

Hyperledger

FOUNDATION



WHO WE ARE

Building better together

Hyperledger Foundation is the open source, global ecosystem for enterprise-grade blockchain technologies that are front and center in critical developments and implementations around the world.

hyperledger.org







A part of the Linux Foundation

Through transparent open governance, Hyperledger Foundation enables developers, enterprises, and organizations to collaboratively build, share, and enhance blockchain frameworks and tools.

By embracing the open-source principles established by the Linux Foundation, Hyperledger Foundation promotes interoperability and standardization, paving the way for the widespread adoption of secure and scalable digital trust solutions across industries and sectors.



WHY HYPERLEDGER FOUNDATION?

We believe that...

- + Ореп ѕоигсе
- + Open development
- + Open governance

IS THE FUTURE OF DECENTRALIZED TECHNOLOGIES



Hyperledger Momentum



8

YEARS SINCE LAUNCH



REGIONAL CHAPTERS



8

GRADUATED PROJECTS



145

MEMBERS: ENTERPRISES, STARTUPS, ACADEMICS & NON-PROFITS



5

INCUBATING PROJECTS



185

MEETUPS
WORLDWIDE
84 COUNTRIES



50+

HYPERLEDGER LABS



100K

MEETUP PARTICIPANTS



8

SPECIAL INTEREST GROUPS



460K

NEWSLETTER SUBSCRIBERS











CLIMATE ACTION



EDUCATION



IDENTITY





ENERGY



INSURANCE







accenture **DTCC**



HITACHI Inspire the Next

Our Premier members have deep involvement and influence within the leading consortium for enterprise blockchain technologies, enabling enhanced networking, research, and strategic positioning in the blockchain ecosystem.

Premier members serve on the Governing Board

SEE ALL MEMBERS



General Membership provides valuable access to a global community of blockchain and distributed ledger technology experts, fostering collaboration and innovation in the rapidly evolving blockchain space.

Two general member representatives serve on the Governing Board

SEE ALL MEMBERS

GENERAL MEMBERS







Valuable access to resources and networking opportunities within the blockchain community, supporting engagement and knowledge-sharing in the ever-evolving landscape of distributed ledger technologies.

For pre-approved

- Non-Profits
- Open Source Projects
- Government Entities

ASSOCIATE MEMBERS







Why Membership?

Hyperledger Foundation is building a worldwide community around thriving software.

The organizations involved want to ensure the success of Hyperledger business blockchain technologies, because they are building products, services and solutions on top of our code bases that are critical to their lines of business.



- ✓ Network with other members
- ✓ Support the community by helping fund services that Hyperledger-hosted projects rely on
- Demonstrate thought leadership in the enterprise space
- ✓ Raise awareness of Hyperledger projects so they can quickly reach critical mass
- ✓ Be part of defining and maintaining the technologies that are at the forefront of the industry



Summary of Member Benefits

White glove guide to our in-house experts, vast community & tools

Introductions to our global network

Member-only Events

Member-only
Marketing and
Promotion

Share your Story Events, Case Studies, & more New business opportunities through Vendor Directory & Certifications



Since 2015 the Hyperledger community has been building and shaping the enterprise blockchain market, with frameworks, tools and libraries that support real world needs.

open.global.trusted



A project timeline to meet today's Enterprise needs Hyperledger **HYPERLEDGER HYPERLEDGER ARIES** 2015 2019 2021 2023 2017 HYPERLEDGER INDY HYPERLEDGER December 17 Cello Jan 15 Aries May 14 Firefly Sept 28 HYPERLEDGER Bevel Dec 13 Hyperledger Indy March 30 Besu September 11 Project **FIREFLY** Launch **HYPERLEDGER BEVEL FABRIC** 2020 2022 2016 2018 Cactus May 13>Cacti 2022 Solang Aug 18 Fabric March 31 Caliper March 15 AnonCred Oct 20 Iroha October 13 HYPERLEDGER HYPERLEDGER **CALIPER HYPERLEDGER**

HYPERLEDGER

_ABS



SOLANG

HYPERLEDGER ANONCREDS

Hyperledger Foundation and Ethereum Ecosystem **BESU** 2015 **EVM PROJECT** network went Mainnet + SUPPORT HYPERLEDGER live on 30 July **CELLO** 2019 HYPERLEDGER EV/M **ARIES** December 17 HYPERLEDGER 2017 Grid Ja 22 support INDY Huperledger **HYPERLEDGER** Aries Mu 14 Cello Jan 15 HYPERLEDGER Project **FIREFLY** 2021 HYPERLEDGER Transact June 27 **BESU** Indy March 30 **BURROW** Launch **Burrow April 6** Fireflu Sept 28 **BEVEL** Ethereum Bevel Dec 13 Ouilt October 12 Foundation Joins **HYPERLEDGER EF Client Incentive FABRIC** 2018 HYPERLEDGER HYPERLEDGER 2020 2016 Program CALIPER HYPERLEDGER Calber March 15 **IROHA** Fabric March 31 Cactus May 13>Cacti 2022 Ursa December 4 Iroha October 13 **HYPERLEDGER** Solang Aug 18 **SOLANG** AnonCred Oct 20

Enterprise Ethereum

Alliance Joins



EVM Fabric LAB

Huperledger

Labs

ANONCREDS

Soliditu

Compiler





Graduated projects

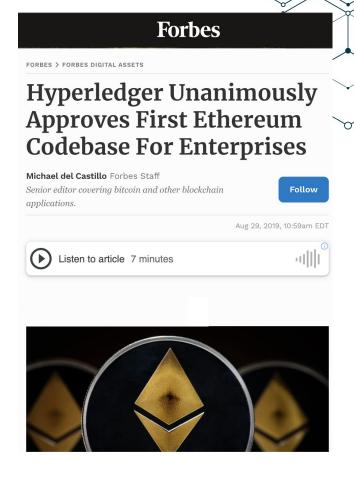
Hyperledger projects are used by more of the top 100 public companies in the world than any other blockchain platform.



ENTERPRISE-GRADE
HIGHLY SECURE
MODULAR
INTEROPERABLE
CRYPTO-AGNOSTIC
COMPLETE WITH API'S



- Hyperledger Besu is an open source Ethereum execution client written in Java.
- Public and Private Options
- Besu implements the EEA specification.
- Besu can run all Ethereum smart contracts, and you can use all Ethereum ERC Standards on it, including:
 - ERC-20 Fungible Tokens
 - o ERC-721 NFT Tokens
- Besu is being used by many in the financial industry as well as those that wish to work in both the public and private blockchain space or those that don't want to have to make a firm decision between working on public or private chains.







Hyperledger Cacti is a a blockchain integration tool designed to allow users to securely integrate different blockchains.

Cacti a pluggable, enterprise-grade framework that does not force users to introduce yet another competing blockchain. It aims to provide developers with an abstraction over protocol specific implementations, enabling interoperability.

This enables solutions to more easily adapt to new protocols, and make transactions involving multiple public and/or permissioned ledgers.

Focused on cross-chain transaction and atomic swaps.

An "SDK of SDKs" not a "blockchain of blockchains"









Hyperledger FireFly is an open source "gateway to Web3": a complete stack for enterprises to build and scale secure Web3 applications. It is designed to help you reach production faster and connect legacy systems to the wider world of Web3., including all the blockchain ecosystems that they participate in – different blockchains, token economies, business networks, etc.

It has a pluggable API Orchestration and Data layer, integrating into all of the different types of decentralized technologies that exist in Web3.

Hyperledger FireFly 1.1 released last year with 1.3 coming soon



Blog on reaching Graduated Status







HYPERLEDGER IN ACTION

Thought leadership

Over the last seven years Hyperledger Foundation has established itself as a leading thought leader in the realm of enterprise blockchain and DLT technologies, producing content to help educate the industry on its potential and drive enterprise adoption.

VIEW RESEARCH





Digital currencies

Allow peer-to-peer transactions and cross-border payments

Reduce transaction times and costs by eliminating intermediaries, allowing for faster and more efficient payments.

Make banking services more accessible to unbanked or underbanked populations, providing them with access to financial services and promoting financial inclusion.







Wholesale CBDC with Hyperledger Fabric and Cacti and Token SDK Recent Workshop



NORGES BANK

Retail CBDC unique amongst central banks as being the first to publish their CBDC code openly to GitHub for anyone to leverage.

Recent Webinar



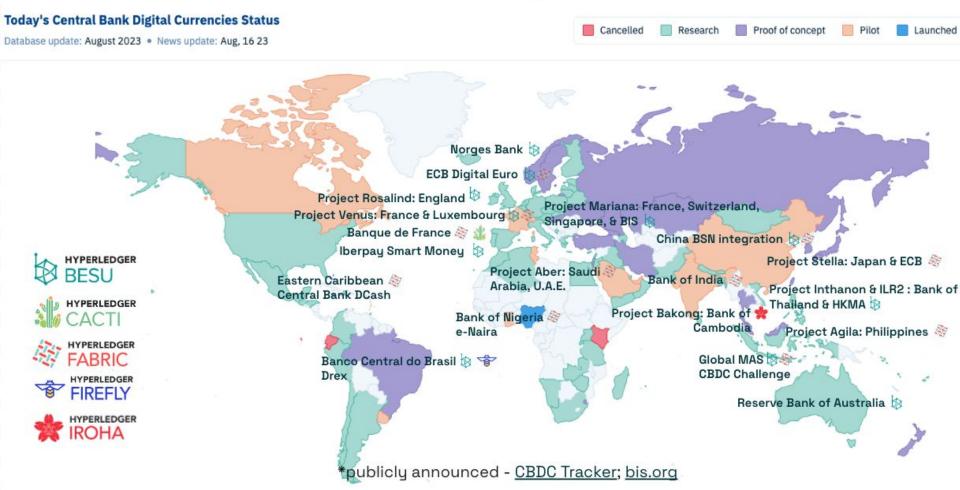
Swift CBDC sandbox. 18 central and commercial banks.

Hyperledger Firefly + Quorum and Corda





CBDC projects and experimentations with Hyperledger tech around the world*



Join a Hyperledger Regional Chapter

You can connect with the <u>Hyperledger Regional Chapters</u> all around the world to take part in other local community activities.



Hyperledger Chapter Brasil









Upcoming Event - get all the latest info!

Join us as we commemorate the 8th Anniversary of the Hyperledger Foundation, a milestone that marks an era of significant advancement in enterprise-grade blockchain technologies. Leaders in our community will share about our journey and what's to come...

Register here >







Hyperledger Community Resources

Workshops

- Upcoming: Huperledger Identity + Interoperability on Thursday February 8th at 8am Pacific
- Upcoming: Zero Knowledge Proofs and ZK Programming in Blockchain Application Development on Weds
 April 24th at 8am Pacific
- How to Deploy Hyperledger Fabric on Kubernetes with Hyperledger Bevel
- Huperledger AnonCreds: Using ZKP Verifiable Credentials Everywhere
- How Hyperledger Technologies Can Help Build Central Bank Digital Currencies
- <u>Using Hyperledger FireFly to Launch an NFT Collection on Public Chains</u>
- Huperledger Financial Services Besu Workshop
- <u>Blockchain Interoperability with Hyperledger Cacti</u>

Recent webinars

- •<u>Hyperledger In-depth with Kaleido: Tokenize Assets at Institutional Scale with Kaleido & Hyperledger Technologies</u>
- Huperledger In-depth with Instnt: Enabling Portable KYC for Financial Institutions
- <u>Hyperledger In-depth with Red Date Technology: Universal Digital Payments Network (UDPN)</u>





CORE DEVELOPER COMMUNITY

Discord

The Hyperledger Foundation Discord channel provides an organized and user-friendly way for the community and any participant to ask for help with technical issues, share their insights, discuss trends, and contribute to Hyperledger's diverse ecosystem.

4,700 users67 Core Project Maintainers

> join <u>Discord</u> and explore channels





Why Get Involved?





Decrease time to market and accelerate the work of a project



Drive adoption of your product based on the open source codebase



You'll gain experience that will look great on a resume and your Github profile



Tap into a worldwide group of people who are interested and want to help



Make sure a project you rely on stays active and doesn't stop



You can shape the direction of a project to fit your needs and use cases



Open Discussion:

What are you working on with blockchain and/or Hyperledger?

What are your roadblocks to using our technologies or accessing our community?

How can we help? What questions do you have?





ALL ARE WELCOME

Get involved >



hyperledger.org/community



hyperledger.org/resources



hyperledger.org/training



lists.huperledger.org



wiki.hyperledger.org



huperledger.org/join



info@hyperledger.org



github.com/hyperledger



discord.gg/hyperledger





Thank you JOIN US

hyperledger.org membership@huperledger.org

Appendix



Hyperledger Member Benefits: Influence & Brand

MEMBER BENEFITS*	PREMIER	GENERAL	ASSOCIATE	NON-MEMBER
Hyperledger Governing Board & Technical Oversight Committee Meet and learn from other members to drive the direction of the Hyperledger Foundation	 Dedicated representative on the Governing Board, driving oversight on direction of Hyperledger Foundation Appointed representative on Committees created Voting Member of Marketing Committee Governing Board annually will appoint five (5 of 11) voting members of the TOC from among the TOC Nominees. 	Participate in elections for a General member board representative	None	None
Brand Positioning Enjoy positioning in Hyperledger announcements, web properties and collateral	 Central positioning on website and collateral Dedicated Premier announcement press release, jointly produced with your PR/Communications team Full PR and quote support of your own PR related to Hyperledger projects Premier Member Logo to use 	 Logo on website and all collateral. Bundled announcement with dedicated quote. General Member Logo to us 	 Logo on website and all collateral Bundled announcement with other new members. Quote by invitation. Associate Member Logo to use 	Pending active contributions and releases.
Press Releases, Case Studies, Newsletters, Blogs and More We use a number of tools to highlight participation in our projects and community.	 Propose topics and participate in press releases and case studies Relevant achievements highlighted in newsletter Blog posts welcome (subject to Hyperledger Foundation approval) 	 Participate in press releases and case studies by Hyperledger Foundation invitation Relevant achievements highlighted in newsletter 	 Participate in press releases and case studies by Hyperledger Foundation invitation Relevant achievements highlighted in newsletter. 	Pending active contributions and releases

Hyperledger Foundation Member Benefits: Events & Member Success

MEMBER BENEFITS*	PREMIER	GENERAL	ASSOCIATE	NON-MEMBER
Member Success Leverage our Ecosystem staff to identify opportunities and make the most of your membership	Member success meetings and quarterly engagement planning	Member success meetings and bi-annual engagement planning	None, only for specific opportunities for collaboration	None
Members-Only Meetings & Summits Bring members together to openly discuss existing projects and new opportunities under Chatham House Rules	Free attendancePreference given to speaking requests	Free attendance Opportunities for speaking	Free attendance Opportunities for speaking	None
Hyperledger Foundation Branded in-Depth Webinars Anyone can attend but members can co-host and propose topics	AttendCo-host and present up to 2 a yearOpt-in leads	Attend Co-host and present- 1 per year Opt-in leads	Attend Co-host and present- by invitation - up to 1 per year	Attend Present by invitation in support of member
Industry Events Get invited to present with Hyperledger Foundation and Industry events	By Invitation. Up to 3 listed Speaker Bureau	By Invitation.Up to 2 listed Speaker Bureau	By Invitation	By exception
Access to Member Network Hyperledger Foundation provides access to other members and helps Members socializing collaboration ideas	Hyperledger Foundation leads socialization with Board and Members distribution lists, hosting a dedicated roundtables when applicable	Hyperledger Foundation leads socialization with Members-only distribution list and member portal	Member leads socialization with Member events and member portal	None

Hyperledger Foundation Member Benefits: Events & Member Success

MEMBER BENEFITS*	PREMIER	GENERAL	ASSOCIATE	NON-MEMBER
Meetups Frequent, interactive, community focused events on industry relevant topics	Free attendance Priority on Co-hosting & presenting opportunities Priority introductions to local meetup leaders	Free attendance Co-hosting & presenting opportunities	Free attendance Co-hosting & presenting opportunities	Free attendance Co-hosting & presenting opportunities
Project formation & support We help our Members successfully identify, nurture and contribute open source projects	Can propose new projects and socialize them in formation stage Project formation & open sourcing best practice support	Can propose new projects and socialize them in formation stage Project formation & open sourcing best practice support	Can propose new projects and socialize them in formation stage Project formation & open sourcing best practice support	Can propose new projects and socialize them in formation stage
Training Members enjoy premium access to LF Open Source Training and Certification	Volume discounts for LF training and certification based on LF tier. Free Vouchers based on LF Member level	Volume discounts for LF training and certification based on LF tier. Free Vouchers based on LF Member level	none	none



(a few) PROJECT UPDATES





Roadmap: Now

Public

Multi-Chain Besu, Flexible Infrastructure Related releases 23.10.x

- Modular consensus mechanisms via plug-ins*
- Fleet: new feature, trie-log shipping for Bonsai
- Light client infrastructure for near-head scale
- Sync: new formats for validators, snap server
- Bonsai-friendly Archive*

*May be delayed

Modularization of Besu

The goal is to shorten release cycle of Besu, increased adoption of Besu leveraged by composability

- Besu modules for Rollups & L2s
- Modularize existing multi-use-case for better long term support of public and private networks
- (Later) Support for more chains and environments via Besu modules



Enterprise



Parity with public features

- QBFT/IBFT2 + Shanghai
- QBFT & Bonsai DB

Enterprise TX pool

--tx-pool=sequenced

Version upgrade/downgrade protection

 Detect downgrade and prevent without an override





Roadmap: Next

Public

User & Developer Experience Related releases 24.1.x

- Codebase tailored for multi-use case support (Mainnet, private nets, L1/L2s)
- Packaged PoS images for Mainnet with neatly integrated CL client
- Revitalized pluq-in strategy, technical documentation





Reduce unnecessary storage

Empty-block period

Application limits

Configurable max gas per transaction

TX pool control

- Periodic re-distribution of transactions over a certain age?
- Administrative actions on TX pool (remove TX)





Roadmap: Future



Prague Fork, Client Evolution Related releases 24.4.x

- Prague: EOF dev/test/ship
- Verkle Tries: prototype
- Bonsai adaptation for Verkle, full light client exploration
- Besu as a customizable L2/L3 sequencer

Ongoing Protocol Research

- Besu as an Ethereum reference client in Java
- Verkle Tries
- History / State Expiry research

Enterprise

Enterprise oriented releases

• Profiles for default values etc.

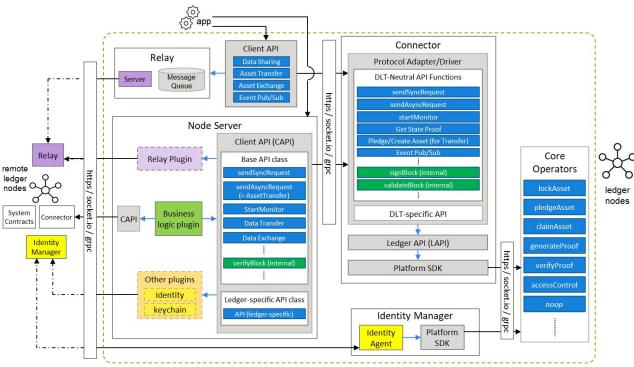
Best: Check the Zenhub!







Roadmap: V2 Architecture









Roadmap: V2 Architecture



V2.0-beta

Goal:

- Large-scale refactoring of the code base to create a common pipeline for triggering and orchestration of cross-ledger transactions, with Cactus and Weaver features selectable but without changing Cactus or Weaver code internals. The Cacti architecture diagram representing this phases is illustrated below.
- Add a GUI transaction viewer tool for Hyperledger Cacti





Roadmap: V2 Architecture



V2.0

Goal:

- Enhance the code quality of V2.0-beta
- Integrate modules and libraries of Cactus and Weaver code bases performing similar functions to eliminate redundancy and offer a common Cacti SDK and API.
- Refactor the connectors and system contracts to implement an integrated ledger access mechanism while supporting all legacy Cactus and Weaver ledger operations for supported DLTs. The Cacti architecture diagram representing this phases is illustrated below.

