Revamping Campus Connectivity: A Case Study of IIM Calcutta's Network Upgrade

Overview

The successful implementation of Zyxel's fiber-based network solution marked a significant milestone in IIM Calcutta's journey towards technological excellence. By overcoming the limitations of outdated infrastructure and embracing modern networking technologies, the institution has unlocked new possibilities for innovation, collaboration, and academic excellence. As a result, IIMC stands poised to empower the next generation of leaders and scholars with a future-ready network infrastructure that fosters connectivity, creativity, and continuous growth.

Challenges

Prior to the upgrade, IIMC grappled with sluggish internet speeds and connectivity issues stemming from an outdated network infrastructure. The reliance on IPDSLAM technology hindered the institution's ability to support the diverse array of devices used by students, faculty, and staff, including mobile devices, IoT devices, and PCs/laptops. This outdated infrastructure not only impeded academic and administrative operations but also undermined the institution's reputation for technological excellence.

Solutions

Enter Vortex, a local vendor armed with expertise and innovation. With a keen understanding of IIMC's needs, Vortex proposed a transformative solution centered around Zyxel networking technology. The cornerstone of this transformation was the deployment of Zyxel's cutting-edge networking solutions, including the OLT 2406, ONT PMG5617GA, and ATP 800 Firewall.

The Zyxel OLT 2406 served as the backbone of the network, providing high-speed fiber connectivity to various endpoints across the campus. Paired with the ONT PMG5617GA, which functioned as the customer premises equipment, this solution enabled seamless integration with a diverse range of devices while ensuring reliable and high-performance connectivity.

Customer
IIM Calcutta

Industry
Education

Location
Kolkata, India

Partner
Vortex Electronics Pvt. Ltd.

Customer Background

Established in 1961, IIM Calcutta is India's premier institute for post-graduate management studies. Collaborating with MIT, West Bengal Government, The Ford Foundation, and Indian industry, it offers top-tier education rooted in Indian ethos. Evolving autonomously, it excels in management education, executive training, and research. Known for attracting top talent and fostering academia-industry partnerships, IIM Calcutta stands as Asia's beacon of management excellence, shaping future leaders and advancing management knowledge.

Furthermore, the ATP800 served as a firewall for inspecting network traffic and defending against cyber threats. Beyond that, it provided captive porta functionality for authenticating devices connected to the network, with user authentication facilitated through an existing Active Directory server.

Results

With the implementation of Zyxel's cutting-edge technology, IIMC witnessed a transformative shift in its connectivity landscape. Gone were the days of sluggish internet speeds and disrupted academic pursuits. In their place emerged a realm of enhanced connectivity, where students and faculty seamlessly accessed online resources, collaborated across platforms, and embraced the boundless opportunities of digital learning. As the curtains rose on this new era of connectivity, IIMC found itself poised for greatness—empowered by a network redefined, ready to embrace the challenges and opportunities of tomorrow.

Product List

- ONT PMG5617GA

- OLT 2406

- ATP800 ATP Firewall

Application Diagram

Internet

ATP800

OLT2406

AD Server

PMG5617GA

Switch

Workgroup

PMG5617GA

IP phone

Fiber
10G Copper
Gigabit