

## **CASE STUDY**

HOW A CLOUD NATIVE EDTECH COMPANY
ACHIEVED FASTER TIME TO MARKET AND
LOWER TCO USING CLOUD CONTROL APPZ



### **PROBLEM STATEMENT**

Client: A Large EdTech Startup

#### **Challenges:**

- Aggressive deadline to move to AWS.
- Code residing on developer desktops, no Git repo.
- The deployment plan not getting finalized, due to differences in approaches suggested by different stakeholders.
- Lack of DevOps team.
- Not enough time to onboard a new DevOps team.
- A large part of the Operations budget needs to be allocated toward DevOps expenses.

### **EXECUTIVE SUMMARY**

**Cloud Control Solutions Inc**. ("CCS") worked with the client to onboard their newly developed application to Kubernetes ("K8s") managed cluster on AWS cloud with 'One-click' deployment capabilities using the AppZ platform.

Once onboarded, CCS provided SRE as a Service to ensure that customers could achieve continuous releases and deployments.

AppZ also provided them with the built-in capabilities of Observability, Alert Management and Log Management.



## PROJECT OBJECTIVES

While adopting AppZ solution, the objectives of the EdTech company were:

- Utilize the latest cloud technologies such as Kubernetes and containers for their upcoming Adaptive Learning and Career Development App for Youth.
- Achieve automation right from Git to the operational tasks, to reduce the dependency on DevOps teams, for more frequent product releases.
- Leverage the cloud capabilities to establish a highly scalable and resilient application and avoid performance degradation.
- Offer full observability, logging capabilities and audit trail for enhanced control and audit requirements.
- Eliminate Privileged Access while allowing the existing Infrastructure team members to manage the digitally transformed application.



## **SOLUTION**

Cloud Control Solutions (CCS) used a Lowtouch tool powered approach to the adoption of the cloud and for subsequent automation and operations, including SRE. Using AppZ platform CCS was able to onboard the EdTech application within the customer time frame. AppZ platform allowed them to have an automated CI/CD pipeline, with compliance guardrails. Now they have continuous releases which are compliant with their policies. CCS is also providing them SRE as a Service in order to take care of the upkeep of the customer cloud application, while they focus fully on their business requirements and new releases.





# **DEPLOYMENT HIGHLIGHTS:**

- A Kubernetes environment built with 4
   EKS clusters and one MicoroK8s
   cluster across 2 AWS regions, running
   2 Production clusters and 3 non
   Production clusters.
- Separate VPCs for DEV, QA, Pre-PROD and PROD.
- Application runs behind the LB protected by AWS WAF.
- Standard AppZ Stacks (re-usable, curated and scanned images) with client customizations were used to deploy NodeJS, PHP, Laravel, MariaDB, DynamoDB and RDS.
- Improved security by managing all secrets using Vault.
- Client application was up and running in the AWS production environment within ten weeks. It took only four months for the completion of the entire lifecycle – Planning, Development, QA, Production Parallel and Production.
- Customer was able to complete their Pen test and GDPR compliance audit for the new application in the first pass, without any nonconformance observations.

### **BENEFITS**

- AppZ provides EdTech with fully automated GitOps. Business Unit is able to do continuous releases with full automation and control without any infrastructure team support.
- EdTech is able to perform multiple zero downtime upgrades of the Client Portal application and infrastructure using CCS AppZ platform.
- Client application runs seamlessly in multiple AWS regions in different Availability Zones, providing high availability and DR capability.
- No additional resources required to manage the production environment.
- Full visibility and observability of the application cloud environment using AppZ Dashboard.
- Automated Alerts from AppZ provide
   EdTech proactive indication, which helps
   them avoid performance degradation or
   unavailability.
- EdTech application is easily portable now.
   They are able to move easily to any Cloud provider of their choice, if they desire so, with the help of AppZ platform.



## ABOUT CLOUD CONTROL SOLUTIONS

Cloud Control Solutions ("CCS") offers a platform - **AppZ** for accelerated migration, modernization and management of customer application environments to cloud. AppZ Stacks is a collection of popular application templates, which are curated and hardened and it helps containerize legacy applications for deployment on Kubernetes for added scalability, resiliency and redundancy.

More than 1400 legacy applications have been transformed to leverage the cloud while meeting SOC2, NIST and CIS best practices for VMware, Private Cloud, Nutanix, AWS, Azure, Oracle Cloud and Google Cloud deployments.

Learn more at eCloudControl.com | info@ecloudcontrol.com

