

Abstract

The objective of this thesis is a section design of biographical data from a digital interoperable library named VESTIGIUM. With this aim, we carried out an in-depth study on the regulation, technology and current projects concerning the information of persons, which we here refer to as biographical data or authority control.

We therefore analysed the current level of name authority control, right from the first conceptualisations back in the 19th century, and the usual settings in which this type of data appears: libraries, archives and museums (LAM). We then analysed the current aspects of the new universe in which these abstract entities operate, since they can appear in multiple environments for different uses throughout the World Wide Web. This is the reason why the analysis becomes complex and limited, since authority records may be treated differently according to the context and use.

The working method consists of both literature review techniques and fieldwork which aim to find information systems that operate with authority control on the internet as well as cases of use of linked data (LD).

The creation of a regulatory framework in terms of name authority data in the scope of archives –International Standard Archival Authority Record For Corporate Bodies, Persons and Families (ISAAR (CPF)) and Encoded Archival Context – Corporate Bodies, Persons and Families (EAC-CPF)-, libraries and information science –Functional Requirements for Authority Data (FRAD), Guidelines for Authority Records and References (GARR), MARC 21 Format for Authority Data, Resource Description and Access (RDA), MARCXML, Metadata Authorities Description Schema (MADS)-, and in the implementation world of recommendations for metadata from the World Wide Web Consortium (W3C) –Dublin Core Metadata Initiative (DCMI), Resource Description Framework (RDF), Friend to Friend (FOAF), RELATIONSHIP, and BIO- have enabled us to create a prototype that acts as grounds for the inter-operability of biographical data, ensuring visibility at international level. Likewise, the formats of export defined according to the rules and standards of the application actually enable data exchange, taking into account that the use of technologies from the Semantic Web allows the integration of data originating from various systems.

The data model proposed in *author's table* with contextual information complies with the four basic principles defined by Berners Lee for the publication of linked data. The benefits achieved by using the semantic regulation on the table are the following: improvements in the process of obtaining links between entities semantically similar or related, vocabularies of values, groups of metadata elements or data groups that originate from different sources which in turn also provide this kind of data.