

Hyperledger

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HYPERLEDGER

BLOCKCHAIN TECHNOLOGIES FOR BUSINESS

Bloomberg
Markets

IT'S ALL
ABOUT THE

BLOCKCHAIN

BLYTHE MASTERS
IS BETTING
THE DIGITAL LEDGER
BEHIND BITCOIN
WILL REVOLUTIONIZE
THE WAY WE
TRADE BONDS,
LOANS, DERIVATIVES,
AND MUCH ELSE.

+
THE
INNOVATORS
BRAD KATSUYAMA'S
NEXT CHAPTER
A BANK FOR PEOPLE
WHO HATE BANKS
A HUNDRED APPS
BLOOM IN CHINA



Hyperledger Modular Approach



HYPERLEDGER

Distributed Ledgers



**HYPERLEDGER
BESU**

Java-based
Ethereum client



**HYPERLEDGER
BURROW**

Permissionable smart
contract machine (EVM)



**HYPERLEDGER
FABRIC**

Enterprise-grade DLT
with privacy support



**HYPERLEDGER
INDY**

Decentralized identity



**HYPERLEDGER
IROHA**

Mobile application focus



**HYPERLEDGER
SAWTOOTH**

Permissioned & permissionless
support; EVM transaction family

Libraries



**HYPERLEDGER
ARIES**



**HYPERLEDGER
QUILT**



**HYPERLEDGER
TRANSACTION**



**HYPERLEDGER
URSA**

Tools



**HYPERLEDGER
AVALON**



**HYPERLEDGER
CACTUS**



**HYPERLEDGER
CALIPER**



**HYPERLEDGER
CELLO**



**HYPERLEDGER
EXPLORER**

Domain-Specific



**HYPERLEDGER
GRID**



**HYPERLEDGER
LABS**



HYPERLEDGER

BLOCKCHAIN TECHNOLOGIES FOR BUSINESS

Hyperledger Modular Approach



Secure Private Chaincode in Trusted Execution Environments

Distributed Ledgers

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“Standard” smart contract engine

Libraries

 HYPERLEDGER ARIES	 HYPERLEDGER QUILT
 HYPERLEDGER TRANSACT	 HYPERLEDGER URSA

Tools

 HYPERLEDGER AVALON	 HYPERLEDGER CACTUS	 HYPERLEDGER CALIPER
 HYPERLEDGER CELLO	 HYPERLEDGER EXPLORER	

Domain-Specific

 HYPERLEDGER GRID
 HYPERLEDGER LABS



Secure oracle – Implements EEA’s Trusted Compute Specification

Blockchain Integration Framework

Platform for building supply chain solutions

On standardization of Smart Contracts

- Existing industry-specific standards ought to be reused
- Blockchain is still a very young technology, innovation is plenty which means lots of variations:
 - specific language (Solidity)
 - general purpose languages (Javascript, Java, Python, Go, ...)
 - formal proof oriented (Haskell)
- Smart Contracts interface with client and ledger but also with other components such as Oracles and Trusted Execution Environments