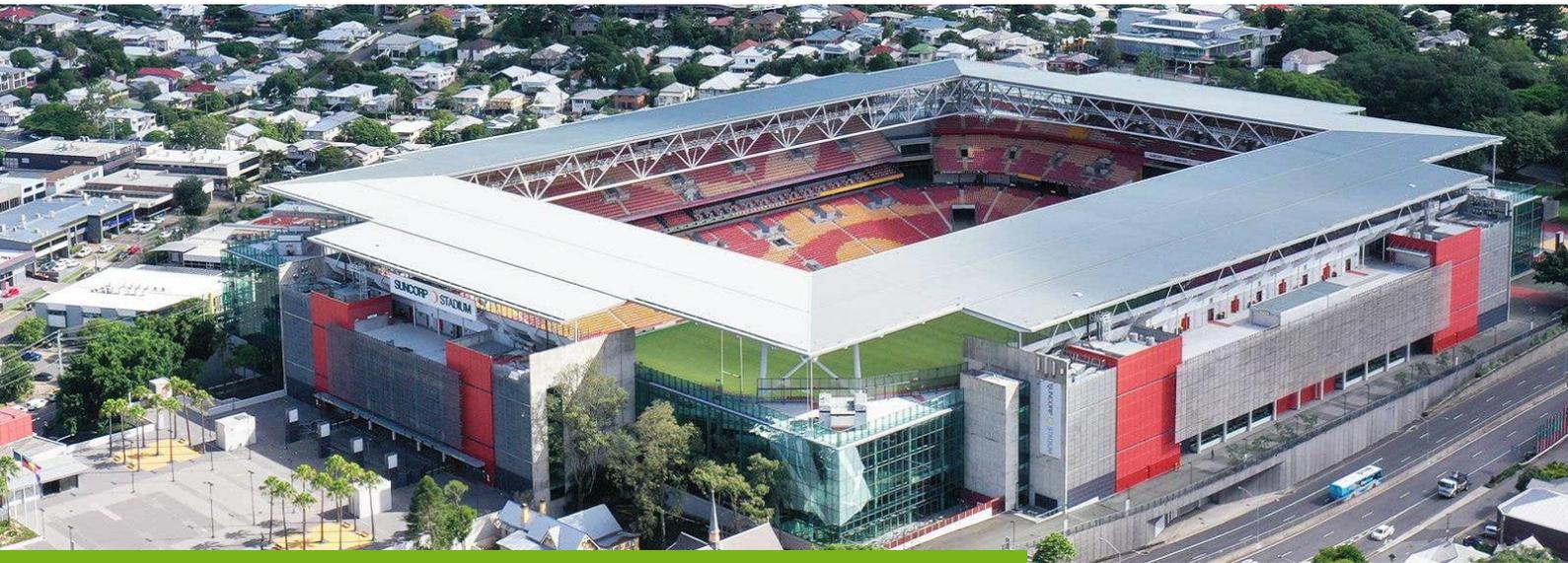


CASE STUDY: SUNCORP STADIUM



Suncorp Stadium, Brisbane's premier 52,500-seat venue, needed a high-density wireless solution to attract and host major international sporting and entertainment events.

Stadiums Queensland, the owner and operator of Suncorp Stadium, took the opportunity to participate in an international sporting event, which had stringent wireless standards set by the event organisers

Stadiums Queensland wanted to deliver high-density public Wi-Fi for tens of thousands of spectators without impacting its business-critical stakeholders including merchants, corporate partners, and broadcast media organisations. A common centralised management platform would also help reduce its operational support costs.

Building on the success at North Queensland Stadium, CDM partnered with HPE Aruba to help Stadiums Queensland design and commission a solution that would set the blueprint for future wireless deployments and establish the backbone infrastructure for all major stadiums in Queensland.

This was essential for ensuring a smooth handover to Stadiums Queensland when the Wi-Fi network came online.

CENTRALISING THE WI-FI SERVICES FOR ALL QUEENSLAND STADIUMS

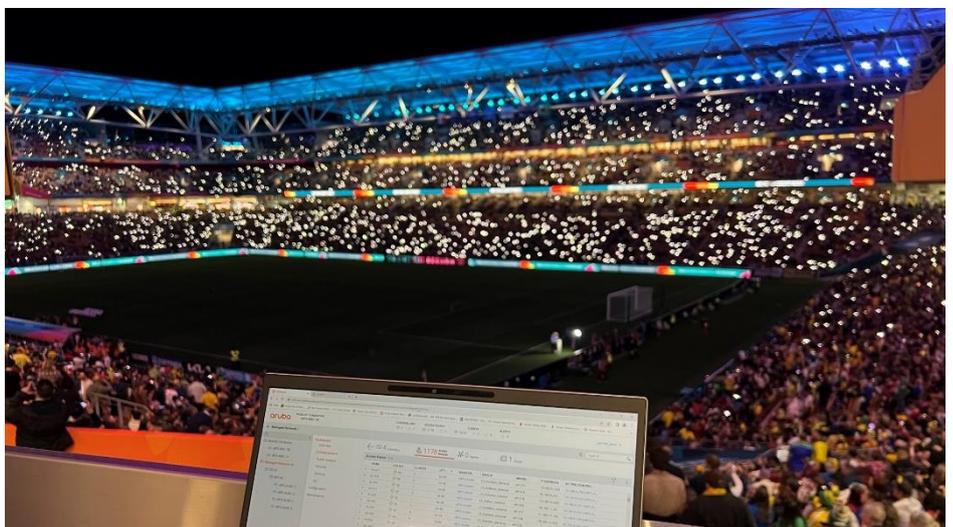
As a long-standing networking partner to Queensland Government and having successfully implemented Aruba wireless at North Queensland Stadium, CDM was engaged to design and deploy a wireless solution with centralised management and control solution for all Stadiums Queensland venues.

The project moved the management systems from North Queensland Stadium and introduced a new standard virtual platform for all stadiums. Physical controllers were reconfigured to operate with centralised masters in accordance with the low-level design.

The design addressed the wireless and wired network topology, user authentication and access control for Suncorp Stadium and the wider Stadiums network, leveraging the redeployment of the physical management system.

PROVEN WIRELESS SOLUTION DESIGNED TO FIT SUNCORP STADIUM

While the principle was to reuse the same wireless design as that developed for North Queensland Stadium across Suncorp Stadium, designing and implementing the high-density wireless coverage in Suncorp was not entirely the same. To achieve the coverage in Suncorp Stadium, a mixture of under seat small cell and overhead wireless coverage was needed.





Working with an existing built stadium presents physical challenges unique only to that stadium, and in Brisbane, factors of seating space and concrete slabs were considered fixed and features our design worked around.

More than 1,200 HPE Aruba wireless access points were deployed across indoor and outdoor areas of the stadium with rugged weatherproof access points being deployed across overhead gantry, under seat, concourse and outdoors areas to deliver Wi-Fi coverage to the stadium and surrounding areas.

CDM's proven design utilised Aruba's latest technology deployed in world-leading stadiums such as Chase Centre, Tottenham Hotspur Stadium and Queensland Country Bank Stadium. Small cell access points are deployed throughout the stadium under seats in a honeycomb design. This delivers a superior Wi-Fi signal, providing all patrons with high-quality reception and fast Wi-Fi with speeds up to 100Mbps.

Statistically, the solution accommodated more than 650 concurrently connected back of house endpoints, three dedicated wireless networks, 40,000 concurrently connected endpoints across four controllers, and over 600 APs provisioned under seat across the bowl in a honeycomb design.

SCALABLE, SECURE, AND SEAMLESS CONNECTIVITY AND MANAGEMENT FOR INTERNATIONAL EXPERIENCES

One of the challenges of delivering high-density public Wi-Fi on the international stage is ensuring the fan connectivity doesn't affect the performance of the people using the network to make their living.

With local and international media organisations broadcasting live from events, public Wi-Fi had to be delivered with minimal disruption to the stadium's other stakeholders.

Aruba Airwave provides a scalable, full featured management solution that offers the visibility, control and troubleshooting tools required to fully manage the wireless environment, and in this project, CDM and Aruba ensured Airwave was designed and implemented to support all Queensland Stadiums.

This centralised management platform approach allows Stadiums Queensland to maintain the reliability and performance of Aruba access points, controllers, switches, and selected multi-vendor devices in every stadium in Brisbane, reducing operational support costs. When it comes to keeping corporate, media and the public network traffic segregated and secure, the Wi-Fi solution leverages Aruba ClearPass. Aruba ClearPass provides real-time

policies for how users and devices connect and what they can access, as well as robust guest access and strong enforcement capabilities – offering simple ways to let event attendees securely connect devices to the network without compromising security.

DEDICATED DELIVERY IN PARTNERSHIP WITH STADIUMS QUEENSLAND

At each stage, CDM and Aruba Large Public Venue (LPV) worked in partnership with Stadiums Queensland's Technology Services team, as well as their contractors, to ensure they were across every detail of the project.

The network was put through its paces, supporting multiple international soccer events and NRL games where CDM provided both remote and onsite support coverage before and during the events. CDM delivered comprehensive post-match event reports detailing the performance of the wireless network with no wireless network-related incidents.

"In an extremely competitive events environment, offering sporting clubs and associations as well as concert promoters a venue that allows their fans to participate and engage using wireless technology is crucial."

– Stadiums Queensland

ABOUT CDM

CDM is an Australian-owned company providing the full spectrum of ICT services, from consulting to delivering and managing your ICT needs.

CONTACT THE CDM OFFICE NEAREST TO YOU, VISIT OUR WEBSITE WWW.CDM.COM.AU OR EMAIL SALES@CDM.COM.AU