

# InfraBlockchain

## The Trust-based Enterprise Protocol

### InfraBlockchain, the New Baseline of Trust

Until a few years ago, the blockchain technology was something unfamiliar to the most people. Now, it is considered and being carefully studied as the technology that can guarantee the data integrity, the transparency of transaction history, and the fair and effective work process.

Although the blockchain technology was originally designed to be a permissionless network, and therefore had difficulties getting the businesses and the governments – that are mostly concerned about publicly exposing their data – to adopt the service, engineers have created a new design of the technology as a private network.

Many private blockchains, such as Hyperledger Fabric, Coda, and Quorum, are offering ways for the businesses and the governments to use the blockchain technology to transparently and securely process data. At the same time, however, private blockchains are designed to provide solutions to specific use cases, and are often criticized for its scalability and flexibility to be used generally.

Ultimately, for the blockchain technology to fully demonstrate its technological prowess, it is important to resolve the limitations of a private blockchain and to replicate the technical advancements of a public blockchain in a private blockchain.

Blockchain Labs is actively developing a scalable blockchain technology that can overcome the limitations of a private blockchain and apply the strengths of a public blockchain.

**InfraBlockchain**, Blockchain Labs' enterprise solution, is designed to maintain the technical advantages of a public blockchain while satisfying the needs to privately secure sensitive data and to follow legal and societal regulations.

### Fiat-based Blockchain

A public blockchain is a permissionless network that depends on a cryptocurrency to provide economic and privacy structure. **InfraBlockchain**, which can be developed as either permissioned or semi-permissioned network, only uses fiat-pegged (reserved) tokens issued by the trusted entities, and does not use any volatile cryptocurrency.

### Consensus from Actual Users

Unlike the consensus mechanisms that favor the nodes with more financial resources (both Proof-of-Work and Proof-of-Stake), **InfraBlockchain's** unique Proof-of-Transaction consensus mechanism allows individual users that actually perform transactions to vote for the block producers. This can create a selection of block producers that are committed for the network's security and validity, instead of those that are committed for financial incentives.

### Selective Anonymity

The main problem that the blockchain technology faces is that all transactions are openly recorded and shared to every node in the network.

**InfraBlockchain** offers an anonymity solution to selectively apply to services that require secret ballots or services that do not necessarily require identity validation. Anonymous transactions on **InfraBlockchain** are secure, can be validated, but will not reveal the account identity.

## All-in-One Enterprise Blockchain

**InfraBlockchain's** key technical highlights are listed below:

- Semi-permissioned or permissionless network
- Proof-of-Transaction (PoT) consensus mechanism
- Fiat-based transaction fee model
- Option to waive or to have the service provider pay the transaction fees
- Selectively anonymous transactions
- Extremely low latency with a block produced in every 0.5 second
- 4,000+ TPS
- WebAssembly-based smart contract
- EVM & Solidity support (Ethereum compatibility)
- Flexible module add-on/update structure
- Able to upgrade the system without any network interruption
- Communication using HTTP-RPC or WebSocket

Furthermore, we provide additional tools to help operate an enterprise blockchain:

- Node operating & monitoring tools
- Backup & Restore tools
- Expired data removal tools
- Inter-blockchain communication tools
- Data migration tools

Currently, **InfraBlockchain's** enterprise features are customized per each order, but will be available as a pre-packaged solution by late 2020.

For more information, please visit our [website](#) or read our [whitepaper](#).

## Future-proofing State-of-the-art Technology

The blockchain technology is one of the hottest technologies that will continue to be developed and updated. If a system is not designed to adapt and adopt new developments, it may become outdated in just a few months.

Especially in the case of the blockchain technology, which is difficult to disrupt once it goes online, it may be impossible to add new features or update the network if you just use any existing solution.

Blockchain Labs' Blockchain Core Development Team features elite blockchain engineers with proven accomplishments at the global open source projects, and is actively developing the most advanced blockchain technology in the world. Our system can continue to evolve without being disrupted, so it will effectively adapt to newer technologies.

Furthermore, because Blockchain Labs' blockchain solution is meant to be a general-use blockchain system, it is possible to expand an existing system for different use cases. For example, if the blockchain system needs to incorporate Decentralized Identifiers (DID) service to the existing system designed for regional currency circulation, two systems can be used together rather than creating an additional blockchain system. This offers flexible and cost-efficient ways to operate a blockchain system.

## InfraBlockchain Use Cases

**InfraBlockchain** had already been acknowledged for its capabilities and is being used operate a blockchain-based regional currency and payment system in Berkeley, California, and was chosen to participate in the sandbox operated by Gyeongsangbuk-do, Republic of Korea, to develop a blockchain-based medical marijuana management system.

Unlike other existing blockchains that issued their native cryptocurrencies and sold them to make profit, **InfraBlockchain** was designed as a public-use blockchain that prevents the developers to freely profit from it. Regional and federal government ministries and other public sectors can use **InfraBlockchain** across various services to improve their efficiency without worrying about controversially favoring any private entity.