Olin College

DELL EQUALLOGIC

COMPANY:
Engineering college emphasizing entrepreneurship as well as science and engineering fundamentals

INDUSTRY:
Education

PLATFORM:
Microsoft® Windows® 2003, Red Hat® Linux

APPLICATIONS:
Microsoft® Exchange, file & print, DHCP, DNS, Crestron® e-Control®, VERITAS® Backup Exec™, Pro Engineering, Solidworks, Math Lab, CAD Modeling, AVID Video Editing

CHALLENGES:
Offering advanced services while staying within budget and managing rapid growth and flexibility for a leading environment

SOLUTION:
PS Series arrays offer flexible, easy-to-manage data storage with ability to grow as well as snapshots for improved backup and replication

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OLIN COLLEGE OF ENGINEERING ADDS EQUALLOGIC PS SERIES ARRAYS TO ADVANCED TECHNOLOGY ARCHITECTURE

The Franklin W. Olin College of Engineering, in Needham, Mass., offers an engineering education that bridges science and technology, enterprise, and society. To prepare well-rounded future leaders, Olin is committed to remaining bold, pioneering, flexible, and creative. Officially opened in 2002, Olin offers undergraduate engineering degrees using an interdisciplinary curriculum that is project based, emphasizing entrepreneurship and liberal arts as well as rigorous science and engineering fundamentals. The current population includes about 220 students, all receiving full tuition scholarships.

INNOVATIVE TECHNICAL ENVIRONMENT
Befitting a leading-edge educational institution, Olin's infrastructure is far from ordinary. It's foundation is a fully converged IP network that includes Voice over IP phones. Most campus equipment is on the network – from video projectors, lighting, VCRs, and DVDs to materials science analyzers and microscopes – so that resources can be shared. Building security devices, HVAC, and parking devices are on the network, as are vending and laundry machines – Olin students can not only pay for laundry using swipe cards, but can use the network to check when their laundry is done!

DIRECT ATTACHED STORAGE COULDN'T KEEP UP
Computing resources in the data center include more than 65 servers, mostly running Windows 2003 and Linux, all with direct attached storage – which proved a stumbling block for Olin's growth and usage. Some courses integrate art, music, photos, and multimedia in the curriculum, making storage-intensive MP3 and AVI files required for learning. E-mail consumes a tremendous amount of storage – up to one gigabyte for some users – but in addition, each student needs 500 megabytes for the competency assessment program, 150 megabytes for their personal folder, and 200 megabytes for Web space. With its cutting edge educational mission, Olin wants to provide for all these needs without compromise.

Backups also posed a challenge. Olin followed a traditional process of doing incremental backups daily and a full backup weekly. However, there were times when a quick, on-the-fly backup would have been very helpful, but tape is not flexible enough for that.

For CIO Joanne Kossuth, the primary challenge was how to support this complex and growing environment moving forward, offering services that allow users to leverage advanced technology while remaining efficient and cost effective. "Continuing to throw new servers at the problem was clearly not the answer," recalls Kossuth.

iSCSI – AN EASY SELECTION

Kossuth and her team investigated Fibre Channel and iSCSI SAN technology. Selecting iSCSI was a no-brainer, since the fully converged IP network was everywhere on campus. "It was also the way to get the most bang for our dollar," comments Kossuth. "We could get more capacity at lower cost, with minimal changes to our infrastructure. Fibre Channel was too expensive to acquire, and the network management piece was cost prohibitive."

EQUALLOGIC GOES TO THE HEAD OF THE CLASS

Olin looked at solutions from several iSCSI vendors, and found EqualLogic's technology to be clearly superior. First, the EqualLogic team brought an array to campus and had it set up and configured within an hour. Second, Kossuth noted the PS Series array's intelligent self-management, easy provisioning, scalability, and performance. "We were impressed with the PS array's fully integrated feature set, redundant hardware, and hot-swappable components that give us the high data availability of an enterprise SAN." Kossuth also values the fast provisioning and flexibility. "We sometimes have to turn on a dime, responding to constantly changing criteria. The PS array lets us respond on the fly, and expand our capacity without downtime – we couldn't do that before."

Kossuth is currently using snapshots to support standard backups and now can accommodate user requests for quick backups on specific projects. Future plans include using replication for disaster recovery and business continuity. In addition, the snapshot and replication functionality will smooth the way for web service and e-commerce expansion at Olin.

"The PS Series array has had a very positive impact on our faculty's ability to innovate and to meet student needs," says Kossuth. "We are a forward-thinking institution, and we need technology solutions that are equally progressive. EqualLogic's technology fits our way of thinking."

SIMPLIFYING NETWORKED STORAGE

EqualLogic PS Series solutions deliver the benefits of storage consolidation in an intelligent, enterprise-class storage system that is easy to install, manage and grow. Let us show you what simplifying networked storage can mean for your business, visit our web site at **www.equallogic.com**.

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