

Coop - E-commerce Website Infrastructure Cloud Migration Case Study



Executive Summary

Coop has both physical supermarkets and a webshop. Unsatisfied with their previous solution, they needed a more cost-effective, stable and reliable platform to run their e-commerce and backoffice on.

Using EC2, S3, RDS and Route53 a new environment was created to host their platforms.

The Challenge

Alignment

Align and plan with multiple external and internal IT service providers for a smooth transition.

Migration

It was required to migrate as soon as possible, with as few downtime or interruptions as possible, in a less than 8 hours window.

Database size

Transfer the database from a locked down on-premises server to S3 in a timely fashion, without limiting bandwidth for the existing application

Why AWS

In the era of rapid technological change, the cloud is not only useful for backup and storage, it's key for future-proofing businesses and maintaining a competitive edge. Businesses moving mass amounts of data to the cloud can take advantage of the latest technology and move away from aging on-premises infrastructure, putting them at the forefront of innovation.

Migrating to Amazon Web Services (AWS) unlocks efficiencies and operational benefits that businesses never knew were possible. From lower costs to increased speed, AWS helps businesses focus more on core competencies and reimagine how they work and how they innovate.



About Coop

Coop Supermarkets is a result-oriented, independent cooperative which provides delicious food to consumers and members entrepreneurs. Coop is affiliated to Superunie, a procurement organisation for thirteen supermarket organisations with a market share of 29.2 percent. Coop's physical distribution is carried out via two national centres: one for shelf-stable articles and one for fresh products.

“We were impressed with the improved performance and stability of the Amazon infrastructure and the knowledge and cooperation of the different team members.”

Marco van der Zalm - IT Director

“Coop has 315 supermarkets around the country, of which 156 are branches and 159 are stores run by independent entrepreneurs, based on 4 formulas: ‘Coop’, ‘Coop Compact’ local shop concept, the ‘Coop Vandaag’ city concept, and coop.nl, online webshop. ”

Why Cloudar

Cloudar designs, builds, migrates and reviews AWS environments based on the AWS Well-Architected framework. This guarantees that the customer’s architectural requirements are met. Cloudar is also ISO/IEC 27001 certified which is the best-known standard providing requirements for an information security management system (ISMS). Cloudar’s single-vendor focus assures customers to get the most in-depth AWS knowledge available on the market.

The Solution

We’ve migrated the on-premises Oracle back-end databases to Amazon RDS for Oracle using the import from S3 method. After testing, this turned out to give us the shortest time window needed for migrating.

Before, Coop was also using a on-premises FTP server, both for incoming data from SAP systems, as for outgoing data towards branch offices. By moving this flow to AWS Transfer for SFTP and integrating it with the EC2 instances which run the e-commerce software, the management overhead was reduced significantly.

Route 53 outbound resolvers are being used for the e-commerce software to resolve the addresses of the on-premises SAP systems.

Coop uses Intershop as their e-commerce platform. The solution provides a redundant setup for the web, app and solr servers.

With AWS, Coop has the opportunity to scale in and out as required.

“Coop is a modern consumer organisation with a unique cooperative structure. The supermarket stands for nearby, delicious and affordable. Coop is aware of its position in society, puts its customers first and likes to surprise them with unique products. Coop is a supermarket for all budgets.

Results and Benefits

The implementation of the e-commerce application on AWS has proven a significant performance improvement. At the same time this improved application infrastructure environment resulted in a considerable cost saving.

The architecture is set up according to the Well Architected Framework, resulting in an optimal and compatible setup for Managed Services support under the best circumstances. A pro-active approach and 24/7 support offered by Cloudar as the MSP Partner will result in less downtime of the application. This way the Coop IT Team will be able to focus on the application and business support.

Coop also benefits from cost savings by stopping test and acceptance environments outside of office hours.

Next Steps

Create a scalable caching solution for the website and the Coop app.
Set up a new Angular based frontend on AWS.

Benefits



Cost

By moving away from on-premises systems, the cost has been lowered significantly.



Reduce management overhead

By using AWS managed services such as RDS and AWS Transfer for SFTP, we improved operational efficiency.



Availability

Using EC2, the e-shop now has higher uptime.



Well Architected

The whole application landscape now runs faster, cheaper and much more reliable.

About Cloudar

Cloudar, an AWS Premier Consulting Partner & AWS Next-Gen MSP, was founded in 2014 with a 100% focus on Amazon Web Services. As DevOps, AWS and infrastructure experts, Cloudar offers rock solid, high available and scalable solutions for any type of business in the AWS Public Cloud. Being part of Xplore Group (<https://www.xplore.be/en.html>), Cloudar can offer their customers complete solutions that go beyond AWS expertise such as Big Data, Ai & Machine Learning Solutions, Cloud Native Development, ... Cloudar has delivered dozens of agile, right-sized projects and provides 24/7 Managed Services to customers across all industries (including public sector), creating a well-architected core from which these organizations can operate and grow their journey in the AWS public cloud. Feel free to contact sales@cloudar.eu or visit www.cloudar.eu for more info about our AWS expertise.

