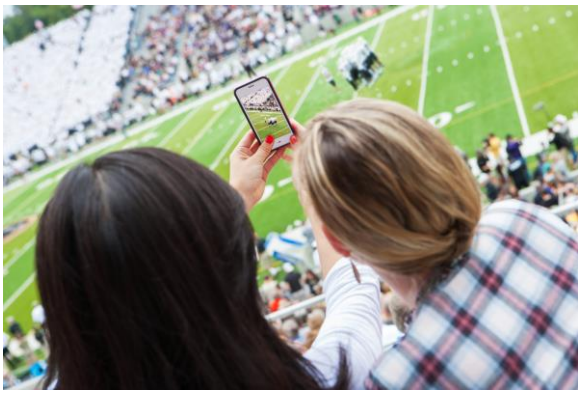
Upgrading the stadium Wi-Fi® experience with Wi-Fi 6

Wi-Fi 6 satisfies the unique requirements of stadiums

Large venues and stadiums face unique challenges when implementing Wi-Fi® networks. The crowd at a typical sporting event is more tightly clustered than in most neighborhoods, office buildings, shopping centers, or other public areas. Stadium visitors want continuous Wi-Fi connectivity to engage with their friends and favorite teams on social media, or to share photos from their arena experience. Fans have come to expect this level of connectivity despite heightened density and bandwidth challenges resulting from tens of thousands of guests accessing the stadium Wi-Fi network at the same time.

Wi-Fi usage in stadiums has skyrocketed in recent years. According to ExtremeNetworks[1], data transferred via Wi-Fi at the Super Bowl alone has increased seven-fold from 2014 to 2019, with demands on coverage and capacity only expected to grow. To address the growing demands of stadium visitors, large venue owners and operators are upgrading their Wi-Fi networks to the newest generation of Wi-Fi, Wi-Fi 6.



Several stadiums have already deployed Wi-Fi 6 networks. In 2019, more than a quarter million fans enjoyed access to Wi-Fi 6 at stadiums around the country with Wi-Fi 6 networks in place.

Stadiums deploying Wi-Fi 6

- Ohio State Stadium - Columbus, Ohio
- Gaylord Family Oklahoma Memorial Stadium - Norman, Oklahoma
- Lucas Oil Stadium - Indianapolis, Indiana
- BBVA Stadium - Houston, Texas
- West Texas A&M Buffalo Stadium - Canyon, Texas

Two additional stadiums have plans to deploy Wi-Fi 6 networks in 2020:

- SoFi Stadium and Hollywood Park - Inglewood, California
- Nissan Stadium - Nashville, Tennessee

As these and other stadiums around the world implement Wi-Fi 6 networks at their venues, the number of fans with access to the benefits of Wi-Fi 6 will continue to grow.

Wi-Fi 6 in action

Early stadium adopters of Wi-Fi 6 have seen impressive results. After deploying its Wi-Fi 6 network in the summer of 2019, Oklahoma University's Gaylord Family Oklahoma Memorial Stadium achieved its highest ever usage rate during a November 9, 2019 game against Iowa State with 32,673 unique users transferring 4.2 terabytes of data.[2]

Ohio State Stadium also reported extremely high data usage rates during the Ohio State vs. Michigan State football game on October 5, 2019. The recently upgraded stadium network posted the highest Wi-Fi data usage for any single day event at 25.6 terabytes – topping the 24.05 terabyte figure from the 2019 Super Bowl. High network usage was the

[1] https://www.extremenetworks.com/extreme-networks-blog/wi-fi-6-for-sports-venues-4-things-you-should-know/
[2] https://www.mobilesportsreport.com/2020/01/new-report-oklahoma-leads-the-way-with-wi-fi-6/

result of 71.5 percent of the 104,797 fans in attendance connecting to the Wi-Fi network during the game, with each user averaging 341.6 megabytes of data.[3]

Wi-Fi CERTIFIED 6™ delivers quality experiences in stadium Wi-Fi networks

Since the introduction of Wi-Fi 6, stadiums have been upgrading their facilities with Wi-Fi 6 networks to deliver the capacity, efficiency, and performance required to provide fans with an optimal Wi-Fi experience. Wi-Fi 6 addresses the needs of densely populated environments, such as crowded stadiums, and provides up to four times more bandwidth than the previous generation of Wi-Fi.

The improved performance offered by Wi-Fi 6 translates to benefits for both fans and venue owners. Stadium visitors are able to enjoy a streamlined experience with mobile ticketing, remote food ordering, and access to real-time stats. For stadium owners, providing more consistent Wi-Fi service and extras such as augmented reality applications means higher ticket sales and in-venue purchases. Because fans stay connected to the stadium network, owners gain visibility into fan behavior in order to ensure their marketing efforts are targeted, effective, and add user value.

Stadiums deploying Wi-Fi CERTIFIED 6 networks gain the added benefits of device interoperablitity between multiple vendors, backward compatibilty with older versions of Wi-Fi, and the latest in security with Wi-Fi CERTIFIED WPA3™. Wi-Fi CERTIFIED 6 devices ensure the highest quality stadium user experience.

Wi-Fi CERTIFIED 6 benefits

Stadium visitors

- More consistent network coverage
- Streamlined mobile ticketing experience
- Efficient remote food ordering
- Access to real-time stats
- 4K video streaming
- Enhanced social media access

Stadium owners

- Boost in ticket sales
- Increased food and merchandise sales
- Improved guest analytics
- Ongoing fan engagement

Wi-Fi CERTIFIED™: Technology to trust

Since 2000, Wi-Fi Alliance® has been driving the adoption and evolution of Wi-Fi through the Wi-Fi CERTIFIED program. The Wi-Fi CERTIFIED logo designates products with proven interoperability, backward compatibility, and the highest industry-standard security protections in place. Wi-Fi CERTIFIED devices can communicate with previous and future generations of Wi-Fi technologies, enabling homes installed with Wi-Fi CERTIFIED networking devices to provide a seamless, interoperable experience with a multitude of other Wi-Fi devices brought into the home for years to come.

Learn more: www.wi-fi.org/wi-fi-certified-6

[3] https://www.mobilesportsreport.com/2019/10/ohio-state-breaks-wi-fi-records-with-25-6-tb-of-data-during-michigan-state-game/