

## Case Study

# Cloud orchestration platform builds on the power of DevOps to automate infrastructure provisioning, Event Driven Architecture and management for DeLaval

## About the Client

DeLaval is a globally acclaimed leader specializing in integrated technologies and advanced solutions for managing dairy ecosystems. The company's mission has been to optimize the ecological implications of food production while assisting agri-commodity manufacturers in scaling their throughputs sustainably. The organization is highly customer-centric, leaning on impeccable innovation leadership to balance customer interests and profitability.

## Engagement Snapshot

**Headquarters:** Sweden, Europe

**Industry:** Dairy and Farming Machinery

**Project Type:** Cloud orchestration through DevOps

**Model:** Offshore

**Key Technologies:** Amazon Web Services (AWS), GitLab, Grafana, Atlassian Suite (Jira, confluence, Opsgenie), Terraform, NodeJs



- Public Sector
- Immersion Day
- Solution Provider
- Amazon EMR Delivery
- SAP Services Competency
- Amazon Kinesis Delivery
- Amazon Redshift Delivery
- Well-Architected Partner Program

## Business Need

DeLaval was in need to standardize and streamline their infrastructure provision process and was looking for a technology partner to:

- Build a cloud orchestration platform for their newly developed and onboarded applications
- Setup a centralized infrastructure automation process through infra-as-code & configuration management using all DevOps best practices.
- Setup of Control Tower to manage the organization's AWS account structure and hierarchy.
- Implement automated application deployment lifecycle with use of CI/CD principles.

## Problem Statement

As a part of business expansion, DeLaval team faced a daunting challenge in onboarding a large number of new applications which required an effective mechanism to centrally manage them. Their infrastructure provisioning, cloud management and release processes were de-centralized which required tremendous manual efforts and operational overheads. The lack of any security vulnerability check and remediation solution, as part of application release process posed significant risks in operations. To address these concerns, they sought the assistance of a trusted and experienced vendor to implement effective solutions.



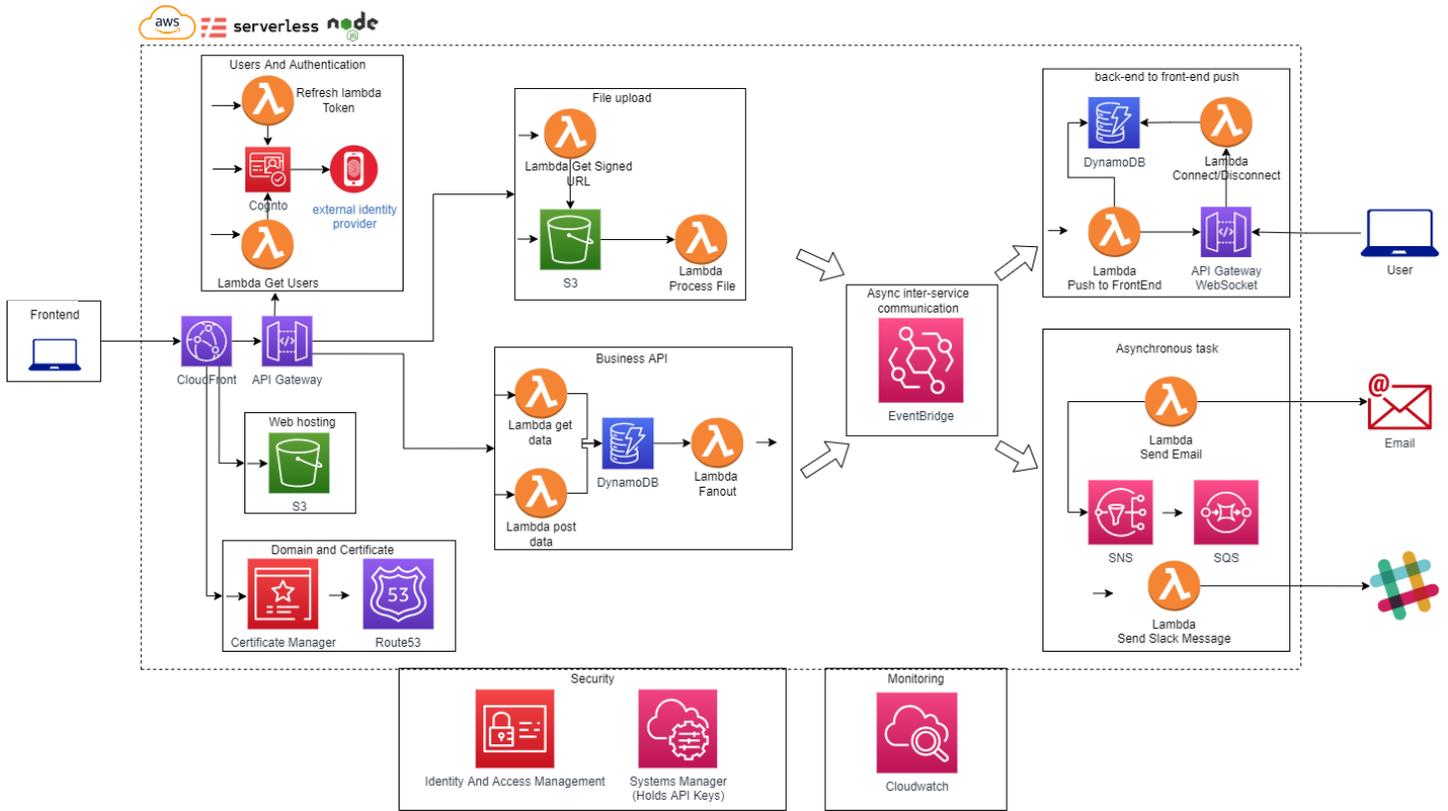
## Solution Provided

In order to build the proper infrastructure automation, which can not only service the current purpose of setting up environments, but can also be used as a reusable solution for other future projects.

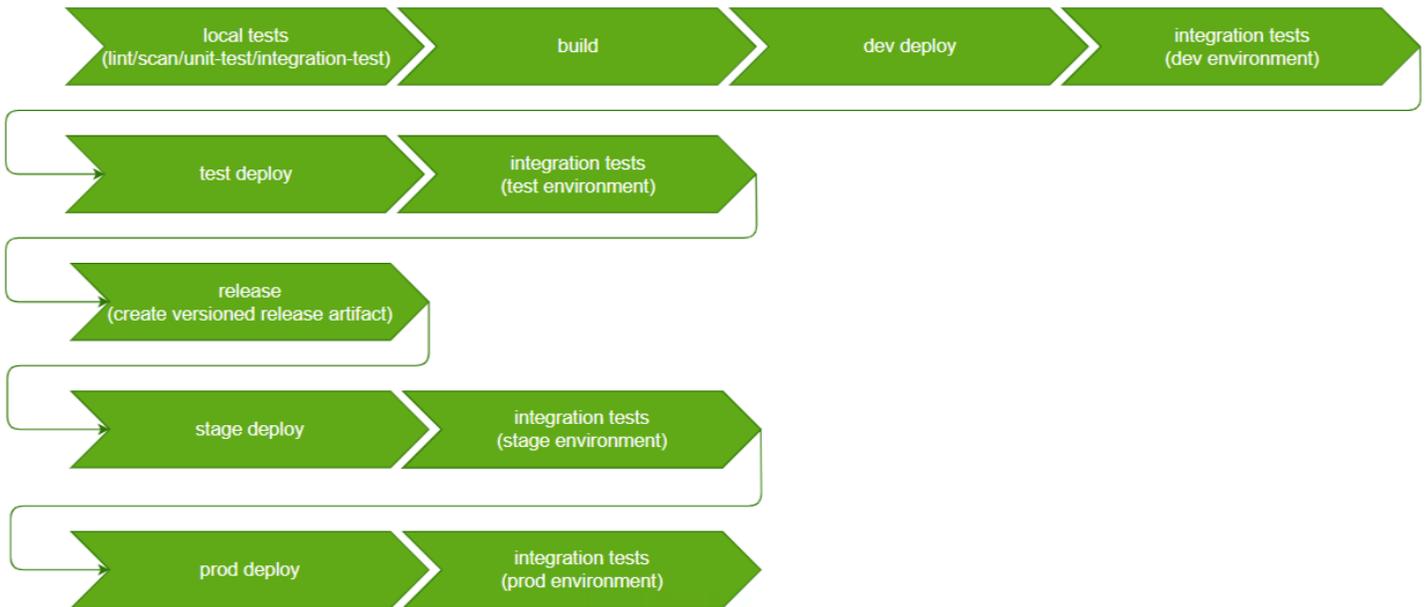
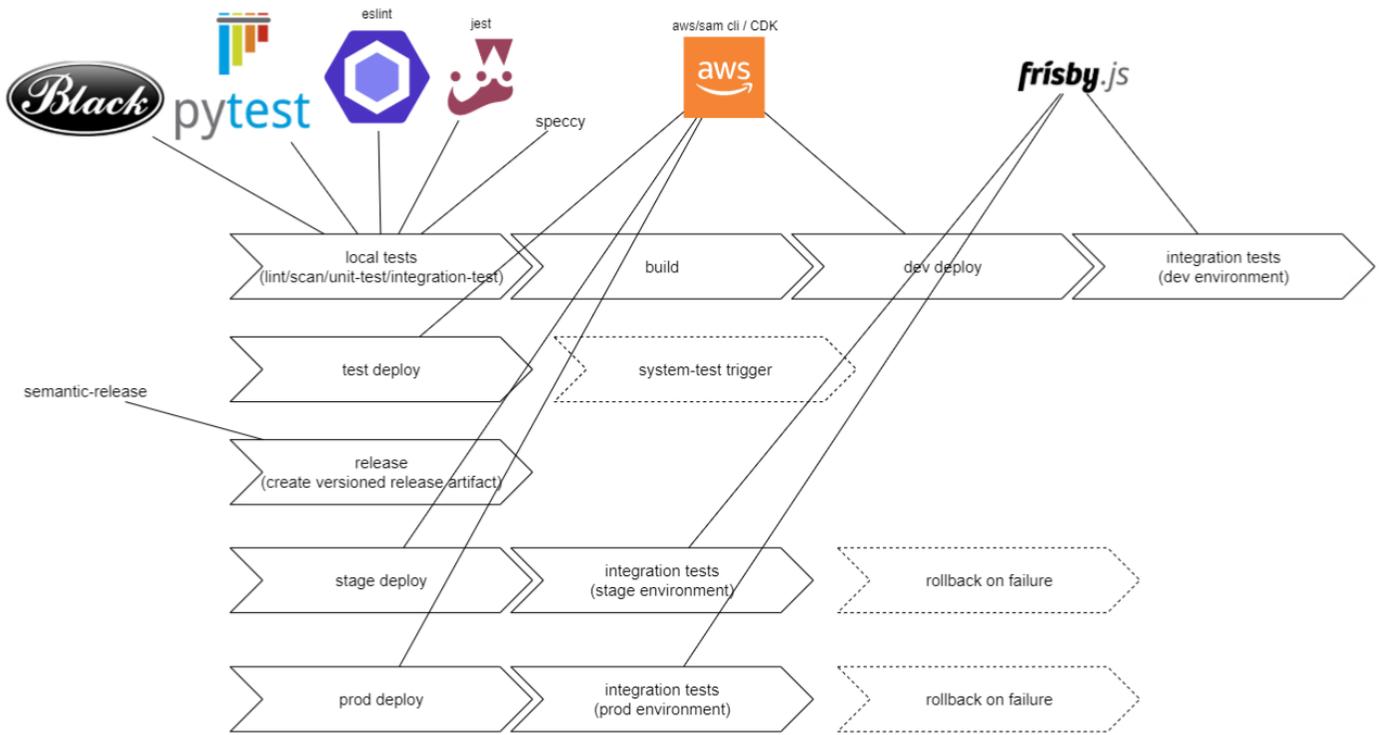
As part of this engagement, our panel of Cloud, DevOps certified experts had several discussions to understand the client's requirements. We recommended an AWS-hosted infrastructure to deliver applications with required use case. Using an agile approach in developing an end to end solution for the company, we started with a digital vision that was implemented in phases that included -

- Develop and onboard new applications using DevOps based development practices designed to leverage an end-to-end automated release.
- Setup multiple environments on different AWS accounts for the customer.
- Implementing security first approach with DevSecOps implementation on continuous build and release culture.
- Infra-as-code (IAC) for complete infrastructure scalability and automation.
- Using AWS Cloud services including EC2, Lambda, API Gateway, DynamoDB, CloudWatch, Security Hub, Autoscaling etc. and some of the open source tools like Terraform, GitLab, SonarQube etc. to have stable, and reliable environments for the application.

# Solution Architecture

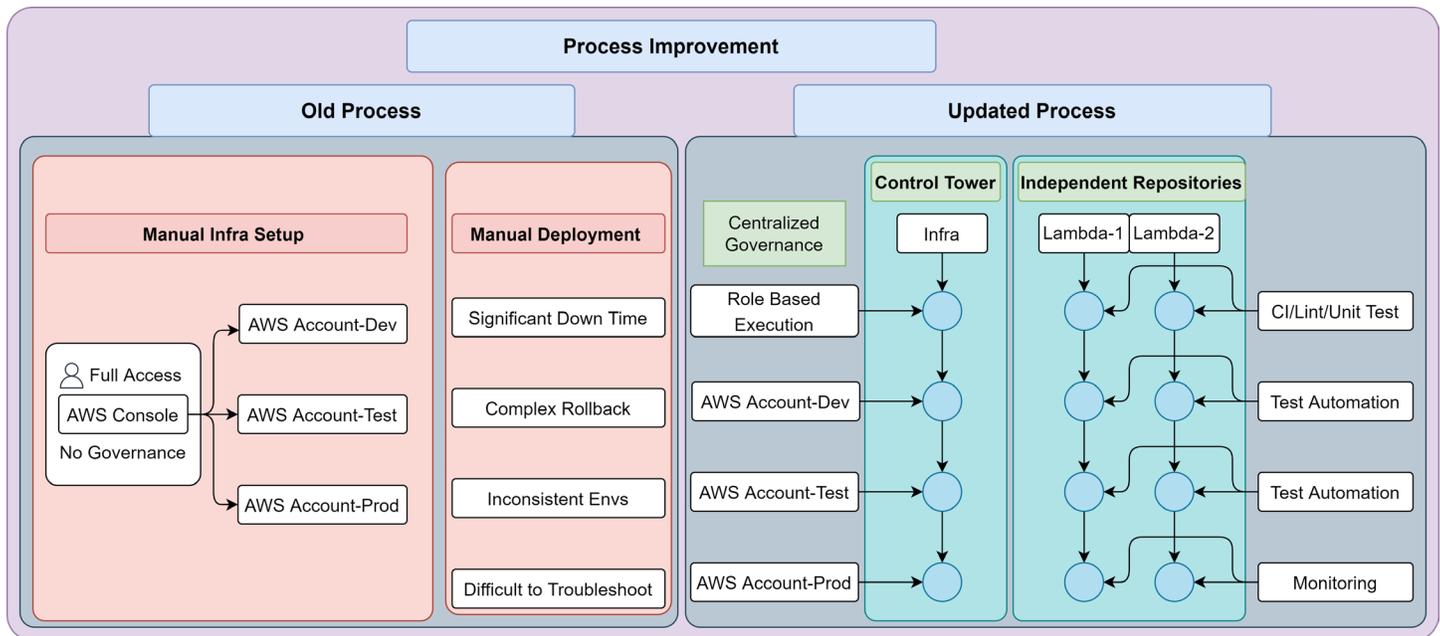


# Pipeline Architecture



# Process Improvement Metrics

The former process setup involved making all the changes manually using AWS console. As a part of new process using AWS Control Tower, YASH strengthened the governance and adapted the best practices where role-based access was implemented. This resulted in highly secure practices and thus mitigated potential risks. Use of automated implementation and centralized governance enabled clean-up of all the unnecessary resources leading to **cost savings of 28%**.



## Business Benefits

- Setup of AWS Control Tower helped apply guardrails leading to quick configuration to setup management strategy thus **saving couple of months for customer implementations**.
- The use of serverless implementation helped **reduce infrastructure costs by about 28%** and helped **provide scalability during peak business hours**.
- The effective implementation of faster CDN solutions helped provide best services to the customer at a **reduced latency** which also helped **improve SEO rankings**.
- The implementation of DevOps practices helped customer to deliver high quality applications which **lead to new business growth and reduction in operational costs**.

For more information and for your own personalized free assessment, reach out to YASH today at [info@yash.com](mailto:info@yash.com) or visit [www.yash.com](http://www.yash.com)

### About YASH Technologies

YASH Technologies focuses on customer success. As a leading technology services and outsourcing partner for large and fast growing global customers, the company leverages technology and flexible business models to drive innovation and value throughout its customer's enterprise. YASH customer centric engagement and delivery framework integrates specialized domain and consulting capabilities with proprietary methodologies and solution offerings to provision application, infrastructure and end user focused Right-Sourcing services. YASH is a SEI CMMI (Level 5) and an ISO 9001:2015 certified company with U.S. and India headquarters and regional sales and development offices globally with customers spread across 6 continents.

### Global Presence

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