



CASE STUDY

Paving *and* Braving the way toward an esports legacy—powered by a reliable, secure connection



Highlights

- Converted an unused theatre built in 1906 into a cutting-edge, multi-use gaming arena
- Outfitted the new arena with a reliable network and Wi-Fi connection so players and fans could enjoy a best-in-class gaming experience
- Used the Meraki dashboard to troubleshoot, deploy networks, measure network latency, and monitor connections

20 hours

saved on installation with the plug-and-play nature

200 devices

connected at peak hours

200 person capacity

theatre with at least 100 in attendance for live events

LOCATION

Ottawa, Kansas
United States

INDUSTRY

Higher Education

PRODUCTS

Meraki dashboard
Meraki Health
MS switching
MX security and SD WAN

Overview

A one-year subscription to *Rolling Stone* magazine—that was the top prize for the first video game tournament that took place back in 1972. From those humble beginnings, electronic sports—or esports—have become a global phenomenon, with over 550 million players competing daily in a variety of online games.

As the world of esports continues to expand, collegiate esports is experiencing similar growth with the help of outside organizations like the National Association of Collegiate Esports (NACE), which offers membership to more than 170 colleges and universities with their own esports leagues.



One of the colleges paving their way toward an esports legacy is Ottawa University (OU) in Kansas which, in partnership with Chief Technology Officer Adam Caylor, is pioneering a new era of collegiate esports.

Powered by an advanced Meraki network, the OU team transformed a theatre built in 1906 into a modern esports arena. The wired and wireless experiences are optimized through the intelligent, AI-powered Meraki platform, enabling rapid response and delivering lightning-fast network speeds.

“ The nature of the Meraki solution being as flexible, dynamic, and scalable as it is—it allowed us to turn on a dime.

ADAM CAYLOR

Chief Technology Officer of Ottawa University

Challenge

While a majority of college esports teams use existing classrooms or dorm spaces with limited capacity for their practices and competitions, Caylor was thinking outside the lines, or in this case, outside the classroom walls for OU's future in esports. We're talking full-scale arena status. The solution? Peters Auditorium, a school theatre built 100 years ago that was slowly collecting cobwebs.

Caylor, a self-proclaimed gamer, combined his interests in the sport with his expertise in technology to lead the theatre's transformation toward a next-level gaming experience.

Converting a theatre built in the 1900s to a tournament-ready arena came with a unique set of challenges. Beyond the superficial updates—like new paint, flooring, and walls—technology in the theatre was essentially nonexistent, so Caylor and his team needed to get the space connected.

“ We were really reinventing the wheel here with what student engagement looks like—and Meraki was able to help build the foundation for this new channel of engagement.

ADAM CAYLOR

Chief Technology Officer of Ottawa University

Much like a football team needs a field complete with goal posts, scoreboards, and referees, the OU Braves esports arena required a space with gamer-ready technology and support. Caylor and his team wanted to create a space with the bandwidth required to connect the esports student athletes and hundreds of concurrent fans. That meant a reliable, secure LAN for gamers participating in tournaments. It also required the highest-performance Wi-Fi connection for the fans watching live who wanted to engage and participate, while also giving IT the ability to monitor connections and bandwidth.

The arena needed to be multi-use as well, fulfilling the needs of a lecture hall and classroom during the day and an event and gaming space in the evening. This required a dynamic solution that could provide multiple types of connectivity and support a wide array of end user experiences.



Solution

OU was already a full-stack user of Cisco Meraki products. Having seen the successes of other Meraki solutions on campus, Caylor decided to connect the theatre using Meraki MR access points and MS switches. The space would need to support more than 100 people at a time, including both student athletes and spectators. This meant OU needed high-capacity MR access points to ensure the best possible Wi-Fi experience for fans to engage with their favorite players (looking up gaming history and Twitch stats), as well as for students using the arena as a classroom during the day.

OU uses the MS switches installed in the arena, along with a secure MX appliance at the edge, to separate the esports traffic from the rest of the network and optimize the connection. This same infrastructure also manages and prioritizes traffic from the PCs that gamers use to compete on stage.

Along with reliability, security and segmentation are also top of mind. A very real threat in esports is unapproved players or online users who attempt to disrupt events, join the network, and/or affect the competition in a way they shouldn't. This puts the security of other players and viewers at risk, while also creating potential for lagging and crashes—not ideal for any gamer.

The OU esports theatre relies on multiple network segments, dividing administration, student access, A/V, and of course, the esports network.

The fears around these threats were greatly eased with Meraki secure SD-WAN technology and WIPS capabilities that monitor the wireless LAN networks for rogue access points and other wireless threats, providing an added layer of security. While the arena has yet to experience any issues with wireless intrusion, Caylor “has comfort knowing that they are covered by Meraki security.”

“ The dashboard has become a big part of the entire IT team. Our help desk is actively troubleshooting, engineering, deploying networks, broadcasting digital media, measuring network latency, and even fixing connection issues during a broadcast.

ADAM CAYLOR

Chief Technology Officer of Ottawa University

Results

When in use as the Ottawa Braves esports arena, the space now serves as the backdrop for a wide variety of tournaments. The Braves have gone on to win multiple national championships and are amping up for a new season of competition under the guidance of their very own director of esports, Alex Madera.

This is just the start for the Braves. Between their connected OU arena and the esports space at their Surprise, Arizona, campus (also powered by Meraki), they are quickly building their own community of fans and gamers who can engage in-person and virtually thanks to the Meraki network.

The Meraki dashboard provides Caylor and his growing IT team with immediate 24/7 visibility into the health of the access points, switches, and the esports network as a whole, allowing them to monitor competitions and practices from anywhere, anytime. Caylor views the dashboard as an “integral part of the IT team.” From the help desk doing troubleshooting, engineering, deploying networks, even digital media broadcasting and measuring network latency and connection issues during a broadcast—the dashboard “makes sure everything is working.”

As the OU esports league continues to expand, the arena is set to host larger competitions and Caylor is excited to utilize the flexibility of Meraki Health to manage metrics and monitor bandwidth peaks and access. The intelligent, AI-powered Meraki Health service provides a new level of insight and assurance that supercharges the performance of the esports network and helps OU provide a best-in-class gaming experience.

Looking to the future of collegiate esports, colleges may find that prioritizing the building of esports communities and dedicated facilities can pay off in student recruitment efforts. Not only that, but student athletes on scholarship who acquire an injury that prevents them from playing in their physical sport can seek a new resolve in the esports community.

Caylor sums up his role in the University's esports legacy as saying that although he isn't the one coaching or playing the games, he feels pride in knowing that the team and the games they play are powered by his hard work—and Meraki.



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