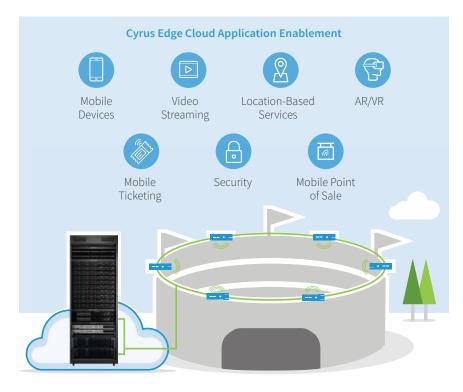


Transforming Sports Venues with Mobile Edge Clouds

As in-home and mobile entertainment options continue to expand, fan attendance at many live events is declining. Does that mean the days of "Take Me out to the Ballgame" are a thing of the past? Not necessarily. More and more sports and entertainment professionals are harnessing technology to lure fans back to the ballpark and other entertainment venues.

Stadiums and arenas are incorporating new technologies that enable and enhance fan connectivity and mobile engagement. Investments in Wi-Fi, cellular and in-stadium apps have become "must haves" for smartphone-focused fans.

Today, most sports and entertainment venues rely on Distributed Antenna Systems (DAS) to provide cellular coverage, with expensive and cumbersome carrier base stations powering the network. ASOCS is pioneering an alternative approach to the traditional base station using Mobile Edge Clouds that process and provide cellular capacity inside the venue.



Benefits

Unlimited capacity for mobile data

- Add capacity as a software
- Pay-as-you-grow and service model

Guaranteed quality of service

- Guaranteed delivery and continuity of mobile services
- Venue-owned edge cloud can support multiple carriers

Analytics from all mobile devices

- Collect valuable data and analytics to increase fan engagement and improve operations
- Data collected from all mobile devices, with or without Wi-Fi connection

LTE-based IoT Network

- A private, highly secured, high capacity LTE network
- Supports all cellular-based applications: security, PoS, video surveillance, smart building sensors

IT -Managed

- Multi-vendor cloud with monitoring
 and control
- Simple integration with Cloud
 Automation



With the cloud approach, the network is fully scalable and secure but is virtualized rather than based on hardware from cell network vendors. This distinction is important because it means the venue can own the cellular network for coverage and capacity, rather than mobile operators. With that ownership comes vastly improved control and monetization opportunities.

With Mobile Edge Clouds, venue owners and operators can collect vast amounts of data and analytics to help them improve the fan experience. Unlike Wi-Fi, which has not lived up to capacity expectations in high-density facilities like stadiums, edge clouds guarantee connectivity for fans. It also eliminates the need to proactively search for a Wi-Fi network and connect to it.

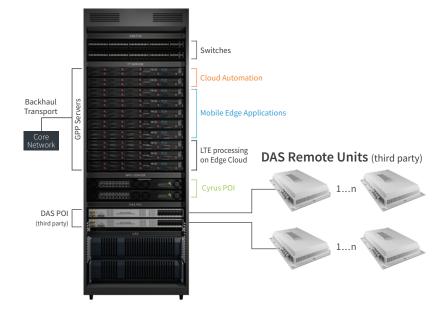
Being able to collect and analyze data from ALL mobile devices (not just those connected to Wi-Fi) provides valuable insight to facility operators; they will be able to know user location, wait-times at concession stands and restrooms and more, in real time. Data on user's preferences, and type of mobile activity can also be collected, providing valuable insight to marketing teams who can improve personalization which in turn will strengthen fan engagement.

Mobile Edge Clouds also streamline operations by allowing venues to connect all IoT applications to a single, private LTE network – including mobile ticketing, digital signage, security, and high-bandwidth applications like instant replay.

Fan benefits:

- Seamless always-on connectivity without registration
- Personalized and improved fan services, including shorter wait times
- Enables fan experiences like augmented reality and virtual reality

These are just a few of the ways that ASOCS' mobile edge cloud technology can improve a stadium's operations and enhance fans' experience to keep them coming back to the arena or ballpark.



Example: Multi-sector End-to-End Solution



Visit www.asocsnetworks.com to learn more.