## Hyperledger Iroha

<table>
<thead>
<tr>
<th>Project</th>
<th><img src="image" alt="Hyperledger Iroha Logo" /></th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>GRADUATED</td>
</tr>
<tr>
<td>CLI Badge</td>
<td>[Image]</td>
</tr>
</tbody>
</table>

**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

- 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-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

<table>
<thead>
<tr>
<th>Key</th>
<th>Summary</th>
<th>T</th>
<th>Assignee</th>
<th>P</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>IR-1155</td>
<td>Use h2 crate in iroha_http_server if possible</td>
<td></td>
<td>Unassigned</td>
<td></td>
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<tr>
<td>IR-1139</td>
<td>Migrate to thiserror</td>
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<td>IR-1105</td>
<td>Use FuturesUnordered instead of join_all</td>
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<tr>
<td>IR-999</td>
<td>Change constructors api from <code>new(t: T)</code> to <code>new(t: impl Into&lt;T&gt;)</code></td>
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<tr>
<td>IR-822</td>
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<tr>
<td>IR-739</td>
<td>Add Kura benchmarks</td>
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</table>
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... 100% 1 vote

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

**Recent space activity**

- Hy Jones 2022-10-07 Meeting updated Oct 07, 2022
- Victor Gridnevsky 2022-10-07 Meeting created Oct 07, 2022

**Space contributors**

- Ry Jones (5 days ago)
- Victor Gridnevsky (5 days ago)
- Grzegorz Bazior (79 days ago)
- Sam H. Smith (91 days ago)
- Sean Bohan (96 days ago)
- ...