Hyperledger



The Hyperledger Foundation is an open source collaborative effort created to advance cross-industry blockchain technologies. It is a global collaboration, hosted by The Linux Foundation, including leaders in finance, banking, IoT, supply chain, manufacturing and technology. To learn more, check out the About Hyperledger page. You can also find out more about Hyperledger's projects, labs, Working Groups, Special Interest Groups and other community activities at the links below.

Getting Started

Everyone is welcome to get involved. Not sure where to start?

Watch the Getting Involved with Hyperledger video

Visit the Frequently Asked Questions

Get a free Linux Foundation ID to access our tools.

Zero Knowledge Proofs and ZK Programming in Blockchain Application Development



Wednesday, April 24



8AM Pacific

Trending Community Activity

Recent Issues

476 Copy service availability test from PDO contracts guardian to PDO services

102 Add resource limits configuration capabilities for the chaincode pods

4301 panic_on_invalid_genesis.sh is outdated

4295 Implement human-readable bytes in the config

4294 Implement human-readable durations in the config

See more >>>

Recent Pull Requests

1632 Polkadot: ink! 5.0

103 chore(deps): Bump express from 4.18.2 to 4.19.2 in /opssc-api-server/src

102 chore(deps): Bump express from 4.18.2 to 4.19.2 in /opssc-agent/src

678 Bump express from 4.18.2 to 4.19.2 in /packages/athena

184 Add missing k8s_builder config to v25 core.yaml

See more >>>

Recent Releases

v1.3.5 v1.3.5

v1.3.9 v1.3.9

v0.12.0 v0.12.0

v1.3.0 v1.3.0 v1.0.0 1.0.0

See more >>>

Graduated Projects

These Hyperledger projects have successfully exited the incubation phase (see the Project Lifecycle document for more details about Graduated Projects). All of these projects are open, so feel free to get involved with anything that looks interesting. You can also add all Project calls to your calendar to find out about upcoming meetings.

blocked URL	Hyperledger Aries provides a shared, reusable, interoperable tool kit designed for initiatives and solutions focused on creating, transmitting and storing verifiable digital credentials. It is infrastructure for blockchain-rooted, peer-to-peer interactions. This project consumes the cryptographic support provided by Hyperledger Ursa, to provide secure secret management and decentralized key management functionality.
blocked URL	Hyperledger Besu is an Ethereum client designed to be enterprise-friendly for both public and private permissioned network use cases, with an extractable EVM implementation. It can also be run on test networks such as Sepolia and Görli. Hyperledger Besu includes several consensus algorithms including Proof of Stake, Proof of Work, and Proof of Authority (IBFT 2.0, QBFT, and Clique). Its comprehensive permissioning schemes are designed specifically for use in a consortium environment.

HYPERLEDGER CACTI	Hyperledger Cacti is a blockchain integration tool designed to allow users to securely integrate different blockchains.
blocked URL	Hyperledger Fabric is intended as a foundation for developing applications or solutions with a modular architecture. Hyperledger Fabric allows components, such as consensus and membership services, to be plugand-play. Its modular and versatile design satisfies a broad range of industry use cases. It offers a unique approach to consensus that enables performance at scale while preserving privacy.
HYPERLEDGER FIREFLY	Hyperledger Firefly is a multiparty system for enterprise data flows, powered by blockchain. It solves all of the layers of complexity that sit between the low level blockchain and high level business processes and user interfaces. FireFly enables developers to build blockchain apps for enterprise radically faster by allowing them to focus on business logic instead of infrastructure.
blocked URL	Hyperledger Indy provides tools, libraries, and reusable components for providing digital identities rooted on blockchains or other distributed ledgers so that they are interoperable across administrative domains, applications, and any other silo. Indy is interoperable with other blockchains or can be used standalone powering the decentralization of identity.
blocked URL	Hyperledger Iroha is designed to be simple and easy to incorporate into infrastructural or IoT projects requiring distributed ledger technology. Hyperledger Iroha features a simple construction, modular, domain-driven C++ design, emphasis on client application development and a new, crash fault tolerant consensus algorithm, called YAC.

Special Interest Groups

Special Interest Groups (SIGs) are industry specific groups of community members working together to help drive adoption of Hyperledger. All of these groups are open, so feel free to get involved with anything that looks interesting. You can also add all Special Interest Group calls to your calendar to find out about upcoming meetings. Learn more about Special Interest Groups.

- Climate Action and Accounting SIG
- Financial Markets SIG
- Healthcare SIG
- Identity SIG

- Media and Entertainment SIG
- Public Sector SIG
- Supply Chain and Trade Finance SIG
- Telecom SIG

Regional Communities

Hyperledger is a global community and people contribute from all over the world. In some places community members have organized regional activities for those who share a common geography and/or language. Check out the information below to see how to connect with an existing regional community or learn how to create a new regional chapter.

- Hyperledger Africa Chapter
- Hyperledger Brazil Chapter
- Technical Working Group China
- Hyperledger India Chapter

- Hyperledger Italian Chapter
- Hyperledger Japan Chapter
- Hyperledger Latinoamerica Chapter

Task Forces

Task Forces are short-term groups created by the Technical Oversight Committee to focus on specific deliverables. All Task Forces are open to anyone who is interested in getting involved, so feel free to check out the following groups and join the discussions on Discord and in Task Force calls. Learn more about Task Forces.

Incubation Projects

These Hyperledger projects are in the incubation phase (see the Project Lifecycle document for more details about Incubation Projects). All of these projects are open, so feel free to get involved with anything that looks interesting. You can also add all Project calls to your calendar to find out about upcoming meetings.



Hyperledger AnonCreds – short for "Anonymous Credentials"- is the most commonly used Verifiable Credential (VC) format in the world. Ledger agnostic and with a formal open specification, AnonCreds is a VC format that adds important privacy-protecting ZKP (zero-knowledge proof) capabilities to the core VC assurances.

	HYPERLEDGER BEVEL	Hyperledger Bevel is an accelerator/tool that helps developers rapidly set up and deploy secure, scalable and production-ready DLT network(s) that also allows new organizations to be easily on-boarded on the network. Bevel accelerates DLT network deployment and lets developers focus on building blockchain applications without having to waste precious time standing up the environment or worrying whether the network will scale and meet production requirements. Bevel facilitates a safe and secure way of deploying and operating different DLT platforms.
W	HYPERLEDGER CALIPER	Hyperledger Caliper is a blockchain benchmark tool, it allows users to measure the performance of a blockchain implementation with a set of predefined use cases. Hyperledger Caliper will produce reports containing a number of performance indicators to serve as a reference when using the following blockchain solutions: Hyperledger Besu, Hyperledger Burrow, Ethereum, Hyperledger Fabric, FISCO BCOS, Hyperledger Iroha, and Hyperledger Sawtooth.
S	HYPERLEDGER CELLO	Hyperledger Cello aims to serve as the operational dashboard for Blockchain, which reduces the effort required for creating, managing and using blockchains. Besides, it can also be used to facilitate creating Blockchain as a Service. Cello provides an operational console for managing blockchain's efficiently and running on top of various infrastructures, e.g., baremetal, virtual machine, and various container platforms.
	HYPERLEDGER SOLANG	Hyperledger Solang is a Solidity compiler written in rust which uses Ilvm as the compiler backend. Solang can compile Solidity for Solana and Substrate.
	Hyperledger WEB3J	Hyperledger Web3j is a highly modular, reactive, type safe Java and Android library for working with Smart Contracts and integrating with clients (nodes) on the Ethereum network.

Note: Hyperledger Avalon, Hyperledger Burrow, Hyperledger Composer, Hyperledger Explorer, Hyperledger Grid, Hyperledger Quilt, Hyperledger Sawtooth, Hyperledger Transact and Hyperledger Ursa have been moved to Archived status. The code for the projects is still available.

Hyperledger Labs

Hyperledger Labs provides a space (i.e., GitHub repos) where work can easily be started without the creation of a project. Labs are a good place to experiment and to start to build a community around an idea. Several Hyperledger projects initially started out as a lab. Anyone is welcome to start a new lab and you're also welcome to get involved in any of the existing labs. The following labs have also set up regular community calls where you can dial-in to learn more, ask questions and collaborate with others.

BDLS Consensus	BDLS is an innovative BFT consensus algorithm that features safety and liveness by presenting a mathematically proven secure BFT protocol that is resilient in open networks such as the Internet.
Blockchain Explorer	Explorer is a simple, powerful, easy-to-use, open-source utility to browse activity on the underlying blockchain network.
Cardea	Cardea is a complete ecosystem for the exchange of privacy-preserving digital credentials
Open Enterprise Agent	The Enterprise Cloud Agent is a W3C/Aries standards-based cloud agent written in Scala that provides self-sovereign identity services to build products and solutions based on it.
Orion	Orion is a key-value/document database with certain blockchain properties such
Private Data Objects	Private Data Objects (PDO) enables sharing of data and coordinating action amongst mutually distrusting parties.