plainID

Freddie Mac Modernizes Enterprise Architecture with PlainID Authorization Platform

US government-sponsored financial services evolves across controls and workflow processes for loan approvals with next-gen authorization for microservices and AWS API Gateways.

FreddieMac

COUNTRY: USA
EMPLOYEES: 9,000+
INDUSTRY: Financial Services

Business Challenge

Freddie Mac set out to accelerate their architecture modernization initiative. However, various lines of business within the enterprise had their own unique way of addressing authorization including a legacy solution. Freddie Mac needed a modern access control management approach that provided visibility and control to better:

- Secure 400+ microservices for customer-facing loan approval process

- Control access to 500+ AWS environments accessed by hundreds of developers

- Protect sensitive customer data used by the Business Intelligence (BI) analyst team

- Support applications using OPA-based policies

With disparate methods for managing and enforcing access, it had become costly and ineffective to create a homegrown solution. The enterprise architect team sought to find a solution that lowers operational costs, provides a path for migration away from the limited Oracle Entitlement Server (OES), and future-proofs their authorization needs. The team also needed the ability to support and manage OPA policies which are used by several application development teams.

Key Impacts

✓ Enabled modern architecture for cloud-native apps and microservices

✓ Gained visibility, control and consistency of enterprise-wide access control

✓ Gained control of developer access to over 500 AWS environments

✓ Secured sensitive customer PII by enforcing fine-grained access to BI data

"PlainID has made it simple for us to build and manage access policies that align security and business requirements across our technology stack — from legacy application, to our modern cloud apps, and all the way to the data we collaborate on."

– Dmitry Tepper, Senior IT Enterprise Architect

Why Freddie Mac Chose PlainID

Freddie Mac's vision entailed implementing a solution that addressed the depth and coverage needed for multiple architecture layers for current and future needs. The PlainID Authorization Platform aligned with Freddie Mac's need for consistency and centralized management of access policies for critical functions of the business, from application to APIs, microservices, and data assets. This ultimately enabled the enterprise to modernize their architecture for cloud-native applications and services.

With PlainID, Freddie Mac had the ability to implement a Policy-Based Access Control (PBAC) framework for authorization that addressed the needs for all types of deployment patterns. The platform makes it simple for business and application teams to decouple authorization from application code, and apply business logic to access policies using plain language along with a visual representation of the policies.

This empowered the infosec team with the ability to approve new policies as part of their workflow to mitigate risk and ensure compliance.

"It was important for us to have a single vision for how authorization is handled across multiple architecture layers."

– Dmitry Tepper, Senior IT Enterprise Architect

Results

The platform and its out-of-the-box authorizers gave their infosec team full visibility and consistent management of end-to-end connections between identities and data for their loan approval projects. By distributing policy enforcement closer to the data, Freddie Mac maintained stronger security, improved application performance and productivity across multiple teams and projects.

Application and microservice development were no longer slowed down by security requirements. They were able to build and deploy access policies according to their business need within hours instead of months by using a PlainID authorizer for Istio which extended the platform's capabilities and fine-grained authorization for service-to-service traffic.

Microservice and API developers also gained more secure access to AWS environments relevant only for their own projects through a PlainID authorizer for AWS API Gateway. Similarly, the data team was able to restrict access to sensitive BI data for analysts through fine-grained authorization enforced with PlainID authorizers for data layers such as Dremio and Denodo.

The migration from legacy OES to the PlainID Authorization Platform brought centralized management and productivity improvements to multiple projects and their respective teams.

As Freddie Mac continues to modernize their architecture with PlainID as the foundation for authorization, the enterprise architecture team plans to add token enrichment via a PlainID authorizer for Ping Identity as well as delegated authorization management capabilities to streamline B2B authorization for external third parties.

ABOUT PLAINID

PlainID is the world's leading provider of enterprise Authorization, helping enterprises address the complex challenges of Identity Security. The PlainID Platform allows you to discover, manage, and authorize access control policies for enterprise applications and data. Our solution is architected to protect against identity-centric security threats powered by Policy-Based Access Control (PBAC). Visit PlainID.com for more information.

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