



Success Story

Indian Mall Enjoys Hassle-Free, Cost-Optimal Network Upgrade with Zyxel MSAN Solution



Shopping
Mall



Pacific Mall



India



Zyxel
MSAN
Solution

Overview

Challenges

- Enhance the existing system to meet the required connectivity and performance of new demand
- Look for a technology to increase data download and upload speeds faster than 40 Mbps
- Utilize existing analog telephone infrastructure and avoid disruptive rewiring

Results

- Stable, high-speed VDSL and WiFi internet services to all staff and stores in the mall
- Cost-optimal solution that saved deployment and maintenance costs
- Easy and flexible deployment over existing infrastructure

Solution

- Zyxel MSAN Solution

Summary

The modern, newly-built Pacific Mall found that their analog telephone system could not easily deliver their required data transfer speed over the same old copper wire. Zyxel's MSAN solution helped the mall to upgrade its network system over the existing telephone infrastructure without extra cabling costs and labor. Upon completion, the Pacific Mall Dwarka mall gained a state-of-the-art, stable, and reliable network solution. The management was more than pleased to have the Zyxel solution since it helped them to increase the internet speed while reducing deployment and maintenance costs. Pacific Mall has different branches and is considering working with Zyxel again to enhance their network infrastructure in the future.

Background

Pacific Mall Dwarka is one of Pacific Group's largest project located in Dwarka, New Delhi. The newly-opened mall features a convenient location and proximity to metro stations and the Airport Express Line. The modern and luxury mall houses some of the famous Indian and

international brands as well as popular restaurants serving multinational cuisines across 3 lakh square feet. The addition of state-of-the-art network technology is fundamental to the mall's ongoing development.

Challenges

The stores and mall administration staff required fast and stable network services, supporting more than 40 Mbps of data transmission speed. The Pacific Mall adopted the analog telephony system over copper wire connection which was already installed at their premises. They wanted to enhance their existing system since their existing system was not able to provide them the desired connectivity, speed and performance. The new network solution was required to be stable and high-performance while simultaneously being able to handle a heavy user load.



Solutions and Benefits

The mall's system integrator Skynet suggested that the mall management use VDSL technology instead of ADSL for its faster download and upload speeds. The Indian mall selected Zyxel's Multi-Service Access Node (MSAN) solution which enables easy and cost-saving upgrades on the existing infrastructure. The deployment enhanced network connectivity to the mall without having to go through the cost and hassle of installing new infrastructure.

The core of the network utilized a Zyxel **2U Temperature-Hardened 5-slot Chassis Remote MSAN IES4105M**, which provides comprehensive management options and supports multi-service interfaces including ADSL2, VDSL2 and VoIP. The MSAN access device worked with two **VLC1124A-51 VDSL Line Cards** to distribute VDSL and WiFi signals to all stores and public areas in the mall. Besides, the compact 2U design fitting standard racks make it easy and flexible to deploy the MSAN on the currently existing network infrastructures. The hot-swappable and modulation designs simplified replacement and maintenance without the need for powering down and interrupting services.

Along with the MSAN, **VMG1312-B10A Wireless N VDSL2 4-port Gateway with USB over POTS** were installed to ensure fast and reliable wireless network access. Zyxel's VMG1312-B10A supports Vectoring technology, which is an

effective way to deliver high bandwidth over existing copper infrastructure. The technology was used to eliminate interference among different VDSL lines, improve data rates and enlarge service coverage without changing the current infrastructure. The gateways featuring 802.11n technology enhanced both network speed and coverage, delivering more than 40Mbps of data transfer rate. The gateways also allowed for remote management and configuration without manual intervention from end users. It reduced deployment complexity, and thus saving on operating and maintenance costs for service providers.

After the deployment, all the staff and stores in the mall are now equipped with fast and stable wired and wireless connectivity. The Pacific Mall is pleased with the overall deployment and performance of Zyxel's MSAN solution. Now they are getting enhanced download and upload speed over the existing analog telephony system. Benefitted from cost-optimal investment and hassle free upgrade, the mall is considering working with Zyxel again for any future opportunities at other branches.

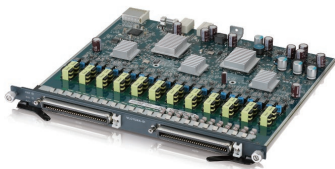
Products Used

IES4105M • 2U Temperature-Hardened 5-slot Chassis Remote MSAN



- 2 GbE backplane to support broadband and IGMP traffic
- 4 slots for hot-swappable 64-port VoIP, 24-port VDSL2 and 32-port ADSL2+ line card
- 2 GbE combo interface for uplinks and subtending
- Built-in POTS splitter, DC, AC or Dual power

VLC1124A-51 • VDSL Line Card



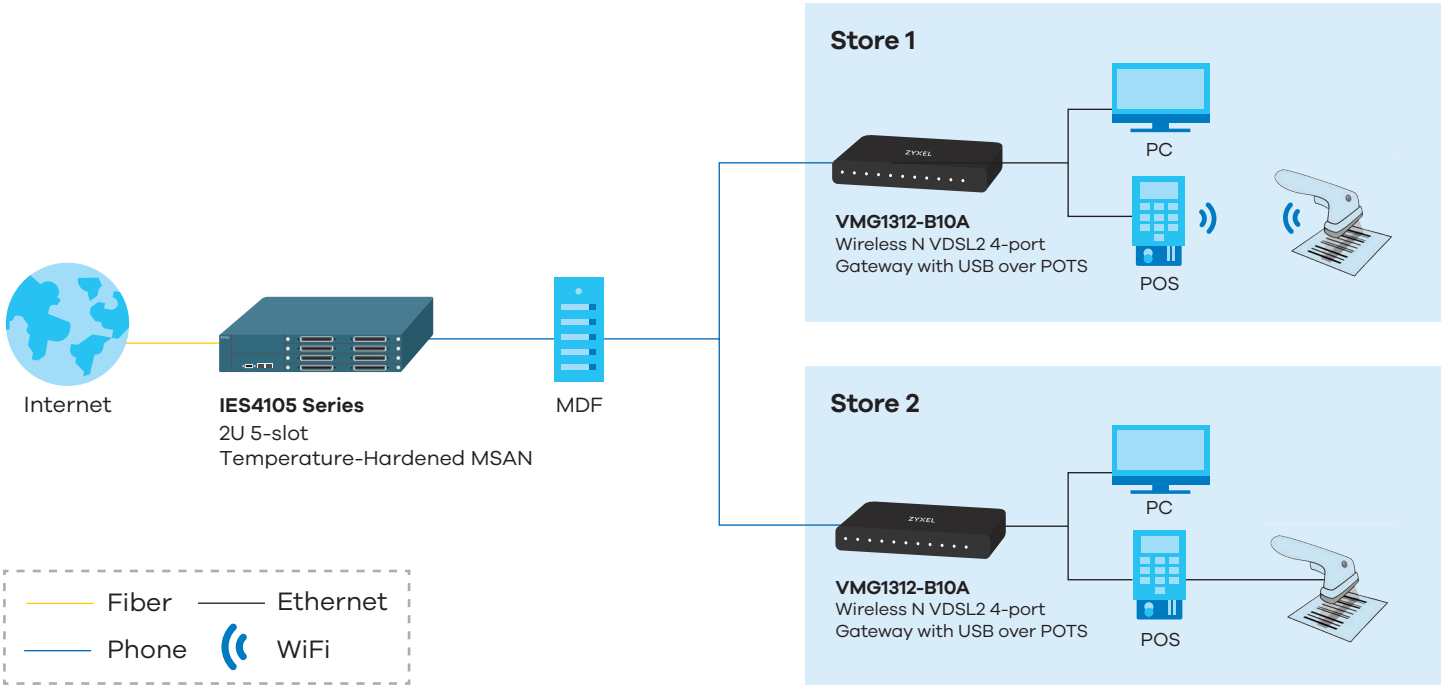
- G.993.2, G.994.1, G.997.1
- Twenty-four VDSL subscriber ports via one champ-64 connector
- Twenty-four POTS splitter input ports via one champ-64 connector
- Annex A
- Built-in POTS splitter that supports both 600 and 900 ohm
- Hot-swappable

VMG1312-B10A • Wireless N VDSL2 4-port Gateway with USB over POTS



- VDSL2 Vectoring for maximized service coverage
- 2.4 GHz 11n (2x2) for superior performance and coverage
- Remote provisioning and management through TR-069
- Always-online, always-compatible alternative 3G connection

Diagram



About Zyxel

Focused on innovation and customer-centricity, Zyxel has been connecting people to the Internet for over 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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