

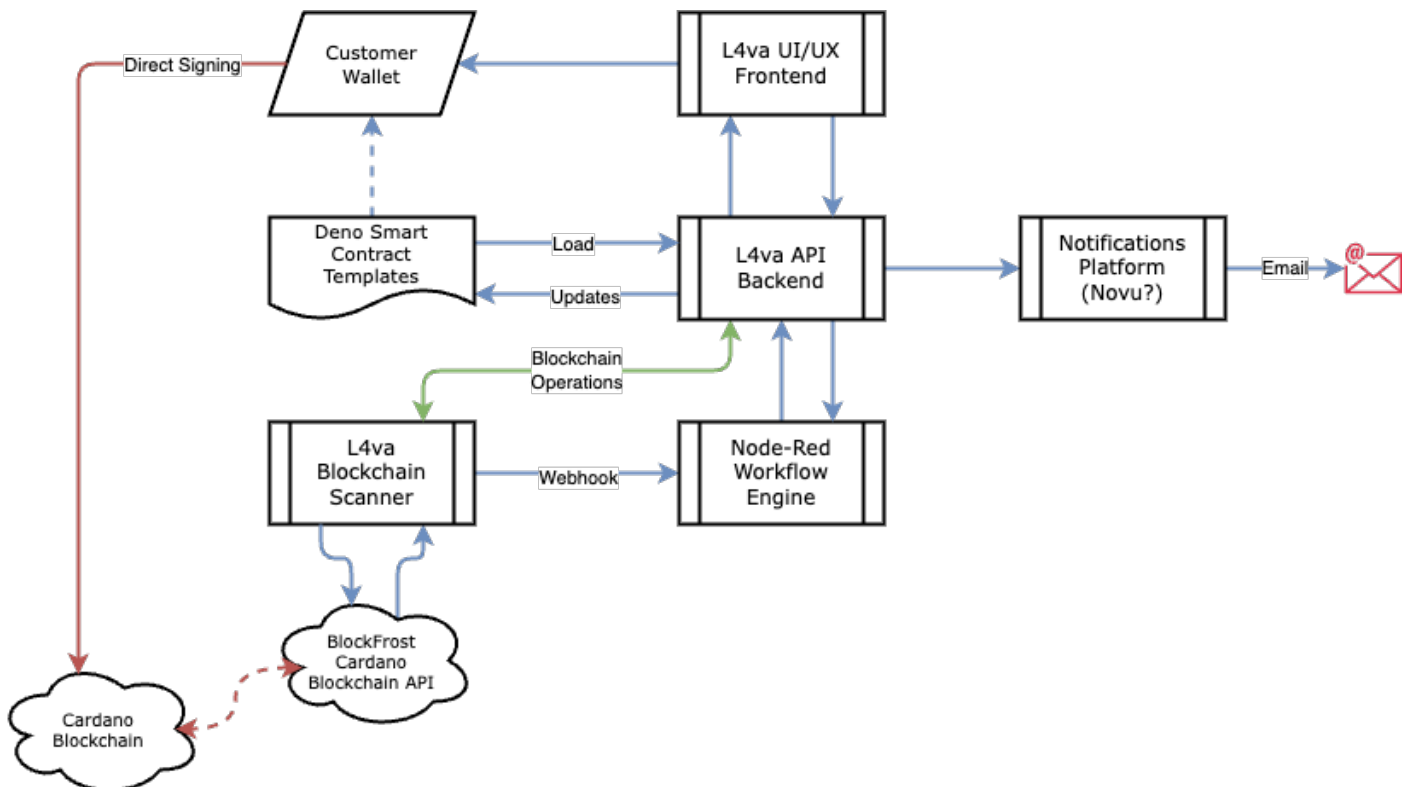
Infrastructure Design

Our "Glue" Components

Components List

- **L4va UI/UX Frontend:** This is what our users interact with. This Web based frontend app authenticates a user using a Web3 wallet. It then communicates with the API Backend.
- **L4va API Backend:** This component connects our UI/UX Frontend with our database and implements parts of our business logic.
- **Deno Smart Contract Templates:** These are our Smart Contract templates which we populate with real data gathered from the user via the Frontend, or gathered from the blockchain via the L4va Scanner. We then present them to the user's wallet for direct signature and submission into the blockchain.
- **Scanner:** This component leverages the Blockfrost API to continuously monitor the Cardano blockchain for a specified list of assets. It supports configuring multiple webhook subscriptions on the same blockchain object, where different events trigger distinct notifications. For example, when ADA is received into a wallet, it might trigger a "Receive" webhook, and when ADA is sent out, it could trigger a separate "Send" webhook. Each webhook would then trigger a potentially different Node-Red workflow.
- **Node-Red Workflow Engine:** This is a real-time, visual workflow engine that allows us to quickly implement workflows for our webhooks. The workflows can run code, perform database queries, trigger API calls in our own system or in external systems, and much more.

Architectural Diagram



Revision #7

Created 22 November 2024 00:57:01 by Aric Fedida

Updated 4 April 2025 17:45:10 by Aric Fedida