



Devvio

THE Enterprise Blockchain

<https://devv.io>

“Blockchain For Business”

Forbes

Devvio Automation Management

KEY FEATURES

Devvio’s smart contracts enable automation of all Devvio’s products and solutions.

Devvio automation enhances agility, productivity, operational efficiencies, reduced risk, regulatory compliance and transparency.

The Devv Blockchain is Byzantine Fault Tolerant. It is distributed and all transactions are assured through a consensus protocol.

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

The Devv blockchain can support tens of millions of transactions per second.

Devvio can maintain both short-term and long-term storage for an immutable record of transactions. This provides full backups, disaster

Given Devvio’s ability to implement on-chain smart contracts, processes involving any of Devvio’s products or solutions can be automated. Devvio’s smart contract automation can be thought of as the execution layer for a Business Process Management (BPM) solution - an automated solution that enhances agility, productivity, operational efficiencies, reduced risk, regulatory compliance and transparency on a platform that provides the added benefits of Devvio’s security, scale, cost and privacy.

Devvio Automation Management

One of Devvio’s biggest value propositions is the ability to automate Devvio products and solutions. These capabilities have been proven with traditional BPM services which have been around for decades. The difference, however, is that traditional BPM services tend to handle internal workflows within a single organization only. They do not manage the workflow process and information across organizations. In situations where BPM management can work across organizations, there are the added problems of inefficiencies and maintaining a trusted centralized repository of information controlled by a third party. Many businesses simply do not want to use that approach. If a third party holds data and is responsible for passing it from one organization to another, there are many risks including a central point of failure, privacy, and security. Fundamentally a single third-party has access to all the private data of the participating organizations.

Devvio’s Automation Management solves these problems. Devvio provides for privacy that lets the participants and counterparties

recovery, and prevention of ransom attacks.

Devvio's Security OS provides a cost-effective solution even at scale. Devvio provides a backbone for designing and implementing shared operational and technical frameworks.

Devvio implements shared frameworks that adhere to regulatory requirements.

One of Devvio's key enabling elements is the patented ability to implement, manage and scale independent shards horizontally without sacrificing global state management.

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

KEY BUSINESS BENEFITS

Devvio Automation Management can deliver best-in-class BFT solutions at a cost and scale that drives strong ROI for enterprise use cases.

Devvio is able to support automation, greater control, granularity and trust to data and asset sharing. This will represent a core catalyst for Communications and IoT business models involving broader ecosystems and will solve some of the most pressing issues for the future of Communications and IoT networks.

Devvio can extend a best-in-class Security overlay for all extended automated solutions including IoT, Financial Services, Payments, Compliance, Identity, Mobility and Supply Chain.

Devvio provides security solutions that enable identity, authentication,

maintain control of their own data, while also providing for a public backbone where companies can work together in areas that require collaboration, such as logistics, payments, or IoT.

By leveraging Devvio smart contracts and the auditability of Devvio's immutable blockchain, Devvio can facilitate processes involving multiple parties. In these scenarios, the Devvio blockchain is being used not only as a way to automate business processes but also as a way to share documentation, communicate information, and track different states of transactions. Integration of these systems with existing workflows and back offices provides better visibility among all participants. This does not require all parties to adopt the Devvio platform. Instead, Devvio enables simple integration of legacy infrastructure into new networks which are able to provide improved functionality.

Devvio's blockchain technology allows for the creation of a peer-to-peer automated system that eliminates the central repository of information and allows multiple corporations to exchange information directly with counterparties while guaranteeing the integrity of the process. The system allows for organizations to verify and enforce requirements that specific steps are being taken and performed correctly by any party on the network. With Devvio Automation Management, one can code guidelines into smart contracts, and the verification of those transactions can be independently verified by anyone, while still allowing for privacy.

The result is a platform in which all parties can trust operations, while relying on security and privacy.

Devvio Smart Contracts

Devv implements extensible smart contract capabilities using a directed acyclic graph of oracles that checks each state transition or contingency of a contract for validity and soundness. Smart contracts in the Devv system follow a declarative structure consisting of references, parties, initial conditions, event conditions, triggers that react to events, and execution requirements. The Devv system uses a canonical and declarative contract structure rather than procedural scripts, since these are more analogous to the real-world structure of smart contract needs. Contracts within the Devv network can react based on integrations with external systems. Like any transactions on Devv blockchains, contract contingencies can be settled immediately and irreversibly or protected in escrow for some predetermined time period. Each oracle provides one atomic operation for the decomposition or processing of contracts, so new types of contracts can be composed by rearranging the graph of oracles. The declarative structure makes it easier to write and understand a contract without requiring specific knowledge of the implementation details of the underlying oracles.

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's security OS has EU GDPR compliant mechanisms.

Devvio Security

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. Devvio enables the deployment of a Byzantine Fault Tolerant security backbone across the entire communications and IoT network providing security solutions that enable identity, authentication, resiliency, the reliability of information, and surety of access to communication networks and digitized assets. Devvio has built a large patent IP portfolio around the security capabilities and enabling technology in this space. This security component is critical to enabling the automation of Devvio products and solutions.

Devvio Best-in-Class Scale

One of the top technical challenges facing Blockchain technology deployment is the ability to scale and do so at an effective price point while maintaining security. These requirements are foundational to running secured networks in mission-critical, high-risk and high data volume (sometimes low-bandwidth) environments. Devvio has solved the sharding problem, enabling horizontal scaling and therefore a solution for scaling challenges in a global multi-enterprise automated solution.

Devvio Interoperability

The ability to securely and reliably interconnect multiple networks and systems is a challenge in the Communications and IoT realm. 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.

Multiparty Collaboration

While interoperability is typically viewed as a technical or standards hurdle between data sets, devices, networks, etc., it is also a deeply ingrained cultural hurdle. Traditional business instinct is competitive, proprietary and walled off, and is not interdependent or shared. This friction has challenged the current Communications or IoT market as traditional product-based business models are being forced to data-driven service-based business models, which inherently require an ecosystem to deliver. The level of collaboration required for the successful and sustainable deployment of modern communication networks is significant. The range of interactions between previously disparate parties will continue to grow. Devvio protects these disparate parties. Blockchain will not only allow all participants to come together but will also provide for integrations with new laws, rules, liability frameworks, standards, and processes. Like Communications and IoT, the potential value of any blockchain configuration is a function of the “network effect” where the number of participants is a large part of the value of the network as a whole. Devvio’s technology enables a multiparty system that will represent a core catalyst for future Communications and IoT business models. Devvio’s technology allows broader ecosystems and solves some of the most pressing issues for the future of Communications and IoT networks.

Regulatory Compliance

Devvio’s Security OS 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 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 the most valuable asset of many organizations – their data.