



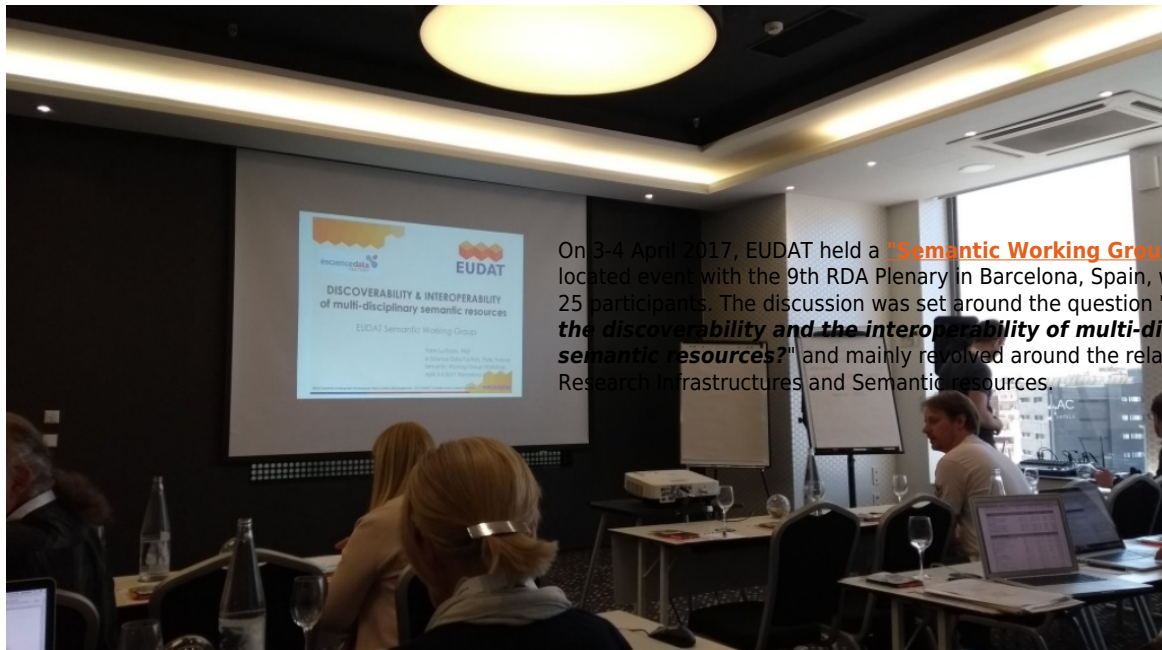
Semantic Working Group

3-4 April 2017

“ How to improve the **discoverability**
and the **interoperability** of multi-disciplinary
scientific semantic resources? ”



The EUDAT Semantic Working Group: Making Scientific Semantic Web Resources FAIR



On 3-4 April 2017, EUDAT held a "**Semantic Working Group**" workshop as co-located event with the 9th RDA Plenary in Barcelona, Spain, which involved over 25 participants. The discussion was set around the question "**how to improve the discoverability and the interoperability of multi-disciplinary scientific semantic resources?**" and mainly revolved around the relationship between Research Infrastructures and Semantic resources.

In order to provide its users with semantic resources, the EUDAT team developed **B2NOTE**, the new EUDAT annotation pilot service allowing users to create annotations which associates files in B2SHARE with terms/concepts coming from existing domain-specific controlled vocabularies (**you can test it at <https://b2note.bsc.es>**). To provide users with existing semantic terms/classes, we created a satellite service, the Ontology Look Up (OLS) service, which indexes the content of well-known existing repositories (currently from the Biomedical domain).

Throughout the development of the **annotation service B2NOTE** and its companion OLS, we identified two clear issues which hamper the extension of B2NOTE as a multi-disciplinary tool:

1. The **discoverability** of the existing semantic resources: where do we find the existing ontological resources for the different domains or from the different communities in EUDAT?
2. The **interoperability** of the existing resources at the level of metadata description and the API: how do we increase interoperability in order to develop a scalable solution to access and harvest the content of these resources?

In the context of the EUDAT Joint Research activities, we are currently developing a prototype of a multi-disciplinary OLS providing a catalogue of semantic resources and services to harvest part of their content to extend the semantic term index.

The co-located workshop with RDA Plenary was organised both to support our work and align it with the different stakeholders, as well as to build an active working group on these specific issues. The workshop was open to any interested participants and included invited leading experts, community developers of semantic resources, the representatives of different domain-specific ontology repositories and various related domain-specific initiatives (**[click here](#)** to see the programme).

During the first half-day, many relevant approaches and initiatives were presented and discussed, including the related RDA Vocabulary Service Interest Group. This served as a basis for a full day of discussion on these topics dedicated to the identification of specific issues and relevant potential solutions. Among the various topics considered, three main issues were selected as starting point and were the focus of dedicated discussion groups:

1. Minimum set of necessary metadata fields to describe ontologies
2. What does metadata interoperability mean?

3. An ontology market place to support the reuse of ontologies

The interactions between the participants and the strong interest to tackle these issues lead to discussions whether we organize each other via the follow up of the related RDA Vocabulary Service Interest group or the creation of a new one. We are planning to continue this work during a second workshop, co-organized with **LifeWatch Italia**, which should be held in July (in Lecce, Italy). More information will be communicated on this event soon. Persons interested in contributing to this working group are invited to contact the organizers: **Yann Le Franc** (ylefranc@esciencefactory.com) or **Barbara Magagna** (barbara.magagna@umweltbundesamt.at).