VPN connections for some overseas campuses.

Supporting Info:

Set up VPN network access for campuses in Geneva, Leiden, Vienna and Thailand so that faculty and staff in those locations could directly access the student information system, thus streamlining the registration process.

Accomplishment:

Provided email listserv services.

Supporting Info:

Provided email listserv mechanism by which the institution could communicate with various segments of the student population quickly and inexpensively.

Accomplishment:

Implemented network-based video delivery system to dorms

Supporting Info:

Cable TV services to new dorms are delivered over the campus network, and this buildout sets the stage for future ability to deliver educational content to every classroom on the campus at a low cost.