

Data Access Enforcer for Atlassian Bamboo

Control Global Data Access from Anywhere



OVERVIEW

Atlassian Bamboo enables organizations to automate and streamline the product development and delivery process, so data security products can also be automated. Data security policies must be dynamically evaluated at the time of the access request, so that any changes in the user, data, or environment are incorporated into the decision to grant access. Organizations that have data security policies to ensure compliance must ensure those policies are enforced on CI/CD platforms like Bamboo, where many steps have been automated.

Since Bamboo is deployed in conjunction with other Atlassian products, like Confluence, JIRA, and BitBucket, policies must be consistently enforced across all products. Automation removes manual checks, and by removing those manual steps there is less likelihood of human error. Organizations that take advantage of this automation to automate their data security policy enforcement can end up with a much more secure and robust process than manual alternatives.

THE SOLUTION

NextLabs Data Access Enforcer for Atlassian Bamboo provides dynamic data-level security controls and fine-grained data access governance for data in Bamboo and other Atlassian products like Confluence, JIRA, and BitBucket. This complements the protection provided by Bamboo's built-in access controls. Through NextLabs' patented Dynamic Authorization platform, organizations can leverage attribute-based policy and centralized policy management to improve their security and compliance posture for Bamboo. DAE for Atlassian Bamboo enforces policies based on the identity of the Bamboo user and can enforce data-level security controls - such as field-level data masking and record level data segregation and monitors data access activity directly from within the data access layer of Atlassian Bamboo.

DAE for Atlassian Bamboo prevents unauthorized access to data in Bamboo through fine-grained data-level security controls, protecting data and addressing compliance requirements at the same time. DAE for Atlassian Bamboo enables organizations to secure the automated product development and delivery process provided by the Bamboo platform with a seamless integration that can be deployed with zero code and no disruption to existing Atlassian Bamboo systems.

THE BENEFITS

DAE for Atlassian Bamboo provides the following benefits:

- Externalize authorization management to simplify and reduce the time spent on administering access control policies
- React more rapidly to changes in business requirements, market conditions, or regulatory environment with policy changes that can be made without code changes or application downtime
- Lower your total cost of ownership by leveraging your existing investment in the NextLabs platform
- Reduce the cost of compliance through more efficient and cost-effective monitoring and auditing of your data

Key Features

Feature	Detail
Real-time enforcement of attribute-based access policies	Access to data based on policies that examine attributes of the data being accessed, the context of the request, and user identity. DAE dynamically applies the relevant policies, factoring in changes in the attributes of data or the user to enforce fine-grained entitlement and security controls to data regardless of where or how the data is being accessed. Rules are validated in real-time when a user attempts to access data, only then granting access.
Field-Level Data Masking	DAE ensures that users can only view the fields on the record to which they have been granted access, dynamically masking the value of the field for which users are not authorized. It uses policy-driven approach to mask the data in the unauthorized fields based on attributes at the time of data access. These centrally managed policies define masking patterns and rules to determine who, what, when, where, and why to mask field(s) in real-time.
Format Preserving Encryption (FPE) Data Masking	Data can be masked at rest or in motion such that the masked data preserves the length and format of the original data, making the masking non-obvious to unauthorized users and maintaining application dependencies. Masking can be reversed to allow authorized users to view the original data. DAE for Atlassian Bamboo includes a built-in FPE library or can integrate with 3rd party encryption tools. DAE's Bulk Obfuscation Tool (BOT) makes applying FPE masking at rest consistent and straightforward across all affected tables and fields pre- and post-implementation of DAE.
Record-level Data Segregation and Filtering	DAE ensures that users and entities can only view records or data they are authorized to access and that sensitive records are excluded. 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, workflows in Bamboo may require access to sensitive data that should only be accessed by a restricted group of users. Those records can then be excluded when other users or entities attempt to access the data.
Centrally Managed Policies	Authorization policies can be centrally managed and reviewed across all an organization's applications, substantially reducing administration costs.
Centralized Monitoring and Auditing	DAE tracks and stores user activities and data access across all 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.
Out of the Box Integration	DAE for Atlassian Bamboo integrates with Atlassian Bamboo systems through an application extension with no custom code required. Data models incorporate Atlassian Bamboo's object structure for seamless integration.

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>.