

# Hyperledger Projects

Baohua Yang April, 2017

#### **About Me**

#### Researcher in IBM

-Fintech, Cloud and Analytics

#### Open-Source contributor

- Hyperledger, OpenStack, OpenDaylight, etc.

#### Hyperledger developer

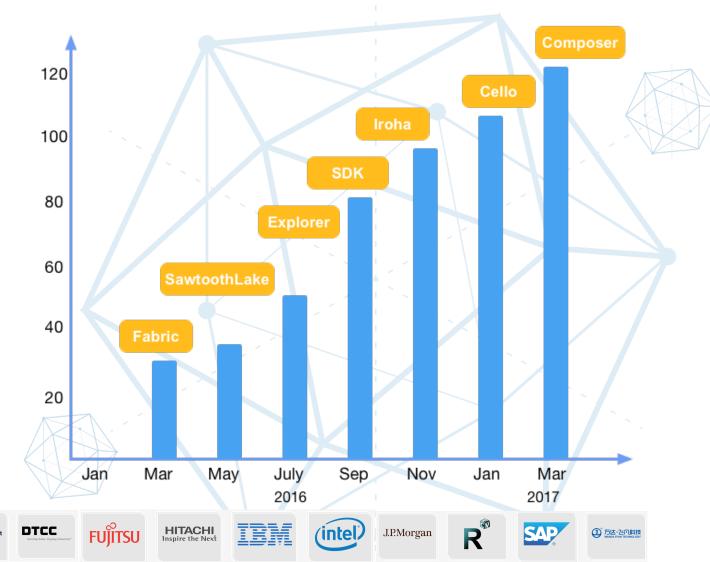
- -Code committer to <u>fabric</u>, <u>sdk</u>, <u>Cello</u> etc.
- -PTL of Cello project and fabric-sdk-py project
- -Chair of Hyperledger Technical Working Group China
- Drafter of fabric sdk spec and multi-channel consensus spec



#### Hyperledger Projects

- Since Dec 17, 2015
- Apache v2 License
- 30 founded members
- 30/129 (China) members
- 6 top projects
- 200+ contributors
- 9000+ commits

Enterprise grade, open source distributed ledger framework!











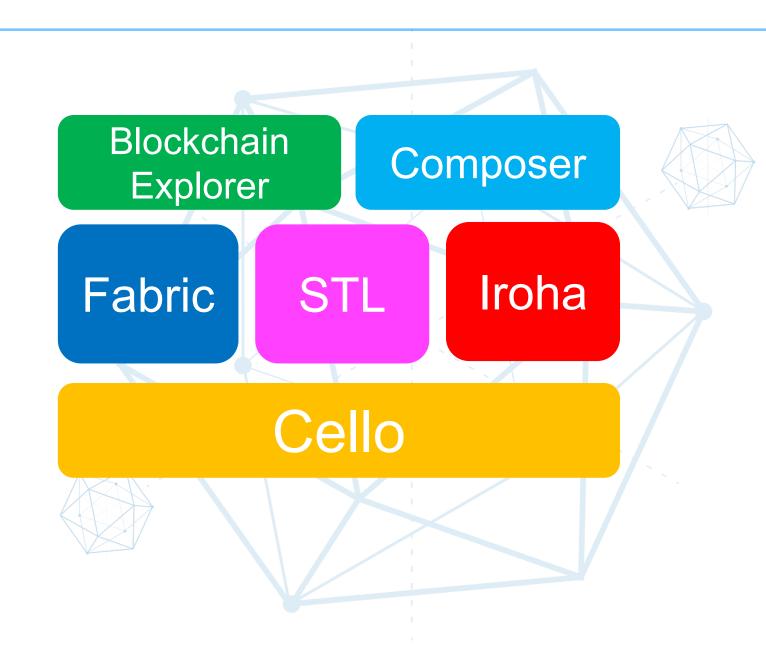






### Hyperledger Projects

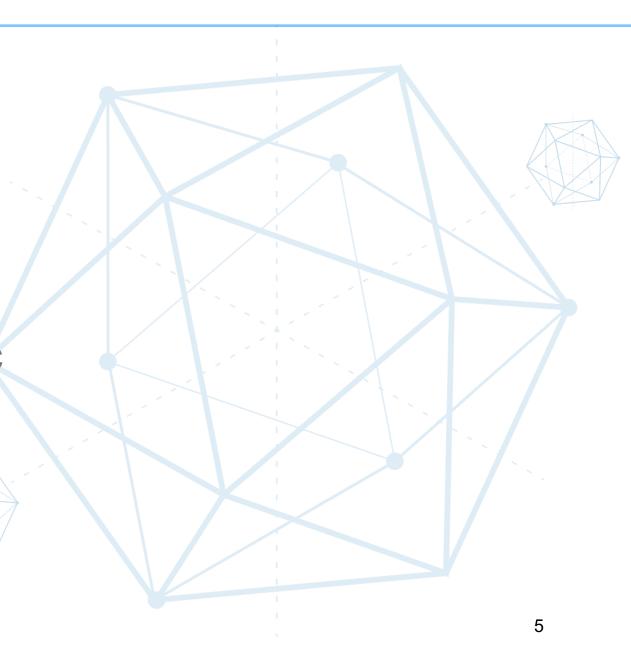
- 6 top projects
  - -Fabric
  - -SawtoothLake
  - Iroha
  - -Cello
  - -Blockchain Explorer
  - -Composer



### Hyperledger Fabric

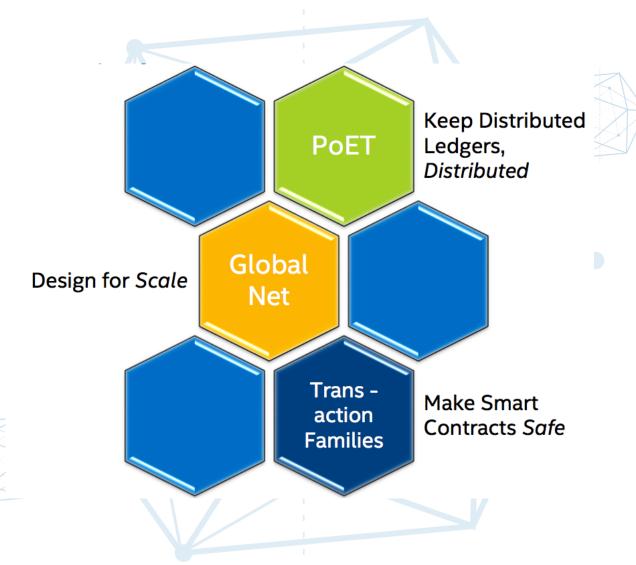
- Open-sourced at Dec, 2015
- Proposed by IBM and DAH
- Written in Golang
- 70+ contributors
- 4000+ commits
- v0.6: ~80k loc; v1.0: ~310k loc

Active now, in 1.0 pre-release



#### Hyperledger SawtoothLake

- Open-sourced at April, 2016
- Proposed by Intel
- Python
- 30+ contributors
- 3000+ commits
- Key features
  - -PoET consensus
  - Transaction Families
  - Scalability





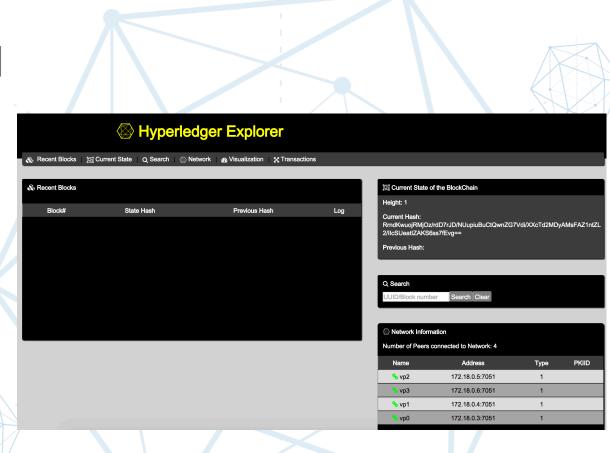
### Hyperledger Iroha

- Open-sourced at Oct, 2016
- Proposed by <u>Soramitsu</u>
- C++
- 20+ contributors
- 2000+ commits
- Key features
  - -C++ environment
  - Mobile and Web application Support
  - -Sumeragi consensus



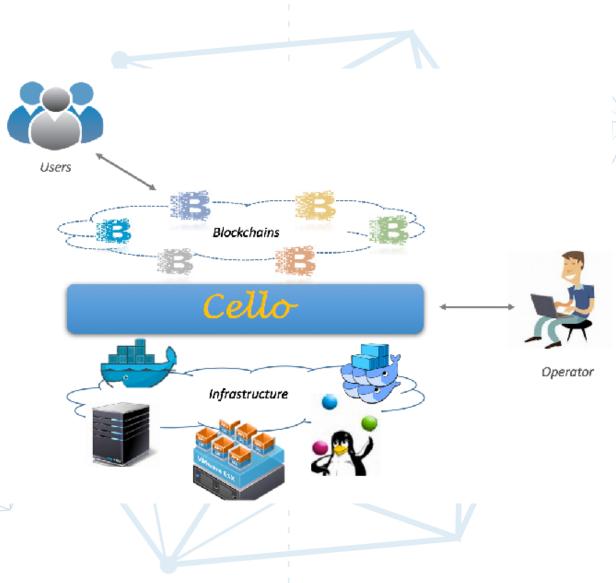
#### Hyperledger Blockchain Explorer

- Open-sourced at Aug, 2016
- Proposed by Intel, DTCC, IBM
- UI to interact with ledger
- Node.js
- Under-development
- Key features
  - -Web UI to explorer a blockchain
  - Single-Page Application



### Hyperledger Cello

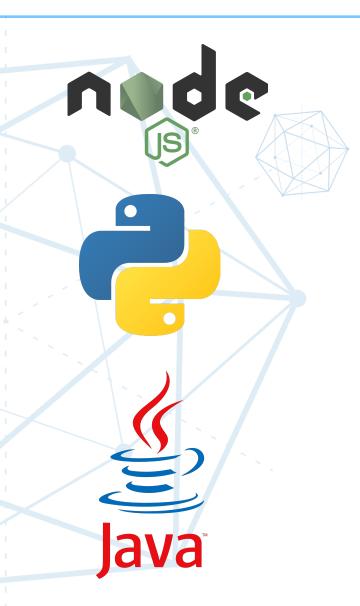
- Open-sourced at Jan, 2017
- Proposed by IBM
- Python, JavaScript
- 370+ commits
- Key features
  - -Blockchain as a Service
  - Support various infrastructures
  - High-performance
  - -Scalability
  - Pluggability



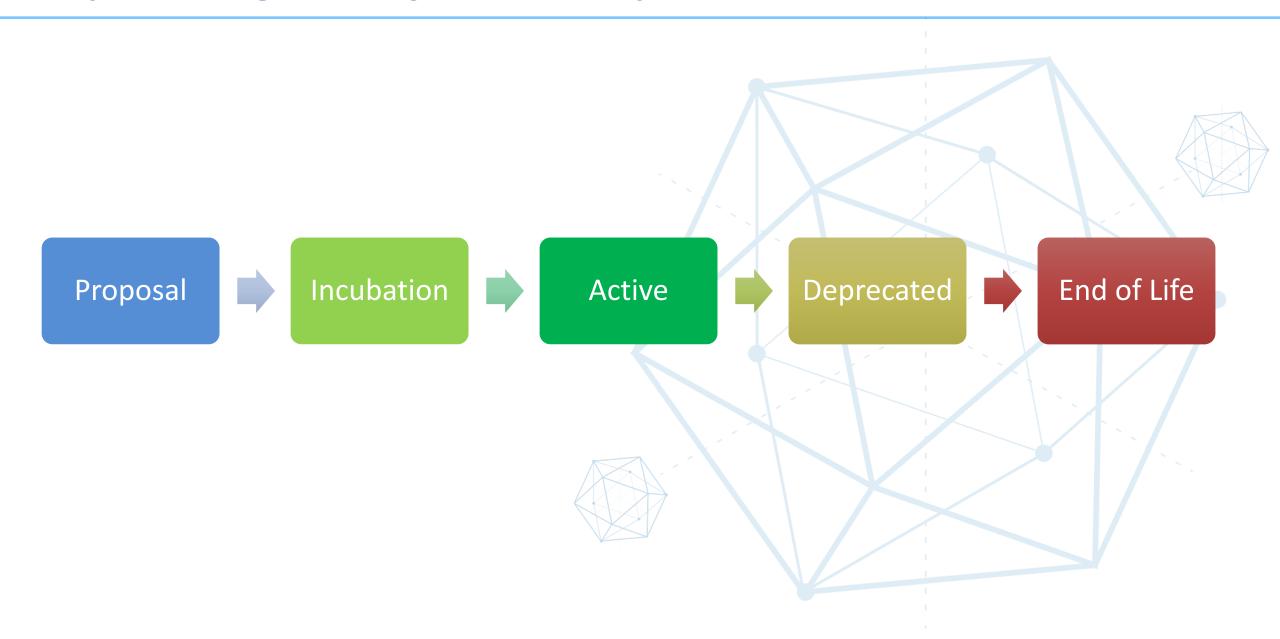
### Hyperledger Fabric SDK

- Node.Js
  - https://github.com/hyperledger/fabric-sdk-node
- Python
  - https://github.com/hyperledger/fabric-sdk-py
- Java
  - https://github.com/hyperledger/fabric-sdk-java



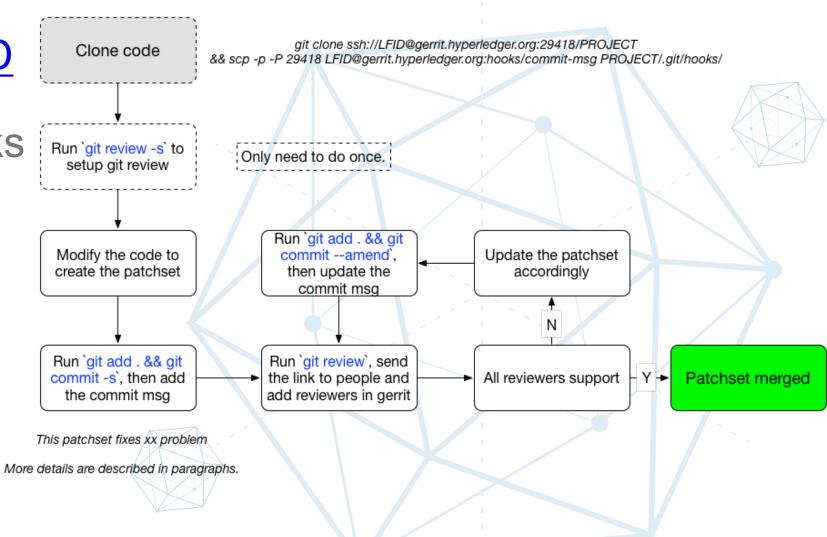


### Hyperledger Projects Lifecycle



#### How to Contribute

- Linux Foundation ID
- Jira to manage tasks
- Gerrit to host code
- RocketChat



#### Reference

- Hyperledger Wiki&Documentation
  - wiki.hyperledger.org
  - hyperledger-fabric.readthedocs.io
- IBM 区块链
  - ibm.com/ibm/cn/blockchain/
- Hyperledger Fabric Compose files
  - github.com/yeasy/docker-compose-files#hyperledger
- •《区块链技术指南》
  - github.com/yeasy/blockchain guide
- •《Docker 从入门到实践》
  - github.com/yeasy/docker\_practice





## Questions?

Thank You!
@baohua

Slides available at github.com/yeasy/seminar-talk#hyperledger