

SAP Enforcer

Enforce ABAC & Externalize Authorization



OVERVIEW

Business success nowadays often hinges on the ability to share information quickly and easily across organizations and geographies. This includes sharing road maps, product designs, inventory forecasts, etc., both internally and externally (e.g. with contractors, suppliers, and partners). However, challenges abound when trying to strike a balance between giving stakeholders access to sensitive data on one hand and the need to protect the “crown jewels” while adhering to applicable compliance requirements on the other.

THE SOLUTION

NextLabs SAP Enforcer provides granular access control and data governance for SAP applications. Through NextLabs’ patented Dynamic Authorization platform, organizations can leverage attribute-based access control and centralized policy management to improve their security and compliance posture for SAP.

SAP Enforcer prevents unauthorized access to sensitive SAP data through fine-grained access controls, allowing customers to protect data and address compliance requirements at the same time. Ultimately, SAP Enforcer enables employees and external partners to share critical information, which encourages collaboration, boosts workplace productivity, and increases business agility.

THE RESULTS

SAP Enforcer is a scalable data security solution that protects SAP data in real-time. Benefits include the following:

- **Protect sensitive data** - Leverage a transaction - and data-level access management system to secure access and protect data across all SAP applications. SAP Enforcer’s policies control access to business functions and sensitive customer data based on attributes such as data classification, environmental information, user roles and metadata, location, and client system.
- **Ensure compliance** - Create information barriers to segregate regulated data or between confidential projects to avoid data spills or contamination. Manage, educate, enforce, and audit access policies to sensitive corporate data to ensure compliance with regulations such as GDPR, ITAR/EAR, and SOX.
- **Streamline compliance** - Automate the process of auditing authorization and data access to demonstrate compliance to auditors, regulators, and customers. SAP Enforcer provides comprehensive visibility about who is accessing what data and when, identifies anomalies before they become major breaches, and monitors and tracks events for audit, oversight, and investigation.
- **Reduce security and compliance management costs** - Eliminate the need to implement and maintain costly customizations to meet security, compliance, and governance requirements. Attribute-driven dynamic authorization eliminates the need to maintain multiple SAP instances or manage individual authorization or user groups.
- **Improve business agility** - SAP Enforcer works natively with SAP and manages authorization logic through an externalized, standardsbased policy framework. As a result, this slashes application development time and automates change management processes, thereby enhancing business agility.

KEY FEATURES

Attribute-Based Access Control (ABAC)

ABAC solutions control access to data, business transactions, and batch processes based on policies that examine attributes of the data being accessed, the context of the request, and the user's identity.

SAP Enforcer takes into account any changes in the attributes of the data or the user and dynamically applies the relevant policies to enforce fine-grained access controls across a wide range of business functions. For instance, a rule may state, "Allow only US-based employees to access ITAR-classified materials from US locations." When a user attempts to access materials, this rule is validated in real-time before access is granted.

This flexibility greatly streamlines change management processes by reducing the need to develop customized code to modify existing roles every time they must be updated, i.e., to account for changes in a user's business function, organizational assignment, location, etc.

Centralized Policy Management

Authorization policies can be centrally managed and reviewed across all of an organization's SAP applications, substantially reducing administration costs.

Dynamic Runtime Policy Enforcement

SAP Enforcer uses contextual information (e.g., location, device, department) to determine if a user is authorized to access data at runtime. It also segregates the data virtually with view- and field-level security controls for added granularity. Ultimately, SAP Enforcer simplifies role administration as conditions and attributes change.

Extensive Support of SAP Applications

SAP Enforcer is an out-of-the-box, SAP-endorsed solution, integrated with several SAP applications natively, including SAP ERP, SAP S/4HANA®, SAP Fiori®, SAP Advanced Planning and Optimization, SAP Business Warehouse, SAP Customer Relationship Management, SAP ERP Human Capital Management, SAP Product Lifecycle Management, SAP Document Management System, the Public Sector Management module, and the Collaboration Folders application.

Security Classification Module

Because classification is crucial to data-level access control rules, SAP Enforcer includes a module that simplifies the process of identifying and maintaining classification values to address multiple security and compliance concerns at the same time. Security classifications can be easily configured, extended, and managed using batch, interactive, or programmatic interfaces.

ABOUT NEXTLABS

NextLabs®, Inc. provides zero trust data-centric security software to protect business critical data and applications. Our patented dynamic authorization technology and industry leading attribute-based zero trust policy platform helps enterprises identify and protect sensitive data, monitor and control access to the data, and prevent regulatory violations – whether in the cloud or on premises. The software automates enforcement of security controls and compliance policies to enable secure information sharing across the extended enterprise. NextLabs has some of the largest global enterprises as customers and has strategic relationships with industry leaders such as SAP, Siemens, Microsoft, AWS, Accenture, Deloitte, Infosys, and IBM. For more information on NextLabs, please visit <http://www.nextlabs.com>.

NEXTLABS®

Extensible to Custom Applications

In addition to native support of several SAP applications, SAP Enforcer provides a framework utilizing API calls that can be leveraged within custom applications (aka "Z Programs").

Granular Data Filtering

SAP Enforcer ensures that users can only view records or other data to which they have been granted access. Authorization can be determined based on the industry, location, department, position, project assignment, or any other attribute of the user, which can then be compared against other attributes of an entity or record such as sensitivity level, type of transaction, etc. For example, you can filter data in charts and reports to quickly identify inventory shortages in Thailand.

Safeguarding of Business Transactions

Users can be given permission to view a set of data and other entities while being authorized to edit, create, and delete only a subset of these records. For instance, a finance manager may be given permission to view detailed cost information on all oil pipeline projects in North America but only allowed to create and edit information for similar projects in Texas.

Enforcement of Segregation of Duties

SAP Enforcer enables the creation and real-time enforcement of segregation of duties policies, ensuring that no single individual can control all phases of a process or transaction. For instance, to reduce the risk of fraudulent behavior, no person should be able to both create a vendor profile and initiate a payment to said vendor.

User Attributes and Identity Management Integration

User attributes can be leveraged from existing sources, including SAP Central User Administration, Identity Management, Human Capital Management, and other thirdparty identity management providers, directory servers, or federated identities.

Centralized Audit and Monitoring

SAP Enforcer tracks and stores user activities and data access across all SAP applications in a central audit server, simplifying compliance management. Analytics for user behavior and access patterns are provided via dashboards, reports, and automated monitoring facilities.