Client Success Story

A German pharmaceutical and life sciences company with multiple subsidiaries and sources of users

German firm updates pharmaceutical repository security with AWS, reducing access complexity

An AWS IAM/SSO solution helps a leading pharmaceutical company secure file repositories at scale, enforce access policies, and reduce overall costs and complexity.

Customer Challenge

Despite a centralized identity management system for all end users, this leading pharmaceutical company did not have integrated access to storage targets for secure file uploads to storage repositories. It resulted in significant cost and complexity, as access privileges had to be granted via manual onboarding processes. Instead of continuing with costly manual support, the company wanted to extend its investment in an existing identity management system to support access to the repository.

The updated pharmaceutical repository security solution would need to support uploads of files into AWS S3 services and provide a single automated authentication framework, without manual interventions, while remaining versatile enough to support multiple user stores and identity providers.

AWS + Cognizant Solution

Cognizant leveraged its partnership with Amazon Web Services (AWS) to design a scalable access management platform, powered by AWS security controls and other services, to facilitate automation and user self-service/portal access to hosted repositories.

AWS S3 serves as the storage target for file uploads into the repositories. To access these repositories, users authenticate into directory services on premise, with hooks into OpenID. Next, the platform establishes an OpenID Connection (OIDC) to pass users' role information to Amazon CloudFront, which serves as a CDN-type network. After applying token validation, the platform establishes an SSL connection to a self-service portal hosted on Amazon S3.

At this point, the portal forwards a user authorization request to the Amazon API Gateway as a custom authorization. It generates and returns a signed Amazon S3 URL using serverless AWS Lambda functions to first validate the token against the pharmaceutical directory services and then perform a role and country attribute check against AWS IAM. With authorization now complete, regardless of internal corporate or federated external user status, the portal grants access to Amazon S3 via signed URL, allowing users to upload files into the repository.

Architectural Attributes

Generally speaking, the solution uses AWS services throughout. AWS S3 provides both file storage and static web portal hosting. AWS IAM grants permissions to Lambda, which generates the signed URL using serverless computing. The Amazon API Gateway, paired with CloudFront, provides the function to validate the OPID token.

Outcomes

By integrating repository access into an automated and centralized self-service platform for file storage, the pharmaceutical company eliminated 100% of all manual onboarding costs. Multi-user authentication added flexibility and scale to support both internal corporate and external federated users. Finally, leveraging existing infrastructure as a part of the access to the pharmaceutical repository security solution further reduced costs.

About the Partner

Cognizant (Nasdag-100: CTSH) is one of the world's leading professional services companies, transforming clients' business, operating and technology models for the digital era. We engineer modern businesses to improve everyday life. Our unique industry-based, consultative approach helps clients transform technology, reimagine processes and transform experiences, ensuring businesses remain agile, relevant and ready to run more innovative and efficient enterprises.

With AWS as our partner, we focus on the outcomes that matter most to businesses and underpin our solutions with deep industry experience and market-leading IP. Cognizant's more than 6,000 AWS-certified professionals, dedicated AWS-certified consultants in 43 countries, hundreds of customer launches and successes, and more than 70 transformational blueprints help drive innovation beyond cloud migration.

As a premier consulting partner, Cognizant holds numerous AWS competencies, including AWS Mainframe Migration, AWS SAP, AWS Migration, AWS Financial Services, AWS Healthcare and AWS Life Sciences. Partner programs include AWS Well Architected, AWS Managed Service Provider, AWS Marketplace Seller, AWS Solution Provider Program and AWS Public Sector Solution Provider

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