



Empowering a Connected Campus at Lovely Professional University

Overview

As the academic and research infrastructure of Lovely Professional University (LPU) expanded, its existing network began struggling to meet the demands of a modern, data-driven campus. Heavy traffic from online learning tools, research systems, and administrative operations led to frequent bottlenecks and latency issues. The university required a secure, high-speed, and scalable network that could connect multiple blocks, departments, and student zones across a vast campus, without disrupting daily activities. To achieve this, LPU worked with Zyxel Networks and its trusted local partner Cyberwall Infotech LLP to modernize its campus connectivity. The result was a complete transformation of its digital backbone through Zyxel Networks' advanced switching infrastructure, combining performance, stability, and centralized control to create one of India's most connected learning environments.

Challenges

The existing setup was a mix of old and new systems, unable to handle the exponential rise in data traffic. With more students relying on digital platforms for learning, the network struggled with slow speeds and downtime during peak usage. Communication between the academic and administrative blocks was often delayed, and the IT team faced growing challenges in managing multiple devices spread across different floors and departments. LPU needed a network that was not only powerful and reliable but also flexible enough to integrate with existing systems while being ready for future expansion.

Solutions

To tackle these demands, Cyberwall Infotech LLP and Zyxel Networks designed a comprehensive network architecture built on intelligent switching and efficient traffic management. The deployment began at the distribution layer with Zyxel XS3800-28 L3 Aggregation Switches, forming a strong and resilient backbone for the campus. Equipped with 10G capabilities and Layer 3 routing, the XS3800 ensure d smooth data flow across major academic zones and delivered the bandwidth the university needed for its expanding digital ecosystem.

Customer

Lovely Professional University

Industry

Education

Location

Jalandhar, Punjab, India

Partner

Cyberwall Infotech LLP

Customer Background

Lovely Professional University is one of India's most trusted and fastest-growing institutions, established in 2005. LPU offers a wide range of UGC-approved online and distance education courses to learners across India and abroad. Emphasizing on quality education and digital innovation, the school enables its students to learn from anywhere, at any time, through its flexible and interactive learning platform.



“Our goal was to build a digital-first campus that could keep pace with the growing demands of smart learning and real-time collaboration. With Zyxel Networks’ high-performance switching solutions, we’ve achieved seamless connectivity across all academic and administrative zones. The stability and speed of our new network have made a tangible difference in how our students learn and how our teams operate every day.”

Balvinder Singh, Sr. Network Administrator
Lovely Professional University

Sharing his thoughts on the collaboration, Karan Singh, Director of Sales at Cyberwall Infotech LLP, said, “With Zyxel’s XS3800, XGS1930, and GS1900 series switches, we built a unified and powerful network that’s both scalable and easy to manage perfectly aligned with the university’s vision for a connected campus.”

At the edge layer, XGS1930-28 GbE Lite-L3 Smart Managed Switches were deployed to support high-volume data traffic from departments, classrooms, and administrative units. Their four 10G uplinks enabled fast data movement and reduced delays during peak usage. The XGS1930-28HP PoE+ models extended this capability by delivering stable power to devices like IP cameras, WiFi access points, and smart classroom panels, removing the need for separate cabling and simplifying installations. To support high-power devices like IP cameras, WiFi access points, and smart classroom panels, XGS1930-28HP PoE+ switches were introduced at the access layer. Their strong PoE capabilities eliminated the need for separate power cabling, simplifying deployment while ensuring steady power delivery to connected devices. Complementing this setup, GS1900-24 and GS1900-24HP switches strengthened the last-mile connectivity across academic and administrative areas.

Product List



- XS3800-28 L3 Aggregation Switch
- GS1900-24HP Smart Managed PoE Switch
- GS1900-24 Smart Managed Switch with GbE Uplink
- XGS1930-28 GbE Lite-L3 Smart Managed Switch with 4 10G uplink
- XGS1930-28HP GbE Lite-L3 Smart Managed PoE Switch with 4 10G uplink

Results

With Zyxel Networks’ intelligent switching solutions in place, Lovely Professional University now operates on a stronger, faster, and more reliable network than ever before. These switches offered the flexibility and reliability needed for classroom and office endpoints, offering stable connectivity to hundreds of devices running simultaneously. Together, these products established a network that was intelligent, secure, and easy to manage, empowering the IT team with better visibility, faster response times, and the ability to scale effortlessly as campus needs evolve. The new network has enhanced digital learning and collaboration while simplifying management for the IT team, solidifying LPU’s position as a leader in technology-driven education.

- 70% boost in overall network speed and stability
- Reduced downtime by over 60% for uninterrupted academic and administrative operations
- Faster uplink capacity by 65%, ensuring smooth inter-departmental data flow
- Simplified management with unified control and real-time monitoring

