

TITLE: Arches Version 4: A case study in developing a modular semantically-enabled data management platform for ongoing documentation of all types of cultural heritage

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ABSTRACT:

Arches began as a project by the Getty Conservation Institute and World Monuments Fund to create immovable heritage inventory system software for cultural heritage organizations worldwide. In order to serve that goal and solve the problems often encountered by these organizations, the project adopted some guiding design principles that eventually led to its expansion and wider applicability and participation. In particular, one of those guiding design principles was that data held in an Arches-powered system would be semantically structured to facilitate better data retrieval and to create self-describing datasets for migration, interoperability and sustainability. Using various implementations as examples, this paper will look at how the Arches project incorporated the CIDOC-CRM ontology into the system and how the current version of Arches is modular and can accommodate different kinds of cultural heritage uses, from built heritage inventories to provenance indices to conservation science data management, both in the field and in the office or lab.