Rollkit

Validator nodes allow you to participate in consensus in the Celestia network.

Rollkit is an ABCI (Application Blockchain Interface) implementation for sovereign rollups to deploy on top of Celestia.

It is built by replacing Tendermint, the Cosmos-SDK consensus layer, with a drop-in replacement that communicates directly with Celestia's Data Availability layer.

It spins up a sovereign rollup, which collects transactions into blocks and posts them onto Celestia for consensus and data availability.

The goal of Rollkit is to enable anyone to design and deploy a sovereign rollup on Celestia in minutes.

Furthermore, while Rollkit allows you to build sovereign rollups on Celestia, it currently does not support fraud proofs yet and is therefore running in "pessimistic" mode, where nodes would need to re-execute the transactions to check the validity of the chain (i.e. a full node). Furthermore, Rollkit currently only supports a single sequencer.

Tutorials

The following tutorials will help you get started building Cosmos-SDK applications that connect to Celestia's Data Availability Layer via Rollkit. We call those chains Sovereign Rollups.

You can get started with the following tutorials:

- GM World rollup
- GM World frontend
- Recipe Book rollup
- Wordle app
- CosmWasm rollup
- Polaris EVM rollup [][Edit this page on GitHub] Last updated: Previous page Deploy an OP Stack devnet to Celestia Next page Create a wallet with celestia-node []