



Hyperledger Iroha

Project	
Status	ACTIVE
CII Badge	
Description	Distributed ledger in C++

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

- [README](#)
- [Wiki](#)
- [Documentation](#)

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-ios \(iOS SDK\)](#)
- [iroha-android \(Android SDK\)](#)
- [iroha-javascript \(JavaScript SDK\)](#)
- [iroha-python \(Python SDK\)](#)
- <https://github.com/hyperledger/iroha-ed25519>
- <https://github.com/hyperledger/iroha-scala>
- <https://github.com/hyperledger/iroha-dotnet>
- <https://github.com/hyperledger/iroha-java>

Archived

- [iroha-ametsuchi \(flatbuffer database\)](#)

Communication

Mailing List

- [iroha](#)

Chat (for questions and ephemeral discussions)

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

Meeting

- Discussions are conducted in chat, to allow for worldwide participation. We also create meetings to discuss some questions. Please subscribe to the mailing list or join the chat to keeps informed!

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	T	Assignee	P	Status
IR-573	Refactor pending txs storage tests	<input checked="" type="checkbox"/>	Unassigned	▼	<input type="button" value="TO DO"/>
IR-438	(Re)Move TransactionSequence classes	<input checked="" type="checkbox"/>	Unassigned	=	<input type="button" value="TO DO"/>
IR-403	Separate BatchHashEquality and MstState	<input checked="" type="checkbox"/>	Joseph Nicholas Alcantara	=	<input type="button" value="TO DO"/>
IR-402	Remove unwanted public key format validation from unit tests	<input checked="" type="checkbox"/>	Unassigned	▼	<input type="button" value="TO DO"/>
IR-358	Add information about used ports in Deployment documentation	<input checked="" type="checkbox"/>	Unassigned	=	<input type="button" value="TO DO"/>
IR-324	Rework YAC-related unit tests to use supermajority checker mock	<input checked="" type="checkbox"/>	Unassigned	=	<input type="button" value="TO DO"/>
IR-280	Fix UB sanitizer issues (Segfaults) and identify false positives	<input type="checkbox"/>	Unassigned	=	<input type="button" value="TO DO"/>
IR-279	Fix data race sanitizer issues (thread sanitizer) and identify false positives	<input type="checkbox"/>	Unassigned	=	<input type="button" value="TO DO"/>

IR-278	Fix AddressLeak sanitizer issues and identify false positives		Unassigned	=	TO DO
IR-257	Make a MockBlockStore possible in Storage		Unassigned	=	TO DO
IR-240	Create python examples: can_add/subtract_domain_asset_qty		Unassigned	=	TO DO
IR-197	Unnecessary Protobuf backend usage in irohadr		Unassigned	=	TO DO
IR-122	Leave default value if some of env value IROHA_POSTGRES_* do not exist		Unassigned	=	TO DO
IR-81	Wrong response on getAccountAssetTransactions query (a non-existing account or asset)		Unassigned	>	TO DO
IR-80	Force peer check that it is launched with the same key as it has in genesis block		Unassigned	<	CLOSED
IR-78	Genesis block should pass stateless validation		Unassigned	=	TO DO

16 issues

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

Example Poll

@KellyCooper for poll request additions

Yes, this location works for a poll

No, arrange for a poll to be added to the template

I think it would be great if we move it to the pool example page and then add to decision pages

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

Recent space activity

[Sara Garifullina](#)

[Suggestions and ideas for HL Iroha 1.x and 2.0!](#) created Jan 24, 2020



[Mikhail Boldyrev](#)

[Custom ordering of query results](#) created Jan 03, 2020

[Iroha and OSS-fuzz](#) updated Oct 17, 2019 • [view change](#)

[Konstantin Munichev](#)

Space contributors

- [Sara Garifullina](#) (75 days ago)
- [Mikhail Boldyrev](#) (96 days ago)
- [Konstantin Munichev](#) (174 days ago)
- [Kelly Cooper](#) (233 days ago)
- [John Siegrist](#) (265 days ago)
- ...



Iroha and OSS-fuzz updated Oct 17, 2019 • [view change](#)

Sara Garitullina

Hyperledger Iroha updated Aug 20, 2019 • [view change](#)