

GroupLogic

Apple in Higher Education:
Challenges, Benefits and Solutions

INTRODUCTION

Higher Education institutions have long celebrated diversity and their IT infrastructure is no different. In a recent survey of 125 North American colleges and universities, GroupLogic found that not only is Mac use growing on campus, it's expected to rise by another 20 percent over the next five years.¹ This diversity in computing platforms offers myriad benefits to students and staff. However, it also brings management and security challenges for higher education IT staff as universities embrace the latest in mobile and cross-platform operating systems. Often overlooked is the fact that not only must educational institutions keep the needs of students, staff, board members and even government oversight in mind, their infrastructure size and heterogeneity often rivals that of enormous enterprises. As a result, enterprise-level solutions deployed on an enterprise scale are essential to ensuring the seamless integration of multiple platforms on one university network.

Apple's presence on college campuses is projected to grow more than 20% over the next five years.

In this white paper, GroupLogic, the leading provider of solutions for the cross-platform enterprise, will discuss the challenges and benefits that come with platform diversity within an institution's computing network. We'll also explore solutions that seamlessly integrate cross-platform operating systems into a single network with multiple servers. We'll discuss how this is possible without compromising the end-user experience for students and staff, so the speed, quality and security users have come to expect from institutions on the cutting-edge of thought leadership, research and technological exploration is not only sustained, but significantly improved.

IPODS + IPHONES = GROWING STUDENT DEMAND FOR MACS

Though Apple already had a toehold in the education market with the iMac and eMac computers, it wasn't until the arrival of the iPod in 2001 that Apple gained a significant advantage in their sales to students. The device's enormous popularity among young people fostered both brand loyalty and a new found interest in the company. In 2004, USA Today reported that the device was boosting Mac laptop sales among students—in a sea change from 4 out of 10 in the prior year at one college to 6 out 10.6

By April 2008, 40% of perspective college students planned to purchase a Mac.⁷

By fall 2009, thanks partly to iPhone sales, Apple was doing quite well in what otherwise was viewed by all to be a "down" economy.⁸

By July 2011, Apple was beating Microsoft at a rate of 8 to 2 in sales to students.⁹ Also in July 2011, USA Today reported that Apple is the fastest growing major retailer in terms of sales in the US.¹⁰

APP-TASTIC: THE RISE OF APPS IN HIGHER EDUCATION

The iPhone has heralded in a new era of applications designed for not just making life easier, but study and coursework more efficient and fun. College students around the world are using iPhone apps as part of their curriculum.¹³

Apps available for higher education run the gamut from organizational, such as myHomework, to InKling, which allows students to purchase just the chapters needed for a class from digital textbooks, to JotNot Pro, a scanner for handouts.¹⁴

In January 2011, The Chronicle of Higher Education reported: "Some of the most innovative applications for hand-held devices...have come from professors working on their own. They find ways to adapt popular smartphone software to the classroom setting, or even write their own code." These include apps that allow for everything from taking roll, collecting research data, recording notes and planning lectures.¹⁵

Apps in education - As of July 18, 2011, there were 439,514 active apps available for download in the Apple store. Of those, 38,896 were in the Education category.¹⁶ The average amount of apps for June 2011 was 364,765. By comparison, in September 2008, 6,700 active apps were available for download in the Apple store.¹⁷

APPLE IN THE HIGHER-ED INSTITUTION—A BRIEF HISTORY

Macs have a long history in education, from the presence of Apple-stocked computer labs in elementary schools in the early 1990s, to the iMac introduction in 1999, and the 2002 introduction of the eMac computer, designed specifically for classroom use.² Ongoing initiatives by Apple founder Steve Jobs to support Macs in education include competitive pricing incentives for university computer labs, as well as for students and their parents, a tradition that continues today.³

The popularity of Mac-based platforms with students is indisputable, but Windows remains just as prevalent. Many universities have computer labs with both Mac and Windows desktops available to meet the varied computing preferences of their students, and it's a given that students and staff are bringing their own computers and laptops to school—be they Macs, Windows, or other operating systems.⁴

The arrival of iPad and other tablets further increases the amount and the variety of devices accessing higher education networks. Some higher-ed institutions, such as the Missouri School of Journalism, are directly recommending students purchase an iPod Touch for their coursework (or, implied in the suggestion, iPad).⁵

THE CHALLENGES OF THE CROSS-PLATFORM ENVIRONMENT

Supporting computing diversity is great in theory as it allows students and staff to work and study in the manner and on the device most comfortable and efficient for them. However, as many university infrastructures are built upon Windows platforms, when a Mac user wants to print from the university computer lab, or save and re-open a file, or share a file with another user, problems arise.¹¹

Large universities are often dealing with cross-platform infrastructure on multiple levels, and individual colleges and departments within the institution have their own servers and IT budgets for maintaining those servers, making a unified support system across the network for all devices and departments just as complicated as supporting a multi-national corporation with separate offices—and datacenters—around the world.

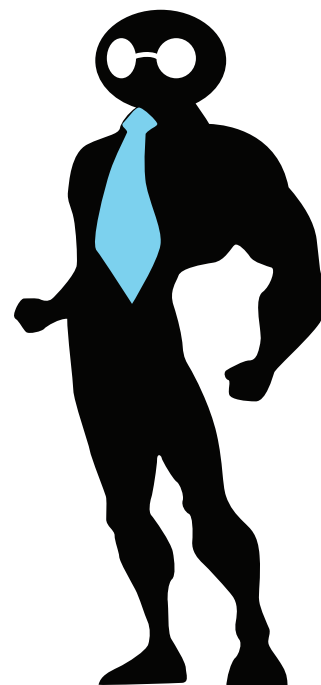
When it comes to mobile computing, universities are still learning how to navigate the world of smartphones and tablets, along with each device's unique operating system requirements and demands the devices place on the university's network. Everything from classroom presentations to uploading homework seems to have been simplified thanks to these devices—as long as there are no networking issues, such as the inability to transfer files directly from a university department server to a staff member's device, or errors when a student attempts to print on one of the university's print servers. These may seem like minor disruptions, but on a campus, whether it serves hundreds or tens of thousands of students, they quickly add up to a major IT disaster as IT staff becomes over-extended with case-by-case troubleshooting. Not only are students and staff frustrated and left feeling less-than-impressed with the technology available at what is probably considered a cutting-edge and expensive institution, the university itself loses money in the tender of time and labor spent on IT troubleshooting.

Bandwidth issues are the latest to be added to the problems of storing, printing, and even archiving files with Apple devices on a Windows-based university server, making network diversity less and less appealing. In 2008, the arrival of iPhones on college campuses in the hands of students caused a disruption in network security and bandwidth, as schools were faced with supporting password-protected network access and Wi-Fi on the devices.¹² Yet, the amazing features, tools and, of course, apps, available to students and staff thanks to the arrival of iPhones, iPad and other smartphones and tablets is a benefit too large to ignore.

SOLUTIONS: IT'S NOT ABOUT MAC VS. WINDOWS, IT'S ABOUT MAC AND WINDOWS, WORKING TOGETHER

To overcome the challenges a diverse computing environment brings—and to maximize the potential benefits—to higher education, institutions need a long-term, low-maintenance solution that offers immediate integration and compatibility of multiple computing platforms.

The ideal solution must be capable of centralized maintenance and multiple server deployments, while ensuring security policies are enforced. Several solutions exist that aim to solve the cross-platform compatibility problem, but many require individual device configuration for deployment: an unwieldy, costly and near impossible proposition for large campuses supporting an ever-changing population of students, staff and their devices. Temporary workarounds exist as well for a sampling of archiving and printing issues, but also must be implemented case-by-case, sapping university IT staff time and failing to ease user frustration as the issue arises again and again. Universal ease of use and low IT maintenance costs are possible, especially with a solution that works with Apple File Protocol (AFP), which is native to every Mac computer and laptop.



CONCLUSION:

Apple's foothold within higher education is not waning, and the rise of the student-purchased laptops and iPads in the classroom—even if the university's computer lab supports only Windows-based PCs—will only continue to cause challenges for simple tasks such as network printing, file sharing and archiving without a solution in place that seamlessly integrates the Mac and iOS operating systems to the university's Windows-based servers. Many universities must also contend with different servers across different departments, and separate budgets and decision-making processes for those departments under one institutional umbrella. This may further slow the selection and implementation of a solution for what appears to be a simple problem in IT's hands. However, universities who do not decipher a strategy for solving this problem not only risk skyrocketing IT costs related to increased help desk inquiries, but undermining their mission by blocking collaboration and communication between students and faculty.

ABOUT GROUPLAGIC

GroupLogic helps enterprise and education IT organizations simply and securely integrate diverse computing platforms into enterprise environments, connecting employees to enterprise files, content and assets to facilitate a more productive and efficient work environment. With more than two decades of experience, GroupLogic leads the marketplace in helping IT organizations effectively and easily manage the integration of Apple products into the enterprise ecosystem. Whether IT organizations are looking to integrate existing Apple assets, purchase additional Apple hardware like Macs and iPads, or want to take advantage of the hardware cost savings that accompany the adoption of IT consumerization, GroupLogic enables IT organizations to easily and securely manage the rapid integration of diverse platforms while ensuring resources are optimized. GroupLogic enables the enterprise to focus on what is really important - competitive differentiation, improved employee productivity, mitigated risk and reduced costs. GroupLogic's proven products- mobilEcho, ExtremeZ-IP, ArchiveConnect, and MassTransit-are in use by some of the world's most innovative companies, including Christie's, International Greetings and Omnicom Group.

For more information, visit our website – WWW.GROUPLAGIC.COM

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