PLDT

PLDT, the leading telecommunications provider in the Philippines, selects Allied Telesis advanced Gigabit switches for the layer 2 aggregation requirements of its Next Generation Network.
Made up of over 7,000 islands in Southeast Asia, the Philippines has a population of 89 million. One of the Telco success stories of recent years, the Philippines has seen tremendous growth, especially in mobile communications. Increased demand for new services and functionality has fuelled investments in leading-edge technology for the country’s communications infrastructure.

**About the customer**

Founded November 28, 1928, Philippine Long Distance Telephone Company (PLDT) started out as a POTS (plain old telephone service) provider. Now the leading telecommunications provider in the Philippines, PLDT offers the largest and most diverse range of telecommunications services across the country’s most extensive fiber optic backbone and fixed line, cellular and satellite networks.

PLDT’s services are offered through its three principal business groups:

- **Fixed line**
- **Wireless**
- **Information and Communication Technology**

The fixed line business group provides national and international long distance phone calls, data and other network services used for domestic and international communications, such as private networking and broadband Internet access.

The wireless business group primarily offers cellular services, including wireless voice and data communications, as well as satellite and broadband network connectivity.

The Information and Communications Technology business group operates call centres, Internet data centres, and an Internet and gaming business.

**The customer network**

With the increasing demands of modern communications, it is important for PLDT to keep its network infrastructure continuously updated to ensure delivery of advanced value-added services to both residential and business customers. The convergence of Voice, Video and Data traffic over the IP network necessitates using leading edge technology to provide seamless delivery of services.

The Next Generation Network developed by PLDT offering both Voice and ADSL / ADSL2+ services saw a tremendous increase in access demand from both residential and business customers.

PLDT now offers advanced solutions for residential and business clients as well as educational institutions.

Residential customers can make use of exciting offerings like Vibe Internet access, available with many options including prepaid and pay-per-surf, as well as leading voice calling plans and services. The PLDT MyPad portal is an online access point for advanced services like texting from PC to mobile phones, downloading ring tones, plus gaming and web-based email access.

Business customers are able to have ‘always-on’ Internet access enabled with services like I-Gate and BizDSL, for secure high-speed communications.

Educational institutions making use of services like eCampus allows teachers and students to enjoy high speed wireless access to the school’s LAN and the Internet anytime and anywhere.

With these and many other offerings covering the whole spectrum of communications technology, PLDT’s Next Generation Network needed the bandwidth and capacity for millions of users.

**Redeveloping the network architecture**

The PLDT Next Generation Network is an end-to-end IP solution with customers connecting into IP DSLAMs and Access Gateways. All of these Access Gateways and IP DSLAMs from different
geographical locations nationwide need to be aggregated so traffic can be passed on into the network core. This is done with advanced Gigabit switches.

When choosing these Aggregation Switches, a number of challenges had to be overcome to be sure the network would provide the functionality required.

**The challenges:**
The Aggregation Switch vendor chosen for the PLDT network was required to meet a number of challenges:

- Dramatic network bandwidth increase due to increasing demand for high-performance services.
- Security/confidentiality of subscriber’s network traffic.
- Minimal delays for voice and real-time traffic to meet customer service level agreements and expectations.
- Service and support structures to provide PLDT with the necessary backup.

“We required a switch vendor who would have products to meet a complex set of requirements for the aggregation layer of our network, providing a secure and easily deployed solution.”

Mr George Lim, VP for PLDT Engineering

Allied Telesis, with an industry leading portfolio of advanced Layer 3 switches, provided a solution to meet PLDT’s requirements and complement their business needs.

Key decision factors were:

- Features
- Performance
- Ease of management
- Value
- Software and feature upgradeable

The aggregation layer solution provided by Allied Telesis met all of PLDT’s requirements at a very competitive price.

**The solution**
The Allied Telesis AT-9924T and AT-9924SP switches were chosen as the Aggregation Switches for the PLDT network; providing copper and fiber connectivity options.

![AT-9924T](image)

![AT-9924SP](image)

The AT-9900 family of advanced Layer 3 Gigabit switches supplies feature rich, resilient switching technology capable of dealing with multicasting (for streaming video), network control, traffic prioritization and security.

The challenges were all overcome by the AT-9924 switches with a combination of performance and features to meet PLDT’s requirements:

- The increasing volume of network traffic from PLDT’s Next Generation Network is comfortably handled with wirespeed Gigabit switching performance.
- To protect the security and confidentiality of subscriber’s network traffic, the AT-9924 switches double VLAN tagging feature provides separation of data with no interference to customer VLAN IDs.
- Voice and real-time traffic is prioritized and forwarded with minimal delay using advanced Quality of Service (QoS) features on the AT-9924 to ensure that service level agreements are always met. With QoS features including full classification, prioritization, traffic shaping and min/max bandwidth profiles, the AT-9924 is ideal for PLDT, ensuring...
AT-9924 switches in the PLDT network infrastructure aggregating the DSLAMs and Access Gateway traffic for the IP network core.
maximum availability of premium voice, video and data services.

- The service and support provided by Allied Telesis really came to the fore with the Professional Services team providing the configuration design support to ensure PLDT created an optimal aggregation layer solution.

**Results**

With over 300 AT-9924s now installed, the Allied Telesis switches have proven themselves to be an integral part of the PLDT network infrastructure, meeting the layer 2 aggregation requirements.

Allied Telesis provided a very cost-effective solution along with both pre-sales network design advice and post sales support for PLDT.

"The Allied Telesis advantage over its competition is having the right mix of advanced features necessary on PLDT’s network, along with great support. The Allied Telesis AT-9924 is the cost-effective solution for our aggregation layer network requirements." Mr George Lim, VP for PLDT Engineering.

Ease of deployment is a real advantage provided by the AT-9924 switches. As increased network capacity is required, the provisioning of connections for new DSLAMs is very simple, with appropriate fiber modules simply plugged in and ready to connect. The AT-9924 switch’s ability to easily swap between multiple configurations makes for trouble-free upgrading of functionality when new services are turned on, or network requirements change.

The Next Generation Network now in operation allows PLDT to offer a variety of advanced communication packages to its customers, with the AT-9924 switches playing their part in ensuring appropriate traffic control and fulfilling service level agreements.

As PLDT continues to offer new and exciting communication services to residential and business customers, Allied Telesis looks forward to continuing the partnership in providing solutions to meet the ever increasing demand for next generation global communication.

**About Allied Telesis Inc.**

Allied Telesis is part of the Allied Telesis Group. Founded in 1987, the company is a global provider of secure Ethernet/IP access solutions and an industry leader in the deployment of IP Triple Play networks over copper and fiber access infrastructure. Our POTS-to-10G iMAP integrated Multiservice Access Platform and iMG intelligent Multiservice Gateways, in conjunction with advanced switching, routing and WDM-based transport solutions, enable public and private network operators and service providers of all sizes to deploy scalable, carrier-grade networks for the cost-effective delivery of packet-based voice, video and data services. Visit us online at www.alliedtelesis.com.