Airtel Africa improves subscriber experiences with network automation

Airtel offers mobile voice, data, and payment services to millions of people across the vast continent of Africa. The mobile network operator (MNO) is committed to delivering world-class experiences and helping currently underserved, unbanked, and unconnected communities benefit from the digital world. A highly automated Juniper network is helping Airtel efficiently achieve its network service goals.

OVERVIEW

Company	Airtel Africa
Industry	Service Provider
Products Used	Juniper Apstra, Anuta ATOM, PTX Series, MX Series, QFX Series
Region	EMEA

CUSTOMER SUCCESS AT-A-GLANCE

14 countries served

Chad, Republic of the Congo, Democratic Republic of the Congo, Gabon, Kenya, Madagascar, Malawi,

128 million

Customers in 2022, with strong growth in mobile data and mobile payment services

Improve service quality

Automated troubleshooting accelerates response times and network fixes

Fuel growth

Expand mobile services across Africa

○○ ○ **CHALLENGE**

Expand access to affordable mobile services

From the pristine beaches in the Seychelles to the equatorial jungles of Gabon, Airtel operates in unique landscapes, each presenting its own challenges of geography and infrastructure. Each country operates as its own entity, with multivendor networks and varying levels of technical skill.

Airtel wanted to upgrade its transport network to 400G to deliver performance at scale and build a new mobile core to support growth of its mobile voice, data, and payment services. In doing so, it took the opportunity to redesign its network for greater service agility, enhanced performance, and operational efficiency across its regions.

SOLUTION

Automation assures network service quality

With Juniper, Airtel can count on a network that is ultra-reliable, scalable, secure. Network automation speeds service delivery and allows for rapid troubleshooting when issues arise, despite the vast geography and without expert engineering resources locally.

It relies on the Juniper PTX Series Packet Transport Routers for its core network and the Juniper MX Series Universal Routing Platform to deliver advanced services to consumers and businesses.

Juniper Apstra intent-based networking software enables reliable, automated operations for its mobile core. With Apstra, Airtel infrastructure teams can accelerate operations with a single source of truth, powerful analytics, and root-cause identification, quickly pinpointing and resolving issues when they arise.

Airtel is in the process of deploying the Anuta ATOM workflow management platform to automate and simplify service provisioning and network configuration with the intent to implement closed loop automation/orchestration in the near future.

The MNO worked closely with Juniper Professional Services to operationalize network automation so the provider could derive value from the new network more quickly.

OUTCOME

Simplification and automation fuel business growth

Airtel is the first service provider in Africa to deploy Juniper 400G routing and an early adopter of Apstra, game-changing decisions that accelerated network modernization to meet the growing business and consumer demand for mobile services.

The new network enables Airtel to expand availability of 4G services, lay the foundation for 5G, and bring business services like SD-WAN and direct cloud connectivity to market.

Network automation allows Airtel to manage its network in a scalable and efficient way, dramatically reducing the potential for human errors, and ensuring consistent service quality across countries.

"Airtel Africa continues to make a difference to millions of people, bridge the digital divide, and expand financial inclusion. A highly automated Juniper network helps us position Airtel Africa for further success on a continent full of potential."

Razvan Ungureanu
Group CTO, Airtel Africa

Corporate and Sales Headquarters

Juniper Networks, Inc.

1133 Innovation Way

Sunnyvale, CA 94089 USA

Phone: 888.JUNIPER (888.586.4737)

or +1.408.745.2000

www.juniper.net

APAC and EMEA Headquarters

Juniper Networks International B.V.

Boeing Avenue 240 1119 PZ Schiphol-

Rijk

Amsterdam, The Netherlands

Phone: +31.207.125.700