

Business Architecture PoP Blockchain

Blockchain Permissioned - Macro process

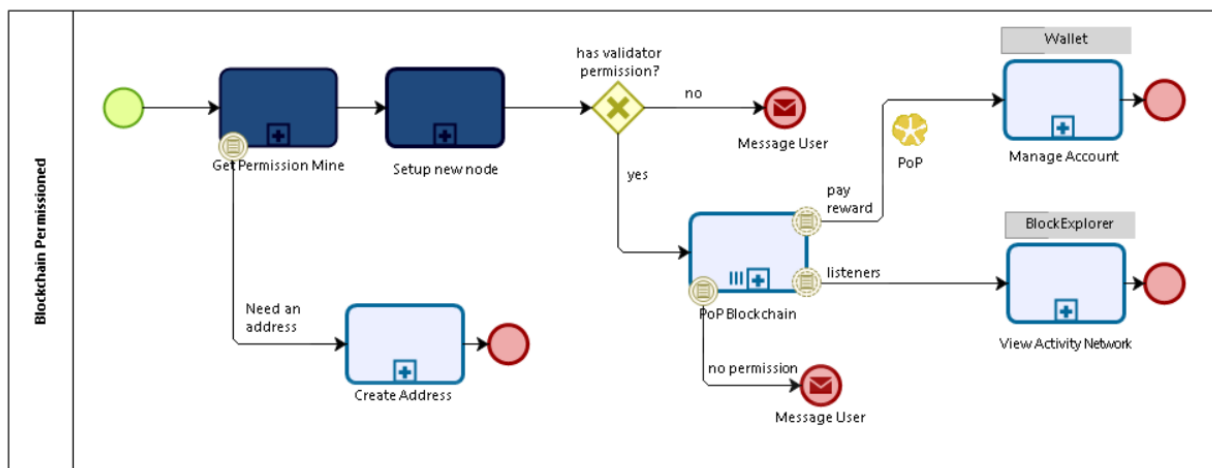
Brief Process Description:

For the user who wants to participate creating blocks and validating on the PoP Blockchain network, it is necessary to get a permission.

With this permission, it is possible to participate in mining and earn the reward the network's standard PoP Coin.

The wallet developed has all the necessary resources to manage the PoP Coin.

BlockExplorer facilitates the consultation of transactions on the PoP Blockchain network offering transparency.



Manage Wallet

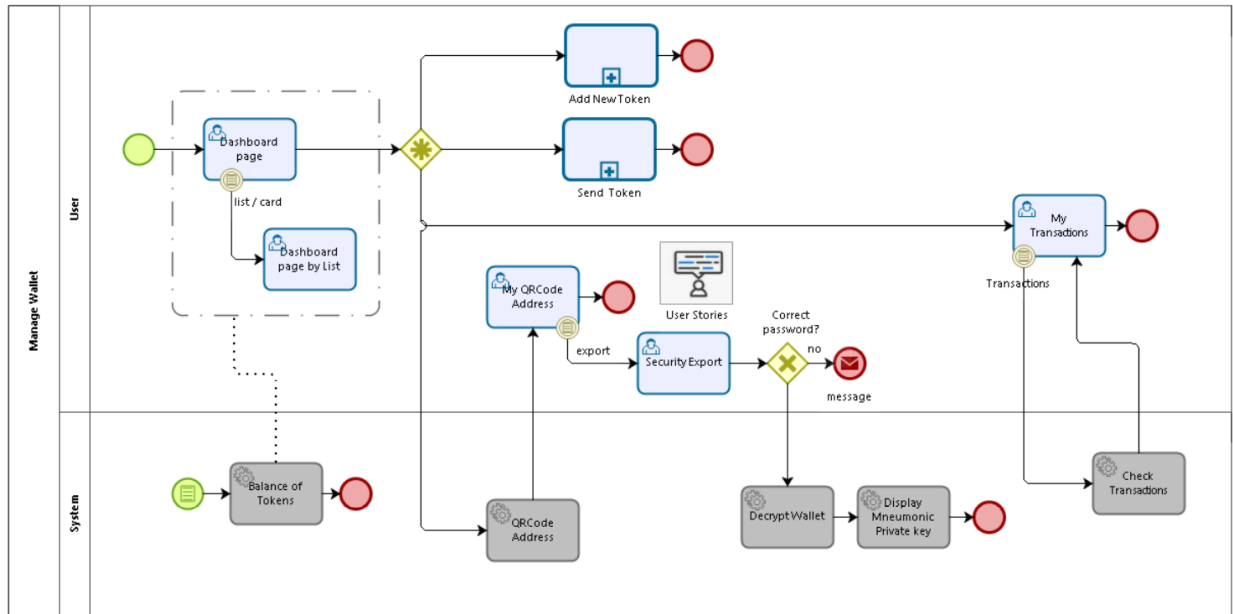
Brief Process Description:

The user can use a proprietary Ethereum wallet or create a new one.

Private keys are stored locally on the user's device.

The user can add or remove other ERC-20 tokens and do transactions. It is also possible to backup the wallet's private key and seed phrase.

PoP Save

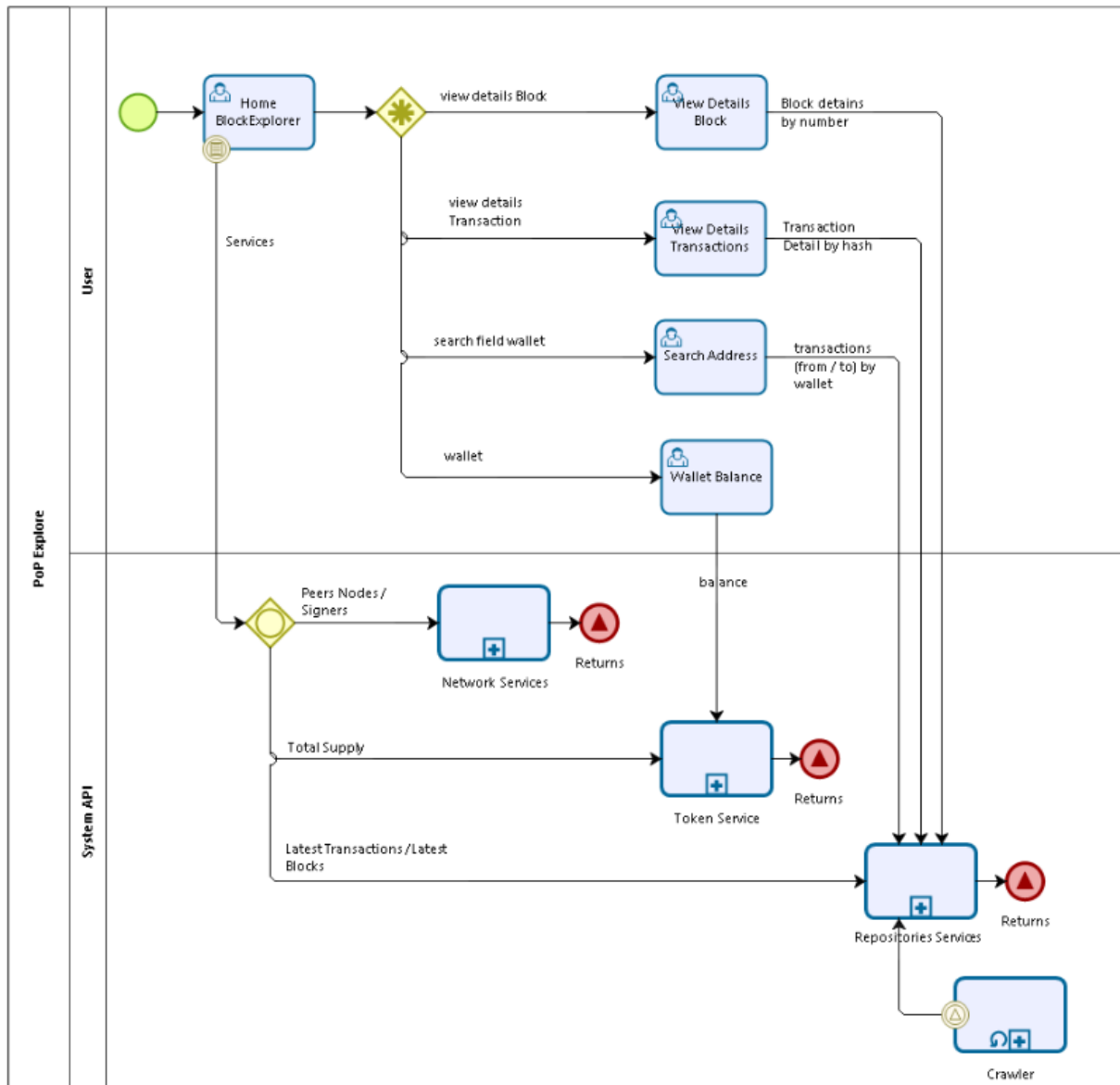


Block Explorer

Brief Process Description:

The user can view the contents of a PoP blockchain network: the last blocks created, the last transactions made, the Total Supply of PoP , number of nodes and signers connected.

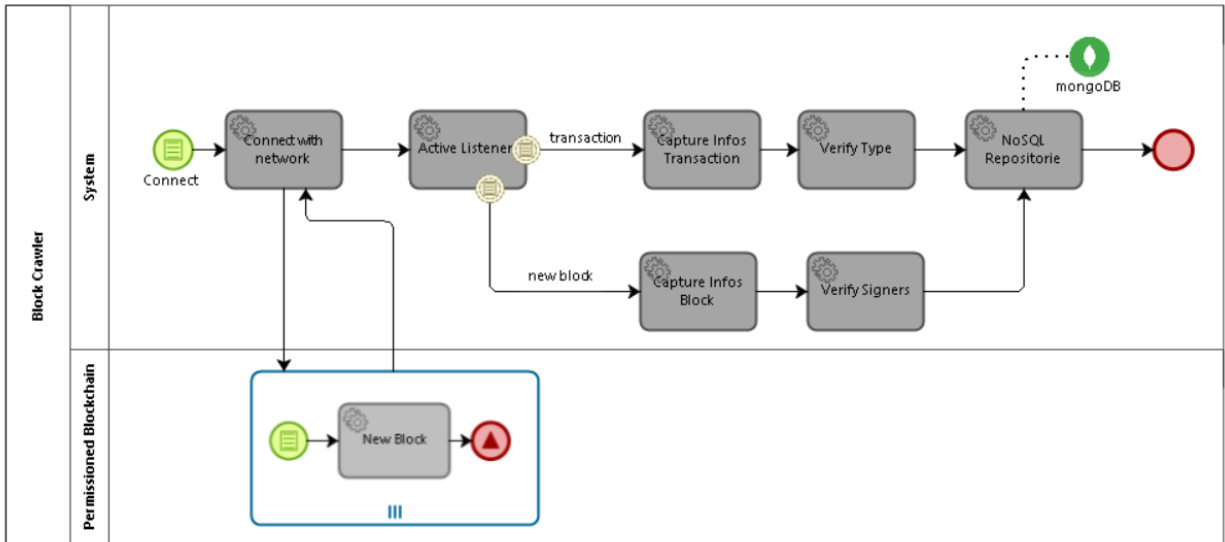
PoP Explore



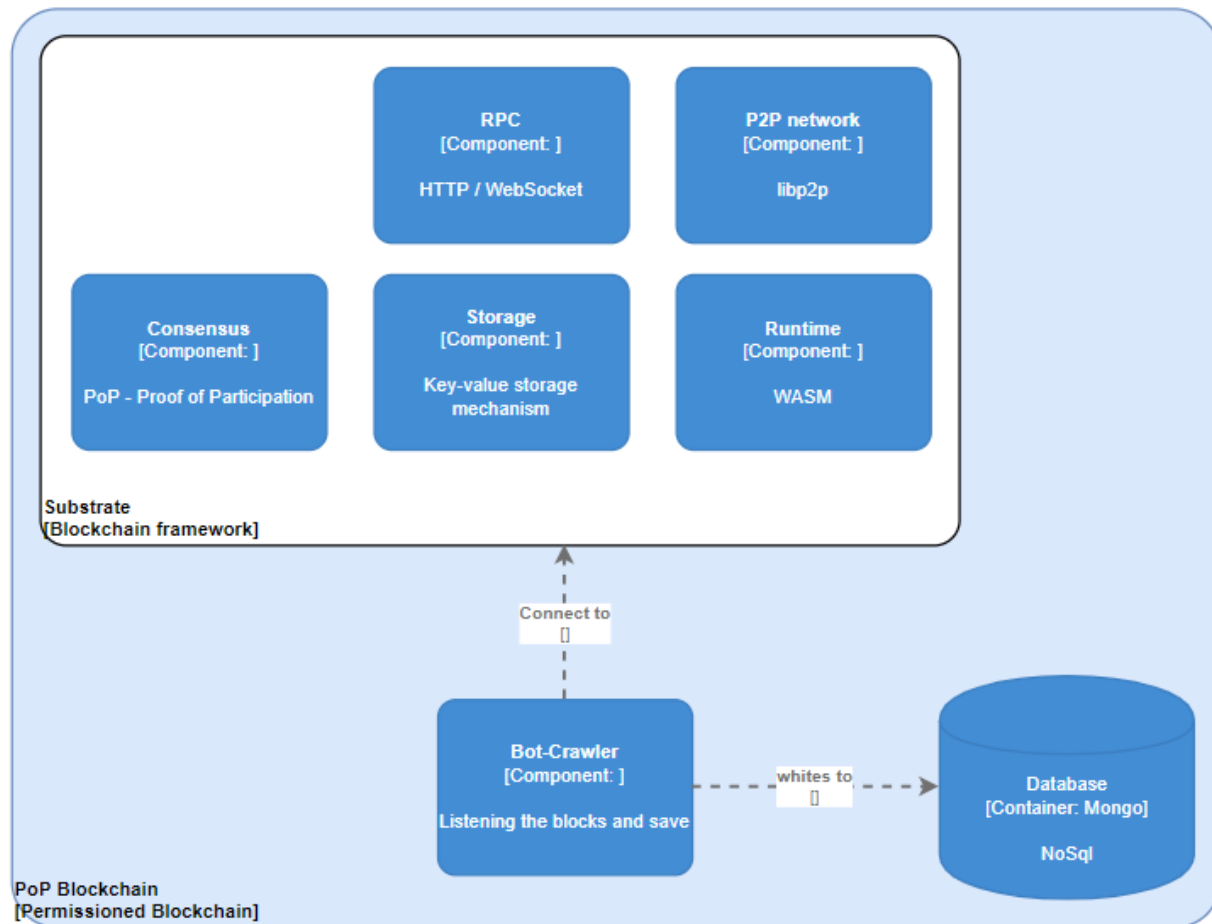
Block Crawler

Brief Process Description:

Each new block created in the PoP Blockchain is stored in a NoSql bank the information related to the block, as well as its transactions.



Infrastructure



PoP Blockchain is built with Substrate, an open-source blockchain-building framework that is developed in Rust.

Core components of the Substrate:

- **Storage** is used to persist the evolving state of the decentralized system represented by a blockchain.
- **Runtime** logic defines how blocks are processed, including state transition logic. Runtime code is compiled to Wasm and becomes part of the blockchain's storage state.
- **Peer-to-peer network** allow the blockchain network to communicate with other network participants.
- **Consensus** engines provide logic that allows network participants to agree on the state of the blockchain.
- **RPC** (remote procedure call) capabilities allow blockchain users to interact with the network.

PoP - Proof of Participation consensus

Proof of participation is the way we prove a validating nodes right to create blocks and receive rewards based on their participation.

The node's are chosen randomly for block producers to receive rewards.

The validating nodes need to be connected to the PoP Blockchain network for and participating in the creation of blocks in order to have the chance of rewards.