

Leading South Asian MNO migrates to **Alepo virtualized AAA (vAAA)**, instantly boosting CX and reducing TTM

Switching to Alepo vAAA helped the MNO deliver an uninterrupted experience to its growing subscriber base and be future-ready to support 5G.

Operator Requirements

In addition to customizations to the AAA to meet its unique requirements, the operator wanted a virtualized deployment to reduce CAPEX and OPEX, improve agility, and ensure faster time to market (TTM). Their requirements included:

- Replace the legacy AAA with a virtualized AAA (vAAA) compatible with the operator's third-party Network Functions Virtualization infrastructure (NFVi)
- Seamlessly migrate enterprise, GPON/fiber, and LTE services to the Alepo vAAA
- Ensure the vAAA collects information from the LTE access network to identify coverage gaps and help improve network performance along with providing Business Intelligence (BI) capabilities.

Project Background

One of the largest mobile network operators (MNOs) in south Asia, the client offers mobile, fixed broadband, and DTH services, and its subscribers account for a major portion of the mobile market in its country of operation. The operator wanted to strengthen its network to maintain a sophisticated customer experience for its constantly growing subscriber base and support its future 5G plans.

The operator sought a virtualized, customized, and trustworthy AAA server, which would identify low-coverage LTE network areas, facilitate troubleshooting, enhance BI capabilities, and help identify revenue leaks.

The MNO's regional telecom partner approached known AAA expert Alepo, which had previously partnered on a deployment for another leading operator in the region. Alepo successfully delivered a proof of concept that ticked all the boxes – including non-standard customizations to the authentication server – and was selected for the project.

Alepo's Solution

Alepo worked with the regional telecom partner to integrate its vAAA in the operator's network. The partnership helped the operator migrate its enterprise GPON and fiber services from its legacy system to Alepo vAAA with no downtime. Alepo solution components deployed for the project include:

- Alepo vAAA including AAA EMS
- Alepo Load Balancer
- Alepo Database
- Monitoring Server
- Reporting
- sVNFM
- Integration of sVNFM with third-party NFV orchestrator (NFVO) and virtual infrastructure manager (VIM)

Solution Highlights

Alepo successfully delivered its virtualized AAA well within the deadline set by the operator. The

enhanced BI capabilities helped the operator launch innovative personalized offerings, boost the brand experience, and instantly reduce sales efforts. Key features of the deployment include:

Customized vAAA

supporting unique authentication requirements; enterprise and GPON/fiber subscribers; accounting for LTE traffic.

Virtualized deployment

with Alepo's Virtual Network Functions Manager (VNFM) in the operator's NFVi environment to manage the virtual instances and scaling; includes VNFs for all modules.

Seamless migration

of enterprise, GPON/fiber, LTE services (90K-plus subscribers amounting to 413K online sessions) to the vAAA with zero downtime and zero complaints.

vAAA collects info from the LTE access network

which is used to identify and close coverage gaps, help with troubleshooting, and improve BI for promotions. It also helps the revenue assurance team to pinpoint revenue leaks.

Alepo's 5G-compliant vAAA

is ready to integrate with the operator's 5G network. It supports diverse next-gen use cases such as slice authentication, authentication and authorization for DNN provisioning, and authenticating access of devices

from non-3GPP networks.

Project Outcomes

The operator has set a new benchmark for mobile offerings in the country, and enjoys the following business benefits:

No network disruptions

Seamlessly migrating its enterprise, GPON/fiber, LTE services to Alepo's virtualized AAA with no downtime helped the operator deliver services without any network disruptions.

Increased revenue margins

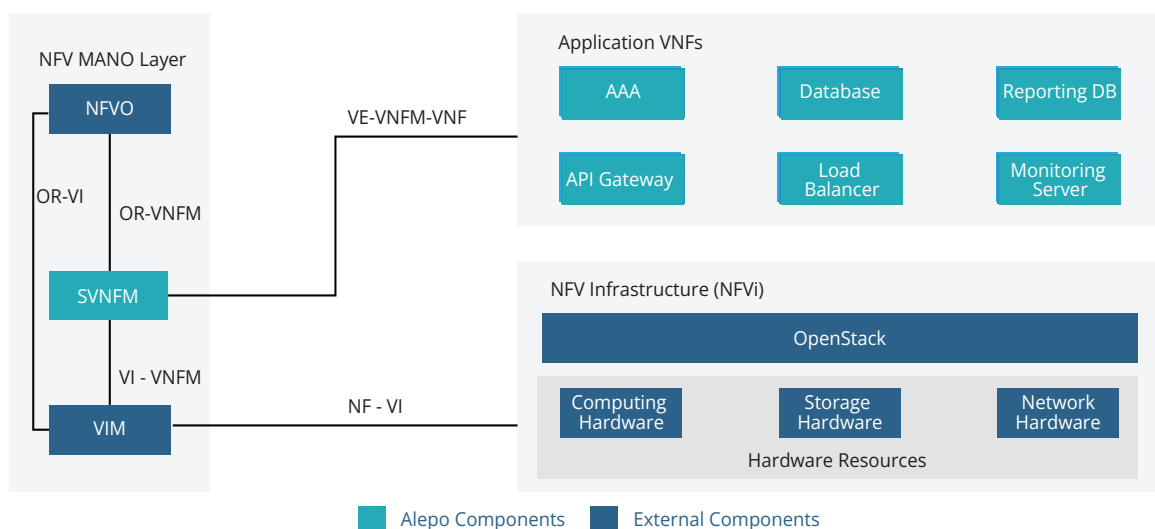
Within the first few months of deployment, the improved BI capabilities enabled the operator to quickly launch targeted promotions and lower TTM, resulting in increased revenue. In addition, Alepo's solution also helped identify revenue leaks, further contributing to increased revenue margins.

Improved network coverage

Alepo vAAA instantly identified low-coverage LTE network areas and helped troubleshoot, enabling the operator to deliver a sophisticated customer experience.

Reduced OPEX and CAPEX

The virtualized solution, which no longer required physical servers and is scalable with dynamic network traffic, substantially lowered OPEX and CAPEX.



Operator's NFVi Architecture