


Hyperledger Iroha

Project	
Status	GRADUATED
CI/CD Badge	blocked URL
Description	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.

Iroha is a distributed ledger project, that aims to provide a development environment where C++ and mobile application developers could contribute to Hyperledger. The project seeks to complement Fabric, Sawtooth, and other potential projects, being a framework with pre-defined set of commands, permissions and queries that can be used with various client libraries to easily create applications for desktop and mobile platforms.

Iroha is inspired by Japanese *Kaizen* principle — eliminate excessiveness (*muri*). Iroha has essential functionality for asset, information or identity management, at the same time being an efficient and trustworthy byzantine fault-tolerant tool for your enterprise needs.

Key Characteristics

Permissioned network; written in C++; Client libraries in Java, Python, JS, Swift; BFT consensus algorithm YetAnotherConsensus (YAC); ready-to-use set of commands and queries, Multi-signature transactions.

Documentation

- [Documentation](#) for Iroha 1 on [Read the Docs](#)
- [Documentation](#) for Iroha 2 on [GitHub](#)
- [README](#) for [Iroha 1](#) on [GitHub](#)
- [README](#) for [Iroha 2](#) on [GitHub](#)

Project Management

Proposals can be created in [Jira](#) or suggested and discussed in [chat](#). Those who can implement the proposals then write the code. If people want to know what to work on, they can ask in a special [contributors chat](#) or create an issue to get attention. Github projects are used to manage release versions.

Repositories

- [iroha](#) (core project)
- [iroha-python](#) (Python SDK)
- [iroha-javascript](#) (JavaScript SDK)
- [iroha-java](#) (Java SDK)
- [iroha-ios](#) (iOS SDK)
- [iroha-ed25519](#)

Archived

- [iroha-ametsuchi \(flatbuffer database\)](#)
- [iroha-android \(Android SDK\)](#)
- [iroha-scala \(Scala SDK\)](#)
- [iroha-dotnet \(.Net SDK\)](#)
- [iroha-go](#)

Communication

Mailing List

- [iroha](#)

Chat (for questions and ephemeral discussions)

Questions are welcome and best asked in Hyperledger Discord. [Learn more about Hyperledger Discord here](#), get the invite and check out one of the many Iroha project channels. Iroha also uses the following platforms:

- [Telegram](#)
- [Gitter](#)

Meeting

- <https://lists.hyperledger.org/g/iroha/calendar> - join us for bi-weekly meetings!


Related Pages

- [iroha.tech](#)

History


- [Proposed by Makoto Takemiya \(Soramitsu\), Toshiya Cho \(Hitachi\), Takahiro Inaba \(NTT Data\), and Mark Smargon \(Colu\)](#)
- [Approved by the TSC on October 13, 2016](#)
- Moved out of Incubation on May 18, 2017
 - [Request](#)
 - [Approval](#)

Good first issues

key	summary	type	assignee	priority	status
<div> JQL and issue key arguments for this macro require at least one Jira application link to be configured</div>					

Examples of additions for this page - based on [Sara Garifullina](#) request to enliven the page:

- ☐ Task lists can be assigned user etc.
- ☐ This is already in use for pages for validating an action is complete

 Unknown macro: 'polls'

Also, charts, galleries, roadmap planner, etc. If you have data or content I can mock up.

Recent space activity



[Nurzhan Sakén](#)

[2024-04-05 \(No meeting, email updates\)](#) created Apr 05, 2024



[Victor Gridnevsky](#)

[2024-03-22 Meeting](#) created Mar 22, 2024

[2024-02-23 Meeting](#) updated Feb 23, 2024 [view change](#)

[2024-01-26 Meeting](#) updated Feb 23, 2024 [view change](#)



[Grzegorz Bazior](#)

[Iroha 1: how to just build on Linux \(commands\)](#) updated Feb 14, 2024 [view change](#)

Space contributors

- [Nurzhan Sakén](#) (12 days ago)
- [Victor Gridnevsky](#) (26 days ago)
- [Grzegorz Bazior](#) (63 days ago)
- [Marin Versic](#) (342 days ago)
- [Ry Jones](#) (516 days ago)
- ...