Alepo AAA upgrade helps Zain Jordan support its **growing subscriber** base as it expands fiber network

Zain Jordan increased network capacity by 100%, serving 80% more requests per second in just four months while supporting exponential subscriber growth.

Operator Requirements

Zain Jordan's primarily wanted to upgrade its legacy AAA with no downtime to meet the increasing demand for user authentication from its FTTx subscriber base. Its requirements included:

- Upgrade to the latest version of Alepo AAA to yield its full benefits, minimize the possibility of connection errors and fraud instances, and seamlessly authenticate its growing base of FTTx subscribers

- Migrate its existing broadband subscribers to the new platform, support Zain Jordan with license expansion, and manage its subscribers using a centralized interface

- Provide automatic and transparent subscriber authentication; API-based subscriber provisioning

- Support use cases such as unlimited data plans, disconnect messages, and change of authorization (CoA)

- Develop a highly available (HA) solution in case of contingency with zero downtime

- Empower Zain Jordan to swiftly launch new services in the future

Project Background

The Zain Group has a commercial footprint in eight Middle Eastern and African countries, providing a comprehensive range of mobile voice and data services to over 49.2 million active individual and business customers. Under its umbrella, Zain Jordan has revolutionized telecommunications in the country with the introduction of GSM mobile services. More recently, the leading mobile voice and data service operator launched its FTTx service, Zain Fiber, offering high-speed internet with uninterrupted smart home solutions such as cameras and digital entertainment.

With plans to expand its fixed broadband network through fiber-based deployment, the service provider anticipated a surge in new customers, and wanted to stay ahead of its competitors by delivering a faster, more secure, and highly available network offering to its subscribers.

Given its longstanding partnership with Alepo, Zain Jordan decided to upgrade from Alepo's legacy platform to its high-performance AAA.

Alepo's Solution

After meticulous consideration, Alepo delivered a solution that met all of Zain Jordan's needs, including authentication for Zain Fiber subscribers, seamless migration of existing broadband subscribers to the new platform, and extending support to ensure zero downtime during the upgrade. The project was completed within just three months of inception, enabling the operator to quickly bring their new FTTx service offerings to the market. The solution included:

- Upgrade to Alepo AAA 11.0 with extended license expansion

- Advanced reports based on the following parameters:

  · Number of authentication requests and responses

  · Number of accounting requests and responses

  · CDR usage

  · Number of subscribers per group (plan)

- Key modules of Alepo AAA, including AAA EMS and analytics module (OLAP server, OLAP DB)

Solution Highlights

The AAA transformation and license expansion enable Zain Jordan to swiftly bring advance offerings to market, meet the increased authentication demand of its growing FTTx subscriber base, easily upgrade to new features, and improve network performance, thereby enhancing the customer experience.

Highlights of the solution include:

High-level fraud management

Alepo's AAA solution has built-in advanced security and fraud management features such as role-based access, reject management, failed login trackers, and audit logs that provide complete protection against fraud and malicious transactions.

Accelerated service recovery

The latest AAA significantly reduced downtime and facilitated quick service recovery caused by power outages, upgrades, migration, and contingencies with minimal manual interventions. The HA solution eliminated the dependency on a single node and provided a high degree of redundancy to the operator's system.

Improved reporting and troubleshooting

The operator has access to enhanced reports that help trigger specific actions and gain valuable insights. Further, Alepo's AAA enables real-time alerts and advanced troubleshooting measures for system users.

Sophisticated customer experience

The solution, including the upgraded AAA, helped improve customer satisfaction with fewer issues, complaints, and calls to Zain Jordan's customer care.

Project Outcomes

Accelerated network performance

Within four months of the upgrade, the operator's network capacity increased by 100%, helping Zain Jordan serve 80% more requests per second. Plus, reduced interruptions during sessions, quick service restoration, and fewer fraud issues helped significantly lower OPEX.

Increased subscriber base

Within eight months of deployment, Zain Jordan witnessed a 100% increase in its active subscriber count. The operator's online subscriber sessions also tripled in count.

Seamless remote migration

The existing broadband subscriber base was migrated remotely to the new platform without issues – a particularly challenging task as the data had to be converted from an older format so that it could be supported by the new AAA.
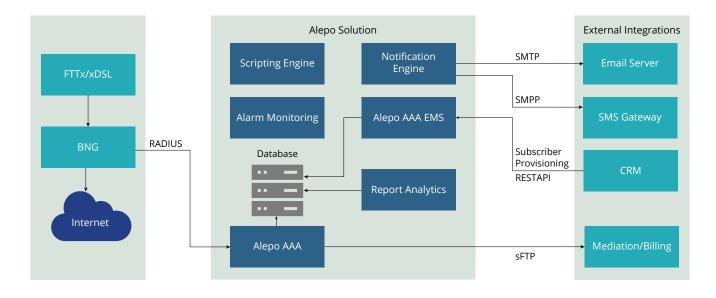
Enhanced security

The upgrade safeguarded Zain Jordan with a more secure FTTx network, improving protection against common threats.

Alepo Solution

Scripting Engine

Notification Engine

Alarm Monitoring

Alepo AAA EMS

Database

Report Analytics

Alepo AAA

External Integrations

Email Server

SMS Gateway

CRM

Mediation/Billing

FTTx/xDSL

BNG

Internet

RADIUS

SMTP

SMPP

Subscriber Provisioning

RESTAPI

sFTP

Network Architecture