

Enhancing Data Access Control and Governance through Policy-Based Access Control (PBAC) for a Global Professional Services Company

A leading global professional services company operating in over 120 countries with a Fortune Global 500 client base embarked on a mission to transform its data access control framework. Previously reliant on a Role-Based Access Control (RBAC) system, the organization faced challenges as its applications grew in number and complexity. To address the limitations of their existing RBAC approach, the organization sought a centralized, streamlined solution for dynamic data access control. PlainID's Policy-Based Access Control (PBAC) platform emerged as the preferred solution, offering dynamic, fine-grained authorization integrated with systems such as Google BigQuery, PowerBI, and PostgreSQL.

CHALLENGES

As the organization scaled its services and applications, it faced an array of access control challenges that compromised operational efficiency, security, and governance. Managing data access for over 300 internal workforce applications and multiple data platforms, the organization needed a centralized and scalable solution. Key challenges included:

- **Fragmented Authorization:** The organization's existing approach to data access relied on authorization logic embedded in individual applications and data platforms Google BigQuery and PowerBI. This fragmentation led to inconsistencies, as each application implemented access controls independently, complicating management and compliance monitoring.
- **Scalability Limitations:** The company's RBAC platform could not fully support its expanding application ecosystem. With over 300 applications, many of which couldn't integrate seamlessly with the existing system, scalability limitations restricted the ability to control and audit user access effectively, introducing potential security gaps
- **Compliance and Governance Requirements:** Maintaining regulatory compliance in a large-scale, multi-application environment demanded fine-grained, real-time access controls. Fragmented policies and a lack of centralized oversight posed risks to the organization's ability to meet stringent regulatory standards and safeguard sensitive data across its systems

PBAC is essential for data access control because it ensures that only the right individuals have access to sensitive information, regardless how they are accessing the data. This approach aligns security with user context and minimizes risks by enforcing least-privilege access based on each user's unique identity profile.

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INDUSTRY: Technology Consulting

EMPLOYEES: 500,000+

HQ/Location: Dublin, Ireland / Global

CHALLENGES

- Fragmented authorization across 300+ applications and data platforms
- Scaling issues with RBAC
- Limitations of coarse-grained access control
- Poor data governance & compliance

SOLUTION

PlainID's PBAC centralized and streamlined authorization, enforcing real-time, fine-grained data access control across cloud and on-premises systems. This enhanced data security, supported governance through consistent policy enforcement, and scaled with infrastructure growth.

SOLUTION

To address these challenges, the organization implemented PlainID's Policy-Based Access Control (PBAC) platform, a centralized solution designed for real-time, fine-grained authorization across applications and data platforms.

Key Features and Implementation Highlights:

- **Centralized Policy Management:** PlainID's platform established a single control plane for managing access policies for over 300+ applications, decoupling authorization logic from individual applications. This centralized approach enhanced governance by providing a consistent and transparent method for enforcing policies organization-wide. Developers could externalize access control from application code, simplifying management and re-use policies for datasets across different applications without having to change application code.
- **Real-Time, Fine-Grained Authorization:** PBAC enabled the organization to implement identity-aware authorization based on user and data attributes. This fine-grained control ensured precise access decisions that aligned with regulatory requirements, supporting both the organization's compliance needs by allowing for granular, context-driven access management.
- **Integration with Core Data Platforms:** PlainID seamlessly integrated with key data platforms, including **PowerBI** and **Google BigQuery**. The platform enabled row-level and object-level filtering by discovering, managing, and orchestrating policies for PowerBI. With Google BigQuery, PlainID's Authorizer allowed the organization to handle high query volumes—up to 250,000 queries per hour—with secure, real-time access enforcement.
- **SDK Integration for Business Critical Applications:** PlainID enabled core business applications to integrate with minor code changes, externalizing and providing consistent authorization decisions that are contextually aware of the user. This approach allows for real-time, fine-grained control over data displayed to the user.

BUSINESS RESULTS WITH PLAINID



IMPROVED SECURITY & COMPLIANCE

Strengthened Security Posture:

Fine-grained, real-time access controls reduced over-privileged access and ensured that only authorized users could access sensitive data – improving compliance with internal policies and external regulations.



OPERATIONAL EFFICIENCY

Reduced Administrative Overhead:

Automated access requests and real-time policy enforcement allowed the organization to streamline operations, saving time and resources while enabling faster responses to access requests.



SCALABILITY & FLEXIBILITY

Support for Growing Infrastructure:

As new business units, platforms, and applications were added, the access control system easily adapted, allowing for seamless growth without requiring major system reconfigurations.

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. Visit PlainID.com for more information..