

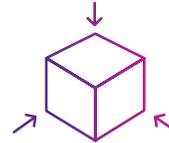
AT&T Stadium transforms fan experience; achieves game-changing savings with digital DAS network



Up to 87 percent
less power consumption



Up to 75 percent
less cooling consumption



65 percent
less rack space



82 percent
less floor space

AT&T Stadium is a world-class athletic structure that provides ultimate once-in-a-lifetime experiences. Opening in 2009, the retractable roof stadium is home to the Dallas Cowboys, the Cotton Bowl Classic and the Big 12 Championship Game. It's the largest NFL stadium, with 80,000 to 100,000 seats.



"CommScope has taken our connectivity to a whole new level. We're achieving our operational and fan engagement goals by providing instantaneous, low-latency connectivity throughout the entire venue."

**Matt Messick, chief information officer,
Dallas Cowboys**

Taking connectivity to a new level

Football fans' mobile device demands before, during and after games never stop. They expect seamless connectivity everywhere—and need a network that can keep up. AT&T Stadium's fans pushed the decade-old analog distributed antenna system (DAS) to the limit, especially given the increasing use of video streaming and sharing. The Cowboys replaced the analog equipment with a CommScope ERA® digital DAS network in 2020. The new system—the world's largest indoor

DAS network—provides an exceptional fan experience, yet it requires dramatically less equipment, space, electricity and maintenance than the legacy analog network.

Developing a new game plan

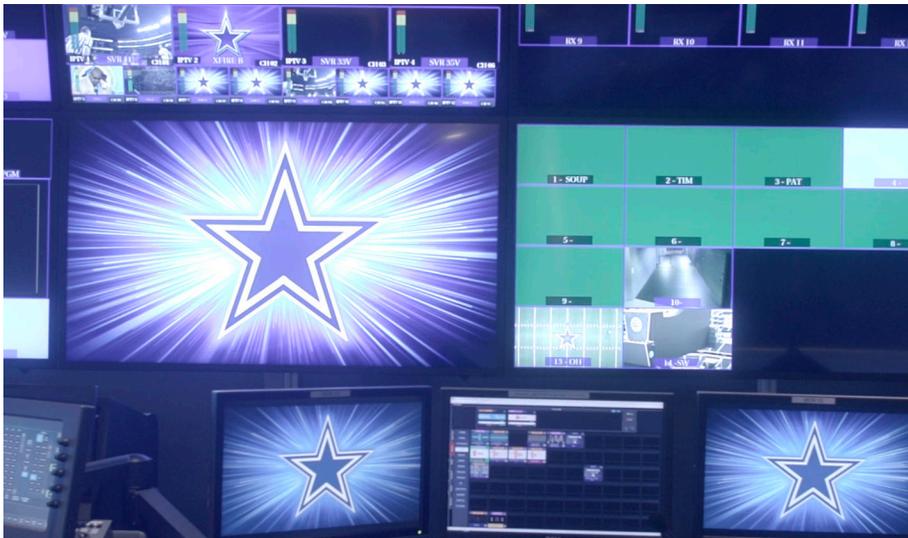
Traditional DAS equipment is under strain in stadiums and arenas everywhere. Thousands of fans depend on their mobile devices for everything from ticketing and ordering food and beverages to purchasing merchandise and sharing their game-day experiences. If a stadium doesn't have the bandwidth to support heavy connectivity

demands, that results in a slow and frustrating fan experience.

Given today's digital realities, AT&T Stadium faced increasing pressure to provide a robust network that could deliver a fan-first experience.

"Our legacy DAS was really at the end of its life," Messick said. "We were hitting the limits."

In exploring options for replacing the venue's analog DAS equipment, the Cowboys organization knew it couldn't rely on conventional designs.



“This had to be nothing like the past. The past designs could only get us so far,” said Jeff Alexander, senior vice president for ExteNet Systems, the stadium’s network operator. “If I said we looked at every available option, that’s an understatement.”

After considering an extensive list of design options, the Cowboys relied on CommScope and its partners to determine the optimal configuration for AT&T Stadium. Starting early in the design process, CommScope worked with all of the stakeholders to design a system that would deliver the best performance while saving the stadium and carriers money.

“If you want carriers’ commitment to the system and to save them money, CommScope’s all-digital DAS makes it easy by avoiding more equipment and space,” Messick said.

A winning solution

While working with CommScope, Cowboys representatives avoided typical industry challenges, which include insufficient space, power, and cooling for analog DAS networks.

“We innovated with CommScope, which brought our connectivity back to the top in the sports and entertainment industry,” Messick said.

CommScope’s ERA DAS uses a Common Public Radio Interface (CPRI) to link the ERA centralized radio access network (C-RAN) to Nokia baseband equipment. The system eliminated traditional DAS analog conversion stages—keeping the entire system digital.

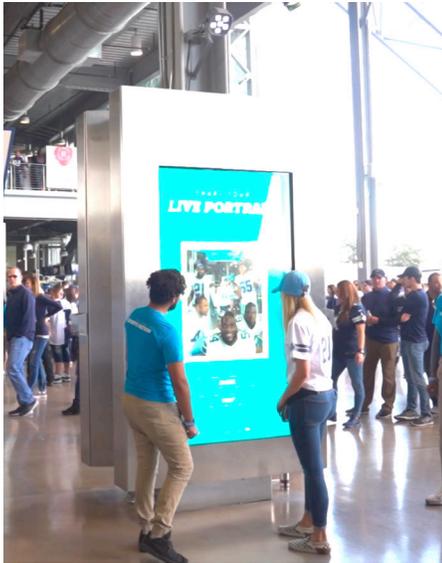
As a result, the network has a much smaller footprint than networks built on analog DAS. CommScope’s digital solution significantly reduces the amount of bulky, power-hungry telecom equipment that’s required for an operator’s headend. For example, the stadium needed only five equipment racks, compared to the 30-40 racks required for an analog DAS deployment.

“We were able to give thousands of square feet back to our general manager,” Messick said. “At the same time, we reduced our heating and cooling requirements.”

The new end-to-end digital DAS network delivers a fan-first connectivity experience,

“The ERA DAS saves space and reduces our energy footprint significantly. That’s every stadium operator’s dream.”

Matt Messick, chief information officer, Dallas Cowboys



with 660 zones and 1,000 DAS antennas. In addition to ensuring the system performed to specifications on day one, CommScope designed the architecture to be scalable. The network has the capacity to grow and adapt to accommodate fans' needs and operational requirements.

A 'game changer'

Messick is impressed with CommScope's solution and its performance.

"CommScope's ERA DAS technology has been a game changer for us in terms of operational efficiencies and fan engagement," he said. "The new ERA DAS enables the operators to make changes seamlessly and remotely all the way out to the edge of the network."

Service providers have end-to-end control. And the digital technology is allowing the stadium to engage with fans in ways it couldn't do with the legacy system. For example, every seat has a unique QR code that fans can scan to order food and beverages—without visiting concession stands.

"The ERA DAS has absolutely changed the game for our fans," Messick said. "They don't even have to think about connecting."

Explore ERA solutions

Solution

- ERA digital DAS
- 660 zones
- 2,452 ERA/CAP remotes
- 1,000 DAS antennas

CommScope pushes the boundaries of communications technology with game-changing ideas and ground-breaking discoveries that spark profound human achievement. We collaborate with our customers and partners to design, create and build the world's most advanced networks. It is our passion and commitment to identify the next opportunity and realize a better tomorrow. Discover more at commscope.com

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