

Enabling Machine Learning at the FDIC

How Enquizit Created a Compliant Landing Zone in the AWS Cloud

By Scott Swanson



At the Federal Deposit Insurance Corporation (FDIC), employees are committed to maintaining stability in America's financial system by insuring deposits and monitoring financial institutions to protect businesses and consumers. Over the years, fulfilling that mission has become increasingly more complex as the markets become more volatile and the amount of financial data the FDIC must process grows exponentially.

To keep up with an ever-growing repository of financial data, the FDIC needed a scalable analytics platform with artificial intelligence and machine learning (AI/ML) capabilities to process these data volumes efficiently. And as they modernized, they also had to ensure that their current high security needs were maintained and improved. The system could maintain daily operations at the agency. In 2020, the FDIC turned to Enquizit for the dual task of maintaining their struggling on-premises system and transforming their analytics capabilities by constructing a complaint landing zone in the AWS Cloud.

Streamlining Analytics With a Secure Landing Zone

The FDIC knew that leveraging AI/ML on their analytics platform would help them process critical financial data faster so they could better serve the American public. But there was one problem standing in their way: security and compliance. While AI/ML tools could be added to their on-premises environment, the costs for implementation were far higher than using the services already available on the AWS Cloud. In addition, AI/ML services on the cloud were continuing to improve—at no cost—which wasn't the case for on-premise services. The FDIC would have to invest hours of labor to ensure each of those tools stayed secure and compliant over time.

The FDIC needed a cloud environment where all their disparate applications could live efficiently under a centralized set of compliance standards—which is why Enquizit suggested building a landing zone. A landing zone would allow the FDIC to maintain security on a systemic level, so when a problem arose, they would only have to solve it once.

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Leveraging more than a decade of experience building secure environments for government agencies, the Enquizit team was well positioned to help the FDIC customize their FedRAMP-compliant landing zone in the AWS Cloud. As they started work on the prototype, Enquizit worked closely with the FDIC to determine controls for their networking traffic, set up identity and access-management protocols, and create security groups. Then they built



preventative and detective guardrails within the landing zone to improve security and ensure that the system remains compliant into the future.

To create this customized landing zone, Enquizit ran the FDIC through the AWS migration-readiness program. This program is a collaborative process where customers move through a series of workstreams—including assessment, security, operations, and training—to prepare the agency for a smooth and successful migration. As a final touch, Enquizit developed a continuous integration and continuous delivery (CI/CD) pipeline for the agency that would allow easy updates to their landing zone. This pipeline will streamline infrastructure and application maintenance and development for future projects, so the FDIC can continue to scale with ease.

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Readying the FDIC for the Future

Before partnering with Enquizit and AWS, the FDIC faced two challenges: a clunky and dysfunctional on-premises system, and the need for secure cloud infrastructure to scale their AI/ML workloads. With Enquizit's help, the FDIC conquered both obstacles—and is now prepared for the future. Although the FDIC hasn't moved into their landing zone yet, the infrastructure is ready for migration. In the meantime, the Enquizit team is ready to support any future challenges the agency may face, from application development to data analytics and beyond.

To learn more about how Enquizit helps organizations and government agencies stay secure in the AWS Cloud, go to enquizit.com.

