

Amdocs brings innovation and cloud benefits to RevenueONE, its flagship mission critical service, by leveraging Amazon Aurora



Case study

Executive Summary

With RevenueONE, Amdocs has redeveloped its flagship, mission-critical, billing, charging, and catalog solutions to be cloud-native, and leverage the full benefits of the cloud such as agility, elasticity, and cost optimization. By migrating its product to Amazon Aurora, Amdocs broke free from the expensive, restrictive models they faced with their licensed based relational database. RevenueONE provides a mission critical solution for communications and media service providers that enables them to create, charge and bill a wide range of service offerings in a highly dynamic and customer centric manner. Amazon Aurora augments RevenueONE's capabilities, presenting new opportunities and bringing innovation and agility to RevenueONE customers.

The Challenge

RevenueONE is Amdocs' flagship product that supports customers' mission critical workloads. It is a billing, charging and catalog solution that enables service providers to offer their end customers different services and payment plan options. Amdocs products were originally built on the licensed based relational database, which was expensive, did not scale easily and required experienced people to operate. Amdocs rearchitected RevenueONE as a fully cloud native solution that provides companies finer billing oversight and control. By migrating to a cloud-native architecture, Amdocs can also take advantage of cloud benefits like improved agility and elasticity at a better value.

The Solution

As one of its final steps in the company's larger digital and cultural transformation, including the adoption of an open-source and API-first approach, Amdocs modified its RevenueONE solution from the on-premise traditional license-based Database to community PostgreSQL. This has made Amazon Aurora the perfect choice to manage PostgreSQL with the needed performance, security and availability that is required from an enterprise Database. At the same time, it provides a fully managed, simple, and cost-effective solution for an open source Database management.

About Amdocs

Amdocs is a leading software and services provider to communications and media companies of all sizes, accelerating the industry's dynamic and continuous digital transformation. With a rich set of innovative solutions, long-term business relationships with 350 communications and media providers, and technology and distribution ties to 600 content creators, Amdocs delivers business improvements to drive growth.

Over the past five years, they have been undergoing a digital and cultural transformation to stay competitive. One of the key steps in this process involved replacing expensive 3rd party licenses with industry leading open source tools and technologies that power their cloud native products.

" It was a no-brainer to move RevenueONE to Amazon Aurora for its managed services. With Amazon Aurora, you get the upgrades, security, scalability, and HA all as part of the solution. **"**

— Zeev Likwornik
Cloud Technologies Lead, Amdocs

“With Amazon Aurora, we don’t have to buy support from yet another third party—AWS is our first line of help.”

— Zeev Likwornik
Cloud Technologies Lead, Amdocs

Learn more

[Amazon Aurora](#) is a MySQL and PostgreSQL-compatible relational database built for the cloud, that combines the performance and availability of traditional enterprise databases with the simplicity and cost-effectiveness of open source databases. Amazon Aurora is up to five times faster than standard MySQL databases and three times faster than standard PostgreSQL databases. It provides the security, availability, and reliability of commercial databases at 1/10th the cost.

Results and Benefits

Amdocs porting to Amazon Aurora takes full advantage of its PostgreSQL compatibility backed by fully managed services of AWS.

Fully managed services with built-in support assistance

Running and maintaining the datacenters that powered RevenueONE requires allocation and knowledge base maintaining of Amdocs technical resources. By moving to Amazon Aurora, AWS assumed many of the responsibilities for infrastructure and database from everyday updates and maintenance tasks to high availability (HA) and disaster recovery (DR) management. “For HA/DR on-premises we really needed to plan ahead,” says Zeev Likwornik, Cloud Technologies Lead for Amdocs. “On Amazon Aurora, we pay as we go, all as a service, and we get it cheaper than the alternatives and with a major reduction of the required technical resources.”

Cost effective scalability through serverless architecture

Amazon Aurora runs on a serverless architecture that makes it much easier for Amdocs to scale RevenueONE when demand shifts. “One of the key items we’ve seen is the scalability. It’s dramatically faster to scale in or out of a relational database when using Amazon Aurora than when using on-premises deployment, where it’s much slower and more cumbersome,” says Zeev.

Improved access to non-production environments

“Moving from on-premises license-based database to Amazon Aurora, changed the development game by making services always available on-demand,” says Zeev. “With virtually a right click, you can get an environment in a short time with almost whatever size you need, and you can turn it off just as fast.” Quick access to resources makes it easy for engineers to test ideas and fail fast without incurring huge debt in the process. “One of the most valuable benefits to the organization,” according to Zeev, “is the pay as you go approach, in which you don’t need to manage or pay for the compute resources of the development and test environments’ databases when they’re inactive.”

APIs for on-premises and cloud Postgres deployments

Not all the Amdocs customers are cloud-based. When they wanted to migrate RevenueONE, they knew they needed a solution that would allow their customers to run in either location. “PostgreSQL has an open source API, which runs both on-premises and on Amazon Aurora,” explains Zeev. “By choosing to migrate to AWS, we can use the same API instead of needing two. Amazon Aurora is one of the best ways to keep our code simplified and efficient, while taking full advantage of its capabilities during development, testing, and production.”