



Enhancing Security & Surveillance Reliability in Government Hospitals with Zyxel Switches

Overview

Government hospitals in West Bengal recognized the urgent need to bolster their security infrastructure by implementing a comprehensive CCTV surveillance system. To bring this vision to life, they required a reliable, high-performance networking solution capable of supporting a large-scale surveillance setup. After carefully evaluating various options, they turned to Zyxel Networks, drawn by its reputation for delivering seamless, efficient, and scalable networking solutions. Zyxel stepped up to the challenge, deploying over 1,500 switches across 10 hospitals in diverse locations across West Bengal. With the project built on fresh infrastructure, the deployment was carried out meticulously and completed within an impressive 1.5 months through the concerted efforts of multiple partners.

Challenges

Ensuring security in healthcare facilities is no small task, and the hospitals faced a number of pressing challenges. They required a network capable of accommodating high-definition surveillance cameras across vast hospital premises, ensuring uninterrupted connectivity at all times. Handling the large influx of real-time video data was another hurdle, as the network had to maintain minimal latency and guarantee smooth, consistent transmission. Additionally, given that the project was built from the ground up, careful planning and flawless execution were critical to integrating new infrastructure without disruptions. Adding to the complexity was the urgency of the deployment, as security concerns necessitated that the entire project be completed within a stringent 1.5-month timeframe.

Solutions

Understanding the gravity of the situation, Zyxel Networks devised a tailored, high-performance networking solution to meet the demands of the hospitals. The implementation included a range of cutting-edge products, each playing a crucial role in ensuring the efficiency and reliability of the surveillance network.

Customer

Hospitals In West Bengal

Industry

Healthcare

Location

Kolkata, India



Customer Background

The West Bengal Department of Health & Family Welfare stands as the cornerstone of public healthcare in the state. They drive comprehensive healthcare delivery through a dual focus: strengthening rural healthcare infrastructure and operating advanced medical facilities. With 80% of services provided free of cost, they ensure that quality healthcare isn't just a privilege, but a right for all citizens.



The XGS2220-30HP switches, with their full Layer 2 functions and basic L3 capabilities and both PoE+/PoE++ support, provided seamless connectivity for IP cameras across hospital facilities. The GS2220 Series L2+ switches ensured network flexibility, optimizing efficiency while maintaining operational simplicity. Additionally, the core switch XGS4600-32F is a Layer 3 aggregation switch managed network traffic with precision, streamlining the transmission of video feeds without any lag. For challenging environments requiring industrial-grade resilience, Zyxel deployed the RGS200-12P PoE switches, ensuring reliable outdoor performance even under harsh conditions. These Switches scattered to different sections with distance are linked easily and work seamlessly by using Zyxel compliance fiber transceivers and 10GbE direct attached cables. The deployment was executed flawlessly in collaboration with multiple partners, ensuring a smooth and well-coordinated integration across all hospital sites. Zyxel's team worked tirelessly to ensure that each element of the solution was optimized for performance, reliability, and future scalability, allowing the hospitals to expand their security infrastructure as their needs evolve.

Product List

-  • XGS4600-32F L3 Aggregation Fiber Switch
-  • XGS2220-30HP L3 Access PoE+ Switch
- GS2220-10/28HP L2+ Managed Switch
- RGS200-12P GbE Managed PoE Switch
- SFP-SX-D Fiber Transceiver
- DAC10G-1M/3M Direct Attached Cable

Results

By successfully executing this large-scale Zyxel-powered surveillance network, government hospitals in West Bengal have achieved a significant leap in security and surveillance efficiency within an ambitious 1.5-month timeline. The seamless CCTV coverage has fortified the safety of patients, staff, and visitors, creating a more secure healthcare environment. Hospital administrators now have real-time access to surveillance footage, ensuring rapid response to any incidents. Zyxel's robust networking solutions provide uninterrupted connectivity, enabling the smooth transmission of high-definition video feeds without interference and has reinforced its reputation as a trusted partner in transforming the security landscape of healthcare facilities across West Bengal.

- Scalable solutions allow hospitals to seamlessly extend their security network as needed
- New network infrastructure enhances the surveillance system, ensuring real-time monitoring and rapid threat response, improving hospital security
- Reliable switch performance ensures consistent connectivity, even in harsh conditions, supporting seamless hospital operations and security

