Solution Brief

eSports is the New Athletics

COMMSCOPE®

Is Your Campus Ready for the eSports Revolution?

There's a new game in town at colleges and universities, and you don't have to be a top athlete to play it. In fact, you don't have to be an athlete at all.

Over 646 million people will watch eSports across the globe by 2023, and analysts expect it to be a $1.8 billion industry by 2022

It's eSports, and it's coming to a campus near you. Think competitive videogaming isn't as big a deal as conventional sports? Think again. Nearly 646 million people will watch eSports across the globe by 2023, and analysts expect it to be a $2.9 billion industry by 2025. eSports can help your college attract and retain students by showing you have a state-of-the-art digital campus. With hundreds of millions spent on eSports sponsorships and events, it can even generate revenue. But none of that's possible if you can't deliver a great eSports experience.

Do you have video gamers complaining about laggy, inconsistent network connections in residence halls? Take that problem and multiply it by every eSports team competing on campus, each demanding the best possible gaming experience. Now, put those teams in front of hundreds, or even thousands, of spectators—all livestreaming and uploading photos of the event, all at once, over the same network. You wouldn't host a big-time football game if you couldn't guarantee that your headsets and scoreboards would work when the school's reputation and dollars are on the line. In the same way, a major eSports event on campus can turn into a nightmare if your network isn't up to the challenge.

Smart campuses with blazing-fast, low-latency connections

In 2021, more than150 colleges were members of the National Association of Collegiate eSports and offered varsity esports—and the list is growing. In addition to scholarships, major universities have started to offer degrees in this emerging field. eSports programs are relatively inexpensive, compared to most collegiate programs. Unlike typical college sports such as football, eSports' infrastructure needs are typically small, but the revenue is as well. However, that is starting to change.

We're already a top choice for eSports venues - from high schools to pro sports arenas

Some schools are building eSports club rooms or practice facilities. While most already have gaming computers, headsets and peripherals; however,hosting an eSports match or tournament, requires more preparation. When you consider your eSports program, you must consider:

- **The venue:** Where will you hold the competition? Schools with big-time eSports programs often augment existing venues, like basketball arenas. But many schools want more flexibility and mobility. They start with "popup" venues—temporary installations in gymnasiums, auditoriums, even outdoors.
- **The gamers' experience:** In eSports competition, lag of even a fraction of a second can mean the difference between winning and losing. Or, for visiting teams, between a great venue and a place they never want to compete again. You'll need an ultra-fast, ultra-reliable switching infrastructure that supports 100-Gbps uplinks and Multigigabit speeds to gamers' computers.
- **The fan experience:** eSports draws fans like any other big sporting event. Expect lots of spectators—sometimes hundreds, even thousands, depending on the venue. For the first sport born in the Digital Age, eSports fans expect an immersive digital experience. That means livestreaming, posting on social media, uploading photos and more, all simultaneously. You'll need a Wi-Fi infrastructure and guest access experience up to the challenge.
- **Reporting:** As your school's students and fans get more excited about eSports, you'll need to track how your venue is holding up to demand. Do teams consistently have the bandwidth they need? Can fans easily get online in this dense environment? Do you have enough throughput for them to share their experiences as they'd like? By collecting fine-grained metrics about network and Wi-Fi performance, and network and application utilization, you can stay ahead of the game as eSports grows on your campus.
- **Security:** You'll need strong security and network isolation to protect eSports events and teams from hackers (like fanboys from competing teams) looking to disrupt the competition. For spectators, you'll want a guest Wi-Fi onboarding process that's quick and simple, while protecting users' security.

Bring Your A-Game with RUCKUS Networks and CommScope

CommScope's RUCKUS network portfolio can help you bring a fully immersive, state-of-the-art eSports experience to your campus. We're longtime leaders in wired and wireless networking for colleges and universities around the world, providing wicked-fast, reliable Wi-Fi and low-latency switching and cabling infrastructure at the world's premier sporting venues for years. We're already a top choice for eSports venues, from high schools to pro sports arenas. We even sponsor a professional eSports team, the Philadelphia Fusion. CommScope and RUCKUS can deliver:

- **The best wireless** to connect, compete and win. We offer the industry's first Wi-Fi 6-certified access points (APs), and the widest portfolio of antenna options and outdoor APs to cover even challenging venues. We're also the only partner who can help you augment your mobile wireless coverage and capacity with private LTE or inbuilding 4G and 5G DAS solutions.
- **The best network scaling** to meet the demanding capacity requirements of eSports teams and fans. With RUCKUS ICX Switches, you can support up to 450,000 clients and manage up to 1,800 ports as easily as if they were on a single physical switch.

- **Ideal multigigabit solutions** for affordable eSports performance. Get the right capacity and performance for your venue, from affordable entry-level multigigabit solutions, to compact form factors for popup networks to top-of-the-line, Wi-Fi 6-optimized solutions with 100 GbE uplinks and 10 GbE client connectivity.
- **ML/AI powered analytics** to troubleshoot and optimize your infrastructure. With RUCKUS SmartCell Insight™, you get total visibility into the team and fan experience as eSports grows on your campus. Track number and type of users, device operating systems, upload/download output by event or type, guest applications and more. RUCKUS Analytics is a cloud service for network intelligence and service assurance. It gives IT staff comprehensive visibility into network operations.
- **The most future-proof solution** to adapt to future requirements. RUCKUS solutions support up to 90 watts PoE power, fiber or structured cabling, and upgradable uplinks. And CommScope is the only partner that lets you add private or in-building LTE connectivity, or new IoT sensors and connected devices to existing infrastructure, just by adding a new module to your APs.
- **The simplest management** with complete wired and wireless management all in one place. RUCKUS SmartZone™ provides a single element network controller, either on-premises or in a cloud-based form factor, with intuitive wired and wireless troubleshooting tools, and unified policy management.

Ruckus products for eSports	
	**Ruckus Wi-Fi 6** access points for maximum banwidth and capacity
	**Ruckus ICX** multigigabit stackable switches for low latency
	**Ruckus Cloudpath** for secure network access
	**Ruckus Analytics** for reporting and insights for better fan experience
	**Ruckus SmartZone** for simplified, unified wired and wireless network controller
	CommScope designs and manufactures the gold standard for **structured cabling**.

Get in the Game

To learn more about how you can deliver an amazing eSports experience for your students, gaming teams and fans...

Check out our eSports blog post >>

Contact your local CommScope Rep for more information. >>

Ready to Play

Overview

In Washington, D.C. the place to be is the **Entertainment & Sports Arena.** From WNBA and NBA G league basketball, world class concerts and dancing the night away, if it's happening in D.C. it will be happening at the Arena. In addition to sports and music, the Arena is home to eSports events.

Design

Per the eventsDC website, this high tech venue has been designed to handle it all. From social media to live streaming, the 802.11 Wave 2 Wi-Fi system will be capable of pushing over 1 gigabit of data per second, capable of handling the most demanding fans' wireless broadband expectations.

The system is designed to support:

- 5,000 simultaneous connected devices (bowl seating accommodates 4,200 plus 800 on the floor)
- Average speeds in excess of 20 Mbps download per device
- Capacity to post 5,000 Instagram photos per second
- Capacity to handle 5,000 live streams

Note: The Wi-Fi system is also being built with flexibility in mind, so it can be reconfigured for anything from WNBA Games to esports events. The system can also be adapted on the fly to accommodate various seating configurations. Wireless system capacity can also be augmented either by adding Wi-Fi APs or small cell LTE using CBRS modules.

Overview

From the day it opened in October of 2016, the $558 million **Golden 1 Center** set new standards for connectivity. The six-square block complex boasts an unparalleled connectivity platform, an advanced and secure network infrastructure, and next generation command center.

Design

The Sacramento Kings engaged CommScope for infrastructure design assistance and validation, including a future-proof concept, next-generation data center models, and efficient installations implementation. The Kings technology team were committed to delivering the most state-of-the-art entertainment complex, and turning to industry leaders like CommScope was key to their success.

Benefits

- More than 1,000 Wi-Fi access points, the highest network density for a sporting venue of its size
- In excess of one million square feet of Wi-Fi and cellular coverage using 802.11 ac Wavw 2 technology capable of delivering data at 100 gigabits per second and more
- 200 Gbps internet bandwidth
- 670 miles of TeraSPEED® ZWP singlemode fiber cabling for the network backbone
- 265 miles of SYSTIMAX® GigaSpeed® X10D copper cabling
- eSports gaming facilities to house Kings Guard eSports team

COMMSCOPE®

commscope.com

Visit our website or contact your local CommScope representative for more information.

CO-113806.1-EN (10/21)