# Treasury Withdrawal - Dolos: Sustaining a Lightweight Cardano Data Node

## **Title**

Withdraw ₳220,914 for Dolos: Sustaining a Lightweight Cardano Data Node

## **Abstract**

This treasury withdrawal funds **Dolos: Sustaining a Lightweight Cardano Data Node** which will provide the following services:

This request for support focuses on Dolos (<https://dolos.txpipe.io/),> a lightweight Cardano data node, designed as a backend for dApps. It is fine-tuned to solve a very narrow scope: keeping an updated copy of the ledger and replying to queries from trusted clients. Unlike a full Cardano node, Dolos is optimized for minimal resource usage while maintaining high data integrity and responsiveness. As an open-source project, Dolos has been steadily growing in adoption, with 366 commits, 367 pull requests, and contributions from 21 developers. It is becoming a key tool for projects seeking efficient blockchain data access without the overhead of full-node infrastructure. To ensure Dolos continues to evolve alongside Cardano’s ecosystem, we are requesting funding for the following roles: 0.5 FTE Blockchain Developer and 0.125 FTE Tech Lead.

This Treasury Withdrawal is submitted by Intersect on behalf of the vendor. The following sections; Abstract, Motivation, Rationale and Vendor Profile have been sourced from the approved proposal submitted by the Vendor as part of the Intersect budget process.

This treasury withdrawal funds one of 39 proposals to give effect to the approved budget info action for ₳275,269,340, administered by Intersect via gov\_action1u9x73kwufaxa70lfy59g4ynwyrcsaxdcd0gxzzmh67s9fxq4j8hqqk2phgh. The information provided herein is intended to fulfill the spirit of the constitutional requirement for a treasury withdrawal info action by also providing the details of the proposed solution, alignment to the budget, and amount to be withdrawn from the Cardano Treasury.

## **Motivation**

This proposal aims to solve the following problem:

Dolos is a specialized Cardano data node designed to maintain an updated copy of the ledger and respond efficiently to queries. Optimized for data integrity and speed, it provides developers with reliable blockchain data access while requiring a fraction of the resources of a full node. Over the past year, Dolos has gained adoption within the Cardano ecosystem, with an active open-source community contributing to its growth. To continue improving its efficiency, maintaining compatibility with Cardano upgrades, and expanding its capabilities, ongoing development and maintenance are necessary. This proposal seeks funding to ensure Dolos remains actively supported, optimized, and available for the growing number of projects relying on it.

## **Rationale**

### Project Solution

Securing funding for Dolos will ensure its continued maintenance, optimization, and feature expansion, directly benefiting projects that rely on fast and lightweight access to Cardano ledger data. Continued improvements will enhance performance, reduce infrastructure overhead, and support a broader range of use cases. By keeping Dolos actively maintained, the Cardano developer community gains a robust and efficient alternative to traditional node setups, lowering operational costs and improving blockchain data accessibility.

### Vendor Profile

TxPipe is an active member of the Cardano ecosystem

TxPipe has been developing open-source tools for the Cardano ecosystem for over 3 years and we're not going anywhere. Evidence of our commitment can be found by evaluating the continuous activity of our public code repositories.

Experience developing in the Cardano ecosystem

TxPipe has helped developed several dApps for the Cardano ecosystem. This experience allows us to evaluate the feasibility of the project and its potential benefit from a developer's perspective. We've also participated in development of chains using the released version of the IOG's Partnerchain SDK.

Successful Catalyst proposals

We have successfully completed several Catalyst proposals. This may serve as evidence that our team has the required capabilities to fulfill these type of projects.

Development process will be public and open-source

Both the output and the development process will be public and open-source. This approach provides an easy way for the Catalyst team and the Cardano community to evaluate the progress at each step of the process.

### Contract Management

A written off-chain Legal Contract will be created between the Vendor and the Cardano Development Holdings (CDH), as mandated by the constitution, and will be administered by Intersect. This will include details of the project delivery schedule and dispute resolution.

### Project Delivery

All milestones, acceptance criteria, payment amounts and expected delivery dates will be agreed between the Vendor and Intersect, acting on behalf of the CDH. The vendor will deliver according to the agreed-upon project schedule within the Legal Contract, of which the necessary information will be made public via the budget management platform via transaction metadata.

Defined by the milestones within a Legal Contract, the vendor will submit and attest milestone acceptance to the community, Intersect or 3rd Party Assurer.

Project progress will be monitored via Intersect’s delivery assurance function which will be communicated to the community.

Acceptance of the above work is expected to be supported by a 3rd Party Assurer, who will be responsible for reviewing and signing off the work completed at each project milestone against the corresponding milestone deliverables detailed within the Legal Contract. This work is funded from a portion of this treasury withdrawal.

### Budget Management Tooling

To administrate treasury funds on-chain, Intersect will utilize the treasury management smart contract framework developed by Sundae Labs. The smart contracts have been [extensively tested](https://github.com/SundaeSwap-finance/treasury-contracts/tree/main/offchain/tests) including audits from TxPipe and MLabs. Examples of the usage of these contracts can be seen across mainnet described across Intersect authored [Blog 1](https://www.intersectmbo.org/news/smart-contract-mainnet-demo-a-step-toward-on-chain-treasury-withdrawals), [Blog 2](https://www.intersectmbo.org/news/smart-contract-mainnet-demo-day-two-update) and [Blog 3](https://www.intersectmbo.org/news/smart-contract-mainnet-demo-day-three-update).

Final mainnet validation test can be seen via the Disburse action within transaction: 0f591dc544ae14102dbb4a74d5311a6acffc1772b163d8b7a9656b9525950b17

With the confirmed treasury reserve contract address being: stake17xzc8pt7fgf0lc0x7eq6z7z6puhsxmzktna7dluahrj6g6ghh5qjr

#### Specifics

Intersect will utilize a single Treasury Reserve Smart Contract (TRSC), with many Project-Specific Smart Contracts (PSSC), managed by Intersect. Intersect’s management consists of three ‘admin’ and two Intersect ‘leadership’ roles. An Oversight Committee consisting of five external, independent third-party entities will provide checks and balances on Intersect, and safeguard against errors and unilateral control. The administration of both TRSC and PSSCs will be managed by Intersect, with external oversight on certain actions from the Oversight Committee.

The Oversight Committee consists of Sundae Labs, Cardano Foundation, Dquadrant, Xerberus and NMKR. Their role is to independently verify key administrative actions using on-chain logic, ensuring accuracy and consistency without exercising discretion over governance decisions.

For all details on Intersect’s configuration please see the [**Smart Contract Guide**](https://docs.intersectmbo.org/cardano-facilitation-services/cardano-budget/intersect-administration-services/smart-contracts-as-part-of-our-administration) on the knowledgebase.

The high level permissions are as follows:

* TRSC Fund and PSSC Modify
  + Two of the three Intersect admins, two of the five trusted entities and one of the two Intersect leadership sign-off must authorize
* TRSC Disperse
  + Two of three Intersect admins, three of five trusted entities and two of two Intersect leadership sign-off must authorize
* TRSC Pause and Resume
  + Two of three Intersect admins, and one of two Intersect leadership sign-off must authorize
* TRSC Sweep
  + One of three Intersect admins, and one of two Intersect leadership sign-off must authorize
* TRSC Reorganize
  + Two of three Intersect admins and three of five trusted entities must authorize

#### Processes

Upon enactment of this governance action, funding for this project will be directed into the TRSC’s stake account. All instances of TRSC and PSSC can not be staked with a SPO and will be delegated to the auto-abstain predefined DRep. From here funds will be withdrawn into a UTxO remaining at the TRSC.

When the Legal contract is prepared and the vendor is ready, funding for this project will be transferred using the Fund action to a PSSC. All milestones will be outlined within the metadata.

A dashboard will be available for the community to audit the TRSC or PSSC and track metrics related to this withdrawn ada as well as being immutably verifiable on chain.

The subsections; Contract Management, Project Delivery, and Budget Management Tooling described above cover the constitutional requirements specified in Article IV section 4 and 5.

## **References**

TxPipe Dolos GitHub Repository

* <https://github.com/txpipe/dolos>

Project Proposal In Ekklesia

* <https://2025budget.intersectmbo.org/ballots/680d1b63565577986442d123/proposals/680d1b64565577986442d29a>

Approved Budget Info Action submitted by Intersect via GovTool

* https://gov.tools/outcomes/governance\_actions/e14de8d9dc4f4ddf3fe9250a8a926e20f10e99b86bd0610b77d7a054981591ee#0

Details of all successful proposals (CSV)

* ipfs://bafybeicwrop4q7xvnyjdd5drumbe56sqtm5lbe2ul3c262zt4hgguzdycm

Automating Accountability: Cardano’s Smart Contract Framework Blog

* ipfs://bafybeihqx4ae72z7suqfnxrpqpqithp43cai7o2uuewnqtezgaoyc3ptyq

Sundae Labs Budget Management Smart Contracts Github Repository

* https://github.com/SundaeSwap-finance/treasury-contracts

Budget Management Smart Contracts TxPipe Audit Report

* ipfs://bafybeiccnwejbgj43wo6hrlseckkkmprtoqc5cfuy2hesm6c6yealwho3e

Budget Management Smart Contracts MLabs Audit Report

* ipfs://bafybeiah5fnjhda5hemj3qvaehc4mre3qllqzw2l7mkdsguytn4ftgafw4

## **Authors**

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