



# GRUPO TRANSOCEANICA CASE STUDY

SOFTWAREONE DELIVERS SAVINGS  
IN THE AWS CLOUD

Transocéánica gains functionality, scalability and customer satisfaction using SoftwareONE consulting for application and database modernization on AWS.

## MODERNIZING ORACLE APPLICATIONS FOR AWS CLOUD

### Summary

Transocéánica used an automated tracking system to track commercial containers. However, the system had limited functionality. It wasn't scalable and couldn't generate customer notifications. Lack of schedule coordination led to complaints and constant traffic congestion. SoftwareONE consulting helped to develop a new, efficient, and cost-effective system that runs in the AWS cloud. The result is reduced management overhead and substantially lower licensing expenses. Advanced tracking capabilities enable multiple new functions, automation, and a ninety-nine percent reduction in operating expenses.

### About the Customer

Tercon Container Terminals is a national company, part of Grupo Transocéánica, which provides high-quality storage and repair to both dry and refrigerated containers. It currently provides services to four international shipping lines and two international container leasing companies.

### The Challenge

Moving and tracking commercial containers is at the core of Transocéánica's business. However, the company's container tracking system had limited functionality and the application was unable to create customer notifications of changes in schedules or routes. The application was not scalable and was only available to one booking agent per warehouse and only limited to internal Transocéánica users. The home-grown application was hosted in an on-premise datacenter and ran a Linux operating system using an Oracle database.

Transocéánica recognized the need to redevelop their application to scale and add new features but had budget challenges due to increased infrastructure requirements and software license costs. A decision to implement a new system became even more urgent when a key customer highlighted constant traffic congestion caused by the lack of delivery information and demanded immediate resolution.

### A New Plan

Transocéánica management began developing a new platform plan using AWS with an eye toward multiple improvements that included:

- › A single system to simultaneously manage up to six warehouses
- › System scalability and fault tolerance
- › Real-time capacity utilization reporting of any warehouse
- › Container & carrier scheduling management to resolve local traffic congestion
- › Provisions to book an appointment and pay shipment fees online
- › User notification of route changes and delay information

## The Solution

Transocéánica's development team had created the logic for the new application architecture using Java and node.js but did not have the necessary IT infrastructure required to scale and meet the expected demands of 30,000 import/export container movements and 1,500 daily agency transactions. Also, no budget for additional server infrastructure and Oracle licensing had been approved in the IT budget putting the scheduled deadline in jeopardy.

Transocéánica's CIO turned to SoftwareONE for an evaluation of cost-effective alternatives. SoftwareONE proposed a three-phase optimized cloud strategy (Assess > Mobilize > Modernize) that migrated the new platform to Amazon Web Services (AWS). A detailed application and architecture assessment determined the AWS infrastructure requirements and a migration readiness assessment helped Transocéánica understand their readiness to operate in public cloud for the first time. A detailed business case analysis estimated cost savings of almost ninety-nine percent over three years when compared to the legacy on-premises hosting option.

SoftwareONE proposed a cloud architecture using cost-effective serverless components and a database modernization strategy which involved migrating the Oracle database to PostgreSQL and using Amazon RDS (Relational Database Service). Using Amazon RDS not only reduced ongoing database management overhead costs but converting to open-source PostgreSQL removed the costly Oracle licensing expense. The new platform is cost-effective and easily able to cope with peaks in demand and is highly

available and fault tolerant with automated backups. With the serverless architecture in place, requests are made through API calls which has allowed tracking metrics to be created that identifies which warehouse originates a request and how many Lambda functions are called. Tracking metrics have improved cost visibility and enabled internal cost chargebacks to be efficiently processed at month end.

To meet the aggressive deadline and assure project success, SoftwareONE held over 80 hours of technical enablement workshops for Transocéánica's Operations and Application Development teams. SoftwareONE supported the development team in converting their database from Oracle to PostgreSQL and through the adoption of new cloud-native AWS services including AWS Lambda, Amazon API Gateway and Simple Email Services (SES) which provided the basis of new application features such as customer notifications. Beyond delivery and implementation, the sessions covered architectural best practices and detailed how to re-use portions of the existing backend authentication code to be deployed in AWS. With this new knowledge Transocéánica's development team can innovate more quickly and deploy new services and features.

## > CONTACT US TODAY

Find out more at  
[www.softwareone.com](http://www.softwareone.com)

Or speak to one of our experts now:  
T. +1 800 444 9890  
E. [info@softwareone.com](mailto:info@softwareone.com)

## Benefits & Outcomes

The outcome of this transformation project is improved customer satisfaction, reduced management overhead through automation and substantially lower operating expenses.

**01** Improved end-user satisfaction with real-time customer notifications and new functionality

**02** Increased business efficiency with improved warehouse capacity management decisions using real-time usage data

**03** Reduction in operating costs by ninety-nine percent through database modernization

**04** Improved application availability scalable and handles peak traffic with ease

**05** Reduced time-to-market for application development and deploying new features