



HYPERLEDGER

BLOCKCHAIN TECHNOLOGIES FOR BUSINESS

Hyperledger Update

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Hyperledger简介

开源社区协作努力，推进跨行业的区块链技术。

托管于
Linux 基金会，是基金会历史上增长最快的项目

全球协作 跨金融、银行、物联网、供应链、制造和科技行业

Hyperledger 发展势头

2

从项目成立算起

25k+

代码提交

4

工具

5

框架

1

正式产品发布
**Hyperledger
Fabric v1.0**

200+

成员
(中国有40+)

12

活跃的社区工作
组

91

全球Meetups

25k

Meetup 参与人数

600+

2016年每月媒体
发布次数

模块化伞形框架

基础架构

技术, 法律, 市场, 组织

生态系统加速开源代码开发和市场使用



CloudFoundry

Node.js

Hyperledger

Open Container Initiative

框架

对商业区块链框架有意义的差别式方法, 由一个在整个行业中日益增长的社区群组开发

Hyperledger
Fabric

Hyperledger
Iroha

Hyperledger
Sawtooth

Hyperledger
Burrow

Hyperledger
Indy

模块

典型的一个框架结构设计, 通过通用许可证和社区群组, 输出给其它框架。

Hyperledger
Composer

Hyperledger
Explorer

Hyperledger
Cello

Hyperledger
Quilt

200+ Premier, General and Associate

Premier members

Members



General Members

1WorldBlockchain

ABN Amro

Aesthetic Integration

AlphaPoint

Altoros Americas LLC

Aktiaselsts Eurostep Digital

AMIHAN Global

ANNE

ANZ

BBVA

Beijing Botuzongheng

Science & Technology
Co., Ltd.

Beijing RZXT Technology
Development

Belink Technologies

Bitmark

BitSE

Blockchain

BLOCKO Inc.

Blockstream

Blq

BNP Paribas

BNY Mellon

Broadridge Financial
Solutions

BTS

CA Technologies

Calastone

Capgemini

Chain Connected

ChainNova

China Merchants Bank

ChongQin Xichain

Technologies

CITIC

Clause, Inc

Cloudsoft Corporation
Ltd.

CLS Bank International

Coinplug

CollectorIQ Inc.

Colu

Consensus Base Inc.

ConsensSys

Cuscal Limited

Deloitte Consulting LLP

DLT Labs

Energy Blockchain Labs

Ernst & Young

Factom Foundation

FZG360 Network Co. Ltd

GameCredits

Gem

Gibraltar Stock Exchange
(GSX)

Global Peersafe

Technology Corp.

Guardtime

Hangzhou Fuzamei

Technology

Hashed Health

Huawei

Hyperchain Technologies

IntellectEU

iRootech Technology Co.,
Ltd

Kaiser Permanente

Korea Exchange

Korea Security Depository

Koscom

Kubique S.p.A.

LedgerDomain

Libra

Loyyal Corporation

Lykke

MadHive

Medicalchain

Milligan Partners

MIRACL UK Limited

Monax Industries Limited

MonetaGo

Montran Labs

Moscow Exchange

Murphy & McGonigle,
P.C.

National Stock Exchange
of India

Netki

New H3C Technologies

NEX Optimisation

Nokia

Norbloc

NTT Data

Onchain

Oracle

Orange Magic Cube

Paxos

PDX Technologies

RadarWin Cyber

Technology

Red Hat

Revelry Labs

Samsung SDS

Sany Heavy Group Co.,
Ltd

Sberbank

ScanTrust SA

Schroder Investment
Management Limited

SecureKey Technologies

Shanghai Ginkoo

Financial Technology

Shanghai Onechain

Information

Technology

Shenzhen Forms Syntron
Information

Shenzhen Qianhai

Zhaogu Financial

Service Co. Ltd

Shenzhen Xinguodu Technology

CO., LTD

Sinolending Ltd

Smart Link Lab

Soramitsu

State Street

SWIFT

Swisscom AG

Symbiont

Tai Yi Yun

Tencent

Tequa Creek Holdings

Patientory

Thomson Reuters

TMX Group Limited (TSX)

TradelX Limited

VMware

Wells Fargo

Yuphant Blockchain

Zhejiang Shuqin

Technology

Beijing Smart Card

Technology Research
Institute

Associate Members

Accord Project

Bank of England

Blockchain Research

Institute

Chamber of Digital

Commerce

Cloud Security Alliance

Colored Coins

Federal Reserve Bank
of Boston

IC3

IFSE

Monetary Authority Of
Singapore

Mercy Corps

Nxt Foundation

OSCRE

Sovrin Foundation

Taiwan Fintech

Association

Tecnalia Research &
Innovation

TNO

University of Luxembourg

University of Rome Tor
Vergata/Inuit

Foundation

VSP Global

Zhejiang University

The Illinois Blockchain
Initiative

大中华区超过40个会员



Hyperledge公众号官微

高端会员:



常规会员



中钞区块链



中国技术工作组TWGC

TWGC是全球Hyperledger社区、新进技术用户和贡献者在中国大陆及香港、台湾地区的桥梁，TWGC现在由中国的主要贡献者领导，他们主动贡献给Hyperledger技术社区和建立联合的生态系统

每两个星期的星期三开双周会议

欢迎大家参加电话会议，或加入CTWG邮件列表，了解更多信息。

<https://lists.hyperledger.org/mailman/listinfo/hyperledger-twg-china>

Or Wiki :

<https://wiki.hyperledger.org/groups/tsc/technical-working-group-china>



杨保华(Baohua Yang)，北京
CTWG联席主席



蔡栋(Charles Cai)，上海
CTWG联席主席



胡瑞丰(Victor Hu)，深圳
CTWG联席主席

2017年会员大会中国区会员合影



Cross-Border Payments

Transferring money across international borders is still complicated, time consuming and expensive. Payments routed abroad can take several days to get settled. Existing money transfer systems suffer furthermore from long lines, exchange rate losses, counter-party risks, bureaucracy and extensive paperwork. Cross-border payments have become a critical part of millions of lives as we moved towards a more globalized world and multicultural societies.

After months of work, a global team of developers have completed a cross-border POC built with Hyperledger Fabric. Designed to test whether moving member bank accounts to a distributed ledger could help the inter-bank payments platform Swift reconcile in real time, the blockchain trial is now ready for its next phase of testing with General members ANZ, BNP Paribas, BNY Mellon and Wells Fargo.

Hyperledger Fabric enables real-time visibility on the liquidity of Nostro accounts, easing reconciliation and allowing liquidity savings while meeting key industry requirements such as governance, data privacy, standardisation, and identity.



**WELLS
FARGO**



BNY MELLON



BNP PARIBAS

Read about the POC in [Coindesk](#).

Hear about the collaboration in the
[ANZ Community Spotlight video](#).

Diamond Supply Chain

In 2003, the Kimberley Process Certification Scheme (KPCS) was established to prevent conflict diamonds. Purchased diamonds now come with a certificate to prove the distributor did not obtain the diamond from rebels, that the mine has been audited, etc. The idea is that paperwork can confirm provenance; however, the process is lengthy and there is a history of fraud from missing paperwork.

To keep blood diamonds from entering the supply chain Hyperledger Premier member SAP Ariba is collaborating with Everledger to pilot a distributed ledger diamond track and trace system using Hyperledger Fabric v1.0 that everyone in the industry can write to from miners, to distributors, to retailers.

Holding a diamond to light creates a unique pattern that may be used to create an ID. When a bag of diamonds changes hands in the supply chain, it forms two entries in the chain: the diamond IDs present upon sending and receipt. Once a diamond ID number is inside the system it provides integrity as any stakeholder can then query and instantaneously verify a diamond's provenance.



This system is empowering whistleblowers, governments, mining companies, retailers, journalists, and human rights organizations to get specific on tracking where conflict diamonds are entering the supply chain and preventing them from entering the market.

[Read about the Hyperledger Fabric pilot in](#)

Seafood Provenance

Blockchain technologies are being used in the fishing industry to drive fish catch towards more ethical practices, obstructing pirate fisherman and fish that are caught outside of legal fishing areas from being sold.

Hyperledger Premier member Intel is collaborating with the Hyperledger community to implement a modern approach to seafood traceability. Leveraging the Hyperledger Sawtooth framework, the seafood journey can now be recorded from ocean to table.

IoT sensors can be attached to any object (like fish) that is entrusted to someone else for transport, with trackable ownership, possession, and telemetry parameters such as location, temperature, humidity, motion, shock and title. The final buyer can access a complete record of information and trust that the information is accurate and complete.

Revolutionizing the seafood supply chain is just one example of the many ways Hyperledger Sawtooth can have real world benefits.



Intel has revealed a public demo that finds it showcasing how a seafood supply chain can be built using Hyperledger Sawtooth.

[Watch the explainer video and read the full case study on the Hyperledger Sawtooth project page.](#)

Interstate Medical Licensing

Associate Hyperledger Member State of Illinois has implemented a pilot program in collaboration with General member Hashed Health using Hyperledger Fabric to reduce complexity of interstate medical licensing, as well as to improve the veracity of provider directories and claims adjudication processes.

The Hyperledger Fabric pilot program will identify opportunities to improve the efficiency and accuracy of the medical credentialing process in the state of Illinois. The concept will utilize a blockchain-based registry to streamline the sharing of smart contracts and medical credential data to automate workflow associated with interstate and multistate licensure.

In the short-term they anticipate this pilot will show how distributed ledger technology can help reduce the complexity of interstate licensing processes in Illinois. In the long-term, they see this as a secure, privacy-enhancing way in which state licensure boards can efficiently manage credentialing at national scale, while also presenting health payers and provider networks a 'single source-of-truth' to improve the veracity of provider directories and claims adjudication processes.



HEALTHCARE BLOCKCHAIN INNOVATION



**The Illinois
BLOCKCHAIN
Initiative**

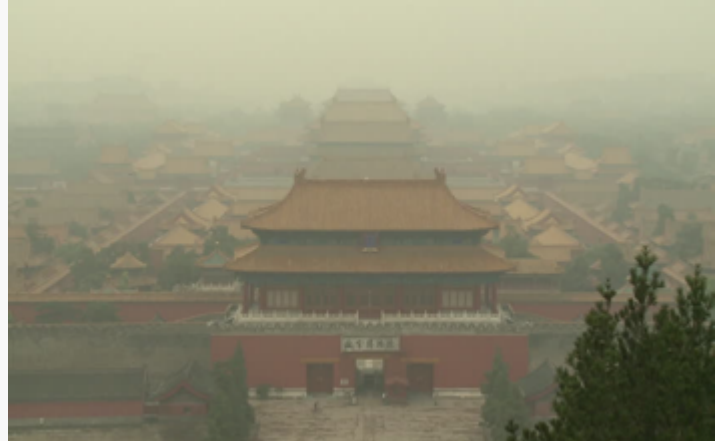
Read the full [announcement](#). 12

Green Assets Management

General Hyperledger member Energy Blockchain Labs partnered with Premier member IBM on the world's first blockchain-based green assets management platform based on Hyperledger Fabric. In production use by the carbon asset market in China, it allows enterprises to generate carbon assets more efficiently, helping to build a green, low-carbon and environmentally-friendly future in China.

Blockchain technology is expected to become an important means for effective control of carbon emissions, which is of great significance to China, the world's largest source of carbon emissions. Carbon asset development, also known as CER (Carbon Emission Reduction) quota issuing, is one of the most popular ways of encouraging enterprises to decrease emissions and use low carbon emission technology.

The platform is estimated to significantly shorten the carbon assets development cycle and reduce the cost of carbon assets development by 20-30 percent just in the pilot stage of the platform, enabling cost-effective development of a large number of carbon assets.



Learn more about Energy Blockchain Labs
in their

[Hyperledger Community Spotlight video.](#)

Join Us!

Ensure the strength and longevity of a core technology to your business.

Publicly proclaim your leadership in the blockchain space.

Work with other blockchain leaders to develop and promote Hyperledger blockchain for business technologies.

Visit hyperledger.org/about/join
or email jgordon@linuxfoundation.org.

WHO WILL YOU TRUST

WITH YOUR TRUST NETWORK?



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