

I'm Yu from UnUniFi (currently Cosmos SDK based L1) team.

We are considering to migrate our L1 to Sovereign Rollup on Celestia, but there is an obstacle that no IBC support is ready on Sovereign Rollups even if it is made with Rollkit+Cosmos SDK.

IBC is the way to realize non-enshrined bridge, and non-enshrined bridge is the key component of Sovereign Rollup we think.

IBC for Sovereign Rollup seems to be in the roadmap in Rollkit, but it is far and other tasks are prioritized I heard from the Rollkit team. Now we can consider to contribute to develop "IBC for Sovereign Rollups" to launch it earlier than the Celestia team directly do it after many other tasks.

However, it is difficult in voluntarily in the perspective of fund managing. There are two options

1. Getting grants from Interchain Foundation
2. After developing IBC for Sovereign Rollups, UnUniFi team launch new Sovereign Rollup beside of UnUniFi. The new network is "IBC Hub for Sovereign Rollups." Tentative name is "Relativity" \$RLTY (It should be distributed for \$GUU private investors and \$TIA holders)

I heard that ICF is in turmoil, so 2 seems to be better in current situation.

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+-----|developed by UnUniFi core devs|+-----+ +-----+ ||Relativity | |UnUniFi| ||IBC Hub | | |
||for Sovereign Rollups| | |$RLTY | |$GUU | |+-----+ +-----+ | ↓ ↓ +-----↓-----↓----- ↓ ↓Consensus & DA
dependency +-----|Celestia |$TIA +-----
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What is "IBC Hub for Sovereign Rollups?"

- It is not a settlement layer
- Sovereign Rollups have their settlement layer on their own rollup
- Different from Dymension
- It is a settlement L1 that can use IBC for enshrined bridge between L1 and L2
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- Different from Cevmos
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- It is a settlement rollup that can be a settlement layer, but that settlement is "enshrined" in the rollup contract.
- It is a "Non-enshrined settlement hub"
- Using this hub is not mandatory, but this hub serves a lot of convenience like:
 - Multi-hop packet forwarding of IBC
 - Multi-hop connection of IBC client
- Celestia appeals that rollups will be able to be deployed as easy as smart contracts in the future. So establishing IBC connection of Sovereign Rollups also should be as easy as it, and this hub can play that role.
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Technical guides

- IBC client for Sovereign Rollups can be made as Wasm IBC client with CosmWasm
- Solo machine client can be used as a substitution in this moment
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Technical concerns

- Definition of Optimistic Application Rollup Interface
- Definition of ZeroKnowledge Application Rollup Interface
- Which Shared Sequencers should be supported for IBC
- Unified interface for supporting multiple shared sequencer protocols
- Unified interface for supporting multiple shared sequencer protocols

Optimistic

Pessimistic

Zero Knowledge

Single Sequencer

highest priority?

Astria Shared Sequencer

Espresso Shared Sequencer

lower priority?

I want to ask you guys the feeling for this idea.

It is different from other Settlement Layers like Dymension, so if there is no cannibalism, it would be worth to do.