

Digicel centralizes its Caribbean network in the cloud with Alepo's Broadband AAA

Deploying Alepo's centralized and advanced platform resulted in a 4X reduction in recurring costs.

Operator Requirements

Digicel wanted Alepo to deploy a unified AAA platform for all Caribbean markets to help fulfill the following requirements:

- Boost network performance and scalability to support growing traffic demands
- Go live in one month to seize time-bound revenue opportunities
- Deploy disaster recovery site for quick restoration and recovery of systems
- Implement centralized network management capabilities
- Introduce automations to streamline and secure AAA functionalities
- Integrate with existing CRM and billing systems
- Maintain subscriber profiles in a single convergent database
- Ensure a swift and seamless migration without disrupting services
- Help reduce operational and maintenance costs

Project Background

With over 10 million subscribers, Digicel is a tier-1 communications service provider operating in 25 markets in the Caribbean, Central America, and worldwide. The leading digital operator is at the forefront of delivering world-class mobile, fiber broadband, and ICT services to its consumers, enterprises, and government customers.

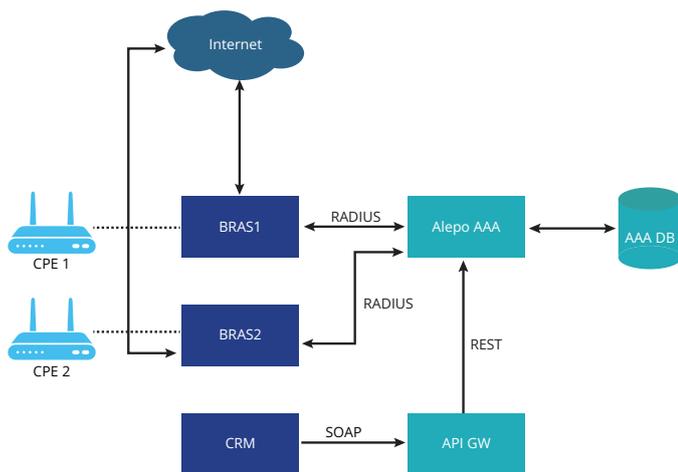
Demand for high-quality fiber broadband services surged during the pandemic and the ensuing lockdowns. Digicel wanted to make sure its network could support this growing FTTx subscriber base across multiple markets in the Caribbean Islands. The operator wanted to rapidly transform its legacy AAAs, which had reached full physical capacity on many island markets. It also wanted to bolster infrastructure and streamline management of these multiple separate AAAs through a centralized cloud-based platform.

Digicel selected its long-trusted technology partner Alepo, which is known for its expertise in successfully deploying AAA solutions globally. Alepo had already helped the operator seamlessly transform its AAAs in a few key markets, and now Digicel wanted to replicate this success across all Caribbean islands.

Alepo's Solution

Alepo deployed its industry-leading Broadband AAA to help transform Digicel's FTTx network. The key components of the solution include:

- AAA server
- AAA EMS
- API gateway
- Database servers
- Monitoring nodes



Architecture Diagram

Solution Highlights

Alepo's cloud-based Broadband AAA eliminated Digicel's physical constraints to grow, and automated functionalities for fewer manual interventions to improve security. In addition, the robust cloud disaster recovery solution ensures high availability and quick service restoration and recovery. Other key highlights include:

Highly scalable platform

Alepo AAA can easily scale to meet dynamically changing traffic demands and a growing subscriber base. IPv4/IPv6 dual stack support helps cater to multiple service needs, ensuring business continuity and supporting future growth.

Centralized AAA for all markets

The highly available and centralized solution encompasses multiple markets serviced by Digicel, helping streamline the network.

Easy integration with existing systems

The solution includes an API provisioning gateway, which accelerated integration with Digicel's different networks. The futureproof system enables any new market to be easily integrated into the centralized AAA for provisioning.

Cloud-based infrastructure

Alepo's AAA infrastructure has been deployed on Digicel's private cloud, affording a host of cloud-native benefits such as lower OPEX and low physical resource footprint.

Zero downtime migration

Digicel customers from all networks were seamlessly migrated to Alepo's unified AAA platform with no service interruptions or glitches. Alepo also helped with data cleansing to prevent compliance risks and improve accuracy and data quality.

Client Testimonial

"Alepo's centralized Broadband AAA streamlined the management of our services in the Caribbean Islands, helping us support our growing subscriber base across our many markets. They seamlessly migrated our services, moving from multiple legacy platforms to a unified private cloud setup. By improving our network's scalability and ensuring high availability, Alepo's solution has enabled Digicel to drive revenue."

- *Oleksandr Hnydiuk, CTO H&E and Fixed, Digicel Group*

Business Use Cases

- Session management
- Subscriber profile management
- Multi-country subscriber authentication
- Flat charging
- CDRs for offline billing
- Authentication, provisioning, and accounting for FTTx services

Project Outcomes

Alepo's Broadband AAA in the cloud has accelerated the performance of Digicel's fiber network. It also enabled a host of other business benefits, including:

Seamless market migration

Digicel's services across 13 Caribbean island markets, including Saint Lucia, Grenada, Saint Vincent, Barbados, and others, were smoothly migrated to the centralized system with zero downtime or disruptions. The solution's API gateway ensured zero-impact integration with the CRM and billing systems in all Digicel markets.

Increased scalability

Alepo's AAA has offered much-needed scalability to support Digicel's increasing network demands. The deployment has enabled the operator to meet dynamically changing traffic load while maintaining high

quality of service.

Improved OPEX and revenue

Alepo's modular, open, and virtualized architecture ensured a low-risk deployment. Within the first month of launch, recurring costs witnessed a 4X reduction.

Reduced network downtime

Alepo's disaster recovery setup has helped boost network performance, ensuring 99.999% availability. Also, in the first three months of launch, network disruptions were reduced significantly.

Heightened security measures

The deployment has implemented process automation to bolster network security, minimizing potential errors arising from manual intervention.

