

IBM Blockchain Platform for financial markets



How important is the security of your enterprise data?

Blockchain is poised to revolutionize how the financial markets do business. The reason— it allows organizations to completely redesign traditional business flows.

Briefly, blockchain is a decentralized distributed ledger that is shared across members in a business network. This technology changes transaction tracking from a siloed, duplicated model to a model that provides a common view across the network.

Because blockchain uses consensus to commit transactions to the immutable ledger, results are final. In addition, since each member holds a copy of this ledger, asset provenance and traceability are transparent.

By improving transparency throughout the transaction, blockchain technology can strengthen the trust upon which the financial markets rely. And by automating this transparency, organizations within the industry can reap the rewards of increased trust coupled with reduced transaction costs.

The market reality

Blockchain can transform how organizations do business in the financial markets industry. For example, blockchain can help your organization:

- Enable compliance with know your customer (KYC) by creating a cross-location view of customer identity
- Improve private equity fund management by recording documents and information connected to transactions involving the fund
- Streamline collateral management in securities lending by automating the complex collateral management workflows with smart contracts on blockchain
- Reduce securities trade settlement in low liquidity markets by automating the end-to-end multi-party interactions from trade execution to settlement on the blockchain

The IBM solution

IBM delivers blockchain technology with the IBM® Blockchain Platform in the IBM Cloud. These services provide a fully managed blockchain service running on IBM LinuxONE™ in the IBM Cloud, delivering secure-rich, isolated compute environments that are ideally suited for workloads with sensitive data.

The IBM value proposition

The IBM Blockchain Platform is an integrated, business-ready blockchain platform that addresses the full lifecycle of development, governance and operation of a multiorganizational blockchain network. It's designed to accelerate the creation of a *built for business* global blockchain network through collaboration in each phase. The IBM Blockchain Platform provides capabilities that are designed to meet the needs of virtually any organization, no matter where it is in its blockchain journey.

IBM Blockchain Platform is built upon IBM LinuxONE and the Secure Service Container technology. This foundation gives you significant additional protection against security breaches by including:

- System and fabric code that are protected from malware
- A service that is tamper-resistant, even from privileged administrators
- Cryptographic keys that are secured in the hardware security module (HSM) and certified to the highest industry standard, FIPS-140-2 Level 4
- Encryption of data that's used for communications and at rest to ensure privacy
- EAL5+ certification of IBM LinuxONE to satisfy multi-tenant isolation requirements

Finally, rich tooling radically simplifies development as well as lifecycle updates. And it includes monitoring so you can optimize the value created by your blockchain.

How to move forward

IBM has extensive experience with shared network data and infrastructure security. You can take advantage of this IBM expertise to:

- Connect your innovation and line of business teams with IBM financial markets industry expertise to help develop a use case. Then an IBM Garage team can provide blockchain education, and evolve your use case into a pilot product for a first project.

