



Hyperledger Fabric v1

Fabric v1 is a Hyperledger blockchain implementation that allows participants to utilize both the confidentiality advantages of a permissioned blockchain and the scalability of a public blockchain

Key Capabilities

Confidentiality

Confidential Agreements: Only parties involved in an agreement can see and verify a transaction.

Scalable

Modular Design: limits the number of peers needed to execute every transaction, maintain a ledger, and run consensus.

Security

Allows networks to manage confidential obligations to each other **without** passing everything through a **central authority**.

Hyperledger Fabric



Fabric v1 is offered by one of the fastest growing open-source blockchain communities.

Key Capabilities

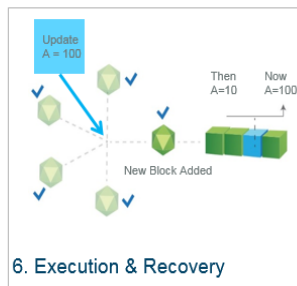
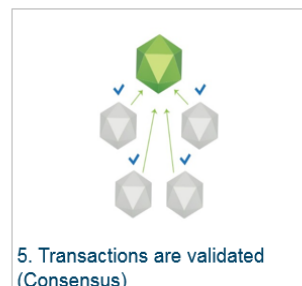
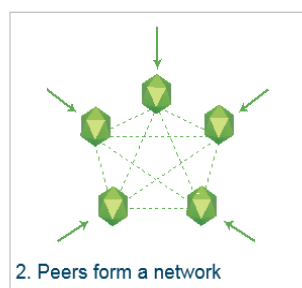
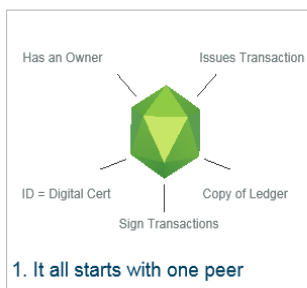
APPLICATION BACKEND

1. Manages end users and registers them with membership service
2. Initiates transaction requests, and sends the request to a node

MEMBERSHIP SERVICE

1. Issues enrollment certificate to each end user and organization
2. Issues transaction certificates associated to each end user and organization
3. Issues TLS certificates for secured communication between Hyperledger Fabric entities
4. Issues chain specific keys

How it works:



NON VALIDATING NODE (PEER)

1. Manages and maintains user certificates issued by the member service
2. Constructs transactions and forwards them to validating nodes
3. Maintains a local copy of the ledger, and allows application owners to query information locally

VALIDATING NODE (PEER)

1. Manages and maintains user certificates issued by the member service
2. Creates transactions
3. Executes and validates transactions with other validating nodes on the network
4. Maintains a local copy of ledger
5. Participates in consensus and updates ledger