Introduction

Celestia is a modular data availability network that securely scales with the number of users, making it easy for anyone to launch their own blockchain.

Celestia enables the next generation of scalable blockchain architectures <u>modular blockchains</u>. Celestia scales by<u>decoupling execution from consensus</u> and introducing a new primitive <u>data availability sampling</u>.

The former entails that Celestia is only responsible for ordering transactions and guaranteeing their data availability; this is similar to<u>reducing consensus to atomic broadcast</u>.

The latter provides an efficient solution to the data availability problem by only requiring resource-limited light nodes to sample a small number of random shares from each block to verify data availability.

Interestingly, more light nodes that participate in sampling increases the amount of data that the network can safely handle, enabling the block size to increase without equally increasing the cost to verify the chain. [][Edit this page on GitHub] Last updated: Next page Monolithic vs. modular blockchains []