



City of Los Angeles Works with ScaleCapacity to Cut Document Management Costs by 80% on AWS

Executive Summary

ScaleCapacity, an AWS Partner, worked alongside the City of Los Angeles Information Technology Agency (ITA) to move a critical document management system to an AWS serverless solution using services including Amazon S3 and AWS Backup. As a result, the ITA reduced its document management costs by 80 percent, lowered data replication time from 24 hours to 15 minutes, and scales on demand to store 500,000 additional data objects each year.

Limited by a Complicated and Costly Document Management System

Los Angeles is the second-most populous city in the US, with nearly 3.9 million residents. To ensure the city's citizens, businesses, and visitors have a state-of-the-art digital experience, the [City of Los Angeles Information Technology Agency](#) (ITA) works with other city departments to develop and support a range of critical IT services.

As part of their work, ITA's financial management and document management teams store and manage critical documents related to procurement contracts and transactions for city services. For more than a decade, the city's Financial Management System (FMS) stored these files using a solution that was costly and complex to manage. "We were paying close to \$80,000 a year in licensing and maintenance, and we had two full-time employees dedicated to maintaining the system," says Nima Asgari, financial systems manager at the City of Los Angeles Information Technology Agency. "We also had to invest in the underlying infrastructure and other teams that maintained that infrastructure. As a city department, we have a tight budget, and we're always looking for ways to reduce IT costs."

Additionally, the previous document management solution had limited customization capabilities, making it difficult for ITA to adapt the system to its evolving business needs. "We were only using less than 5 percent of the features because it was so complex," Asgari says. "Cloud-native technologies were becoming more widely accepted across the city, so the solution we had



About the City of Los Angeles Information Technology Agency

The City of Los Angeles Information Technology Agency (ITA) works with agencies and departments across Los Angeles to develop world-class IT infrastructure and applications that provide citizens, businesses, and visitors with modern digital services. ITA has more than 400 IT professionals who operate in 18 divisions and deliver 366 different technology services to internal and external customers.

AWS Services Used

- [AWS DataSync](#)
- [Amazon Simple Storage Service](#)

Benefits

- Reduced document management costs by 80%
- Cut data replication time from 24 hours to 15 minutes
- Scales on demand to store 500,000 additional data objects per year

“Previously, we had a 24-hour recovery point objective for replicating data from one region to another, and that has gone down to 15 minutes on AWS. Having faster access to financial data is important, because we’re storing procurement contracts and other data that we need to be able to get even during a disaster.”

Nima Asgari

Financial Systems
Manager, City of Los
Angeles Information
Technology Agency

was becoming more of a niche system that wasn’t as useful as it once was.” ITA also sought to increase the solution’s availability. “When the pandemic started, we heavily relied on FMS to procure items critical for city operations, like personal protective equipment, and we needed better uptime and higher availability to support those kinds of initiatives,” says Asgari.

Working with ScaleCapacity to Build a New Document Management Solution on AWS

To help address these challenges, ITA chose [ScaleCapacity](#), an [AWS Partner](#) based in Southern California that assists customers in migrating IT environments from on-premises data centers to Amazon Web Services (AWS). ScaleCapacity, which holds [AWS Competencies](#) in DevOps Consulting, Migration Consulting, and Digital Workplace Consulting, had previously helped ITA build a serverless secure file transfer protocol (SFTP) solution running on AWS.

ScaleCapacity used [AWS DataSync](#) to quickly move files from the city’s document management system to [Amazon Simple Storage Service](#) (Amazon S3) buckets. ScaleCapacity also helped give ITA employees access both to the new files and older files stored in the FMS. To enhance security, ScaleCapacity used [AWS Key Management Service](#) (AWS KMS) to give ITA centralized control over cryptographic keys used to protect data. ITA also relies on [AWS CloudTrail](#) for monitoring and secure logging.

To increase FMS availability, ScaleCapacity created a disaster recovery solution in two [AWS Regions](#) using an active-passive design. “If the active service would ever go down, traffic could shift to the passive region,” says Abhijit Gaonkar, senior DevOps engineer and AWS solutions architect at ScaleCapacity. The partner also implemented [AWS Backup](#) to address ITA’s need to access documents in an isolated environment for testing and internal compliance purposes. “AWS Backup helps ITA quickly restore files into Amazon S3 and provide access to those documents when necessary,” Gaonkar says. ITA is also using the Amazon S3 Replication Time Control (Amazon S3 RTC) feature for disaster recovery, which replicates 99.99 percent of new objects stored in Amazon S3 within 15 minutes of uploading.

Reducing Document Management Costs by 80%

By running its document management service for FMS on an AWS serverless solution, ITA no longer needs to pay for document management licensing and infrastructure maintenance. “We are saving roughly 80 percent of our licensing and management costs by running our document management system on AWS,” says Asgari. “As a city agency with resource constraints, that’s important for us.”

Additionally, because the system requires zero maintenance, ITA no longer needs to pay two full-time staff members to manage the document management system for FMS, and it has reallocated those resources to other important projects. “Managing virtual machines was a pain point for us because it required a lot of patching and updating software,” says Jaylen Wimbish, software engineer for the ITA DevOps team. “We no longer have that responsibility, so we can concentrate on other initiatives to support ITA. We also

no longer need to have scheduled downtime for the FMS, whereas before we had 24-hour or 48-hour maintenance windows every month.”

The new document management solution is easier to use, making onboarding and training easier. The solution also gives ITA access to better document management features than it had before. “For example, we can now do encryption of data at rest and in transit with Amazon S3, and that’s something that required a lot of setup and trial and error with the previous environment,” says Asgari.

Accessing Critical Data Faster and Storing 500,000 Objects Yearly

ITA has improved its disaster recovery capabilities by moving to AWS and taking advantage of Amazon S3 RTC. “Previously, we had a 24-hour recovery point objective for replicating data from one region to another, and that has gone down to 15 minutes on AWS,” says Asgari. “Having faster access to financial data is important because we’re storing procurement contracts and other data that we need to be able to get to even during a disaster.”

Scalability has also increased for ITA, which is seeing rapid growth in the number of city documents stored in FMS. “We’re currently storing close to 5 million documents in Amazon S3, and the volume is growing at a rate of half a million objects per year,” Asgari says. “Amazon S3 gives us nearly infinite scalability, which means we’re no longer scrambling to provision more storage for the FMS.”

With the new document management service for FMS in production on AWS, the city plans to continue working with ScaleCapacity on future projects. “This was a complex migration, with many challenges along the way,” says Gaonkar. “We completed the project on time and moved it into production because this was a very collaborative effort between our two teams.”

About ScaleCapacity

ScaleCapacity, an AWS Partner based in Los Angeles, offers technology and consulting services that enable enterprises and other organizations to move workloads to the public cloud quickly and cost-effectively. The company has expertise in the design, deployment, and management of enterprise cloud environments; data analytics; machine learning; artificial intelligence; and Amazon Connect. In addition, ScaleCapacity offers ready-to-use solutions in the marketplace.

