OpsMx

Leading Asian Bank Seamlessly Manages 70+ Argo CDs with OpsMx

Overview

The company is one of the largest financial institutions in Southeast Asia. It serves millions of customers and businesses with digital-first banking and financial services. As part of their cloud-native transformation, they adopted Argo CD to implement GitOps for managing Kubernetes-based applications.

However, as they scaled deployments across multiple environments and multiple clusters, they encountered significant performance, visibility, and security challenges, requiring expert intervention to optimize their Argo CD implementation.

Adopt Argo CD at Scale	**Comply with Security Guidelines**	**Achieve Unified Observability**

Challenges

As the company expanded its use of Argo CD, the DevOps and cloud engineering teams faced several operational and scaling challenges.

Key Challenges

Lack of centralized deployment visibility and auditing

- The company deployed 70+ Argo CD instances across multiple environments (dev, test, staging, production). And they lacked central visibility and audit reports on who deployed into what target using which Argo CD instances.

- Managing 100+ Kubernetes applications across these instances made it difficult to monitor deployment health from a single pane of glass.

Performance bottlenecks in Argo CD slowed the deployment speed

- As the number of deployments grew, Argo CD instances became slow, affecting deployment speed.

- The Ops team had no proactive monitoring of deployments across environments, leading to delayed scaling responses.

Security and compliance requirements

- Being a regulated financial institution, the company had strict security and compliance policies for DevOps tools.

- The InfoSec team required enterprise-grade security with SSO integration, RBAC controls, and encrypted communication between clusters.

Inefficient multi-cluster Argo CD management

- Managing 70+ Argo CD instances across multiple Kubernetes clusters required engineers to manually log in and configure each instance separately.

- Upgrading and managing Argo CD versions was time-consuming and prone to inconsistencies.

After evaluating multiple vendors, the company selected OpsMx to help scale and optimize their Argo CD implementation.

Solution

To address these challenges, the company deployed OpsMx ISD for Argo in their AWS EKS environment. OpsMx provided both expert consultation and an enterprise GitOps management solution.

Key Solutions Implemented:

Optimized Argo CD Performance with Multi-Threading

- OpsMx experts worked closely with the cloud architects to optimize Argo CD's performance.

- Multi-threading was enabled, allowing Argo CD to process multiple tasks in parallel, improving deployment speed.

Unified Observability and Auditing Across 70+ Argo CD Instances

- ISD for Argo provided a single dashboard to monitor all 70+ Argo CD instances.

- Real-time insights included info such as **Application health and sync status, Cluster and namespace details, Argo CD instances, Deployment performance metrics, etc.**

- The DevOps team could now refer to the auditing reports about any failed deployments and take immediate actions.

Enhanced Security and Compliance

- ISD for Argo met strict financial sector security requirements such as Single Sign-On (SSO) via Microsoft Active Directory, RBAC (Role-Based Access Control) for access management for Argo CD, and TLS encryption to ensure secure communication across components.

- All the Argo CD instaces had password tokens. ISD for Argo integrated with Argo CD using Hashicorp Vault to ensure store the secrets.

Centralized Multi-Cluster Argo CD Management

- ISD for Argo became a central control plane for managing all Argo CD instances across environments.

- Engineers no longer had to log into multiple clusters manually. RBAC, configurations, and access controls were managed centrally.

Automated Lifecycle Management of Argo CD Instances

- ISD for Argo simplified version control and upgrades, allowing DevOps teams to apply Argo CD updates centrally, ensure version consistency across environments, and eliminate time-consuming manual updates.

Minutes to react to any errors or discrepancies during GitOps deployment.

Unified observability and **auditing** into application deployments.

70+ Argo CD managed from a central control plane.

Results

With OpsMx ISD for Argo, the company successfully scaled Argo CD adoption, improving performance, visibility, and security.

Key Outcomes:

50% Faster Argo CD performance – Multi-threading optimizations reduced latency and improved deployment speed.

100% Unified visibility and auditing – A single dashboard now monitors 70+ Argo CD instances across environments and audit reports at fingertips.

Proactive monitoring & issue resolution – Real-time insights enabled faster response to deployment failures.

80% Reduction in manual effort – Engineers no longer needed to log into multiple clusters for Argo CD management.

100% Security & compliance – SSO, RBAC, TLS encryption and secret management met strict InfoSec requirements.

Automated Argo CD upgrades – Lifecycle management activities such as version updates happen with the click of a button.

Conclusion

With OpsMx ISD for Argo, this leading financial institution successfully scaled Argo CD adoption, achieving faster and more reliable deployments, stronger security and compliance, and improved operational efficiency.

Their DevOps and cloud engineering teams can now deploy, monitor, and manage Kubernetes applications seamlessly, ensuring a faster, more secure, and more efficient GitOps-driven deployment process.