

Higher Education Case Studies

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CASE STUDY: Baylor University



Baylor University has a renowned presence in both academics and athletics. More than 20,000 students study in a world-class environment at a nationally-ranked research institution.

"The technology is just a given for me with Extreme. I expect them and have witnessed them being leaders in many, many categories. But for me, it's the experience. I just feel that I can get the ear of whoever I need to get the ear of within Extreme and lay out what my needs are, and they'll provide the resources in which to help." - Bob Hartland, Vice President of Information Technology Infrastructure, Baylor University

Technology Requirements

- High-density Wi-Fi network for all athletic venues and the campus
- Leverage real-time content through gameday app; provide an interactive and engaging mobile experience for users
- Establish visibility and control of users, devices, and applications on the network to ensure a quality experience

Solution Components

- Extreme Wireless Access
- Extreme Wired Access
- ExtremeAnalytics
- Extreme Security

- In-Venue, High-Density Wireless: Consistent wireless experience across football, basketball and other venues, supporting predictable user experiences
- **Differentiated Student Experience:** across athletic venues, campus and ResNet
- **Simplified Network Management:** granular visibility, easy onboarding for personal devices, detailed network from a single pane of glass



Leeds Beckett is a leading public university based in Leeds, in the North of England, with a population of over 28,000 students and 2,900 staff from almost 100 countries. Its vision is to be recognized as an outstanding, accessible, and globally engaged university with a commitment to student success, innovation, and enterprise.

Technology Requirements

- Robust. reliable network infrastructure for connectivity across multiple locations
- Latest Wi-Fi 6 technology to deliver powerful user experience
- Remote access from anywhere, roaming capabilities to staff and simplified delivery of services for technical team
- Increased network capacity, security and compliance 3

Solution Components

- Extreme Management ٠ Center
- Extreme Network Fabric •
- Extreme Wired Access ٠
- Extreme Wireless Access •

- Modernized and improved student experience
- Real-time control and automation of network traffic
- Access to the fastest and most prolific wireless service available through Wi-Fi 6
- Scalable, cost-efficient, future-proofed network infrastructure
- Reduced burden on IT team

CASE STUDY: Lincoln University



Founded in 1854, Lincoln University is the first historically black degree-granting college or university in the United States. The University has 2,200 students and 500 faculty and staff members on its 422-acre main campus in rural Chester County, Pennsylvania. Along with the 46 buildings on the main campus, the school also has a graduate center in University City in Philadelphia for some 300 students.

"The overall experience with Extreme Networks and Howard Technology Solutions has been phenomenal, I couldn't ask for more." - Justin McKenzie, CIO, Lincoln University

Technology Requirements

- Stable and scalable infrastructure
- Wide range of coverage for mass amount of devices
- Efficient maintenance and management tasks
- Centralized management

Solution Components

- Extreme Wireless Access
- ExtremeCloud IQ

- Significantly improved wireless performance
- Wi-Fi 6 delivers a more stable video experience for remote learning and other activities
- Increased visibility into its infrastructure, devices, users, and traffic, and the health of those devices and quality of experiences
- Simplified management and maintenance

CASE STUDY: Manukau Institute of Technology



Manukau Institute of Technology delivers vocationally focused tertiary education, research, and technology transfer that ensures Auckland's economy, graduates, employers, and communities have the capability and skills to achieve their potential.

"With ExtremeCloud IQ we can easily see when and where each login attempt was made, the status of the network, and the signal at each location, plus we can identify the user's device and its compatibility. We often find it's a device issue for the user." – Jenna Wolley, General Manager, Manukau Institute of Technology

Technology Requirements

- Reliable, high-performance wired and wireless networking
- Ease of onboarding and management of devices and users
- Ability to support smart infrastructure and digital workplace solutions

Solution Components

- ExtremeCloud IQ
- Extreme Wired Access
- Extreme Wireless Access

- Secure and seamless online and remote user access to services and applications
- Reduction in overall network management costs and resources
- Enabling MIT's rollout of digital transformation and business innovation initiative

ORU ORAL ROBERTS UNIVERSITY

Oral Roberts University is a private evangelical university in Tulsa, Oklahoma. Founded in 1963, the university is named after its founder, evangelist Oral Roberts. Sitting on a 323-acre campus, ORU offers over 70 undergraduate degree programs along with 20 graduate programs across six colleges.

"The future is for education to become more and more fluid, so that it flows with the learner and it flows with the faculty member. That means it becomes more and more just in time, just for you, but also just with you." - Dr. Kathleen Reid-Martinez, Provost & Chief Academic Officer, ORU

Technology Requirements

- The school's existing Wi-Fi network provided spotty coverage and frequently resulted in systems and resources being unavailable at key times
- An infrastructure that would support leadership vision for a global, innovative university
- Network support for next-generation initiatives AR/VR, multimedia production studio and smart classrooms

Solution Components

- Extreme Wired Access
- ExtremeAnalytics
- Extreme Wireless
 Access
- ExtremeCloud IQ

Results

- Improved Network Connectivity and Management ExtremeCloud IQ provides full network visibility and allows IT staff to efficiently manage the network and all connected devices and digital services.
- Technology-Driven Global Education Platform ORU has integrated emerging technologies, like AR/VR, telepresence robots, smart classrooms, and more to enhance teaching and learning experiences.
- Digital Campus Experience

Enhanced fan experiences at athletic events, leveraging Extreme's solutions to make the mobile device a central part of game experience.



Southern Illinois University Carbondale is a public research university founded in 1869. It is the most longstanding campus within the Southern Illinois University System. Nearly 15,000 students are enrolled from over 100 countries and all 50 states.

"We've got a great relationship with our account manager. We can communicate easily, and we trust that he's working for our best interest. With Extreme, we have a partner." – Greg Pangrazio, Network Engineering Manager, SIU

Technology Requirements

- Robust, reliable network infrastructure for wireless connectivity across campus facilities
- Continuous uptime to enable productivity among students and faculty
- Cost effective implementation options
- Simplified routing and switching

Solution Components

- Extreme Wireless Access
- Extreme Wired Access
- Extreme Network Fabric

- Significant decrease in wireless incidents
- Improved uptime
- Better coverage per access point
- Support calls went from hours over days to first time resolution
- Successfully positioned network for continual improvement

CASE STUDY: University of St. Francis



The University of St. Francis is a small university located in Joliet, Illinois, serving more than 3,900 students. The University is consistently ranked among the best when it comes to quality education, affordability, and accessibility. One of their notable strengths is the technology made available to students, faculty, and staff.

JOLIET, ILLINOIS

Technology Requirements

- Changing student and faculty demands for network access and connectivity demanded changes to security posture
- Strong need to extend network infrastructure
- Policies implemented at the network edge were vital to directing traffic and keeping assets secure

Solution Components

- Extreme Wireless Access
- Extreme Wired Access

- Modernized network provided peace of mind that BYOD and IoT devices were secured
- Instant return on investment through network automation – onboarding new services became frictionless
- Simplified network management led to faster decisionmaking and removed roadblocks for new projects

CASE STUDY: Sun Moon University





Technology Requirements

- Wi-Fi coverage to support a blended learning environment of in person and virtual classes across large campus
- Infrastructure capacity for increased distribution of mobile content and big data

Sun Moon University, located in Korea, went through a rapid transition to online classes due to COVID. To support a more stable, contact-free blended class environment, the university needed to upgraded its Wi-Fi systems.

"We expanded to a fast and stable cloud-based Wi-Fi infrastructure to allow support for locations such as classrooms, practical training rooms, public spaces, and outdoor spaces. We will continue to enhance a foundation for a sustainable future campus by continuing to upgrade the Wi-Fi infrastructure. "– Lee Jongwan, System Planning Team Head, Sun Moon University

Solution Components

- ExtremeCloud IQ
- Extreme Wireless Access
- Extreme Wired Access

- Efficient and convenient management and operation of multiple campuses from a central hub
- Faster and more secure connectivity and support for multi-device users at any location on campus
- Greater scalability of new functions and solutions serve as a foundation for a sustainable, future smart campus

CASE STUDY: University of Management and Technology

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UMT[¶]

UMT aims to build a positive and successful learning environment where every student is developed to their fullest potential. The ability to readily adapt to any changes in the digital world 4.0 and become a global citizen are just some of the achievements students strive towards.

"The majority of our students are Gen Z and demand always available Wi-Fi... This is a core part of our goal to prepare them for the digital world 4.0. Extreme Networks' Wi-Fi 6 solutions allow us to support all of their devices and keep the content flowing." – Nguyên Ngoc Nguyên, Office of Information Director, UMT

Technology Requirements

- Provide open learning environment that embraces digital transformation
- Secure, wireless solution to support tech-centric curriculum and growing volume of devices used by faculty and students
- Scalable network to accommodate future growth plans and evolving digital needs

Solution Components

- Extreme Wireless Access
- Extreme Wired
 Access

- Total campus coverage with Wi-Fi 6-enabled APs that provide reliable device connectivity across entire campus with no dead spots
- Additional network capacity increases speeds and supports immediate use of critical learning applications and growing number of devices
- High-density switching platforms save space and energy
- Easy-to-scale architecture enables network expansion into new buildings

CASE STUDY: City, University of London



Founded in 1894, City, University of London is a leading international institute recognized for its high rank in student satisfaction. The university campus spans 24 buildings across multiple sites around central London and accommodates 18,000 students and 2,000 staff members

"The student experience is crucial to us and the technological facilities we provide underpin that. Our goal with Extreme from the get-go was to deploy a network infrastructure that could provide students and staff with seamless connectivity both in the classroom and across campus. Extreme was able to support us in our ambitions to modernize the student experience." - Paulo Leal, Network Manager, City, University of London

Technology Requirements

- Simplified network infrastructure to minimize error and downtime
- Scalable capacity to accommodate requirements and expansion
- Improved user satisfaction with IT services and enhanced student experience

Solution Components

- ExtremeCloud IQ
- Extreme Wired Access
- Extreme Network Fabric

- Seamless access to educational platforms and streaming without delay and future-proofed ability to integrate new programs and curriculum
- Automated operation and management of all network functions gives time back to IT staff to focus on important projects
- Reliable connectivity and faster speeds throughout highdensity environment across campus