Proposal

Overview

At the current 2D stage of Dymension L1, RollApps can only be deployed with the approval from Dymension's onchain governance. Due to the technical overhead of the 2D system, L2s are primarily managed by the Dymension Core team. This structure introduces several trust assumptions and limits innovation.

This proposal details Dymension's 3D upgrade, enabling permissionless RollApp creation without requiring approval from Dymension's onchain governance. Dymension's 3D upgrade includes an array of features designed to enable anyone to securely launch Layer 2 blockchain (RollApps) on Dymension's L1.

As part of this upgrade Dymension L1 has undergone significant changes, testing, and audits. This upgrades includes significant changes to components outside of the scope of the Dymension L1 upgrade including Dymint, Dymension RDK, Roller, Portal, and more. These components in aggregate create a robust system that is designed to enable anyone to permissionlessly create RollApps as well as the resources to do so.

Included as part of this upgrade is a new trading system referred to as IROs

(Initial RollApp Offerings) that enable the pre-launch trading of RollApp tokens, used to bootstrap liquidity pools upon launch. Additionally, new features such as Endorsements (referred to as x/sponsorships

) and Royalties are designed to incentivize active contributors.

On top of the improvements in the stated components, Dymension L1 has implemented security related features such as a rollback, forking, and sequencer rotation system that re-determines the state of the L2 based on any fraud submitted to Dymension L1. This system enables sequencer jailing upon security and/or liveness issues as well as the smooth transition to a newly bonded sequencer.

Ecosystem Participants

Dymension's 3D upgrade introduces a fully seamless, permissionless, and decentralized experience for creators, operators, and users.

Creators

launch tokens and RollApps, they promote and build their ecosystem while having rights to onchain revenues such as Endorsements and Royalties.

Operators

manage and run all L2 infrastructure using the newly upgraded Roller CLI tool. They can easily opt in to service RollApps and get compensated for it.

Users

can participate in the ecosystem in various ways. They can provide liquidity in pools, delegate to operators for RollApp fast withdrawals (for a fee), trade tokens and deposit/withdraw to and from RollApps.

Prominent Features Include:

1. Onchain chain registry:

RollApps are registered directly onchain, ensuring transparent and verifiable deployment. This eliminates the need for cumbersome organizational coordination by shifting all processes onchain, making them fully accessible and removing reliance on external, permissioned tools like GitHub. RollApp metadata such as RPC endpoints, logos, display names, tokenomics and more are now accessible onchain.

1. Initial RollApp Offering

: A streamlined mechanism for RollApp creators to launch tokens prior to their RollApp's deployment and allocate them transparently. Creators define tokenomics, bonding curves and valuation offered enabling users to participate in them directly.

1. Endorsements

(Formerly Sponsorships): DYM stakers vote on which RollApps and liquidity pools receive support through a transparent, permissionless funding system, enabling community-driven allocation of resources.

1. Dymension Name Service (DymNS):

RollApp creators can purchase domain-like names (e.g., @pokerollapp

) for their RollApps, which are transferable and can be resold, simplifying interaction, accessibility, and branding. This feature also establishes a new market within the Dymension ecosystem, enhancing economic activity and opportunities for participants.

Users can purchase usernames to assign their address a human readable username that is compatible across the entire Dymension and RollApps ecosystem.

1. Royalties

: RollApp creators earn 50% of all fees from IRO and RollApp token swaps, with the remaining 50% used to burn DYM. This ensures creators receive fair revenue shares, driving ecosystem growth. Creators will eventually be able to sell their royalty rights entirely, introducing a new asset class within the Dymension ecosystem.

1. Standardized Data Availability (DA) on the Hub

: The Dymension Hub will integrate support for working with various Data Availability layers. This flexibility ensures RollApps can choose the DA solution that best fits their needs, enhancing scalability across the ecosystem.

1. IBC Bridging Fee Middleware

: The middleware applies a tax on IBC transfers from RollApps to the Dymension Hub. Fees are swapped to DYM and burned, creating a revenue stream for the Dymension ecosystem while reducing token supply.

1. RollApp Liveness and Slashing

: Sequencers are required to regularly update the Dymension Hub to maintain RollApp activity. Failure to do so within a specified time results in slashing of their stake, and prolonged inactivity leads to jailing. This mechanism ensures network reliability while incentivizing consistent sequencer engagement.

1. Sequencer Bond Management

: A system that allows sequencers to increase or decrease their bond without fully unbonding. This mechanism enhances security by enabling higher bonds while offering flexibility for sequencers to manage their stake efficiently.

1. Automatic Denom Metadata Registration:

Automates the transfer and registration of denom metadata across RollApps and the Hub using IBC middleware. This eliminates the need for manual metadata registration, ensuring a unified and seamless interoperability enviorment.

1. Graceful Sequencer Rotation and Forced Sequencer rotation:

Allows for seamless transitions between active sequencers on a RollApp, ensuring continuity in cases of voluntary unbonding or enforced rotations due to inactivity, misbehavior, or fraud. Forced rotations reset the RollApp to the last undisputed state on the Hub, while graceful rotations enable the current sequencer to hand over operations securely and without disruption.

1. DRS Dymension RollApp Standards:

Introduces a standard for Dymension RollApps version where every RollApp must utilize an approved DRS, while every non-DRS approved version is considered fraud. In addition a mechanism to force-upgrade RollApps running vulnerable or obsolete DRS versions. This ensures network security by halting RollApps that utilize flagged software versions, preventing further operations and blocking transfers until resolved.

1. Bridge LP/Operator separation:

Enables users to provide liquidity for eIBC demand orders without running the infrastructure or full nodes. Liquidity providers rely on operators for validation and execution, separating financial contributions from operational responsibilities.

Changelog: dymension/CHANGELOG.md at main · dymensionxyz/dymension · GitHub

Commit: b77a9e11a4e890135274effd48e318c17e231e25

Details: Block 5135550

Instructions: 3D Upgrade Guide

Governance Vote

- YES
- NO
- NO WITH VETO - A ‘NoWithVeto’ vote indicates a proposal either (1) is deemed to be spam, i.e., irrelevant to Dymension, (2) disproportionately infringes on minority interests, or (3) violates or encourages violation of the rules of engagement as currently set out by Dymension governance. If the number of ‘NoWithVeto’ votes is greater than a third of total votes, the proposal is rejected and the deposits are burned.
- ABSTAIN - You wish to contribute to quorum but you formally decline to vote either for or against the proposal.