Executive Summary

Collaboration, communication, and celebration are central to the WorkHub team efficiency management platform. Their Platform are developed for remote work management platforms to boost productivity and efficiency. Workhub professional services include software product development as well as turnkey software testing solutions for customers in Germany and Europe. Their application was hosted on EC2 instances, and they were manually deploying their application code to their staging and production environments.The infrastructure was not standardised across the staging and production environments. KeplerWorx proposed adoption of DevOps model on AWS to simplify provisioning and managing infrastructure, deploying application code, automating software release processes, and monitoring application and infrastructure performance. As part of the DevOps model, we implemented Infrastructure as code practice. The cloud's API-driven model enabled their developers and system administrators to interact with infrastructure programmatically, and at scale, instead of needing to manually set up and configure resources.

Customer Challenge

WorkHub Platform was operating on the Amazon Web Services (AWS) Cloud, but inefficiencies crept into the platform design as they were manually deploying the application code to their staging and production environments. They wanted to improve their operational performance and cloud architecture as they continued to grow.

Their goals included increasing the velocity of deployment and implementing DevOps practices with an automated continuous integration/continuous development (CI/CD) pipeline.

Why AWS

Workhub Platform was able to take advantage of a scalable, reliable, and secure global computing infrastructure, the virtual backbone of Amazon.com's multi-billion-dollar online business that has been honed for over a decade.

Why KeplerWorx

Workhub engaged KeplerWorx, an AWS Advanced Consulting Partner, to accelerate project delivery.

KeplerWorx did extensive work to find the optimum balance between the number and type of instances used. Workhub needed to constantly release and update its software to stay one step ahead. Transformation of its CI/CD pipeline and a streamlined DevOps practice have facilitated a shorter release cycle. Workhub was releasing once every two weeks or even once a month in some cases, and can now release daily.

About WorkHub Platform

WorkHub Platform, a solution for remote work management platform to boost productivity and efficiency within the teams. WorkHub professional services include software product development and provide full turnkey solutions in software testing services.
WorkHub Platform specializes in customer and employee engagement solutions, creating plugins and add-ons for marketplaces and platforms such as Microsoft, Slack, Workday, Salesforce, Shopify, and others.

The Platform enables you to manage projects, focus on what's important, and organize work in one place for seamless collaboration.

How KeplerWorx helped in enhancing the Customer Experiences on the platform

KeplerWorx initiated preliminary work to shift from single tenant to multi-tenant architecture, from monolith to microservices. This strategy wouldn't only reduce the cost to serve per customer, but also remove interdependencies that could hinder scaling. KeplerWorx's expertise around Containers and Kubernetes to scale optimally and to deploy changes as fast as possible helped in the decision-making process

KeplerWorx migrated the existing deployment on EC2 instance to Amazon EKS. The DevOps migration allowed WorkHub to streamline their automation, monitoring and continuous integration of new code to achieve faster development cycles with more frequent and reliable releases cycles.

Solution Deployment Characteristics: KeplerWorx deployed infrastructure-as-a-code for WorkHub Platform. As a result of application containerization and deployment on Amazon EKS, the development and production environment for WorkHub becomes more channelized. Amazon EKS automatically manages the availability and scalability of the Kubernetes control plane nodes responsible for scheduling containers, managing application availability, storing cluster data, and other key tasks. Github Actions makes it easy to automate entire software workflow with world class CI/CD build. GitHub Actions enables WorkHub to build, test, and deploy the code right from the GitHub.

Deployment of AWS CloudTrail enabled WorkHub to improve governance, compliance, operational auditing, and risk auditing of their entire AWS infrastructure. For application logging, AWS OpenSearch was deployed. OpenSearch Service securely unlocks real-time search, monitoring, and analysis of the development process. The DevOps transformation helped WorkHub Platform focus more on their business and the feature development of their applications.

Results and Benefits

Reducing Time-to-Market: Accelerates velocity of releases, facilitating daily release cycle
Reduces Costs by 20%: Right-sizing instances and the number of containers per instance, performance improvements due to smart caching practices have all contributed to cost reduction.
Shortening the SDLC: DevOps practices helped Workhub's ability to deliver applications and services at a rapid pace.
Increased Agility & Resiliency: KeplerWorx implemented highly scalable, efficient data protection in the cloud – creating redundancies and automated backups that enable fast, reliable data recovery.

About KeplerWorx
KeplerWorx is a global cloud consulting company with operations in Middle East, India, US and Europe. Driven by technology, we focus on delivering solutions on Cloud, mobility DevOps and Big Data. Speed, innovation, and excellence are the underlying tenets that drive our culture.

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