

Toward FAIR semantic resources

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The objective of producing FAIR scientific data (Findable, Accessible, Interoperable, Reusable) is increasingly supported by the use of domain specific ontologies and thesauri. Generalizing this approach to all scientific domains and building the necessary multi-disciplinary semantic tools and services will require finding and reusing multi-disciplinary semantic resources. These resources are heterogeneous and scattered through the web either as individual entities or within various specialized repositories. The lack of discoverability, the technical and metadata heterogeneity of the semantic resources (ontologies, thesauri and specialized repositories) pose a challenge for their effective integration. In this presentation, we argue that we need to work toward building FAIR semantic resources. To achieve this objective, we are considering two main challenges: the interoperability of the semantic resources both at the metadata level and the API level and the discoverability of these resources. We will first introduce an international and multi-disciplinary collaborative effort initiated by the EUDAT Semantic Working Group and driven by the RDA Vocabulary and Semantic Service Interest Group. This collaborative effort aims at addressing the interoperability and governance of semantic resources challenges. We will then present the proof-of-concept service developed by EUDAT to support discoverability and aggregation. This service, called the Semantic Look Up service (Goldfarb and al., 2017), allows semantic providers to publish a description of their resource which will be used to index their content. This semantic index provides a central point of access to multi-disciplinary concepts for semantic tools and services (both academic and commercial) and a unique resource to analyse the resources. We will briefly discuss the potential impacts of the Semantic Look Up Service and hope to trigger discussions regarding the future of this effort during the DI4R meeting. This presentation is open to all participants.

Topic Area

Interoperability

Type of abstract

Presentation (15 minutes)

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