

## CASE STUDY



### OVERVIEW

Located in Paris, France the AccorHotels Arena is one of the top five arenas in the world. Bringing sports and concerts to its fans, it serves 20,000 clients at any given event.

### REQUIREMENTS

- Reliable high-speed wireless network that is scalable and innovative
- Provide the best coverage and connectivity inside and outside the arena
- Ease of use and simple management

### SOLUTION

- R500 & R700 access points mounted within the stadium
- 65 T301 mounted on the catwalk
- 12 T300 for outdoor coverage
- Virtual SmartZone (vSZ)

### BENEFITS

- Increased the number of concurrent users
- Users have a seamless roaming experience within the arena
- Using Smart Positioning Technology (SPoT), AccorHotels Arena is able to detect its client's location in real time through drop-in analytics.
- Using Smart Cell Insight (SCI), AccorHotels Arena can now gather real-time & historic data
- A reliable and fast network

## BIG SUCCESS FOR INTEGRATED ROAMING EXPERIENCE AT ACCORHOTELS ARENA

Imagine walking into an arena and your smartphone immediately pings you that a \$30 premium seat upgrade is available for purchase on your mobile device. As soon as you settle in to enjoy that awesome game or show, you use your smartphone to order a pulled pork sandwich and beer delivered right to your seat. As you continue to spectate, you begin to post pictures and videos to all your social apps such as SnapChat, Facebook and Instagram to share your experience with all your friends and family. Stadiums and "indoor" arenas are racing to digitize their venues to improve the fan experience. Since we live in a time where everyone is carrying some sort of mobile device, the expectation is that there is Wi-Fi available at almost any location. The underlying stake is not only to be able to connect to any Wi-Fi network, but to be able to connect to a reliable and efficient Wi-Fi network, that provides useful apps with a great customer experience to audiences.

### CHALLENGE

AccorHotels Arena is ranked second best in worldwide arenas. It's an indoor sports arena and concert hall located in Paris, France. Designed and built in the 1980s, the venue has a pyramidal shape and its gently-inclined walls are covered with sloping lawn. The arena holds up to 20,000 clients at any given event. Before its renovation, the arena had poor cabling and coverage—nobody could connect to Wi-Fi. In 2014, this exceptional meeting place launched an ambitious modernization and digital transformation program that lasted 17 months.

"Before the renovation, we had really nothing in regards to Wi-Fi. It was only 40 access points, poor cabling, poor backhaul network—it was very old as well as the building being 30 years old," states Guillaume Lairloup, director of systems of information at AccorHotels Arena.

As they began restorations, AccorHotels Arena was looking for a new complete solution that would provide enhanced performance and capacity across all the public seating areas. Deploying wireless broadband connectivity in a high-density venue like the AccorHotels Arena is a very challenging undertaking. In theory, it is believed that a large number of access points (APs) are necessary to provide reliable coverage in such a large venue. However, the reality is that it is just the opposite as they can interfere with one another. High density deployments are all about interference management. It is important to get a reasonably accurate assessment of the demand that 20,000 people can place on the network. In order to do so, the Ruckus Wireless team led a site survey at AccorHotels Arena to accurately assess the location and the relative strength of Wi-Fi APs.

"We needed to build a completely new Wi-Fi infrastructure during the renovation process. It had to be state of the art in order to deliver seamless services to all of our clients. During concerts, there are 20,000 people in the venue so Wi-Fi is very important as we want to be able to provide more services to our clients via our future mobile app, AccorHotels Arena," states Lairloup.



“Ruckus brought us the capacity to deliver services to our population of fans in the venue all at the same place and same time. Our network rocks now.”

### GUILLAUME LAIRLOUP

Director of Systems of Information  
AccorHotels Arena

## SOLUTION

Looking for just the right solution, AccorHotels Arena management looked at several suppliers such as Aruba by HP, Xirrus, Cisco and Ruckus Wireless. Ruckus Wireless was selected because its technology is well suited to the challenges associated with the AccorHotels Arena which requires increased coverage performance and very high capacity (several Megabits/second per user). To optimize coverage while at the same time minimizing interference, the Ruckus R500 and R700 APs were mounted within the stadium. These APs ensure the most reliable connectivity within challenging and ever-changing RF environments. They are equipped with BeamFlex patented adaptive antenna technology to keep RF energy focused on the specific user for whom the wireless transmissions are intended. By directing the signal in an optimal way towards each user, the APs avoid the interference risks that occur in massive stadiums or high density environments. 65 Ruckus T301 were mounted on the ceiling to provide stronger signals to the fans at higher levels in the arena. For outdoor coverage, 12 Ruckus T300 were deployed allowing for seamless Wi-Fi roaming in and outside the arena.

Managing these APs is the Ruckus Virtual SmartZone (vSZ), a software platform offering the ultimate in flexibility. Using Smart Positioning Technology (SPoT) as one of the key features, AccorHotels Arena is able to detect its clients locations in real time through drop-in analytics. In addition, the Smart Cell Insight (SCI) gathers real-time and historic data which is analyzed and graphically displayed in an easy to understand format with a wide variety of views and customized reports. The data gathered by Ruckus SCI details essential network statistics such as traffic usage, client and session measurement, network changes, network latency and inventory. This is incredibly important in helping the arena produce statistics about the fan engagement rate during events.

“Now we’re able to offer a complete range of digital services to our fans. Our audience uses the Wi-Fi to connect to their social network, take videos, interact during the events by posting tweets while the tweets get displayed on all of the different screens in the venue and we can push content towards them to upsell services by being able to communicate with them more directly and easily,” commented Guillaume Lairloup.

Since Ruckus’ solutions deployment, the AccorHotels Arena has seen an amazing increase in the number of concurrent users. Fans are now able to connect to anyone in or outside the stadium, and can share their experiences with the world. In parallel, the arena continues to create new future applications to engage with their customers even more – keeping their fans happy—which makes everyone happy.

“Ruckus brought us the Wi-Fi capacity to deliver innovative and quality services to our population of fans in the venue, all at the same place, at the same time. Today our Wi-Fi network is identified as one of the highest satisfaction categories for our visitors,” concludes Guillaume Lairloup.