Celsia Colombia **modernizes its broadband network** with Alepo's AAA Transformation

Alepo's Broadband AAA helps Celsia Colombia upgrade the performance of its fiber network, reducing service provisioning and plan change duration by over 50%.

Alepo's Solution

Alepo deployed its Broadband AAA solution, including new business use cases such as unlimited data plans and speed-based offers and advanced analytics to help drive business success. Key components include:

- 5G– and NFV-compliant AAA Server and AAA EMS to secure authentication, authorization, and accounting processes, support horizontal and vertical scaling, and ensure high availability

- DHCP Server and IPAM for management and assignment of the IP address pool

- An authoritative and recursive DNS solution

- Advanced reporting module for comprehensive BI insights

Project Background

Celsia is a Grupo Argos-owned renewable energy company as well as a leading broadband service provider that offers residential and enterprise internet services in Colombia.

With growing demand for high-quality residential internet, the operator wanted to bolster its fiber broadband network in the regions of Valle and Tolima. Celsia wanted to ensure it met the needs of customers by introducing advanced and innovative data plans with high quality of service (QoS) at competitive prices, while streamlining network and account management operations.

Given Alepo's track record of AAA deployment successes globally and in the region, Celsia partnered with the solution provider to deploy a robust and modern platform.
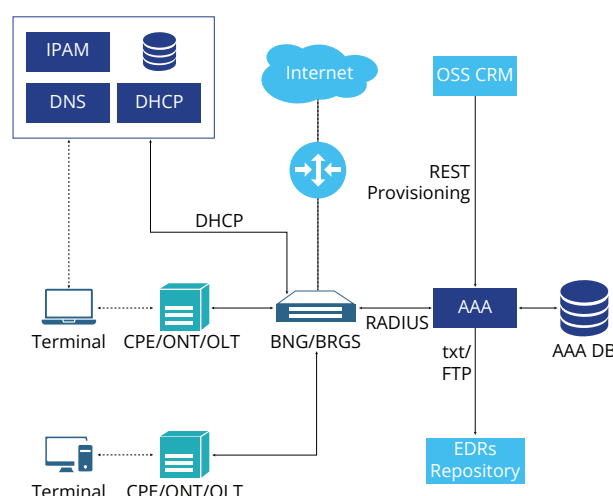
Operator Requirements

Celsia wanted Alepo to help them streamline customer account management operations and upgrade network performance using Alepo's Broadband AAA and DDI solutions. To achieve its network expansion aim, Celsia wanted Alepo to:

- Implement a scalable platform to support a growing customer base and increasing traffic

- Support the launch of modern and innovative data services

- Help maintain high QoS and network availability

- Introduce automations in the fiber broadband network

- Enable the operator to reduce operational costs

- Help overcome issues with controlling subscriber accounts

Network Architecture

Solution Highlights

Alepo's AAA transformation helped Celsia introduce numerous automations to streamline account and network management, while providing the scalability to support growing traffic demands. Key features of Alepo's modular, open, and virtualized solution include:

Swift and easy deployment: Alepo ensured a rapid and low-risk implementation that is compatible with Celsia's existing systems. Additional BRAS integrations were achieved and the operator's licenses were increased.

Full control over customer accounts: Alepo integrated with Celsia's management platforms to overcome existing issues that the operator faced in controlling customer accounts. The operator can now manage activations, broadband plan changes, deactivations, and has full control over session speeds to create flexible and innovative offerings.

Automated network management: Customers receive reminders and notifications about their plan expiry. When their plans have lapsed, they are automatically redirected to the captive portal for renewal. Additional automations help accelerate customer sign-up and customer profile provisioning.

Scalable to support subscriber growth: The Broadband AAA enables horizontal and vertical scaling to support dynamically changing traffic as well as a growing subscriber base. The platform ensures five-nines availability to help provide high-quality internet services without disruptions.

Project Outcomes

While Alepo scheduled migration of Celsia's existing subscribers in phases, new subscribers are directly registered to the new platform, ensuring individualization for simplified account management and billing. Key outcomes include:

Automated configuration

Alepo's Broadband AAA solution integrated with Celsia's third-party OSS. By automating configurations, the deployment reduced service provisioning times by more than 50%.

Improved plan flexibility

Alepo's Broadband AAA has enabled Celsia to easily introduce and modify innovative new services, including unlimited data plans and speed-based offers. It has resulted in a 50% reduction in the time it takes to upgrade or downgrade bandwidth-based plans.

Lower operational costs

Celsia has bolstered security and improved the network experience with five-nines availability. Introducing automations in the platform has helped reduce operational costs by 50%.

Complete regulatory compliance

Alepo's solution has implemented the capability of customer access traceability, enabling Celsia to ensure it meets local regulatory requirements.

Client Testimonial

"Alepo's solution has enabled us to fulfill our commitment to provide modern and accessible internet services to our customers. Alepo's Broadband AAA has enabled us to launch innovative offerings and introduce automations to streamline our network management capabilities. The deployment has helped reduce overheads, enabling us to drive business success."

-Diego Armando Ruiz Giraldo,
 Design and Engineering, Internet, Celsia