

Viettel scales network to advance digital society in Vietnam



Viettel Group is focused on expanding digital society in Vietnam to meet the expectations of its tech-savvy youth and driving economic growth through technology.

To efficiently meet growing demand for mobile and broadband services while maximizing its public IPv4 addressing resources, Viettel upgraded the carrier-grade network address translation (NAT) capabilities on its Juniper MX960 Universal Routers.

OVERVIEW

Company	Viettel Group
Industry	
Products Used	MX960, MX2020, MX-SPC3 Security Services Card, SRX5800, ACX2100
Region	

CUSTOMER SUCCESS AT-A-GLANCE

70

Million mobile subscribers worldwide

9

Million fixed broadband subscribers in Vietnam

Manage

IPv4 address exhaustion

11

Countries of operation

CHALLENGE

Fast growing digital economy

Viettel’s business growth reflects Vietnam’s status as the fastest growing digital economies in Southeast Asia.

“Viettel is the largest communications company in Vietnam,” says Le Trung Kien, IP and Fixed Broadband Engineer, GNOC3 Department at VNet, Viettel Group. It’s also the only Vietnamese company to be included in Brand Finance’s “Top 500 Most Valuable Brands in the World” ranking.

In 2022 Viettel’s revenue grew 6%, driven by its leadership in local telecom services, overseas investment, and digital business and industry services. The company holds 54% share of Vietnam’s mobile market and 40% share of the country’s fiber Internet market.

With public IPv4 addresses a scarce resource, both in Vietnam and around the world, Viettel needed to upgrade its carrier-grade NAT capabilities as more consumers, businesses, and agricultural and industrial customers wanted fast, reliable mobile and broadband connectivity from bustling cities to rural villages.




SOLUTION

Make the most of IPv4 resources

Viettel has relied on Juniper networking for more than 10 years, using Juniper MX Series Universal Routers for its core and edge and Juniper ACX Series Metro Routers for its regional networks.

To increase its address translation capacity and seamlessly connect subscribers' devices, Viettel upgraded its Juniper MX960 Universal Routers with Juniper MX-SPC3 Services Cards to provide the additional processing power needed for carrier-grade NAT. This approach allowed Viettel to grow subscriber connectivity while preserving its capital investment in Juniper routing and its Junos OS operational expertise.

"It was easy to expand Juniper NAT to meet the traffic growth of our services," says Kien.

Using carrier-grade NAT allows Viettel to avoid IPv4 address exhaustion and allows IPv4 and IPv6 addressing to coexist in its network. It also protects Viettel's private host addresses from being directly targeted by cyberattackers.

Viettel worked with SVTECH, one of the leading systems integrators in Vietnam, to upgrade the MX960 routers. It also uses the company's services for ongoing maintenance.


OUTCOME


Deliver high-quality digital services

As a leading service provider in Vietnam and with growing operations in Latin America, Africa, and Asia, Viettel can continue to rely on high-performance, reliable, and scalable networking from Juniper.

"With Juniper carrier-grade NAT, we can continue to deliver the best quality of experience to subscribers," says Kien.

Viettel can efficiently protect and scale its consumer mobile and fixed broadband services, including television, gaming, and finance, as well as its OfficeWAN enterprise VPN service for businesses.

Easy expansion of carrier-grade NAT capabilities will also allow Viettel to meet demands for IoT to support manufacturing and smart cities, which will contribute to the government's economic growth goals.



"We continue to rely on Juniper networking as we uplift Vietnam's mobile and fixed broadband services to bring digital services to more people and businesses."

Le Trung Kien

IP and Fixed Broadband Engineer, GNOC3 Department at VNet, Viettel Group

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