

Egyptian Football Association (EFA)



Customer Profile
Name: EFA.
Sector: Coworking
Capacity: +500 employees
Project date: 2025

Distributor: DOMAIN

System integrator:



₩ BACKGROUND

The customer is the Egyptian Football Association (EFA), the official governing body responsible for overseeing football activities in Egypt. EFA manages national teams, organizes domestic leagues and tournaments, and works in coordination with international bodies such as FIFA and CAF. As a high-profile organization, EFA requires reliable and secure communication and IT infrastructure to support its operations and events.

♥ CHALLENGE

Deploying a large-scale, fully managed network infrastructure in a sensitive and dynamic environment such as the Egyptian Football Association (EFA) presented multiple challenges. From TP-Link's perspective, the primary concerns included ensuring seamless wireless coverage across a multi-floor facility, maintaining high network performance during heavy user traffic (especially during events or match days), and delivering a reliable and centralized management solution that meets both current and future scalability needs. Additionally, the integration of surveillance and access control systems over the same network backbone required precise planning and a resilient switching architecture to guarantee security, stability, and uninterrupted service.



The Egyptian Football Association (EFA) required this project to enhance its internal c ommunication infrastructure and support digital transformation across its operations. The key reasons for implementing the Wi-Fi and networking solution included:

- Improving connectivity across all departments and ensuring fast, stable internet access for staff and visitors.
- Supporting hybrid work environments, allowing employees, media personnel, and guests to stay connected at all times.
- Facilitating press conferences, training sessions, and events with reliable wireless access.
- Upgrading outdated infrastructure to meet modern performance and security standards.
- Creating a future-ready network that can scale with the organization's growth and evolving digital

The project covered two key buildings within the Egyptian Football Association (EFA) premises:

- EFA Main Building The administrative headquarters including offices, meeting rooms, and operational areas.
- 2. **EFA Hotel** The on-site accommodation facility used by players, officials, and guests. The wireless and network infrastructure was designed to serve:
- Over 500 active users (staff, media, guests, players, etc.) daily.
- Seamless roaming between buildings with unified SSID and centralized management.
- Reliable coverage for indoor areas as needed.

The challenge of this project

The implementation at the Egyptian Football Association (EFA) presented several real-world challenges, including:

1. Complex Indoor Structure:

The layout of the main building and the hotel included thick walls and multiple floors, which made it difficult to ensure stable Wi-Fi signal strength throughout all areas.

2. Coverage Across Separate Buildings:

Designing a wireless solution that maintains seamless roaming and unified connectivity across two physically separated buildings (main building and hotel) required careful planning.

3. Redundant Internet Setup:

Implementing a dual WAN configuration with proper failover and load balancing was a critical point, ensuring that the internet remains stable at all times, especially during events.

4. High User Density:

The network had to support a large number of concurrent users during peak times, such as press conferences or team gatherings, without performance degradation.

Fast and Professional Deployment:

The entire project was completed in a short time frame with minimal disruption to daily operations, thanks to our experienced team and pre-planned deployment strategy.

Customized Network Design:

The solution was tailored specifically to EFA's needs, including VLAN segmentation, SSID planning, and optimal AP placement for full signal coverage.

Centralized Cloud Management:

The network is managed via a Hardware controller, enabling remote monitoring, configuration, and performance analysis from any location.

Scalability and Future-Proofing:

The infrastructure is built with future expansion in mind - supporting more access points, users, and services without the need for major redesign.

Positive Client Feedback:

The EFA team expressed satisfaction with the speed, coverage quality, and ease of use of the new wireless network.



♥ SOLUTION

ER8411 (1 device)

Omada VPN Gateway with 10G Ports



A high-performance enterprise router, ideal for load balancing and internet failover, ensuring 24/7 connectivity.

SX6632YF Switch (2 devices)

Omada 26-Port 10G Stackable L3 Managed Aggregation Switch with 6 25G Slots



This enterprise-grade L3 managed switch provides 26× 10G SFP+ and 6× 25G SFP28 slots, with a massive 820 Gbps switching capacity, making it ideal for high-performance.

SG3452XP (8 devices)

Omada 48-Port Gigabit and 4-Port 10GE SFP+ L2+ Managed Switch with 48-Port PoE+



- 48× Gigabit PoE+ ports + 4× 10G SFP+, 500W PoE Budget.
- Used in high-density areas to power access points and end devices, while supporting uplinks to core switches.

SG2428P (15 devices)

Omada 28-Port Gigabit Smart Switch with 24-Port PoE+



- 24× Gigabit PoE+ ports + 4× Gigabit SFP, 250W PoE Budget.
- Ideal for mid-sized zones with moderate power needs and gigabit performance.

SG3428XMP (8 devices)

Omada 24-Port Gigabit and 4-Port 10GE SFP+ L2+ Managed Switch with 24-Port PoE+



- 24× Gigabit PoE+ ports + 4× Gigabit SFP, 250W PoE Budget.
- Ideal for mid-sized zones with moderate power needs and gigabit performance.

SG2210P (1 device)

Omada 10-Port Gigabit Smart Switch with 8-Port PoE+



- 8× Gigabit PoE+ ports + 2× SFP.
- Used in limited-space areas or zones with fewer connected devices, offering fanless operation and essential L2 functionality.

EAP235-Wall (119 devices)

Omada AC1200 Wireless MU-MIMO Gigabit Wall Plate Access Point



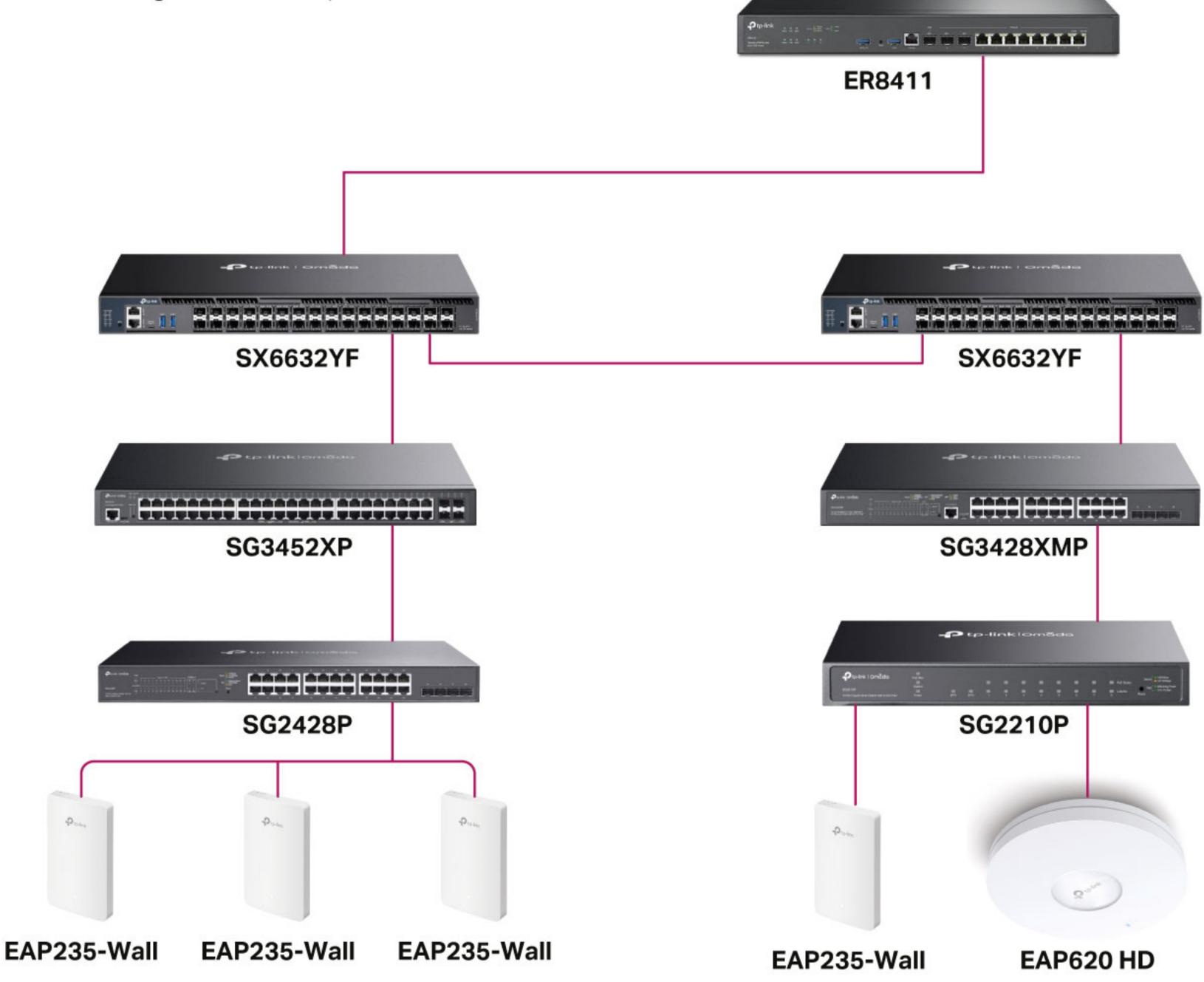
- Wall-mount Wi-Fi 5 APs with MU-MIMO, Gigabit switch (1 uplink + 3 downlink), and PoE pass-through.
- Deployed in each room of the EFA Hotel to provide fast, stable, and isolated Wi-Fi for guests and staff with minimal installation impact.





- High-Density Wi-Fi 6 Access Points.
- Installed in public or high-user areas such as lobbies and meeting halls to deliver ultra-fast, concurrent wireless connections with roaming and mesh capabilities.

Project Topology





♥ PHOTOS







Ceiling EAP

AP Ceiling EAP

Wall EAP



Core Switch





Ceiling EAP

Layer2+ Switch





Rack Mount

♥ BENEFITS

1- As part of the design:

The network infrastructure was carefully prepared to accommodate the IP surveillance system. We ensured that dedicated PoE+ ports and sufficient bandwidth were provisioned across key switch locations to support a large number of CCTV cameras with zero performance impact on the main

2- Wi-Fi 6 Coverage:

The deployment included high-performance Wi-Fi 6 & 5 access points (EAP620 HD) to ensure high-speed, stable, and scalable wireless connectivity, especially useful during events and peak usage

3-Network Redundancy & High Availability: Core switches (SX6632YF) support physical stacking and VRRP, ensuring failover capabilities and uninterrupted operation.

4-Flexible PoE Deployment:

PoE+ switches like SG3452XP and SG3428XMP allowed for easy placement of access points and IP devices without needing additional power infrastructure.

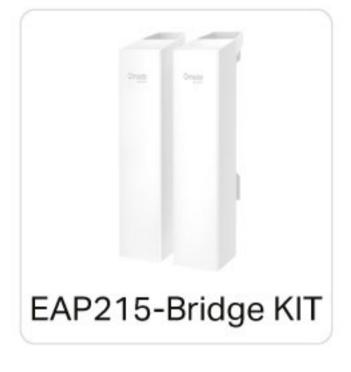
♥ RESULT

- 1. Following the successful deployment of the TP-Link Omada SDN solution at the Egyptian Football Association (EFA) HQ and hotel, the customer expressed high satisfaction with the outcome.
- 2. The network coverage across the premises was described as seamless and stable, especially in high-density environments such as meeting halls and guest rooms.
- 3. The centralized management via the Omada SDN controller greatly simplified day-to-day network operations, offering real-time monitoring, easy troubleshooting, and quick provisioning of new devices.



▼RECOMMENDED MODELS

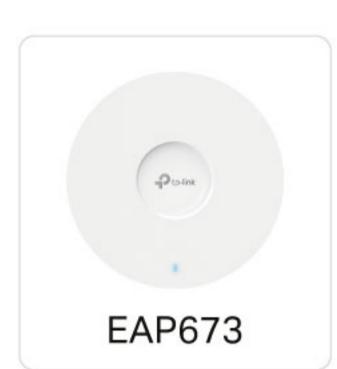
Outdoor Access Points



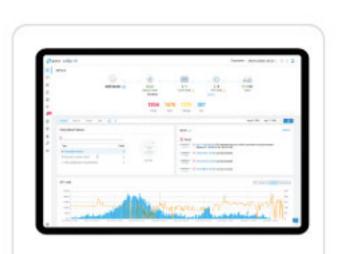


Ceiling Access Points





Software Controllers



Omada Pro Cloud Based Controller



Visit website for more about our bussiness solutions for all types of projects:

www.omadanetworks.com



Hardware Controllers



