



Pervasive Wi-Fi throughout Gillette Stadium Delivers a Differentiated In-Game Experience for Patriots Fans

Case study

STADIUM STATS

- Capacity: 68,756
- Stadium Footprint: 17.3 acres
- Stadium Area: 1.9 million sq. ft.
- Limited IT staff

INDUSTRY

- Sports/Entertainment

CHALLENGES

- Provide stadium-wide, high density Wi-Fi for tens of thousands of users
- Enhance the in-stadium fan experience with exclusive real-time content
- Reduce the network management burden for the existing IT staff

PRODUCTS UTILIZED

- S-Series modular switches
- C-Series stackable switches
- Extreme Networks identiFi™ Wi-Fi
 - Streaming video
- Extreme Networks Mobile IAM (Identity & Access Management)
- OneFabric Control Center

RESULTS

- Reliable in-stadium, high density Wi-Fi internet access
- Unparalleled in-stadium game experience
- Centralized management, granular visibility and control
- PCI compliant

Introduction

Gillette Stadium is New England's premier sports, entertainment and event venue and home field of the New England Patriots – long known as one of the most admired football organizations in the NFL and a brand that is known throughout the world.

With superior fan experience as a top priority, the Kraft Sports Group and the New England Patriots embarked on a mission to provide high-density Wi-Fi at Gillette Stadium to ensure high-speed wireless connectivity that would enhance the experience for fans at New England Patriots games and other events.

Stadium Challenge

To enhance the in-person, game-day experience, the New England Patriots looked to offer high-speed wireless data service inside Gillette stadium. A Wi-Fi solution at Gillette Stadium would pave the way for high-speed wireless connectivity, not only for the fans at New England Patriots games, but also for other events held at the stadium.

With a unique need to provide reliable access for tens of thousands of users, Gillette Stadium needed a very stable, scalable network that could be easily and centrally managed by their existing IT staff, particularly on game day. The “distributed antenna systems” from cellular data carriers that had been pumping cellular-network signals into the stands were subject to intense demand just for text messages and photos.

The Patriots knew that in order to offer a truly differentiated in-game experience to their fans, they would need to design a stadium-wide Wi-Fi network that would allow thousands of fans to simultaneously watch NFL Red Zone, gain exclusive access to stats and interactive game content and share their experience in real-time via social media sites such as Facebook and Twitter.

The challenges of providing high-density Wi-Fi for approximately 70,000 users at Gillette stadium were many and would require a carefully designed Wi-Fi network that would allow for a large number of devices to connect at the same time while ensuring they all were able to receive rich content consistently.

After reviewing all of the available technologies, it became clear to us that Extreme Networks was the best technical solution for providing this service today.

-JONATHAN KRAFT, PRESIDENT OF THE KRAFT GROUP AND THE PATRIOTS AND CO-CHAIR OF THE NFL DIGITAL MEDIA COMMITTEE

“Our initial baseline is, if 40 percent of the people were all using video at the same time, we could handle it,” said Fred Kirsch, Patriots VP of Content and Publisher. “If people were simply sending text or checking out email conceivably we could have the whole stadium using it.” By effectively “offloading” lots of bandwidth demand, the Patriots looked to rely on Wi-Fi to make service markedly better for fans in comparison to connecting to the Net solely through their cellular data carrier service.

Extreme Networks Solution

To roll out its new network, the Kraft Sports Group looked at a talented list of vendors to identify a solution that delivered all services required today, along with the ability to scale in the future as Wi-Fi technologies continue to evolve. Because of their ability to overcome previous issues around wireless density and support for mobile devices at NFL-sized venues, Extreme Networks was selected to be the Official Networking Partner of the New England Patriots. “After reviewing all of the available technologies, it became clear to us that Extreme Networks was the best technical solution for providing this service today,” said Jonathan Kraft, president of The Kraft Group and the Patriots and co-chair of the NFL Digital Media Committee.

Extreme Networks was able to solve the unique business and technical issues of the Patriots in a way that no other vendor could. Part of what the Patriots especially liked about the Extreme Networks product was a well-designed system for determining wireless connection strength and quality down to a seat-by-seat level. Gillette Stadium is now equipped with stadium-wide Wi-Fi that enables fans to experience a new and heightened level of social and multimedia engagement.

The integrated wired and wireless solution for Gillette Stadium includes Extreme Networks S-Series switches at the core, C-Series switches at the access edge, identiFi Wi-Fi using indoor and outdoor access points with directional or multi-directional antennas, Mobile IAM (Identity & Access Management) for BYOD authentication services and OneFabric™ Control Center to centrally manage its network.

Taking just over a month to install, the network was purpose-built to provide the density and throughput to support tens-of-thousands of fans and bandwidth for hungry multimedia applications connecting to identiFi access points using directional antennas to handle the dense deployment.

The folks at The Kraft Group say the new free Wi-Fi network is being complemented with Gillette Stadium and Patriots apps for iPhone, iPad and Android. All of this is designed to enhance the customer experience by providing guests with an unparalleled in-stadium experience via the use of such things as exclusive access to the NFL Red Zone and real-time stats, and the ability to augment the experience by sharing it with those not at the

game via social media. “In-stadium, high-density Wi-Fi providing any guest with a rich internet experience is the next frontier for the NFL and it is something we have been researching for years,” said Kraft. “We believe that well-constructed mobile applications – accessible through the Extreme Networks Wi-Fi network – will ultimately deliver content available nowhere else, truly differentiating the in-stadium experience from any other.”

Results

The Patriots kicked off the first home game of the season by bringing their 70,000 fans a new free Wi-Fi network – offering them an in-stadium experience like none other:

1. In-stadium, high density Wi-Fi internet access. The Patriots are able to provide reliable, free Wi-Fi access to approximately 70,000 fans at Gillette stadium with the end-to-end networking solution that Extreme Networks has provided.

2. Unparalleled in-stadium game experience. The Extreme Networks Wi-Fi solution has allowed Patriot fans to simultaneously watch NFL video and gain exclusive access to game content, providing an enriched and differentiated in-game experience – and is paving the way for the rest of the NFL.

3. Granular visibility and control. The OneFabric Control Center console has brought the entire network, both wired and wireless, into one view for centralized management and control, which has eased the management burden for the IT staff. The Extreme Networks management solution allows the Patriots to proactively determine wireless connection strength and quality down to a seat-by-seat level, so they can ensure a “fan”tastic internet experience.

“The Extreme Networks solution gives us an end-to-end network solution including all the hardware, software, and wiring needed to provide ubiquitous and reliable Wi-Fi access. Extreme Networks management capabilities provide us with complete visibility and control, as well as a world-class support organization with professional services to help implement and manage the solution going forward,” said Kirsch.

The network will become increasingly important as the NFL rolls out future applications to provide fans at live events with exclusive content through smart phone and tablet apps. NFL insiders are looking to a day when people attending games in-person get wireless access to things you can't see or hear on television, such as special camera angles, replays or even a chance to eavesdrop on coach-to-quarterback chatter. These and other unique amenities make the experience of seeing an NFL game in person even more interesting and exciting. “I can guarantee you,” Kirsch said, “that there's going to be exclusive content that the league is going to allow fans to have in the stadium, and having that Wi-Fi network is the groundwork for allowing that.”



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