



INDONESIA'S XL AXIATA PREPARES FOR METEORIC GROWTH IN MOBILE DATA

Summary

Company:

PT XL Axiata Tbk

Industry:

Telco

Business Challenges:

- Setting the stage for burgeoning growth in mobile data business
- Investing heavily in a nationwide 4G LTE rollout
- Required a mobile backhaul architecture that was cost effective, avoided unnecessary complexity, and would readily scale to underpin the growth of the mobile network

Technology Solution:

- ACX2200 and ACX5000 Universal Access Routers
- MX80 and MX960 5G Universal Routing Platforms
- Professional Services

Business Results:

XL has laid the groundwork for its fast growing 4G LTE offering with a Juniper solution that is both highly efficient and can cost-effectively support exponential traffic growth

As Indonesia's second largest mobile services operator, XL Axiata is in a highly competitive battle for leadership in the country's fast growing mobile data market. Its corporate strategy hinges on the transition to 4G LTE, a technology shift that is already delivering meteoric growth for the company. First trialed in 2014, XL's 4G network had already expanded to more than 8000 base stations covering almost 100 cities and regions by the end of 2016. With nearly half the country's population still not reached by XL's 4G network, the pace of the expansion is increasing. A fast and seamless rollout is critical to XL's 4G future.

Business Challenge

XL turned to PT Lintas, which over time has supplied much of its infrastructure, applications, and managed services solutions, for a complete mobile backhaul network. The solution needed to cope with mobile data traffic that was more than doubling year-on-year, and it needed to be able to scale rapidly to serve the proliferating network of base stations across Indonesia.

A competitive vendor selection process evaluated technical and commercial options and, recognizing the primary role of the network's architecture, also closely examined network design proposals. XL's Taufiq Budiman, an IP transport expert, says design services were formalized as part of the selection because "good network designs mean we can both spend less CapEx and optimize our investment. They also ensure network stability and efficiency, and all of these factors matter so much because our network needed to expand faster than the traffic was growing."

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- Taufiq Budiman, IP Transport Expert, XL Axiata

Technology Solution

XL chose a Juniper solution, combining professional network design services with Juniper Networks® ACX Series Universal Access Routers and MX Series 5G Universal Routing Platforms, for a blend of performance, scalability, and reliability. The solution would be deployed by PT Lintas. The combination of vendor and partner was trusted because Lintas has developed a deep understanding of XL's network and because Juniper solutions, which have been deployed in XL's core since 2006, have developed a reputation within XL for stability and ease of management.

The deployment specified the ACX2200 Universal Access Router as small cell site routers and the ACX5000 Universal Access Router for aggregating backhaul traffic

over Ethernet. The MX80 and MX960 platforms were chosen for their powerful switching, routing, and security features and their unmatched flexibility.

The expertise to examine the existing network topology and map out an expansion path for 4G LTE deployments was provided by Juniper Networks Professional Services. The design, prepared remotely by a cross-functional team with deep experience in mobile backhaul network designs, evaluated project requirements and formulated high-level designs. The team provided functional technical requirements, planned the layout of physical and logical access and aggregation network topology, defined the scalability requirement for upper aggregation layers, and designed the routing layout.

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- Taufiq Budiman, IP Transport Expert, XL Axiata

Business Results

With phase one of the deployment rolled out and approximately 500 routers up and running, the Juniper mobile backhaul solution is expanding rapidly.

XL's Budiman says the new network is delivering on its promise of scaling to meet current demand and long-term forecasts while reducing both CapEx and OpEx. Its early success relies on the architecture design which streamlined access, aggregation, and mobile backhaul by eliminating unnecessary layers and network overlays.

The architecture now serves as a design template that XL's own design teams can use to rapidly roll out further backhaul deployments. According to Budiman, the investment in Juniper Professional Services has provided a knowledge transfer with lasting value to XL. “We do have internal design resources,” he

explains. “But the Juniper team brought with it experience from other large operators and plenty of fresh ideas. These things contribute to our internal expertise over the long term.”

Next Steps

At the time of writing, Budiman expected XL's new mobile backhaul infrastructure to expand by a further 2000 routing platforms in the following six months. “After that, there will be further phases in subsequent years, using both optical fiber and microwave for the last mile.”

There is, then, still plenty of work before XL's ambitious 4G mobile network completely covers the sprawling Indonesian archipelago. Getting the right solution built, fast, is now within reach because XL has a reproducible mobile backhaul model underpinned by a proven combination of Juniper hardware, software, and professional design skills.

For More Information

To find out more about Juniper Networks products and solutions, please visit www.juniper.net.

For more information about Juniper Professional Services, please visit www.juniper.net/us/en/products-services/services/technical-services/professional-services/#tab=dtabs-1.

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