

Devvio Records Management

KEY FEATURES

Devvio's scalability allows records to be held on a blockchain at costs and scale on par with current database management systems, but with the added benefits that blockchain gives such as security and decentralization.

Records are held on an immutable ledger, providing a secure and auditable history. As records are updated over time, all changes are permanently recorded in time-ordered transactions.

Devvio innately provides for full disaster recovery and fully prevents ransomware attacks.

Devvio Records Management is flexible and can be used to record any type of record. Additionally, it is easy to onboard existing data, and work with existing systems with our RESTful API. Devvio's ability to maintain a full history of immutable and auditable records enables new levels of reporting, security, interoperability, compliance and privacy of records at global scale and cost.

Devvio Records Management

Devvio's blockchain technology is ideal for maintaining any type of record. Devvio Records Management provides a highly secure system, an immutable ledger for accounting and auditability, privacy, access controls, decentralization, and wide interoperability. Given Devvio's scalability, for the first time, these blockchain benefits can be implemented to maintain records at global scale and cost effectiveness.

Many types of records, such as government and healthcare records, need to be secure while ensuring that parties to a transaction have maximum privacy and confidentiality, that records are maintained under regulatory compliance, that the system is fully secure, and that data is only accessed on a need-to-know basis. Fulfilling all of these constraints is easier said than done, particularly when many organizations need to work together across multiple records datasets. Centralized databases expose single points of failure and are prone to costly security breaches. Reconciling multiparty transactions across individual and private ledgers is slow and expensive and often results in unreliable and inconsistent data. Digital signature technologies come at a high cost, and the certificates are difficult to acquire. Additionally, there's also uncertainty around the impartiality of third-party providers. Besides technology hurdles, the significant growth of global cross-industry regulations over the past 10 years further complicates records management.

Devvio Records Management enables increased levels of reporting, auditability, compliance, security, interoperability and privacy of data.

Devvio Records Management ensures users are in control of their Personally Identifiable Information (PII) and entities that rely on the identity representations can be assured, through a highly secure system, that third party verifiers have verified an identity to the level they report.

User records can have selective exposure – users can provide only the information that is needed for a specific purpose.

There is no central authority overseeing or owning records information, so users can trust that their data will not be used inappropriately.

Throughput can support millions of transactions per second.

Devvio provides a cost-effective solution even at scale.

Records can exist and be maintained as long as needed. Longer term records that are infrequently accessed can be moved into more cost-effective storage solutions.

Devvio provides a highly interoperable solution that can be used widely across many different organizations and use cases.

Records can be transported across organizations or jurisdictions.

With Devvio's Records Management, all of these challenges are solved within a large-volume and high-throughput records management system. Devvio Records Management provides absolute proof that records are authentic and unaltered, can track incremental changes and revisions, establishes trust not only in the origination of a record but in its full provenance over time, has enhanced auditability, provides instant and regulated accessibility, and does so with best-in-class security.

Devvio Security

One of the central issues and concerns around records management is the high level of security required to protect the data. Devvio's security OS delivers best-in-class security benefits, solving the major problems facing cybersecurity professionals today. For over three decades, Byzantine fault tolerance (BFT) has become the gold standard for security in distributed systems. As the name suggests, Byzantine fault tolerance means that a system can tolerate (i.e. still achieve consensus in the presence of) Byzantine faults — the category of faults where nodes may be malicious. In effect, this means that there is no central point of failure, and even if a number of servers in a network are compromised, the system as a whole maintains its integrity and security. This is important as it provides a trustless solution in which many different companies or partners can all work together on the same platform, share the same data structures, and coordinate across a wide variety of technical implementations, while still maintaining privacy.

Blockchain has not been able to be effectively applied to large-scale records management security use cases because of cost and throughput requirements, but Devvio's solution, for the first time, gives a practical solution to using blockchain at the scale required for real-world global deployment. Devvio has built a large patent IP portfolio around the security and privacy capabilities and enabling technology in this space.

Devvio Immutability

Devvio's ability to create a blockchain ledger that will remain a permanent, indelible, and unalterable history of transactions is a definitive feature that is a key element for Records Management and a key benefit for security systems. Additionally, Devvio's immutable records are distributed and held across multiple computers.

Devvio's blockchain implementation brings an unprecedented level of trust and disaster recovery to the records management space. The immutability and decentralization provide full data integrity and disaster recovery capabilities ensuring that the information they have recorded has not been tampered with, while simultaneously transforming the audit process into an efficient, sensible, and cost-effective procedure.

Devvio Interoperability

Where most security approaches look to harden central points of failure, with Devvio's Security OS, there is no central point of failure.

Devvio smart contracts enable automation of records processes.

Devvio implements shared frameworks that adhere to regulatory requirements.

Data can be encrypted on both public and private shards, and references to off-chain data can be maintained on-chain.

Devvio provides security solutions that enable identity, authentication, resiliency, information reliability, and assured access to communication networks and digitized assets.

Devvio's solution allows privacy to protect an enterprise's private data even while engaging in multiparty collaboration.

Devvio Records Management has EU GDPR compliant mechanisms.

The ability to securely and reliably interconnect multiple systems is a challenge in the records management domain. Although blockchain is not innately a data integration tool, distributed ledgers are inherently designed to offer shared visibility of data. Thus, Devvio's blockchain technology provides for new levels of interoperability. Devvio enables seamless interoperability solutions, easily integrating existing traditional databases with our blockchain platform. Devvio's solution provides a backbone to support connection and cooperation across established technologies, with quick onboarding of traditional data and intuitive integration with existing processes using tools such as our RESTful API, all of which is critical for global records management.

Regulatory Compliance

Devvio Records Management has regulatory and compliance mechanisms that can be implemented and automated to ensure requirements are met and recorded on an immutable ledger both inside and across jurisdictional boundaries. A highly secure and immutable record of all transactions, where all participants' interactions are cryptographically secured, provides an ideal system for auditing and compliance. Devvio's Security OS, which underlies our records management capabilities, also works within important regulatory contexts including the EU General Data Protection Regulation (EU GDPR), Payment Card Industry Data Security Standard (PCI-DSS), and numerous breach notification laws. Various organizations such as the Center for Internet Security (CIS) and U.S. Department of Defense also have recommendations for security configuration best practices in which Devvio's technology enables compliance. The importance of flexible security controls cannot be overstated as new regulations are being released and existing regulations are constantly evolving around IG and records management.

Identity and Access Management

With Devvio's records solution users are in control of the use of their identity and the records associated with them. Entities that rely on these identity representations can be assured, through a highly secure system, that third party verifiers have verified an identity and the information associated with it. In Devvio's paradigm, it is the control of identity information, rather than the information itself, that becomes important, which is the future of identity across the globe. This Devvio identity is then the foundation for providing Access Management (AM) capabilities. Devvio AM enables the process of identifying, tracking, controlling and managing authorized or specified users' access to a location, system, application, or any IT instance such as a personal record or physical structure. It is a broad concept that encompasses all policies, processes, methodologies and tools to maintain access privileges within an IT and physical environment.