EMFI : Case Study

Executive Summary

EMFI Group is an intelligence driven financial services company with a focus on global emerging markets.EMFI delivers up-to-date market colour from major financial centers of the world to local investors who might operate in a very different context.

In this case study we will describe how AAIC helped EMFIto achieve migration and modernization for their Content Management Application. The efforts on deploying, maintaining and supporting the existing applications reduced with the help of AWS Services. Also, How EMFI achieved an optimal automation and DevOps on their platforms.

Applied AI Consulting (AAIC) is a bespoke AI and Cloud Consulting Service. The core team is comprised of industry veterans with cumulative 25+ years of experience in building, architecting and delivering cutting edge technology solutions focused toward solving customer pain points.

Partner Solution

The proposal covers the engagement of AAIC with EMFI, a leader in an intelligence-driven financial company. The engagement is focused on Cloud operations and DevOps for EMFI workloads and CIs in the AWS cloud.

The AAIC engineers team worked with EMFI technical leadership and Product owner team to develop modernized business solutions Primarily involving below objectives.

- Containerizing the EMFI application using AWS ECS Fargate service.
- CI and CD implementation for EMFI application.
- Setting up ALB which distributes the incoming traffic across containers which automatically scales workloads.
- Setting up Operations/Monitoring dashboard on datadog. • Help in migrating private GitLab to public SaaS GitHub. • Automating the deployment of environments for the application with the implementation of ASG to achieve scalability and high reliability.
- Creating high level infrastructure of AWS services using Terraform.

Architecture

Architecture defines a high-level model of solution and describes how the resources are interlinked with each other.Within the AWS the architecture utilized load balancers to distribute incoming traffic across ecs fargate containers which provided stability across the application.
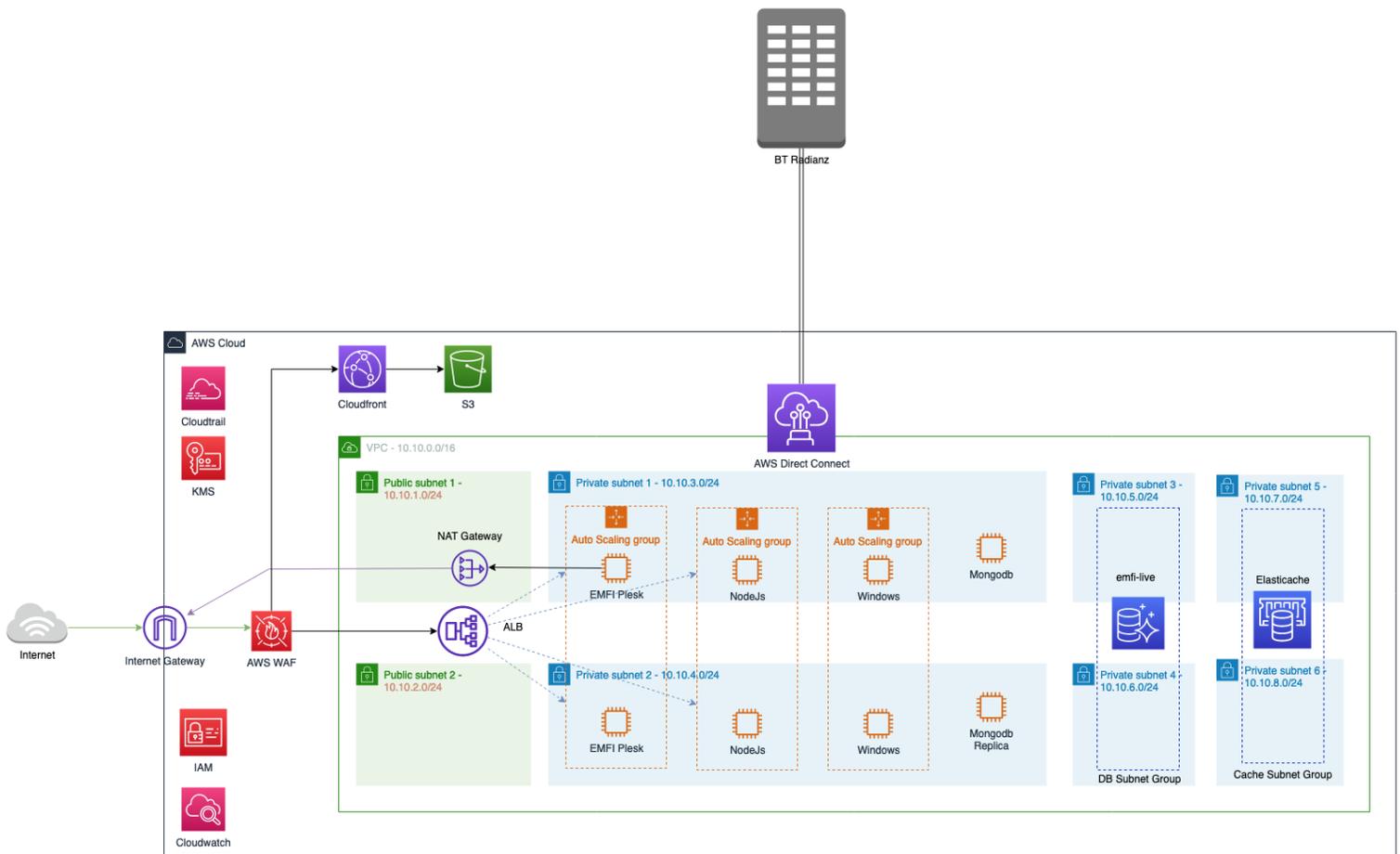
Deployed AWS Services

AWS Service	Usage of service
ECS	Amazon Elastic Container Service (Amazon ECS) is a highly scalable, fast container management service that makes it easy to run, stop, and manage containers on a cluster.
ECS Cluster	An Amazon ECS cluster is a regional grouping of one or more container instances on which you can run task requests.
ECS Task Definition	Task definition is basically the blueprint describing the docker containers that are used to run the application.
ECS Service	Service defines the minimum and the maximum tasks that are running from a single task definition at any given point.
EC2 Instance	EC2 stands for Elastic Compute Cloud. It is nothing but a basic computer virtually present in AWS cloud which you can access and do whatever you can do on a basic computer.
VPC	A virtual private cloud (VPC) is a secure, isolated private cloud hosted within a public cloud.

ALB	The Application Load Balancer is a feature of Elastic Load Balancing that allows a developer to configure and route incoming end-user traffic to applications based in the AWS public cloud.
IAM	AWS Identity and Access Management (IAM) enables you to manage access to AWS services and resources securely.
RDS	Amazon Relational Database Service (Amazon RDS) makes it easy to set up, operate, and scale a relational database in the cloud.

Results and Benefits

- Being on AWS open ups an array of new services and technologies that are now significantly more accessible to the average IT group.
- Being on AWS opens up new possibilities to integrate including best of breed tools & services to connect to other systems.
- Use of Terraform provides create, change, and version infrastructure safely and efficiently.
- Elasticity, load balancing and the capability to scale automatically is a big bonus.

About the Partner

AAIC is a digital technology services company providing Digital Engineering, Cloud Engineering services, and AI-powered Digital Marketing services. We design & build digital platforms and products with Cloud and Opensource at the focal point by working on cutting-edge technologies.

Site: 91SpringBoard, Sky Loft, Creativity Mall,
Opposite Golf Course, Yerawada, Pune, India 411006
www.appliedaiconsulting.com