

Empowering IoT Innovation with Managed Services on AWS: A Success Story



Introduction

The world of IoT (Internet of Things) has revolutionized the way we interact with technology, making our lives more connected and efficient. Client have embraced this transformation by developing an end-to-end smart IoT wearables platform. With a vision to bring wearable technology into everyday life, customer aims to enhance the overall experience of users through their innovative products. To achieve their goals, Client partnered with AWS (Amazon Web Services) and sought ongoing managed services support to ensure seamless operations and business continuity.



Business Need

AWS Infrastructure Support for a Dynamic Environment

Client's workloads on AWS across three environments: Production, QA, and Staging. These environments span multiple AWS regions, including Asia Pacific (Singapore), Asia Pacific (Singapore), Asia Pacific (Mumbai), and US East (N. Virginia). The workload consists of various services such as EC2 instances, RDS (Relational Database Service), Lambda functions, API Gateway, CloudFront, and AWS Security Services. To meet their evolving needs and maintain a competitive edge, Customer required a trusted partner to provide comprehensive managed services for their AWS infrastructure.

» Industry

IoT wearables platform

» Offerings

Managed Services

» AWS Services

Amazon EC2, Amazon S3
Glacier, AWS RDS, Amazon
CloudFront, Amazon Route53,
Amazon CloudWatch, etc.

Implementation

Streamlining Operations and Optimizing Performance

To address Customer requirements, we embarked on a series of strategic implementations, ensuring the smooth functioning of the IoT platform:

- » Route53 domain transfer: Effortlessly transferred the domain across AWS accounts, enabling seamless management and administration.
- » Email setup for cron status: Configured an SNS (Simple Notification Service) topic to receive email notifications regarding cron job statuses, enabling proactive monitoring and issue resolution.
- » Cost optimization: Leveraged AWS cost optimization best practices to maximize savings without compromising performance or user experience.
- » GP2 to GP3 volume type migration: Identified opportunities to optimize storage costs and improve performance by migrating GP2 (General Purpose SSD) volume types to GP3, which offers better price-to-performance ratios.
- » Automated backups: Automated AMI (Amazon Machine Image) and snapshot creation, scheduled EC2 instance backups, and created automated responses to CloudWatch alarms. These measures ensured data protection, disaster recovery preparedness, and minimized downtime.
- » Enhanced security: Configured CloudTrail for comprehensive account-level activity logging and auditing, providing visibility into AWS API activities. Additionally, implemented AWS GuardDuty and Config for enhanced security monitoring and compliance adherence.

Reaping Rewards

Uninterrupted Operations and Optimal Performance & implementation of continuous support provided via Managed Services, Customer has witnessed remarkable benefits:

- » **100% Availability of Instances:** The robust infrastructure setup, proactive monitoring, and timely issue resolution have contributed to a consistent and uninterrupted user experience.
- » **AWS Services at the Core:** The successful collaboration between Customer Pte Ltd and the managed services provider has leveraged various AWS services to drive innovation and operational efficiency.
- » **Amazon EC2:** Elastic Compute Cloud instances power the core infrastructure, offering scalability and flexibility.
- » **Amazon S3 Glacier:** Secure and durable object storage service used for long-term backup and archival purposes.
- » **AWS RDS:** Relational Database Service provides managed database solutions, ensuring reliable and efficient data storage.
- » **Amazon CloudFront:** Content Delivery Network (CDN) service that enhances the speed and performance of web applications.

