

Integrating Archaeological Datasets: the ARIADNE Portal

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Abstract. One of the emerging needs of the archaeological community is represented by the importance of availing of systems that allow to tackle new research questions, by querying diverse available resources. Usually, archaeological digital data is stored in non-standardised individual databases with a limited possibility of integration and a high level of fragmentation. The EU-funded project ARIADNE, has developed an e-infrastructure which enables the integration of archaeological datasets from various different institutions, integrating resource discovery metadata using controlled vocabularies, thesauri, gazetteers and ontology (CIDOC CRM). This paper presents the ARIADNE infrastructure, describing the activities undertaken by the project to achieve interoperability of archaeological resources at the dataset and item level. Moreover, the architecture of the ARIADNE Infrastructure and the Portal, with the different ways to search and access the resources are described.

1 Introduction

In the recent years we have assisted to an increasing awareness of the importance of creating networks of data that allow integrated access to documentation and to digital archives of archaeological resources. An important condition for the development of such networked accesses lays in the definition of standards and guidelines that establish a degree of compatibility between the datasets that make these networks up.

Usually, data is stored in non-standardised individual databases with a limited possibility of integration and a high level of fragmentation of data. This is mostly due to the different needs of the various research communities who store and structure their data according to the standards that apply to their specific research domain. However, when the different communities agree to share their data with the wider community and for a broader purpose, the related problem of data interoperability arises. This is the challenge that ARIADNE is facing [1, 2]. The EU-funded project has developed an e-infrastructure that enables the integration of archaeological datasets from various different institutions. ARIADNE's main objective is to provide researchers with an integrated access and to guarantee the semantic interoperability of archaeological datasets distributed throughout Europe. The main expectation of the project is that researchers will make use of these resources and benefit from them through the use of technologies and services made available by the infrastructure itself, and to challenge

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