Alacriti | **innovators** SYSTEM

SUCCESS STORY

System Innovators Increases Speed with Amazon Web Services (AWS) Move

Partnership with Alacriti AWS Cloud Consulting Creates a Better Payments Experience

Going Beyond Website Payments

System Innovators (SI) provides an on premise Enterprise Revenue Management (ERM) system for over the counter payments but they wanted to extend this functionality to online payment channels and selected Alacriti as their solution provider.

Recently, the municipalities SI serves adopted hosted solutions and were looking for a feature rich ERM platform that resides in the cloud. To achieve their objective to offer a cloud solution with best in class security, SI decided to solicit help from a trusted third party vendor. SI was already utilizing and reselling Alacriti's Orbipay platform, so it was the natural choice to work with Alacriti's AWS Cloud Consulting team.

Alacriti Consulting was able to help them by migrating their product to AWS and building the services necessary for them to be successful.

A Successful Partnership

SI was provided a secure, reliable, and fully redundant solution; that increased speed and revenue for their business! SI has seen a strong increase in computing speed with the move to AWS. With such impressive results, they are now looking to move over more of their public sector customers into the AWS cloud environment.

About System Innovators

System Innovators (SI) is a leading provider of financial management solutions for local government. Through SI's iNovah Enterprise Revenue Management hub, SI simplifies consolidation and revenue management in the public sector, providing one centralized source for revenue, including payment, audit, reconciliation, and reporting. Enterprise revenue management offerings include iNovah ERM, a fully configurable PCI compliant payment collection, online payments, cashiering, and financial reporting solutions. SI's products seamlessly integrate with hundreds of websites, deposit banks, payment card gateway providers, host and financial systems across North America.

To learn more about how Alacriti Consulting can help you with your AWS Enterprise IT needs, please email awsconsulting@alacriti.com.

Technology Details

Based on SI's current needs, Alacriti Consulting configured Amazon Virtual Private Cloud (Amazon VPC) with two (2) Availability Zones that stand up to stringent Disaster Recovery, Performance, Security, and Regulatory Compliance requirements of Government agencies.

- **Amazon VPC** — Provisions a logically isolated section of the AWS Cloud resources that can be launched in a virtual network defined by the user. This means SI has complete control over their virtual networking environment, including selection of IP address range, creation of subnets, and configuration of route tables and network gateways.

- **Multiple Availability Zones** — Gives redundant power, networking, and connectivity so SI can operate production applications and databases with more high availability, fault tolerance, and scalability.

Then Amazon Elastic Compute Cloud (Amazon EC2) Instances along with Windows OS and Amazon CloudFront were implemented as the first line of defense for the environment. Next was the configuration of AWS WAF, Amazon Route 53, Amazon CloudWatch, and AWS Directory Service with Windows AD across cloud and local environments. And finally, the configuration of Elastic Load Balancer for assigning incoming transactions efficiently, AWS Virtual Private Network (AWS VPN) for secure access, and Amazon Simple Email Service (SES) for messaging.

- **Amazon EC2** — Provides secure computing in the cloud. Gives SI a reliable, scalable, infrastructure on demand.

- **Amazon CloudFront, AWS WAF, Amazon Route 53, Amazon CloudWatch — Amazon CloudFront, and Amazon Route 53** — Amazon CloudFront, and Amazon Route 53 work to help protect against DDoS (Distributed Denial-of-Service) attacks. Based on conditions that Alacriti specifies in AWS WAF, e.g., traffic from the IP addresses that requests originate from or the values of query strings can be allowed, blocked, or allowed and counted for further investigation or remediation. Cloudwatch will take all that information and store it in the form of logs, metrics, and events, providing SI and Alacriti with a unified view of the AWS resources, applications, and services running on AWS.

Using AWS Identity and Access Management (IAM), Alacriti Consulting set up user accounts with appropriate admin privileges.

- **IAM** — Enables access management to AWS services and resources securely. Using IAM, SI can create and manage AWS users and groups, and use permissions to allow and deny their access to AWS resources.

The most important part of the project was SI's database servers; Alacriti AWS Consulting setup Amazon Managed Relational Database Service (Amazon Managed RDS) SQL Server with additional Amazon EC2 hosted SQL server(s) for reporting services.

- **Amazon RDS SQL** — Scalability: Running SQL Server on Amazon RDS offers great amounts of scalability. With Amazon RDS, SI can deploy multiple editions of SQL Server in minutes with cost-efficient and resizable computing capacity.