AWS Implementation – HRMS and Application Hosting

Executive Summary

The customer sought a secure, scalable solution to host four key applications on AWS: **App Grid** (HRMS tool), **Auto Intake** (email workflow management), their **static website**, and a **testing environment**. We designed a robust AWS architecture using **EC2**, **RDS**, **S3**, and **CloudFront**, ensuring high availability, performance, and security. The migration resulted in improved scalability, cost efficiency, and seamless integration, enabling the customer to focus on growth while ensuring their applications are secure and future-ready. AWS's flexible infrastructure provided the agility needed to meet the customer's evolving business needs.

Customer Challenge

The customer faced several challenges in hosting multiple applications on the cloud, each with distinct needs. The **App Grid** HRMS tool required a secure, scalable solution for internal operations. The **Auto Intake** application, needed a flexible infrastructure to support email workflow and approval management, while also integrating seamlessly with Outlook. Additionally, the customer's **static website**, raiksolutions.com, required hosting on AWS with plans to transition to dynamic content in the coming months. Finally, a **testing environment** for **Arcus Auto Intake** needed to be set up, ensuring scalability and security. The main challenge was to seamlessly integrate and scale all these diverse applications on AWS while maintaining flexibility and security.

Why AWS

AWS was the ideal choice for hosting the customer's applications due to its unparalleled scalability, flexibility, and comprehensive security features. With **App Grid**, AWS offered a highly available and secure environment, ensuring smooth operation of the internal HRMS tool, while enabling seamless scaling as the business grows. For the **Auto Intake** application, AWS provided the flexibility to rapidly scale resources, integrate with Outlook, and support future expansion without compromising performance. AWS's suite of services, including EC2, Lambda, and S3, provided an efficient platform for hosting and managing the customer's **static website**, with the added capability to transition to dynamic content in the next few months as the website evolves.
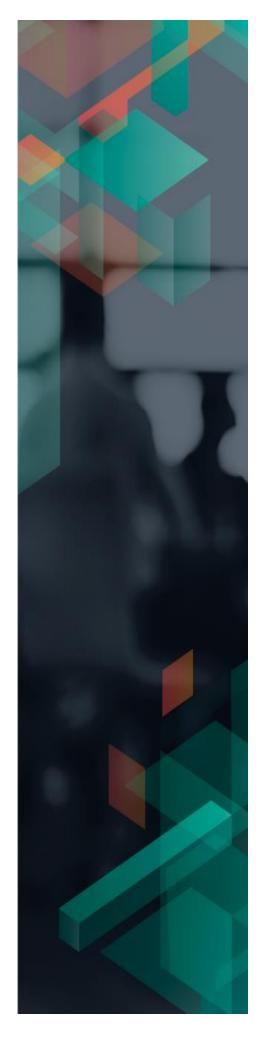
Additionally, AWS's capabilities in creating isolated and scalable environments made it the perfect platform for setting up the **Arcus Auto Intake** testing environment, ensuring the customer could thoroughly test new features and configurations before production. AWS's robust security measures, including VPCs, IAM roles, and data encryption, guaranteed that all applications were secure while complying with industry standards. With AWS, the customer gained a cloud environment that not only met their immediate needs but also offered the flexibility to scale and evolve their applications as their business requirements change.

About RAIK Solutions

RAIK Solutions – Focused on Results, Automation, Innovation, and Dynamic Strategies, we provide tailored IT solutions for governments and businesses of all sizes.

Raik has talented and experienced professionals are passionate about creating cutting-edge products that meet the needs and expectations of end clients. Raik specialize in developing configurable software applications that are tailored to meet the unique needs of each of our clients. Company offer comprehensive, innovative, and top-quality solutions and services that cater to different industries.

Why Converg-IN:

- **Unmatched AWS Expertise:**
  As an AWS Partner, Converg-IN brings deep technical proficiency and a proven track record in successfully implementing AWS-based solutions. Our team is equipped to handle the complexities of cloud deployments, ensuring optimal performance and scalability.

- **End-to-End Cloud Services:**
  From strategic planning to seamless execution and ongoing support, Converg-IN offers comprehensive end-to-end cloud services. We guide clients through every phase of their cloud journey, from initial cloud adoption to long-term optimization.

- **Customer-Centric, Bespoke Solutions:**
  Recognizing the unique needs of each customer, we tailor our solutions to align with specific business objectives. Our customer-centric approach ensures that the solution we craft is designed to solve your unique challenges effectively.

- **Proven Track Record:**
  With a history of delivering successful cloud migration and implementation projects across various industries, Converg-IN has earned a reputation for excellence. Our track record speaks to our commitment to delivering tangible results and driving business transformation.

- **Cloud Optimization and Cost Efficiency:**
  At Converg-IN, we optimize AWS environments for performance, cost-efficiency, and security. Our team applies best practices and conducts thorough assessments to ensure that your AWS investment is maximized, offering both scalability and cost control.

- **Ongoing Support and Monitoring:**
  We provide proactive support and continuous monitoring, ensuring smooth operations post-deployment. Our dedicated team is committed to keeping your AWS environment optimized and resilient, offering ongoing maintenance and quick issue resolution.

Solution Offered

To meet the customer's needs, we implemented a secure and scalable architecture on AWS for hosting four key applications:

- **App Grid (HRMS Tool):**
  Deployed on EC2 instances with Amazon RDS for Oracle, featuring Multi-AZ deployment for high availability and automatic failover.

- **Auto Intake (Email Workflow Tool):**
  Hosted on EC2 with Amazon RDS for PostgreSQL and integrated AWS SES for secure email handling, providing flexibility and scalability during development.

- **Static Website (raiksolutions.com):**
  Stored on Amazon S3 for cost-effective, high-availability hosting, while Amazon CloudFront was used to optimize global content delivery.

Security & Management:

- **Network Security:** AWS VPC, security groups, and ACLs ensure secure resource isolation and traffic control.
- **Access Control:** IAM roles enforce least privilege access to AWS resources.
- **Monitoring:** AWS CloudTrail and CloudWatch track resource activity and performance.
- **Backup & Recovery:** Automated backups for RDS databases with disaster recovery measures in place.

This architecture guarantees high availability, security, and scalability, empowering the customer to efficiently host and manage their applications on AWS.

Results and Benefits:

The migration and deployment of the customer's applications on AWS led to significant improvements in scalability, performance, and security:

- **Scalability and Flexibility:**
  AWS's elastic infrastructure allowed the customer to easily scale their applications, especially as **Auto Intake** continues development, and as the website transitions to dynamic content. EC2 and RDS solutions ensured that the system could handle growing user demands without compromising performance.

- **Enhanced Performance:**
  Hosting the **static website** on Amazon S3 and utilizing CloudFront for global content delivery resulted in faster load times and a smoother user experience. For the **App Grid** and **Auto Intake** applications, AWS provided the high availability and low-latency infrastructure necessary to maintain smooth and responsive operations.

- **Robust Security:**
  AWS's built-in security features, such as VPC, IAM roles, and encryption, ensured that sensitive HR and email data remained secure, adhering to the highest standards of data protection. Regular updates and monitoring via CloudWatch further mitigated potential security risks.

- **Cost-Effectiveness:**
  By leveraging AWS's pay-as-you-go pricing model, the customer reduced infrastructure costs while maintaining high performance and availability. The flexibility of AWS also meant that resources could be efficiently allocated and scaled as needed, avoiding over-provisioning.

- **Business Continuity:**
  With automated backups for RDS databases and disaster recovery strategies in place, the customer's critical applications are now protected from data loss and downtime, ensuring continuity of business operations even in the event of failure.

Overall, the AWS solution provided the customer with a secure, scalable, and cost-efficient environment for hosting their applications, empowering their business to grow and innovate while maintaining high operational standards.

About Converg-IN

Converg-in is one of the leading value-added companies. We at Converg-IN Private Limited, Offer Cost Effective Cloud Solutions using Industry Leading Design Principles & Best Practices. With an unsurpassed track record of success across multiple customers across industry verticals, Converg-IN is your partner. At Converg-IN, we help you build a cloud migration strategy for moving your IT systems and applications to the Cloud, with minimal cost and effort so that you can reduce your capital expenses, minimize support and administrative costs