



Success Story

Zyxel GPON Solution Elevates Network for World's Tallest Statue of Unity



Tourism



Statue
of
Unity



India



Zyxel
GPON
Solution

Overview

Challenges

- Support and integrate multiple applications like voice, video, data, and IP cameras
- Centralize management to simplify network provisioning and monitoring
- Ensure protected, streamlined data storage and access

Solutions

- Zyxel GPON Solution

Results

- Simplified configuration significantly cuts down on deployment and maintenance costs
- Robust fiber cabling delivers secure and stable high-speed connectivity
- Future-proof products and scalable architecture will stand the test of time

Background

The Statue of Unity isn't an official global wonder, but has instantly become an Indian landmark since its 2018 inauguration. At 182 meters in height—240 meters with the base included—the statue is currently the tallest in the world, towering over China's Spring Temple Buddha and the Statue of Liberty in the USA. The massive structure

is a head-to-toe rendering of Vallabhbhai Patel, a leader of the country's non-violent independence movement and sovereign India's first home minister. In addition to viewing the statue, visitors can check out the Wall of Unity, memorial and visitor center, souvenir shop, and cafeteria with its array of dining options.

Challenges

The government had set up a trust to oversee the construction of the monument and deliver a wide range of cultural and educational services to visitors. To guarantee it had the necessary resources to fulfill these duties, the trust wanted to set up a modern network able to support multiple applications like voice, video, and data. It was also important that the network allow for secure data sharing

and the integration of IP cameras. Lastly, they needed to achieve centralized connectivity in the most energy-efficient way possible. If they were able to find a reasonably priced, technologically proven, and scalable solution, they'd be well on their way to building a network as impressive as the statue itself.

Solutions and Benefits

In order bring their network blueprints to life, the Statue of Unity team deployed a centralized and secure Zyxel GPON Solution. Cutting-edge connectivity starts with the Zyxel **OLT2406**, a flexible and secure GPON OLT (optical line terminal) that's able to centrally control the network's peripheral units. Zyxel **PMG5317-T20A Wireless N GPON HGUs** allows all the cultural center's critical applications to fully leverage the raw power that the GPON's fiber infrastructure offers.

The GPON's centralized management via Zyxel's NetAtlas doesn't only streamline configuration and provisioning, it takes a bite out of typical deployment costs. And since the fiber signal is sent to edge devices via unpowered, self-sufficient splitters, the GPON infrastructure significantly reduces potential energy and maintenance outlays. As for security, the network's robust feature set includes safeguards that restrict access to client device information, so staff

can access and share data without disclosing identifiers like MAC addresses. The architecture also brings the office's data server and IP cameras into the fold, further centralizing and simplifying management.

The completed GPON network has delivered seamless, high-speed connectivity to the entire cultural center. Even though departments are logically separated by VLANs, employees have the ability to freely and securely share information throughout the network as a whole. Because each application is assigned a specific level of priority, mission-critical services will never be lacking bandwidth. It's a vital feature to keep the network working optimally.

With a powerful and flexible Zyxel GPON Solution, the Statue of Unity's team has everything they need to ensure the memory of their revered leader never fades.

Products Used

OLT2406 • 2U Temperature-Hardened 6-slot Chassis GPON OLT



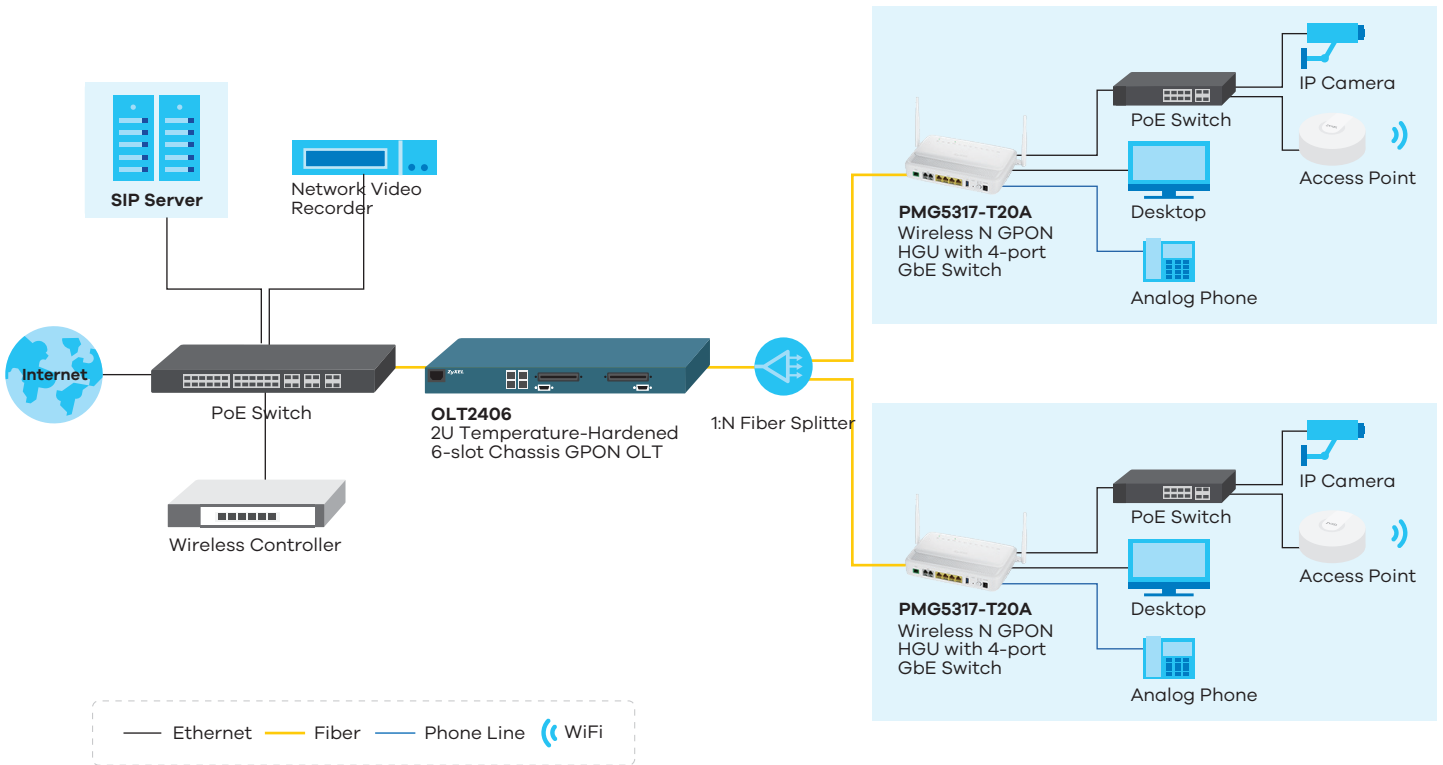
- ITU-T G.984-compliant GPON ports; each port supports 64 ONT
- Two management and switch cards plus two power modules for redundancy
- Four 10 GbE or two GbE uplink ports
- 10 GbE backplane bandwidth per line card slot for non-blocking service
- Four PON or GbE port per line card
- ITU-T G.984.1 type A and type B protection
- Temperature-hardened

PMG5317-T20A • Wireless N GPON HGU with 4-port GbE Switch



- Integrated Internet services through fiber optics
- 2.4 GHz 11 b/g/n (2x2) for superior performance and coverage
- Advanced QoS ensures quality of triple-play services
- Provisioning and Management

Diagram



About Zyxel

Focused on innovation and customer-centricity, Zyxel has been connecting people to the Internet for nearly 30 years. Our ability to adapt and innovate with networking technology places us at the forefront of creating connectivity for telcos and service providers, business and home users. Zyxel is building the networks of tomorrow, unlocking potential, and meeting the needs of the modern workplace — powering people at work, life, and play. Zyxel, Your Networking Ally.

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