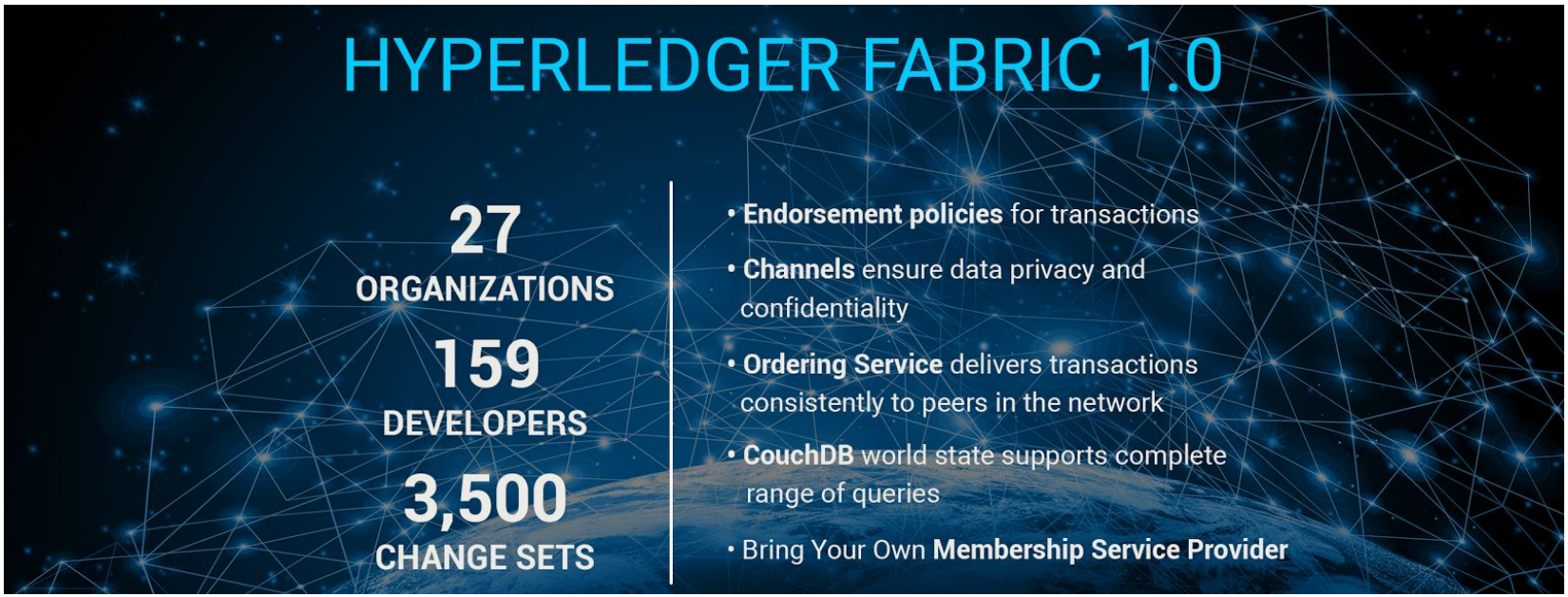
# Hyperledger Fabric 1.0 FAQ




| Question | Answer |
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| What is Hyperledger? | Hyperledger is a collaborative effort, hosted by The Linux Foundation, created to advance blockchain technology by identifying and addressing important features for a cross-industry open standard for distributed ledger technologies(DLTs) that will transform the way business transactions are conducted globally. Hyperledger consists of several projects.<br><br>Find out more regarding all the Hyperledger projects here. |
| What is Hyperledger Fabric? | Hyperledger Fabric is a blockchain framework implementation and one of the five Hyperledger projects hosted by The Linux Foundation. Intended as a foundation for developing applications or solutions with a modular architecture, Hyperledger Fabric allows components, such |

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| | as consensus and membership services, to be plug-and-play. Hyperledger Fabric leverages container technology to host smart contracts called “chaincode” that comprise the application logic of the system. Hyperledger Fabric was initially contributed by Tamas Blummer (DAH) and Christopher Ferris (IBM), as a result of the first hackathon. |
| Who has contributed to Hyperledger Fabric? | 27 organizations contributed to Hyperledger Fabric and 57 engineers, writers and testers contributed to the post-beta cleanup effort. This has grown into a true community effort including engineers from: Arxan, Cloudsoft, CLS, d20 Technical Services, DTCC, Digital Asset, Fujitsu, GE Gemalto, HACERA, Hitachi, Huawei Technologies, Hyperchain, ImpactChoice, IT People, Knoldus, The Linux Foundation, Netease, Passkit, State Street Bank, SecureKey, SAP, Thoughtworks and Wanda Group. We also had contributions from thirty five unaffiliated individuals - 159 developers in total contributed almost 3,500 change sets to Hyperledger Fabric. |
| What is the significance of Hyperledger Fabric v1? | Since Hyperledger and its umbrella technologies focus on the business of blockchain and are recognized as one of the leaders or front-runners in those initiatives (rather than focusing on cryptocurrency), this is a milestone moment as the Hyperledger Fabric technical community has determined that it is now ready for production deployments. After months of announcements around POCs and pilots, we will now also see an emergence of production deployments. |
| What is the difference between Hyperledger Fabric v .6 and v1? | Hyperledger Fabric v1.0 was designed with the following goals in mind:<br>● Better reflect business processes by specifying who endorses transactions |

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| | ● Support broader regulatory requirements for privacy and confidentiality<br>● Scale the number of participants and transaction throughput<br>● Eliminate non-deterministic transactions<br>● Support rich data queries of the ledger<br>● Dynamically upgrade the network and chaincode<br>● Support for multiple credential and cryptographic services for identity<br>● Support for ”bring your own identity”<br><br>These design goals led to a number of differences between Hyperledger Fabric v0.6 and Hyperledger Fabric v1.0. The following features highlight the main differences:<br>● Policies specify which endorsing peers must provide endorsement for transactions on the network.<br>● Channels allow a group of participants to create a separate ledger of transactions thus ensuring that data privacy and confidentiality can be maintained.<br>● Ordering service ensures that transactions are consistently ordered and delivered to the peers in the network.<br>● Support for CouchDB for the world state to allow for keyed queries, composite key queries, key range queries, plus full data rich queries<br>● Membership Service Providers (MSPs) allow organizations to define their own notion of identity, and the rules by which those identities are governed (identity validation) and authenticated (signature generation and verification). |
| What access to Hyperledger Fabric code do Hyperledger members have that non-members do not? | Hyperledger Fabric is completely open source. This means that anyone, regardless of membership, has the ability to download, use, and modify Hyperledger Fabric. |

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| How will transactions be processed if not all the nodes are online all the time (e.g. the ship is in the sea and does not have connectivity)? | Client applications must be able to connect to endorsers to submit transactions to the network. For high availability, the endorsement policies may be set up to allow only a subset of endorsing peers to endorse a transaction.<br><br>For example, if two organizations make up the network, the endorsement policy could be that one endorsing peer at each of the organizations must endorse a transaction. If each organization had two endorsing peers, then one endorsing peer at each of the organization could be down and the transaction could still be endorsed. |
| Where do I learn more about the design of the Hyperledger Fabric? | Hyperledger Fabric is being built in a pluggable modular framework. With this design in mind blockchain networks can be purpose built with different modules to achieve different goals, such as faster ordering service, advanced vs simple query search, etc. Check out the roadmap, and our Design docs. |
| How do I get started with Hyperledger Fabric? | The Wiki is where you will find key items such as:<br><br>• Link to the online documentation<br>• Link to contributing<br>• Link to Jira, which is the place to open a story, epic, task or bug<br>• Link on how to navigate Jira<br>• Link to Gerritt, which is the place to contribute, review CRs or submit code.<br>• Mailing lists to subscribe to conversations.<br>• Key Rocket.chat channels to participate and monitor. |

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| How do I interact with the Hyperledger Fabric community? | Key communication vehicles:<br><br>• Rocket.chat for group and 1 on 1 communications.<br>• Rocket.chat channel guide, giving descriptions, so you can find what you are most interested in following.<br>• Mailing lists to subscribe to conversations and participate.<br>• "Working groups" - There are several active working groups that tackle big items such as the technical steering committee, requirements gathering and definition of use cases, identity, and documentation, etc. |
| Where can I find information on Hyperledger Fabric's architecture? | See Hyperledger Fabric's architecture explained document. |
| I think I found a bug in Hyperledger Fabric, what should I do? | Hyperledger Fabric is an open source project and therefore relies on the community to help spot and fix bugs. If possible, you should file a new bug report in the JIRA bug tracking system. If you cannot do that, please send a description of the bug in an email to hyperledger-fabric@lists.hyperledger.org. |
| I think I found a security vulnerability in Hyperledger Fabric, what should I do? | Security vulnerabilities should be reported to security@hyperledger.org. |