



Making Wireless an Indoor State of Mind



▶ Arizona Cardinals Stadium

New Cardinals Stadium Creates Ultimate Wireless Experience for Fans, Media and Staff



Opened in time for the 2006 National Football League's fall season, the Arizona Cardinals Stadium stands out by offering the latest amenities to over 64,000 guests. Named one of the top 10 stadiums in the world by Businessweek magazine, stadium executives planned on keeping their competitive edge by creating a completely wireless facility.

Working closely with Insight North America, a systems integrator, and Cellular Specialties (CSI), an in-building technology provider, Cardinals Stadium executives knew that stadium stakeholders expected always-on wireless access throughout the vast complex. With complete wireless connectivity, not only could thousands of fans call friends, but vendors could improve concession operations, journalists could upload photographs right from the field and use laptops in locker rooms, first responders could act fast and luxury suite guests could order food and buy merchandise instantly with their IP-phones. There was little question that creating a completely wireless facility would attract larger, high-profile events to the already popular venue.

In order to achieve their goals, stadium executives needed to support multiple wireless voice and data operators and services including Wi-Fi 802.11, 450MHz public safety radio (UMTS) and a variety of devices throughout the complex. Achieving total connectivity required strong wireless reception, despite the stadium's dense steel and glass construction and cavernous interior. Lastly, stadium executives wanted to manage one converged network in order to reduce operating expenses and staffing requirements.

Knowing that media, fans and staff would eventually migrate to new services and upgrade their devices, having flexibility was essential to maximizing the stadium's long-term return on investment (ROI). Stadium executives wanted to keep up with often unknown new services, in the most cost-effective way possible, generating business and keeping fans coming back, year after year.

To address the venue's complexity and rigorous requirements, Arizona Cardinals Stadium needed a comprehensive solution that met the current and future needs of all stakeholders.

The Solution

Arizona Cardinals Stadium executives chose the MobileAccess Universal Wireless Network™ solution for its innovative architecture and proven track record in delivering pervasive wireless coverage for large-scale venues and recent Super Bowl games. "The MobileAccess Universal Wireless Network offered the perfect fit for a project of this scope

The Company ▶▶▶▶

The Arizona Cardinals Stadium is an \$860 million, 1.7 million square foot sports complex in Glendale, Arizona. The state-of-the-art venue is home to Super Bowl XLII and can host up to 64,000 fans on game day.

Challenges ▶▶▶▶

- ▶ Meeting the wireless voice, Wi-Fi, and public safety needs of stadium staff, media and guests
- ▶ Making WLAN management more cost-effective
- ▶ Adding future services whenever they are needed, without disruptions
- ▶ Attracting larger, higher-profile events to the stadium

Benefits ▶▶▶▶

- ▶ The Universal Wireless Network delivers multi-service wireless and WLAN with one cost-effective infrastructure
- ▶ Modular WLAN reduces operational expenses by keeping access points in wiring closets
- ▶ Scalable Wire-it-Once™ architecture ensures new services can be added any time, without re-wiring or service interruptions

and magnitude,” Mark Feller, Senior Technology Director, Arizona Cardinals.

The MobileAccess Universal Wireless Network™ simultaneously supports multiple wireless services, devices and technologies used by stadium fans, media, staff and first responders. The modular Wire-it-Once™ architecture securely houses access points in the stadium’s 37 existing wiring closets, delivering wireless voice, data and Wi-Fi services to discrete antennas throughout the stadium, over a single fiber/coax cabled infrastructure. And the solution seamlessly integrated with the stadium’s existing IP-based network, clustering intelligent components together and providing end-to-end network management tools for one converged network. The result is reliable wireless access and Wi-Fi service throughout locker rooms, the field, seats and anywhere guests go.

Wi-Fi is essential to stadium stakeholders. As a result, the MobileAccess Universal Wireless Network™ backbone ensures “wall-to-wall” WLAN coverage. However, unlike conventional WLAN deployments, the same network also provides pervasive coverage for all of the stadium’s other wireless services. Leveraging one common network infrastructure helps to subsidize WLAN by distributing the initial expense of cabling and labor across multiple wireless projects. And because the modular WLAN approach houses active access points in wiring closets, operational expenses are reduced and staff spend less time maintaining stadium-wide antenna installations. Additionally, deploying a Wire-it-Once™ infrastructure also addresses the stadium’s future needs. The scalable solution gives stadium decision-makers the flexibility to turn up new wireless services, simply by adding the appropriate service module in wiring closets. Unlike parallel network models which require separate cabling when additional services are activated, this scalable, cost-effective approach does not require additional antennas or re-wiring. Having a future-proof network allows Cardinals Stadium to take advantage of new services, whenever and wherever they are needed, without disrupting existing services or incurring unnecessary costs.

By leveraging the innovative MobileAccess solution to create the ultimate in stadium connectivity, the Arizona Cardinals Stadium can continue to attract the hottest ticket in town and maintain its status as a world-class venue.

About MobileAccess

MobileAccess Networks is an enterprise wireless innovator that provides a universal platform for connecting the people and applications that drive business. The company’s intelligent, in-building infrastructure solution is the key to mainstream wireless connectivity in hospitals, office buildings, public venues and other large-scale facilities. The MobileAccess Universal Wireless Network delivers business-quality performance, scalability, security and signal reliability to more than 1000 customers, including Aladdin Resort and Casino, ALLTEL Stadium, American University, Clarian Health Partners, Hearst Corporation, Lehman Brothers, Northwestern Memorial Hospital, Oakland International Airport, SeaMobile and The Homer Building. For more information, visit www.mobileaccess.com.

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“Compared to the cost of just putting in a Wi-Fi antenna system, this gives us a lot more flexibility. Since the antennas are connected with coax back to the wiring closets, the management and maintenance for us is much easier than if the access points were scattered throughout the ceiling and various locations around the stadium. I think you’ll see this technology in use everywhere over the next few years.”

*Mark Feller,
Sr. Technology Director,
Arizona Cardinals*

