

Making Logins Simpler for the GSA

How Enquizit Helped the Federal Government
Build a Shared Authentication Platform

By Arun Sundaram



When the General Services Administration (GSA) first dreamed up a shared authentication platform that would allow citizens to log in to dozens of government websites with a single username and password, they planned to tackle the project internally. But as more and more government agencies became interested in the product that would later become Login.Gov, the list of required features grew exponentially—as did the security requirements. To serve more than 30 million potential end-users, the GSA knew they would need support from a partner who could build responsive tools and work in an agile, iterative, and secure way. They wanted to use Amazon Web Services (AWS) tools to get the job done—and to enhance security and streamline user experience, they called AWS Partner Enquizit.

Enabling Agile Security with AWS Tools

When Enquizit joined the Login.Gov project in 2017, their primary role was consulting with the GSA on application development and AWS security. Following a consistent and modern DevSecOps approach, Enquizit supported GSA to scale their new application quickly, while keeping users' private information safe.

First, Enquizit leveraged its close relationship with AWS and deep knowledge of DevSecOps to build a secure platform for the GSA. As they built the platform, they also consulted with the GSA team to share best practices for implementing critical security tools, including Macie, Guard Duty, WAF, and rotating KMS keys. Notably, a citizen's personal information is dual encrypted using KMS

and the account password. This means that only citizens have the unique power to unlock their personal information. "Only a user's password can unlock their personally identifiable information (PII)—which means as a user, you can rest assured that your information is safe," explains Aaron Chapman, director of software engineering at Enquizit. "Even Congress couldn't access the encrypted personal information in this system."

Next, the Enquizit team built automation tools into Login.Gov to support ongoing security and compliance and ensure seamless disaster recovery. They leveraged automated alerting to keep user data safe without tasking engineers with mundane and repetitive work. And they worked closely with AWS to ensure the platform could scale and failover into another AWS region—a critical element of disaster recovery if the platform's primary region goes down.





Supporting IAL2 Compliance and Ready the GSA for the Future

As part of their security efforts, Enquizit also helped the GSA team get ready for Identity Assurance Level 2 (IAL2) compliance. “IAL1 compliance asks for only a username and password to log in, while IAL2 requires that users complete an identity proofing process for higher level of assurance that they are who they say they are,” notes Chapman. “That verification includes a driver’s license and SSN or government ID that can be tied to the users address or phone number through financial documents and DMV records.” The National Institute of Standards and Technology (NIST) recommends that agencies follow IAL2 standards—

and because the GSA wanted to serve as many government agencies as possible, they needed to incorporate IAL2 compliance into Login.Gov.

To ready the platform for IAL2 compliance, the Enquizit team built a system that enables users to upload a photo of their driver’s license, which is then proofed against DMV and financial records. Once the identity is confirmed, they receive a code via an SMS message to their verified phone number or letter to their verified address, which they input into the system to log in. Security wasn’t the only factor at play here, however—the verification also needed to work quickly and seamlessly for the end-users. To speed up verification of government IDs, Enquizit developed a proofing process that cryptographically verify the user using the digital certificate stored in their ID. This secure form of multi-factor authentication streamlined the log-in process while protecting user data.



Simplifying Secure Authentication for the Government and its Citizens

The Enquizit team played a crucial role in enhancing security and ensuring compliance for the GSA, helping them achieve FISMA moderate compliance and IAL2 authentication and prepare themselves for FedRAMP Moderate ATO. But their cybersecurity expertise doesn't just benefit the GSA staff. As experts in user experience design, the Enquizit team also provided UX content

for Login.Gov. This content includes FAQs and guidance that are written in basic language that any user can understand. With these tips in hand, the users themselves can take steps to protect their private information from bad actors—on the government site and beyond.

Today, Login.gov is operational at several agencies, including the U.S. Customs and Border Protection. The project, which began in 2017 with only one or two government agencies on board, has expanded to support over 20 agencies and 30 million end-users. As Login.Gov continues to grow, the GSA can rest assured that their system is secure, scalable, and user-friendly—thanks in large part to the strong foundation laid by the Enquizit team.

Enquizit is an Amazon Web Services (AWS) Premier Consulting Partner with years of experience building compliant environments for government agencies and their vendors. To learn more about how Enquizit helps government agencies modernize in the AWS Cloud, go to www.enquizit.com.

