Presentation

Ontology Assessment and Extension: A Case Study on LD4L and BIBFRAME

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Abstract

Representatives of the Andrew W. Mellon funded Linked Data for Libraries - Labs and Linked Data for Production teams will discuss their assessment strategy and alignment progress between the BIBFRAME and LD4L ontologies, including semantic patterns and ontology reuse. Further, the talk will discuss the ontology extension work underway within the LD4P program, focusing on those directed by Cornell and Harvard Universities.

Description

During the 2014-2016 Andrew W. Mellon funded Linked Data for Libraries (LD4L) project, the LD4L team created an ontology to express library resources as linked data. While existing ontologies addressed some necessary semantics and were thus reused, the LD4L team did not believe that any one of the existing bibliographic-focused ontologies matched overall semantics and patterns the team needed to express. A primary focus of this investigation included the first version of BIBFRAME; development on the LD4L ontology happened concurrently to that of BIBFRAME v2 (BF2) with the intent that the team would assess BF2 upon its release.

Since April 2016, representatives of the Mellon funded Linked Data for Libraries - Labs (https://www.ld4l.org/ld4l-labs/) and Linked Data for Production (https://www.ld4l.org/ld4p/) teams have been assessing BF2 in an effort to align semantics between BF2 and the LD4L ontology. As part of this alignment investigation, the team reviewed principles followed by the BIBFRAME architects as well as those important in the wider linked data world. Further, the team has investigated ontology reuse and external ontology subclassing assertions within BF2 as well as in depth specifics around semantic patterns. The ultimate goal of this alignment is to influence improvements to BIBFRAME, prune the LD4L ontology and identify a target ontology for LD4L/LD4P tooling to support native linked data production and conversion efforts.

Another ontology-related component of the LD4P and LD4L Labs projects include ontology extensions for focused areas of description; more information on this work can be found on the LD4P wiki site (https://wiki.duraspace.org/x/VQJxB). This extension work will recommend implementation patterns for describing resources in particular domains with greater specificity than designed to be provided by the core BIBFRAME framework. Representatives of the Cornell and Harvard Universities directed extensions will detail this process as well as goals for the extensions for the areas of Rare, Cartographic/Geospatial, Moving Image materials.