

Case Study

GitOps Transformation for a Hospital Management System Provider

Client Overview

Our client, a leading provider of Hospital Management Systems, operates a microservices-based web application crucial for managing patient records, billing, and administrative workflows. Initially leveraging Jenkins for CI/CD, they faced challenges in scalability and operational efficiency. To modernize their infrastructure and streamline developer workflows, they sought a GitOps-driven approach coupled with an Internal Developer Platform (IDP).

Challenges

- Slow and Error-Prone Deployments – Jenkins-based deployments were cumbersome and lacked automation.
- Microservices Coordination Complexity – Deploying and managing multiple microservices required significant manual effort.
- Inefficient Infrastructure Provisioning – High costs due to suboptimal resource allocation.
- Limited Monitoring and Observability – Ineffective debugging tools impacted system reliability.

Infrastructure Tech Stack	
CI/CD	  
Database	 
Cloud Service Provider	   
Version Control System	 
Infrastructure Provisioning & Automation	 
Orchestration & Management	
Monitoring Tools	  
3rd Party tools / Others	     

Our Contribution

- **GitOps Transformation** – Migrated from Jenkins to GitLab CI and Flux CD, enabling fully automated, declarative deployments.
- **Internal Developer Platform (IDP)** – Established a self-service platform, allowing developers to focus purely on application logic without infrastructure concerns.
- **Kubernetes Deployment** – Shifted microservices to a Kubernetes cluster, ensuring independent scaling and robust orchestration.
- **Optimized Infrastructure** – Provisioned resources using Terraform, consolidating environments for cost efficiency.
- **Enhanced Monitoring & Logging** – Implemented Prometheus and Grafana for real-time observability and integrated Slack-based alerts for proactive issue resolution.

Impact Delivered



Accelerated Release Cycles – The setup timelines for new environments have been cut down from three weeks to just three days, thanks to GitOps automation. Over 7,000 releases were successfully achieved in a single year.



Improved Developer Productivity – IDP adoption led to a shift-left approach, empowering developers with seamless deployments.



Enhanced Scalability & Reliability – Kubernetes-enabled zero-downtime deployments and ensured disaster recovery readiness.



Cost Reduction – Optimized resource utilization and environment consolidation significantly lowered cloud expenses.



Operational Efficiency – Automated provisioning and monitoring reduced manual intervention, freeing up DevOps resources.