



A Case Study of
REITR8's
Cloud Adoption and Migration

reitr8

Enabling repetition of success...

About REITR8

REITR8 assists emerging technology team in the cultivation of business strategy, product positioning, and technological execution of new products into burgeoning market opportunities within the Federal Government and select Commercial sectors.

- Establish positioning of new products and marketplace opportunities in the Federal Government and Intelligence Community.
- Develop Marketing strategy and Initial Presentations, Sales team staffing and training plans, and established partnerships for newly established market.
- Facilitating capital infusion and fund raising, private placements, detailed financial models containing revenue forecasts, expense modeling, team augmentation planning feasibility analysis.
- Evaluation of assistance in new Intellectual Property development, including technological assessment, patentability & claim generation, and market viability.

The Challenge

REITR8 was looking for primary storage for administrative documents. They are currently using local hard drives and want to start using cloud storage. REITR8 initially had 60 GB of storage for this particular workload.

REITR8 was looking for a low-cost, low-maintenance PBX system that would utilize AWS technologies. They were looking for a system that could utilize IVR/VRU, skills-based routing, dial by name (voice), forward-to numbers and notifications to their Slack channel.

REITR8 was also looking to replace their local CRM tool with a cloud-based solution. Their local solution consisted of a website with a MySQL database.



The Solution

IMPLERUS employed an Amazon Simple Storage Service (S3) solution for primary storage with Server access logging, AES-256 encryption, versioning and lifecycle rules. The lifecycle rules will move backups to S3 Standard-Infrequently Accessed (IA) after 30 days. Customer did not want any archival at this time. This solution provides Controlling Assets with a safe cloud storage option that is highly durable (99.999999999%), secure, encrypted and highly available.

IMPLERUS created a solution that is comprised of Amazon Connect, AWS Lambda, Amazon Lex and Amazon DynamoDB. Amazon Connect was used to port a DID and to obtain a DID number for their main company numbers. Amazon Lex was added for IVR/VRU selections and call routing. Eight Amazon Lambda functions were integrated with seven Amazon Lex Bots in order to store pertinent call-data information into two encrypted Amazon DynamoDB databases. REITR8 is keeping track of all of their employees and customers within Amazon DynamoDB. If a new client calls and is not registered, an Amazon Simple Notification Service (SNS) notification is sent to their Slack in a designated channel to ensure the new customer is handled quickly and efficiently.

All AWS Lambda functions are sourced from Amazon Connect or Amazon Lex. Amazon Connect calls Lambda functions to read/write/update the DynamoDB databases. Permissions from Amazon Connect to Amazon Lex were completed with the “aws lambda add-permission” (AWS CLI) command to ensure that only the correct instance of Amazon Connect has the required access. Amazon Connect also calls Amazon Lex Bots for dial-by-name and department directories and to obtain customer information which is stored in a DynamoDB database through an AWS Lambda function. Errors in AWS Lambda functions will send SNS events, write logs to a DynamoDB database or Amazon Simple Storage Service (S3) directory and/or are streamed to an Amazon CloudWatch Log Group. All other monitoring is done within Amazon CloudWatch.

IMPLERUS migrated their website to a Lightsail instance and their MySQL database using AWS Database Migration Service to a Multi-AZ Amazon Aurora database. An AWS Lambda function was implemented to ensure older RDS snapshots are deleted.

The Benefits

Amazon S3 allows for virtually unlimited space to store REITR8’s administrative documents. Amazon S3 buckets were built with private access for only the application and approved personnel, encryption of all files and user/API level activity tracking using AWS CloudTrail. Amazon S3 is providing scalability, durability (99.999999999%), version control, along with compliance and audit capabilities. This solution allowed them to have a central repository for their application data while still maintaining tight control of their data.



REITR8 is now pleased to have a full Cloud based PBX/IVR/VRU for a few dollars per month. There is minimal ongoing maintenance with this solution and their customers are now experiencing the latest technologies while making sure they connect to the right person quickly.

REITR8 was surprised with the speed and abilities of Amazon Aurora service. The Multi-AZ feature now allows for better maintenance and reliability for their data.

About IMPLERUS

Implerus Corporation is a Northern Virginia-based AWS Advanced-Tier IT consulting and services firm dedicated to providing innovative solutions to the Intelligence Community, public and private-sectors.

We design, build, integrate and manage solutions for cloud-based applications and system architectures.

Our clients range from Fortune-level global VC firms to government intelligence and defense agencies through our successful relationships with satisfied clients over 25+ years.

For more information or to contact IMPLERUS, please visit us at www.implerus.com