

to their authors, who are in turn affiliated with specific departments and associated with projects, which in turn have specific data sets and publications – such as the initial publication – as research outputs. It is clear to see that it is not feasible to annotate all this information directly when entering the metadata of the publication. Rather, the link to the URI identifying the author establishes a connection to all the other information. Moreover, in the context of the Semantic Web, we can make use of reasoning in order to infer links which have not been asserted explicitly. For example, in cases where a publication has not been annotated with the project in whose context it was created, we can use the Semantic Web formalisms in combination with the aforementioned ontologies and the Dublin Core vocabulary to find potential research outputs of these projects. Here, we can define that if the date of a *dct:BibliographicResource* is within the time interval of an *akt:Project* which has an author of the bibliographic resource as a project member, then the bibliographic resource may *potentially* be a research output of the project. As temporal overlap is not sufficient, however, we do not assert such inferred links explicitly, but instead use them to speed up the process of detecting *actual* research outputs of projects.

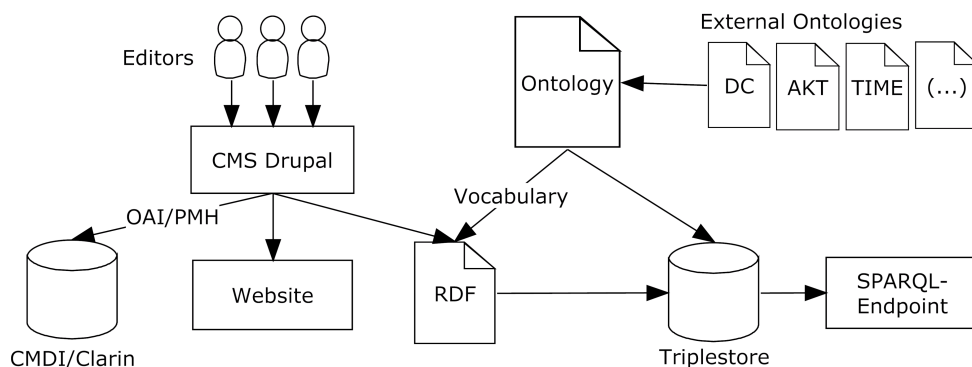


FIG. 1. Architecture centered around the Drupal CMS.

FIG. 1 summarizes the proposed architecture of the system. At the time of writing, both the RDF export and the OAI-PMH data provision have been implemented in a prototype system that is currently being tested, while the ontological formalization is still at an early development stage. In the poster, we present the key concepts of this architecture, illustrating how different modules interoperate to provide metadata descriptions in different formats, such as RDF and via OAI-PMH. Moreover, we will discuss the current state of the ontological formalization of our research institution, illustrate its major benefits, and show how it interoperates with the above architecture.

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