coditas

TGI Sport

Digitalizing sports communities with AWS

codilas

The Client

TGI Sport is a **multiple-discipline sports infrastructure, technology,** and **media rights business** that sets the standard in connecting brands and stadiums to sports fans through **dynamic digitally-led solutions**. They capture data and analyze it to **increase inventory** and **revenues** and help the industry understand sports fans' relationships with clubs and brands.

Project Duration

2+ Years

Problem Definition

TGI wanted a platform where they could **provide advertising solutions** for brands to the sports fans using virtual and digital media in sports events. The application would be a centric place to add, approve and **manage the advertisements**. But the existing app was facing significant constraints:

- Due to the distance, it was **time-consuming** for advertisement clients to upload high-quality files to the application.
- Videos uploaded by the client had to be **converted to mp4** on the go.
- All file specifications that clients uploaded had to be displayed.
- The artworks and files **uploaded to S3** had to be fetched, archived, and then stored.
- A communication medium to send **zip files** to the client was required.

codtas

Why Amazon Web Services?

AWS is mature and stable, enabling them to add new features and products with **maximum reliability**. Its worldwide spread results in **low latency** and **increased availability** for end-users. AWS services are **DevOps-friendly** and convenient to use. They offer both AWS-managed and customer-managed services, which makes development easier. Pay-as-you-go is the **most appealing feature** for businesses to utilize services as needed.

ISV Tools & Technologies Used

- To secure our AWS resources and accounts, we configured **Elasticsearch, Logstash, and Kibana (ELK)** on a server to get logs from AWS and used them for development to exempt the use of the **AWS console**.
- To secure the whole infrastructure, we configured **OpenVPN** to access the private resources, **enabling the connection** between the developers and AWS Cloud.
- We **integrated CI/CD** for **Bitbucket cloud** to set up and automate code deployment to the AWS infrastructure.
- **Cloudconvert** was used to fetch files from S3 and store the data in the database and display the metadata of files uploaded by the client to the application.

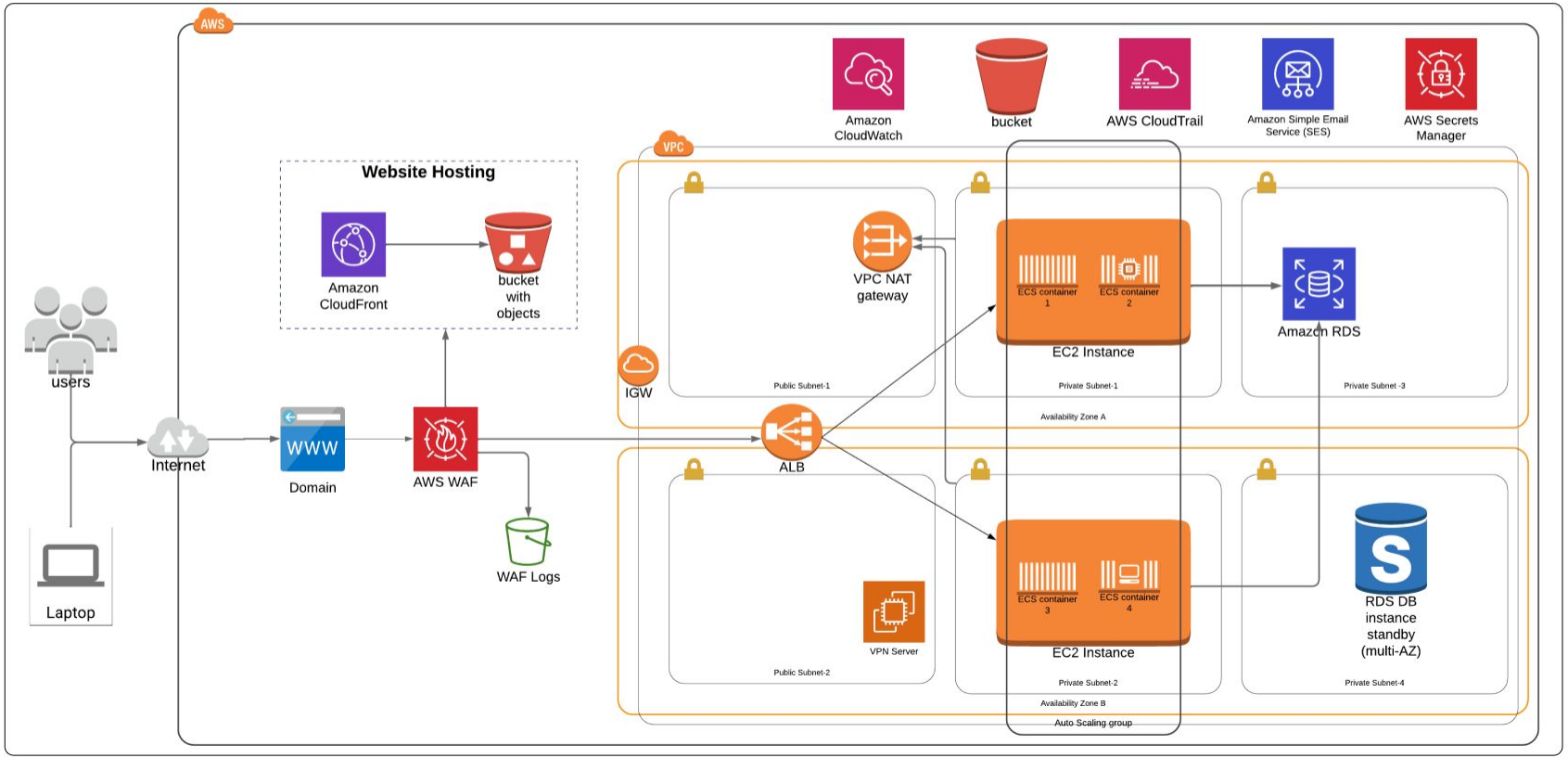
codtas

Proposed Solution

- To speed up file uploads, we used **S3 transfer acceleration**, which enables **fast, easy,** and **secure transfers** of files over long distances between clients and S3.
- We used **Lambda and S3 triggers** to convert any file format to **mp4** on the go.
- To manage the containers in the application, we used **AWS Elastic Container Service**. It automatically scales and runs the web application in **multiple availability zones**.
- AWS's **Simple Storage Service** to store documents, images, video, etc., and S3 provided **all-time availability** at a very low cost.
- AWS Relational Database Service with **MySQL** as the database with **Multi-AZ support** to enhance the database workloads.
- **Virtual Private Cloud** offered advanced security features to control the resources accessed by people.
- We chose **AWS Simple Email Service** to send emails to the recipients through the application for its pay-as-per-use option.
- **AWS Cloudfront** offered caching feature and enabled us to store data on edge locations while maintaining high availability and low latency.

coditas

Solution Architecture



codtas

Outcome and Success Metrics

We built a system that would be accessible to clients **across the globe**.

- AWS enabled the app to be scaled as per **future requirements**.
- The downtime experienced earlier was **significantly minimized**.
- Thanks to AWS System Manager's feature Parameter store along with WAF and VPC services, we achieved **maximum data security**.
- By using CloudTrail, we are able **to log all the account activities performed** that could be later used to trace any suspicious activity.
- Cloudwatch metrics let us view and alarm the system's utilization if it passes the threshold and **handles the traffic by autoscaling** once configured.

TCO Analysis

Reserved Instances gave a significant discount as compared to On-Demand instances.

coditas

We’d love to hear from you

Let’s start talking at

business@coditas.com

coditas.com