Ramsey County Minimizes Risk and Meets Regulatory Compliance Requirements with Amazon Web Services Solution

BACKGROUND
Ramsey County, Minnesota has a population of over 540,000, making it the second-most populous county in Minnesota. Established on October 27, 1849, it was one of the nine original counties of the Minnesota Territory. Named for Alexander Ramsey, the first Governor of the Territory, Ramsey County provides government services to 200,000+ residential customers and 13,000+ businesses in an area covering 441 square miles.

CHALLENGES
Ramsey County’s external payment system application (ePay) allows county residents to view and pay their property taxes online. “We needed a simple solution with 24x7 availability that met payment card industry compliance requirements to interface ePay with another external system,” says Mike Piram, ERP Program Manager at Ramsey County.

SOLUTION
After its history of providing Ramsey County full hosting services for its PeopleSoft and Hyperion enterprise applications, Sierra-Cedar was again engaged by the County for its experience in providing a consistent delivery model to Analyze, Architect, Migrate, and Manage the ePay application. Sierra-Cedar recommended using Amazon Web Service (AWS) because of the cloud service’s high-availability options, low-cost model, and the ease of service delivery. Ramsey County’s ePay application timeline quickly moved through the delivery model beginning in early fall of 2017 and moved to production in November 2017.

The County deployed components of ePay in the AWS Cloud using its extensive options and impressive suite of security services. The architecture leverages Amazon Elastic Compute (Amazon EC2) in multiple availability zones, with AWS Elastic Beanstalk controlling the deployment stack for an auto-scaling, hands-free, and immutable infrastructure. Data in transit is encrypted using SSL to each EC2 instance, leveraging AWS Certificate Manager to provision and manage the certificates. Amazon Simple Storage Service (Amazon S3) provides a secure, durable, and highly scalable object storage. Amazon Web Application Firewall (Amazon WAF) provides an additional layer of security over and above the other security mechanisms and restricts direct system access.

RESULTS AND BENEFITS
Ramsey County has obtained a high-availability environment, critical for its business operations. While the AWS platform has provided 100% uptime to date, the ePay deployment is configured to automatically recover from the smallest to largest issues, including the potential loss of an entire AWS Availability Zone. The automated failover capability to another Availability Zone was a big benefit.
Key Project Highlights:
- Met compliance requirement
- 24x7 availability with zero downtime
- Automatically scales for peak workloads
- End-to-End encryption in transit
- Automated deployment stack
- Zero downtime for operating system patching

With the help of Sierra-Cedar, Ramsey County was able to realize the benefits of the cloud and create a highly available application architecture for components of this critical application. Ramsey County now has the capability and agility to leverage AWS for other critical applications as part of its cloud strategy and continues using Sierra-Cedar as its fully hosted cloud provider.

ABOUT SIERRA-CEDAR
Sierra-Cedar is currently an AWS Advanced Consulting and Government Partner for Commercial, Public Sector, and Higher Education clients, a member of the Amazon Web Services (AWS) Partner Network (APN), a Channel Partner, and has received recognition for achieving the Oracle Competency and 50+ AWS Certifications within our organization. Our strong strategic partnership with AWS is based on the breadth and depth of the AWS services we provide, resulting in a starting set of (rapidly growing) certifications that focus on moving our clients forward.

Sierra-Cedar has expertise and documented success with the following:
- Adopting RDS as a managed database platform
- Tuning online and batch performance of PeopleSoft applications
- Integrating cloud, on-premise, and third-party applications
- Monitoring the complete environment allowing quick resolution when issues do arise
- Securing the environment through a combination of AWS delivered security profiles, host base software, encrypted VPNs, and login authentication integration with leading cloud-based LDAP integrations
- Testing failover scenarios while keeping the application and web services available, including continued processing of production workloads when a failover occurs
- Load testing the PeopleSoft system to provide the business with confidence that the architected configuration will meet demand

LEARN MORE
For more information about how Sierra-Cedar can help your company build and manage your AWS environment or migrate and deploy your enterprise applications in the cloud, visit www.Sierra-Cedar.com/aws.