
Blockchain Name	Type	Consensus Mechanism Used	Permission Model	Speed / TPS	Smart Contract Support	Token Support	Typical Use Case	Notable Technical Feature
Ethereum	Public	Proof of Stake (Ethereum 2.0)	Open	~30–100 TPS	Yes (Solidity)	Native (ETH)	DApps, NFTs, DeFi	Smart contract platform, large dev community
Hyperledger Fabric	Private	Pluggable (default: Raft)	Permissioned	~1000+ TPS	Yes (Go, Java, Node.js)	No native token	Enterprise supply chains, finance	Modular architecture, high privacy
IBM Food Trust	Consortium	Practical Byzantine Fault Tolerance (PBFT)	Permissioned	~200–1000 TPS	Yes (via Hyperledger Fabric)	No native token	Food supply chain tracking	End-to-end food traceability, built on Fabric

Each blockchain platform has different strengths depending on the use case.

Ethereum, being a public blockchain, is best for open and decentralized apps. It supports smart contracts through Solidity and has a native token (ETH), but its speed is lower than others. It's ideal for things like DeFi, NFTs, or open digital marketplaces.

Hyperledger Fabric is a private blockchain designed for enterprise needs. It's fast, supports multiple programming languages for smart contracts, and offers high privacy. Since it's permissioned, only selected members can participate. It doesn't have a native token, which suits businesses that don't need crypto features.

IBM Food Trust is a consortium blockchain made for known partners to work together, especially in food supply chains. It's permissioned, fairly fast, and built on top of Hyperledger Fabric. It focuses on traceability and accountability, not on token use.

Platform Choices:

- For a **decentralized app**: **Ethereum**, due to openness and smart contract ecosystem.
- For a **supply chain among known partners**: **IBM Food Trust**, built for exactly that.
- For an **inter-bank financial application**: **Hyperledger Fabric**, because of speed, privacy, and control.