

Feasibility Study - Data Availability with Validation on Cardano

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Overview

This report addresses [milestone 1](#) of the [Sky Protocol: Data Availability for Cardano Layer 2 Solutions](#) proposal.

Maintenance of Unique Identifiable Contract State

For the maintenance of unique identifiable contract state, we will use NFT-based oracles, similar to the [example](#) from the Plutus Pioneer Program.

Each data topic will be associated with an NFT that stores the root hash as its datum.

Multisig for Data Availability Committee

Initially, we will use a simple M-of-N multisig based on Ed25519 signatures.

In the future we might use Schnorr signatures.

Merkle Proof of Data Availability

We will use the usual [Merkle membership proof](#) approach.