

Case Study

# Sky is the Limit

Modernizing Travel Operations with Sonata’s AWS-Integrated DevOps Platform

## Summary

A leading travel and tourism company partnered with Sonata to modernize their infrastructure and accelerate service delivery. Facing challenges with outdated systems, scalability limits, and high defect rates, Sonata implemented an AWS-based DevOps platform with automated CI/CD, testing, and dynamic scaling. The solution reduced deployment time by 4x and cut release cycles by 30%, and optimized resource use—driving cost savings, scalability, and enhanced stakeholder confidence.

## Client Overview

A top global travel and tourism company specializing in leisure travel, providing services across flights, hotels, and vacation packages. With an annual revenue exceeding several billion dollars, the client operates in multiple countries and manages a diverse portfolio of digital platforms catering to millions of travelers worldwide.

## Pressure Points

**Need for Infrastructure Modernization**  
The existing on-premises setup was outdated, limiting the ability to support rapid development and deployment.

**Limited Automation and High Defect Rates**  
Manual testing and deployment processes increased the risk of errors, slowing down the release cycles and leading to frequent defects.

**Scalability Constraints**  
The on-premises infrastructure struggled with dynamic scaling needs for testing, development, and production environments.

**Inefficient Resource Management**  
Without automated provisioning and decommissioning, resources were often over-provisioned, leading to higher operational costs.

## Solutions

Sonata's integrated DevOps platform on AWS provided a streamlined, automated approach to modernize the client's infrastructure:

**Comprehensive CI/CD Implementation**  
Integrated a robust branching strategy with Bitbucket, utilizing Jenkins pipelines for automated builds, code quality checks with SonarQube, and seamless deployment automation using AWS CodePipeline.

**Automated Testing Framework**  
Integrated Selenium and JMeter for continuous automated testing, reducing manual testing efforts and enabling early defect detection.

**Cloud Deployment with Infrastructure as Code (IaC)**  
Leveraged Terraform and Ansible for automated environment provisioning, supporting dynamic scaling for various environments and implementing AWS ECS, EKS, and Lambda for containerized application deployments.

**Enhanced Monitoring and Alerting**  
Deployed Amazon CloudWatch, Datadog, and Dynatrace for real-time monitoring, integrating PagerDuty for efficient incident management and rapid response.

## Solution Highlights

**High Availability and Scalability**  
AWS's global infrastructure provided robust scaling capabilities, ensuring high availability and minimal downtime.

**Enhanced Security and Compliance**  
Implemented security checks, IAM roles, and audit logging to comply with industry regulations and best practices.

**Dynamic Resource Management**  
Automated provisioning and teardown of environments, optimizing resource usage and reducing costs.

Below AWS services were extensively used during this implementation:

- **AWS ECS, EKS, and Lambda** for container orchestration and serverless deployments
- **AWS Datadog and Dynatrace** for comprehensive monitoring and observability
- **AWS CodePipeline** for CI/CD automation
- **AWS IAM** for secure access control
- **AWS CloudFormation** for automated infrastructure management
- **Amazon CloudWatch** for real-time monitoring

## Results that Speak Volumes

The implementation of Sonata's AWS-integrated DevOps platform provided the following key benefits:

**Reduced Deployment Time by 4x**  
Automated CI/CD processes streamlined the release workflows, cutting down deployment times significantly.

**30% Faster Release Cycle**  
Optimized processes reduced the overall release cycle time, accelerating the delivery of new features and updates.

**Improved Code Quality by 15%**  
Continuous automated testing and quality checks led to early defect detection, minimizing rework and reducing defects.

**Scalable and Cost-Efficient Operations**  
Dynamic scaling and optimized resource utilization resulted in significant cost savings and improved scalability across environments.

**Enhanced Stakeholder Confidence**  
Delivered a reliable, repeatable delivery process, increasing stakeholder trust and satisfaction.