CASE STUDY – Cypress

PROBLEM STATEMENT

The Client's aim was to reduce the time for feature release and make site more responsive. Cost of ownership was a concern as they were moving up the charts and adding features extensively to their site. The problem was with no Developer tools and no setup for Quality Assurance. Every time they have some content updated by the publishers they use to manually update their assets on the site. Client wanted to reduce the cost that had moving on to some better solution.

SOLUTION HIGHLIGHTS

We proposed a solution based on AWS ECS and Developer tools to meet the requirement of the customer. We implemented CI/CD pipeline to reduce the time to release the feature and automate adding content to the site. Changes were made in release cycle.

- Well hosted application on ECS clusters which were deployed with Fargate.
- RDS was used as database keeping in mind the peak loads of the system. We separated develop, Q/A and Production environments.
- CodeCommit Repository for the environments and different Code Pipelines deploying code on AWS ECR.
- Route 53 for Domain registration and SSL certificate. And different paths for Dev, Q/A and Prod Environment.
- Elastic Load Balance was set in front of ECS clusters to manage peak loads.

About Cypress

Industry:

Cypress Dental is a provider of ancillary benefits located in Stockton, California. For 40 years, we have provided exceptional dental, vision and life insurance products to thousands of individuals and their families. Our key focus is to make sure that we are true to our word and are accountable to our clients and brokers.

Challenges:

Cypress is a well-established company in Health Care Sector. They have a system where they add their publishers to their site manually every time. They also had a challenge where it took months for them to roll out a new update as their release cycle was not automated. They were unable to make it more responsive as it was not we architected and had peak loads to handle.

WHY AWS

Choosing AWS for implementing solution was because AWS offers various Developer services which could solve the major issue of release cycle and Automating updates. Serverless Hosting facilities like AWS ECS and auto scaling would help meet the peak loads on site. Working around best practices would resolve the issue of Cost.

- AWS CodeCommit, AWS CodePipeline, AWS ECR would help setup different environments.
- AWS ECS, Auto scaling, Elastic Load Balancer and Route53 would help meet the peak load on the site.

WHY customer selected ScaleCapacity, Inc

Cypress chose ScaleCapacity, Inc has experience engineers who are Developer associate and professional certified which gives them edge over other companies. With this expertise in implementing developer tools. We could help customer built and maintain environments for DEV, Q/A and Production. Company also has experience with AWS ECS and Containerized application. Company's competency in building solution following best practices would help them achieve their goals and reduce Cost of Ownership.

RESULTS

Successfully able to create different environments for development, Q/A and production. We were able to reduce delay in response by 50%.
- Were able to reduce the Cost of Ownership by 50%.
- We were able to implement and Change Release cycle. Time for Release Cycle was change from months to Days.
- Automation was a key feature in the development and was achieved with AWS Developer services.

About Partner	ScaleCapacity, Inc is AWS Advanced Consulting Partner and experienced in providing AWS consulting services related to various client needs, which includes (but not limited to) setting up AWS environments, migrating to AWS, provide well-architected AWS solutions. ScaleCapacity, Inc has well defined processes to carry out client's strategy for delivering solutions on AWS cloud.

Cypress Dental

Developers Testers Users

AWS Cloud

AWS Route53
mycypressadmin.com.

AWS CodeCommit
cypressadmin

://DNS ://DNS ://DNS
Dev stg Directory

AWS Code Pipeline **AWS Code Pipeline** **AWS Code Pipeline**
dev-cypressadmin stg-cypressadmin prod-cypressadmin

AWS Region Us-west-2

vpc-0f402677

AWS ELB **AWS ELB** **AWS ELB**
dev-cypressadmin-elb sc-cypress-test-elb prod-directory-mycypressadm-elb
dev-cypressadmin-tg sc-cypress-test-tg prod-directory-mycypressadmin-tg

AWS ECR **AWS ECR** **AWS ECR**
dev_cypressadmin ecrtest prod_cypressadmin

AWS Security Group **AWS Security Group**
sc-app-dev prod-directory-mycypressadmin-sg

Developement stg production

AWS ECS **AWS ECS** **AWS ECS**
dev-cypressadmin-cluster sc-cypress-test prod-directory-mycypressadmin-cluster
dev-cypressadmin-task:77 test-cypressadmin-task:43 prod-directory-mycypressadmin-task:22
dev-cypressadmin-service stg-cypressadmin-service prod-directory-mycypressadmin-service
Memory: 1024 Memory: 2048 Memory: 2048
CPU: 512 CPU: 1024 CPU: 1024
Auto scale: 4 Auto scale: 4 Auto scale: 4

AWS IAM Role

ecsTaskExecutionRole

CloudWatch

AWS RDS MySQL 5.7.28 **AWS RDS MySQL 5.7.28**

cypressadmin-providers-dev cypressadmin-providers