ezchain.io

Ultra-Litepaper* v0.1 - jabba - @GeniusTeamHQ

**We call this the ultra-litepaper: an early design spec for the future ezchain product. Details may change but our infrastructure choices are set, and we plan to grow with the emerging platforms noted below.*

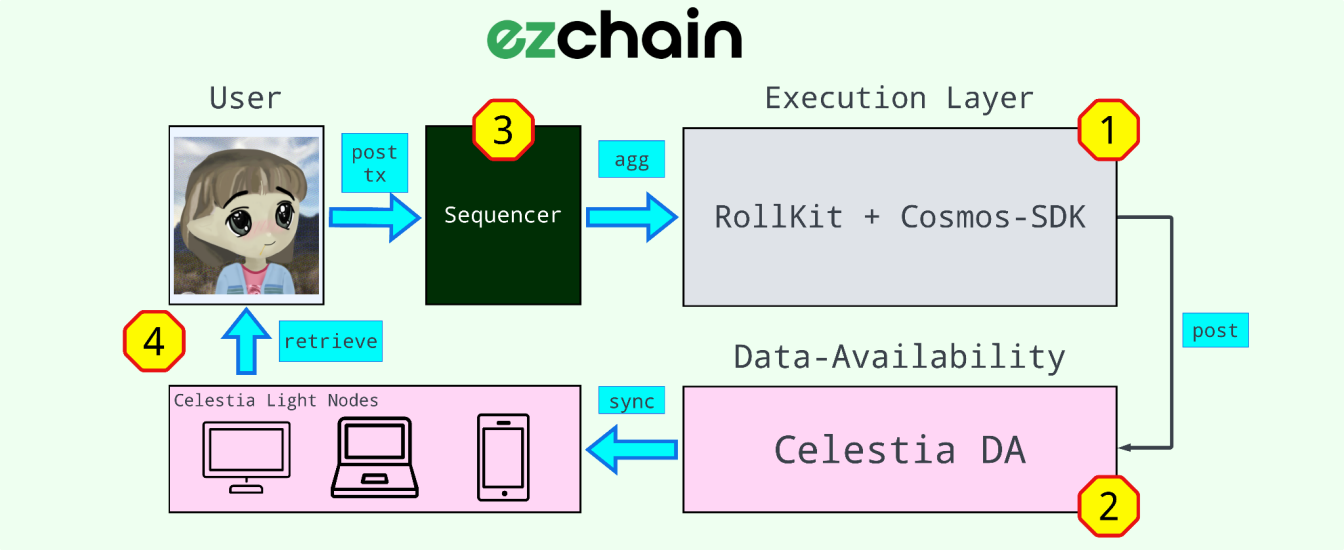
Thank you for your interest in the ezchain product. For background, ezchain.io was slated to be built on the Tezos network using the recently released smart-contract optimistic rollups. We were able to develop the first and only working MVP using smart rollup technology. Unfortunately, high development costs, high opportunity costs, and lack of support from the Tezos ecosystem has led us to find a new home for this product.

On the technical side, ezchain is meant to be a gaming-focused appchain built using layer 2 to enable a near-instant user experience while playing. We were able to achieve instant-play with our Tezos MVP, so we know that it is not impossible. The goal is still the same, but the path we are taking has changed.

We are glad to confirm that ezchain is going modular.

During our latest round of research, we focused on the quickly emerging modular thesis for decentralized apps. In our own experience, being tied to a specific L1 blockchain is not the ideal answer for scaling and long-term stability. We have deep experience in cloud infrastructure, and it became apparent that the modular nature of cloud is one of its strongest selling points. The goal of ezchain is to be extremely EZ for the end-user, and with modular architecture we can choose the best tech for our use-case.

With the introduction complete, let’s dive into our modular stack.



1. Rollup Framework

We have decided to build ezchain on the Rollkit framework. This framework empowers us to quickly and safely spin up modular rollups.

Using Rollkit, we will be building on the powerful Cosmos-SDK for our appchain's execution layer. Cosmos-SDK exposes production-grade modules like Auth, Consensus, Staking, and Slashing, that will reinforce our appchain.

2. Data Availability (DA)

We expect to use **Celestia** as our DA layer for ezchain.

Celestia's light node & data-availability sampling architecture are simply best-in-class, and many projects are awaiting mainnet launch. Rollkit was made to work directly with Celestia, which is a major strength for our goals.

If we are unhappy with Celestia, Rollkit exposes DA adapters to allow our appchain to connect to any other DA layer for storing data. Another win for the modular thesis.

3. Sequencing

One major benefit of Rollkit is that it supports any type of sequencer, out of the box. As we scale ezchain up, we are able to move from centralized to decentralized sequencers with ease.

4. Fraud Proofs

One reason our team built our MVP on Tezos L2 was the availability of working fraud proofs. Fraud proofs are very important to a rollup-based appchain like ezchain, but they aren't everything.

Execution-level fraud proofs are on the timeline for Rollkit, but are not currently active. This is a small setback, but the long-term benefits of modular design are not invalidated because of this fact.

Fraud proofs in Rollkit are already in development on Github, and we are very excited for their release.

5. Growing with Rollkit

With our decision to move to modular and build on Rollkit & Celestia, we are making a bet on the modular thesis. We are very comfortable with this bet. Compared to monolithic chains, the modular landscape gives us any number of escape hatches if we are unhappy with the direction of development on any one part.

We are already very impressed with the focus on developer experience from both Celestia and Rollkit. Their focus on developer experience allows GeniusTeam to focus on **user** experience, and ultimately deliver a more exciting product to our users.