

ETANA-DL: Managing Complex Information Applications – An Archaeology Digital Library

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ABSTRACT

Archaeological research results in the generation of large quantities of heterogeneous information (see Figure 1) managed by different projects using custom information systems. We will demonstrate a prototype Digital Library (DL) for integrating and managing archaeological data and providing services useful to various user communities. ETANA-DL [1] is a model-based, componentized, extensible, archaeological DL that manages complex information sources using the client-server paradigm of the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH) [2].

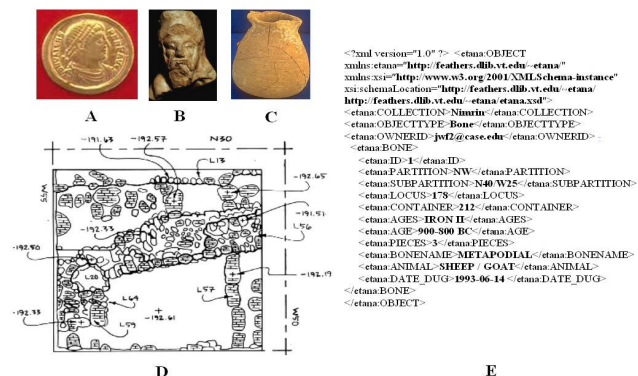


Figure 1: Heterogeneous data in ETANA-DL – A) coin B) figurine C) pottery D) site plan and E) bone record

We present a prototype of ETANA-DL (see Figure 2) that builds on the 5S meta-model [3] we are developing for archaeological systems. We will demonstrate our approach, used to integrate and handle highly heterogeneous data and the various services that ETANA-DL currently supports – searching, browsing, personal collections, workflows, discussions, annotations, etc. Many of these services are pre-existing ODL components [4] developed at Virginia Tech, used with very few modifications to suit our requirements – searching, annotation, recommendation engine, etc. We have developed a few other components – personal lists, recording of most recent queries issued, etc. – that can be reused in other DLs. These various components can be combined to create a full-fledged DL without compromising on performance. Presently, we are working on the structural aspects of the meta-model, and have used the results to develop advanced cross-collection searching and browsing services.

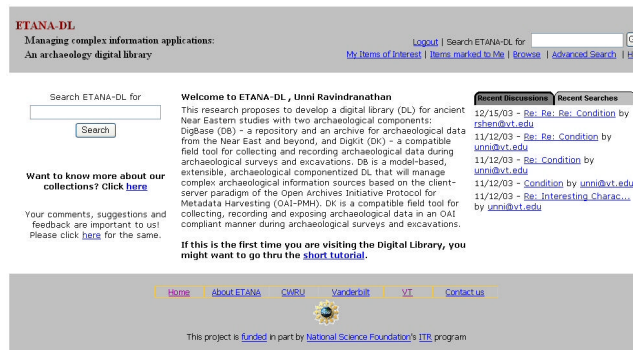


Figure 2: ETANA-DL prototype

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