Open Captable Protocol (OCP): A Blockchain-Based Solution for Security Transfer Management

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Abstract

The Open Captable Protocol (OCP) introduces a revolutionary approach to managing capitalization tables through blockchain technology. This paper presents a comprehensive solution that bridges the gap between traditional security transfer systems and modern blockchain capabilities, while maintaining compliance and data privacy standards.

1 Transfer Agents, Past and Future

[Your content will go here about the history of transfer agents]

2 Problem Background

Current challenges in security transfer management include:

- Market smart contracts for securities cannot settle onchain due to offchain record keeping

- Ownership verification cannot be proven onchain as tokens do not represent ownership records

3 OCP Introduction

The Open Captable Protocol consists of two primary components:

- Offchain component (server)

- Onchain component (smart contracts)

3.1 Smart Contracts

OCP implements the Diamond Pattern architecture on EVM to partition captable functionality into facets. This approach enables:

- Modular functionality distribution

- Efficient gas cost management

- Flexible bytecode size management

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4 Server Architecture

[Your server content...]

5 Compliance

[Your compliance content...]

6 Real World Usage

[Your usage scenarios...]

7 Use Cases Unblocked

[Your use cases...]