



FireFly Updates

Community Call
February 2, 2022



HYPERLEDGER
FIREFLY

Antitrust Policy Notice

Linux Foundation meetings involve participation by industry competitors, and it is the intention of the Linux Foundation to conduct all of its activities in accordance with applicable antitrust and competition laws. It is therefore extremely important that attendees adhere to meeting agendas, and be aware of, and not participate in, any activities that are prohibited under applicable US state, federal or foreign antitrust and competition laws.

Examples of types of actions that are prohibited at Linux Foundation meetings and in connection with Linux Foundation activities are described in the Linux Foundation Antitrust Policy available at <http://www.linuxfoundation.org/antitrust-policy>. If you have questions about these matters, please contact your company counsel, or if you are a member of the Linux Foundation, feel free to contact Andrew Updegrove of the firm of Gesmer Updegrove LLP, which provides legal counsel to the Linux Foundation.



Agenda

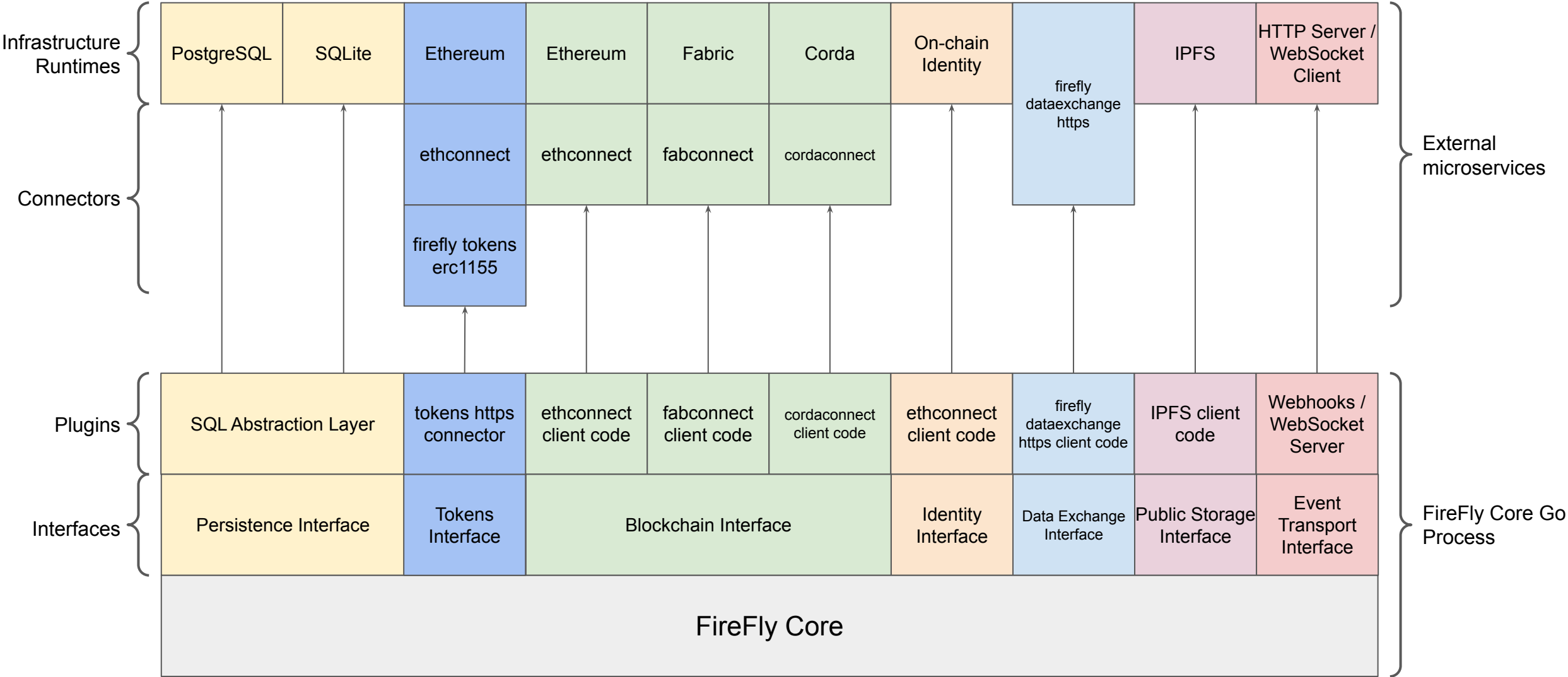
- ERC20 / ERC721 Token Connector
- FireFly v0.12.0 Updates
- FireFly UI Plans & Discussion
- Open Discussion

ERC20 / ERC721 Token Connector

ERC20 / ERC721 Connector

- Single runtime for ERC20 and ERC721 tokens
 - Chooses contract based on fungible/nonfungible flag
- Uses the existing fftokens plugin in FireFly
 - Single interface can be used for this connector or ERC1155 connector
- Uses standard ERC20 and ERC721 ABIs out of the box
 - FireFly does not need to know about your contract when it is first started
- Must deploy instance of your contract on-chain before creating pool
 - ERC20 is in v0.12.0, ERC721 support will be finished this week

Architectural Layers



FireFly v0.12.0 Updates

Release process updates

- Mainline is not guaranteed to be stable commit-by-commit
- Database migrations, APIs may not be stable commit-by-commit
- Released versions **will** be migration- and API-stable
- Recommend all feature development to take place in mainline
- Major/minor releases will be performed by picking a mainline commit, pausing merges temporarily to sanitize, and tagging a release
- Patch releases may be performed via branches from the last release, to integrate fixes when mainline is not stable for release

Changes in v0.12.0

- Preview of custom on-chain logic
 - APIs under `/contracts` and `/apis`
 - Not yet guaranteed to be stable - API subject to change
- Support for new ERC20 / ERC721 connector
- Overhaul of Transaction type, and new BlockchainEvent type
- First-class support for blob filenames
- Richer query parameters for filtering collections (some breaking changes)
- All APIs deprecated in v0.11.0 or earlier are removed
- Bug fixes and improvements

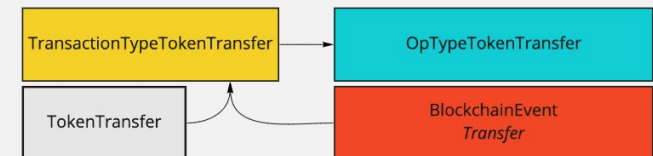
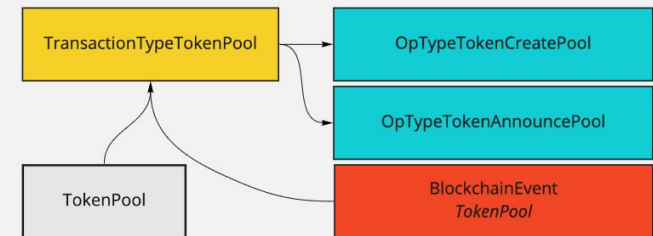
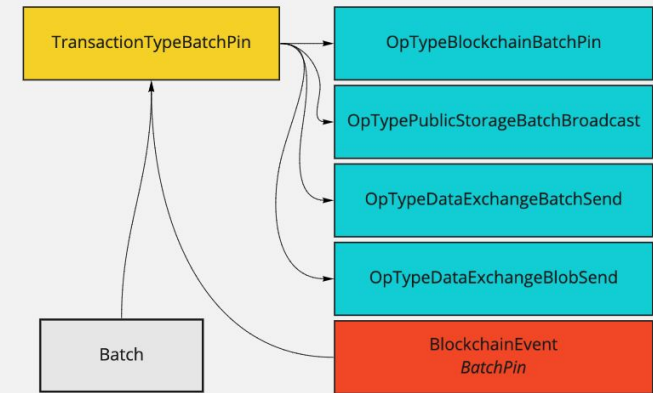
FireFly Transactions

- Map to 0, 1, or more blockchain transactions
- Serve as a container object for Operations, BlockchainEvents, and other FireFly objects
- Many fields are removed from Transaction in this release, or moved to BlockchainEvent
- Transaction status is computed on demand via a `new /transactions/{txnid}/status` endpoint

Transactions are a grouping construct for a set of operations (actions), blockchain events (feedback), and a particular FireFly object created as a result.

Operations are created/tracked on the initiating node only. All other objects in this picture are generally shared between sender and receiver(s).

Transaction status is a function of 1) receiving the expected number of BlockchainEvents, 2) creating the target FireFly object(s) without error, and 3) receiving success for all Operations (initiator only).



Because there are only operations and no feedback events, this transaction will exist on the initiating node only.

FireFly UI Plans & Discussion

Open Discussion