Educational Institute Enriches Student Experience with Technology Solutions

Eminata Group enhances college brands with enhanced communications, managed broadband, and robust wireless.

<table>
<tr><td colspan="2">EXECUTIVE SUMMARY</td></tr>
<tr><td colspan="2">EMINATA GROUP
Industry: Education
Locations: Seven educational brands, including CDI College, through 36 campuses across Canada
Corporate Office: Vancouver, British Columbia
CHALLENGE
• Replace multiple standalone phone systems with centrally managed unified communications system
• Monitor and manage bandwidth throughout college campuses to give students faster and more reliable Internet
• Implement stable and robust wireless infrastructure for new e-book initiative throughout CDI College brand</td></tr>
<tr><td colspan="2">SOLUTION
• Cisco Unified Communications provides centralized plan for voice communications
• Cisco Integrated Services Routers deliver voice and data services on a single, secure device for broadband speeds and simplified traffic management
• Cisco Aironet Access Points enable wireless connectivity for reliable, mission-critical mobility</td></tr>
<tr><td colspan="2">RESULTS
• Improved collaboration between administration and campuses, with faster response to student queries
• Faster and more reliable online access for students and staff
• Robust wireless infrastructure in place for ambitious e-book initiative</td></tr>
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Challenge

Eminata Group is the largest private provider of post-secondary education in Canada, consisting of a number of high-profile institutes across the country, including CDI College. Eminata currently operates 36 campuses in five provinces and employs over 1200 instructors, administrators, and support staff. Eminata is committed to providing students with a rich educational experience that prepares them with the skills and knowledge necessary to attain their dream career.

In recent years, Eminata has seen tremendous growth, adding several campuses to its portfolio. This rapid growth brought with it several technological challenges. Many of the Eminata campuses, as well as its corporate office in Vancouver, British Columbia, had standalone Time Division Multiplexing (TDM) and IP phone systems from a variety of vendors. It was a challenge for the various locations to effectively communicate with each other, which sometimes led to slower response times to student requests. Eminata realized it needed to replace the disparate phone systems with a centrally managed, unified communications system. In addition, the rapid speed in which new campuses are sometimes set up meant that Eminata required a solution that could be implemented in as little a time as one week.

Eminata also wanted to improve Internet access for students and staff. This was especially important at larger campuses such as CDI College, where the network was not always able to support the heavy online usage required by students and was often slow. CDI College wanted to easily monitor and manage the bandwidth within each campus to avoid slow network access and network downtime.

CDI College was also on the verge of launching an ambitious, eco-friendly e-book initiative for the 2011. 2012 school year in which each student is given an Apple iPad. The tablet allows students to download textbooks easily and to network with other students. To meet the new network demands required, the college needed a stable and robust wireless infrastructure that could be implemented within two months and across 40 sites.

Solution

Eminata turned to Cisco partner Boardwalk Communications to implement all its communications needs, beginning with the replacement of its phone system. "After assessing Eminata's business requirements and priorities, we determined the best solution was a centrally managed communications system utilizing Cisco Unified Communications," says Kelly Irvin, a senior account manager at Boardwalk Communications.

Cisco® Unified Communications solutions unify voice, video, data, and mobile applications on fixed and

mobile networks, delivering a media-rich collaboration experience across workspaces. "Eminata recognized that they needed to do something about the aging network infrastructure in order to meet the demands of their growing business," says Philip Stone, President of Boardwalk Communications. "They immediately recognized the value in the solution that we proposed and we quickly assembled a team to move forward on the implementation."

"Our first job was to get the network standardized and install more modern routers to seamlessly connect all the campuses with support in Vancouver. We also wanted to eliminate the disparate phone systems and create a single, centralized plan for providing voice communications," says Irvin.

In order to get the campuses functional as soon as possible, Boardwalk created a "start-up" kit made up of Cisco 881 Integrated Services Routers and select Cisco IP phones. These kits could instantly connect to a basic DSL system, ensuring easy and fast service while Boardwalk worked on a more permanent solution. Approximately four weeks later Boardwalk would implement tailor-made campus kits, consisting of Cisco 2911 Integrated Services Routers to deliver highly secure voice, data, video, and application services onto a single, secure device that offers broadband speeds and simplified management. Boardwalk also supplied the endpoints with full-featured IP phones, including the Cisco Unified IP Phones 7962G and 9971 for high-quality, collaborative communications. Eminata also benefits from Cisco IP Communicator, a Windows PC-based softphone that enables users to make premium voice and video calls through their personal computers.

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To deal with CDI College's data needs, Boardwalk was able to take advantage of the Cisco 2911 routers already in place at each of the campuses to effectively manage each location's bandwidth requirements. To enable wireless connectivity throughout the campuses, Boardwalk implemented Cisco Aironet® 3502 Access Points with CleanAir technology. The Aironet 3502 provides the highest-performance connectivity for reliable, mission-critical mobility. Cisco CleanAir technology, a system-wide feature of the Cisco Unified Wireless Network, improves radio frequency (RF) wireless signal quality by automatically detecting, classifying, locating, and mitigating interference.

Along with Cisco Wireless LAN Controllers and the Cisco Wireless Control System, CDI College now has full control of its wireless networks and is able to plan, deploy, monitor, troubleshoot, and report on indoor and outdoor wireless networks, all from a centralized location. This allows CDI College to easily monitor wireless access and to manage its usage to help ensure students are provided with a reliable and robust platform. In addition, the flexibility of centralized control allows for quicker and more effective expansion or relocation of campuses, doing in hours what would normally require weeks of set-up.

CDI College also decided to implement Cisco's Wide Area Application Services (WAAS) to further accelerate applications, optimize bandwidth and reduce latency. Campus support was fitted with the Cisco Wide Area Application Engine (WAE) 674, while the college's data centre in Kelowna, British Columbia was fitted with Cisco virtual WAAS (vWASS), the first cloud-ready WAN optimization solution. Cisco WAAS Mobile was then deployed at each of the campuses to facilitate faster data access between the campuses and the two facilities.

Results

Since implementing Cisco technology throughout its organization, Eminata has been able to effectively monitor and control bandwidth across its CDI College campuses, providing students with faster and more reliable online access. In addition, the technology has allowed for stronger collaboration between the

administration and the various campuses, helping to ensure that student concerns are dealt with quickly.

"Students at CDI College used to be frustrated with slow network access and interruptions in service that impacted their ability to study effectively," says Robert Taylor, vice president of IT for the Eminata Group. "With the new Cisco infrastructure in place, we're able to shape the bandwidth across the network and make sure students receive better and faster access to the materials they need for their studies. In fact, we've seen a huge drop in the number of complaints we used to get about slow service."

Additionally, data access between campus staff and the data center has greatly improved with the WAAS implementation. CDI College reports a 50 to 60 percent compression on data traffic. The administrative staff can now access information faster and more effectively to handle student enquiries.

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An important result of the new technology is that CDI College now has the wireless infrastructure to support its ambitious e-book initiative. The Cisco Wireless LAN Controller and the centralized model of Cisco Unified Communications meant that the e-book initiative was successfully deployed to all the relevant sites within the allotted time frame.

"The goal of the e-book initiative is to give our students the most dynamic educational experience possible, so it was crucial the technology driving it be robust and reliable," says Taylor. "Students are able to download the content they need without having to worry about the expensive costs of textbooks or lugging them around. They also have the capability of networking with each other and with the teachers to create more specific and effective study groups. It's a truly exciting and unique experience CDI College offers its students, made possible with the help of Cisco technology."

Next Steps

Eminata continues to expand throughout Canada and plans to open new campuses for all its brands in the near future. The ability to manage the communications network through a centralized environment makes it easier for Eminata to scale its business.

PRODUCT LIST
Switches and Routers
• Cisco Catalyst® 2960 and 3750 Series Switches
• Cisco 2911 Integrated Services Router
Wireless
• Cisco Aironet 3502 Access Point with CleanAir technology
• Cisco Wireless LAN Controller
• Cisco Wireless Control System
Wide Area Application Services (WAAS)
• Cisco Virtual Wide Area Application Services (vWAAS)
• Cisco Wide Area Application Engine 674
• Cisco Wide Area Application Services (WAAS) Mobile
Unified Communications
• Cisco Unified Communications System Release 8.0
• Cisco Unified IP Phones 7962G and 9971
• Cisco IP Communicator softphone

FOR MORE INFORMATION

For more about Cisco Unified Communications, visit:
http://www.cisco.com/web/CA/solutions/unified_index

For more about Cisco wireless solutions, visit:
http://www.cisco.com/web/CA/solutions/borderless/index.html

For more about Boardwalk Communications, visit:
www.bdwalk.biz

To learn more about Eminata Group and CDI College, visit: www.eminata.com

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