

**CrimRxiv**

# **From platform dependency to protocol permanence: An OAIS- aligned case study in decentralized digital preservation**

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## ABSTRACT

Institutional digital preservation depends on centralized infrastructure subject to funding cycles, organizational change, and technological obsolescence. This paper presents Project Continuum, an open framework developed by the Ar.io Foundation demonstrating how decentralized, protocol-enforced storage can satisfy and strengthen the functional requirements of the Open Archival Information System (OAIS, ISO 14721). We describe the architectural mapping between OAIS functional entities and the ar.io/Arweave stack, and present a live pilot: the migration of CrimRxiv, an open-access criminology repository, to decentralized permanent storage following the announced sunset of its host platform. The pilot demonstrates verifiable ingest, cryptographic fixity, persistent identifier interoperability (DOI to TXID), and distributed access through a standards-aligned lens. We identify key open questions and invite engagement from the digital preservation community as this framework matures.

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[Platform to Permanence iPRES 2026.pdf](#)

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