SAN FRANCISCO 49ers STRIKE GOLD WITH ETHERNET, VIDEO, & VOICEEDGE[™] SERVICES

FROM COMCAST BUSINESS

SITUATION

- Professional football team has huge local and national fan base due to multiple Super Bowl wins and appearances
- Team started playing in new stadium in 2014

CHALLENGE

- Needed scalable capacity to provide Internet access for fans in the stadium as well as media and the team
- More bandwidth for uploads to HD video boards
- Wanted to move phone system to the cloud
- Wanted stadium-wide TV
 service for entertainment

SOLUTION

- Comcast Business Ethernet
 Dedicated Internet
- Comcast Business
 VoiceEdge[™]
- XFINITY® from Comcast

RESULTS

- Stadium-wide Wi-Fi access for fans and media
- Ability to support ticketless, cashless sales infrastructure
- Cloud-based VoiceEdge services
- In-house video feed supported by XFINITY

PROFESSIONAL FOOTBALL TEAM MOVES TO NEW, TECHNOLOGICALLY ADVANCED STADIUM; FANS, STAFF AND MEDIA ENJOY UNMATCHED EXPERIENCE WITH STADIUM-WIDE WiFi ACCESS AND HD VIDEO

49ERS CONSTRUCT MULTI-PURPOSE, TECHNOLOGY-DRIVEN STADIUM

The San Francisco 49ers are one of the most successful organizations in professional football. The team has won five Super Bowl championships – the second most in history – and six conference titles.

After playing at Candlestick Park on the shore of San Francisco Bay for more than 40 years, the 49ers constructed Levi's[®] Stadium in nearby Santa Clara, Calif., and kickedoff the 2014 season in a new, 68,500-seat, multi-purpose facility that will also host domestic and international soccer matches, college football games, motocross races, concerts and civic events.

HIGH-PERFORMANCE NETWORK NEEDED TO DELIVER STATE-OF-THE-ART FAN EXPERIENCE

Nestled in Silicon Valley, the 49ers wanted to ensure Levi's[®] Stadium could satisfy the team's tech-savvy fan base who have come to expect a multi-dimensional game experience that includes not just the game on the field, but also ubiquitous WiFi access for their many mobile applications. Those fans share their game experiences on social media sites by downloading photos and videos of themselves and friends cheering for the Niners. They also look for up-to-the-minute player statistics so they can check the statuses of their teams in fantasy football leagues.

When constructing the stadium, the 49ers took into consideration that a large media contingent covers the team during the regular season, and that contingent only increases for the playoffs. Levi's® Stadium will also host Super Bowl 50 in 2016, attracting hordes of journalists from all over the world. Yet, regardless of which game they cover, those media members depend on reliable and fast WiFi access at Levi's® Stadium to research statistics on players and teams, submit stories, transfer videos and images, and interact with their readers via various social media channels.

In addition to supporting fans and media, the 49ers also needed enough wireline network capacity to transfer data, photos, and videos for use on Levi's[®] Stadium's high-definition (HD) video boards. A high-capacity network is also essential to support the team's new ticketless and cashless sales infrastructure, which will enable fans to enter stadium events and purchase food and souvenirs via applications on their mobile devices.

COMCAST **B4B** BUILT FOR BUSINESS

"We're in the heart of Silicon Valley. There's an expectation to have nothing less than a softwaredriven stadium, so we needed a highperformance Internet service that would provide the necessary capacity and speed to deliver an immersive technology experience for as many as 60,000 people throughout the stadium."

Ethan Casson Chief Revenue Officer San Francisco 49ers And just as the 49ers wanted to be ahead of the technological curve by offering stadium-wide WiFi access, it also intends to provide abundant television access around the spacious venue, offering in-house video and ancillary programming for fans as they walk around and mingle during games, concerts and events.

"We're in the heart of Silicon Valley. There's an expectation to have nothing less than a software-driven stadium, so we needed a high-performance Internet service that would provide the necessary capacity and speed to deliver an immersive technology experience for as many as 60,000 people throughout the stadium, while also serving as the backbone for the other technological initiatives that will ultimately deliver the best fan experience possible," said 49ers Chief Revenue Officer Ethan Casson.

COMCAST BUSINESS MODERNIZES VENUE WITH STADIUM-WIDE WiFi, VIDEO AND VOICEEDGE SERVICES

Wanting to make Levi's[®] Stadium the model for technologically advanced sports and events facilities, the 49ers needed significant bandwidth capacity to meet the WiFi needs of fans, media and staff for football games and all other events – as well as the capability to offer stadium-wide television programming and advanced VoiceEdge communications for employees. It was also critical to have the deployment completed before the stadium opened, so the 49ers chose Comcast Business to deliver a high-performance communications infrastructure before the 2014 season kicked off.

Comcast Business will equip Levi's[®] Stadium with redundant, 10 gigabit per second (Gbps) Ethernet Dedicated Internet connections, the most Ethernet capacity the company has installed at a stadium to date. With Ethernet service throughout the spacious facility, the 49ers will have ample bandwidth to support video transmissions as well as the simultaneous WiFi connections of as many as 68,500 fans, hundreds of media and team employees.

Fans can have the type of innovative game-day experience they expect when bringing mobile devices to sporting events, concerts and other types of shows. And with high-performance WiFi and Ethernet service, the 49ers have the capability to support intensive media coverage – including the popular Super Bowl – and team operations, which will include data and image transmissions to the stadium's HD video screens and the applications to facilitate ticketless and cashless transactions.

To round out the many technological advancements built into Levi's® Stadium, the 49ers found it advantageous to place its landline service in the cloud as team employees not only work from their new offices but also from their homes and while on the road. After using a traditional on-premise phone system for its communications needs at Candlestick Park, the 49ers decided to implement Business VoiceEdge, Comcast Business's cloud-based landline voice and unified communications (UC) service. Team employees and front office staff can stay productive while away from Levi's® Stadium by receiving and sending work-related calls from their mobile phones and computers.

Added 49ers CEO Jed York: "The mission for Levi's[®] Stadium has always been to create an unparalleled gameday experience through the use of innovative technology," added York. "Comcast Business is the perfect partner to help us achieve that goal, as the services they provide allow our fans to customize their individual stadium experience through the use of their own mobile devices."

