Technology Department Report

Desktop Systems:

Working with our Premier Dell support team we were able to identify the cause of some very intermittent performance and video related issues with a few of our PC's. Our issue was not previously documented by Dell, which resulted in us having to replace several internal components to narrow down the cause. In the end we replaced motherboards, processor fans, and video cards in several systems.

Integrated Communication Systems:

We have finalized our requirements with Treese Communications, and have an updated quote that we are recommending for our Integrated Communication System installation. To facilitate many of the benefits and features of our new phone system, we have worked with local telephone service vendors. We have a recommendation for you for new telephone service which will replace our existing lines with a more sophisticated digital circuit. We chose not to consider any voice over IP service providers at this time because we are not confident our current internet connection is sufficient enough to support it.

We have purchased the last of the necessary network upgrades that will enable our network to facilitate a VOIP integrated communication system, and have installed several of them.

x4 - GB 48 Port Managed Access Switches with Trunking
x3 – FE 48 Port Managed Power over Ethernet (POE) switches with Trunking
x10 – Multi-VLAN/SSID Managed Wireless Access Points

These upgrades will also enable increased network performance capabilities for our desktop and laptop computer systems as well. This is one of the most appreciated benefits of VOIP telephone systems over digital. There is only one infrastructure to support for both computers and telephones and any improvements will in most cases benefit both.

Server and Network Systems:

Our internet system has been overhauled with Microsoft ISA Server 2006 and Websense 6.3 to implement improved content filtering. The benefits are minimized risk of access to undesirable websites, improved performance over our older SonicWall, and easier access to logs and reports. These content restrictions greatly reduce the risk of network transmitted viruses, spy-ware, and ad-ware to our internal systems, in addition to internet applications that may be inappropriate. We have begun customizing the policies, to ensure lab specific access is achievable, as well as provide appropriate policy enforcement for our wireless systems which in the future will include controlled and filtered roaming guest access campus-wide.

Our backup server was audited to ensure we were provided the necessary protection to all of our systems, given the additions and changes that have occurred in the last few months. We were able to identify several opportunities for increased backup performance, utilizing incremental backups throughout the week, and excluding data that

can easily be re-produced with existing on-hand media. We also identified and corrected any areas where not enough backup protection was being provided.

Redundant power supplies were ordered and installed for three of our older servers, to support multiple circuit source power. This ensures that internal power failures do not disrupt service to our servers. In the event of a power loss to the entire building, new UPS batteries have been purchased and installed to protect each circuit coming into the server rack. Additionally, facilities has begun implementing generator protection for these circuits as well, to ensure the highest level of up-time, and more importantly reduce data loss and corruption risks to a minimum, in the event of extended outages.