

Ontology Assessment and Extension a case study on LD4L and BIBFRAME



Linked Data for Libraries

Linked Data for Production

Steven Folsom, Harvard University | Jason Kovari, Cornell University

LD4L Labs & LD4P

LD4L Labs : "helping libraries use linked data to improve the exchange and understanding of information about scholarly resources"

LD4P : "to begin the transition of technical services production workflows to ones based in Linked Open Data" LD4L 2014-2016 Ontology Outputs

Created Ontology https://www.ld4l.org/ontology/

> Produced RDF https://search.ld4l.org/

LD4L 2014-2016 Ontology Principles

Single query path Appropriate Properties Types External Ontology Reuse & Alignment

BF 2.0 Assessment

LD4L (2014-2016) Ontology

BIBFRAME v2 released early 2016

BF 2.0 Assessment

Clear cut cases for reuse remain Different patterns, but only one preferred Different preferred patterns for different circumstances Happily use BF 2.0 Align to external models

Aligning to External Ontologies

Are there proven ontologies/fragments? What external data will likely be used? How is that data modeled? Who do you want to consume your data?

Aligning to External Ontologies

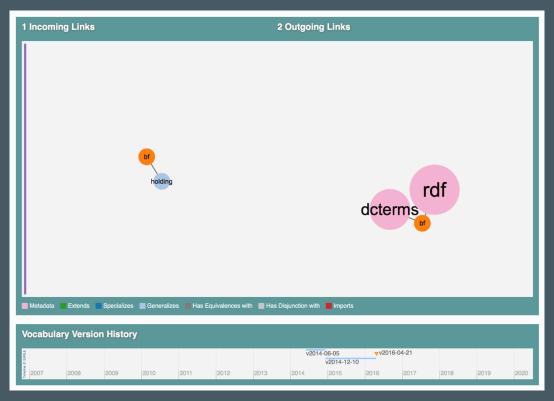
Don't change meaning of external classes/properties Otherwise: rdfs:subclassOf or rdfs:subpropertyOf, etc. All... while remaining not overly committed

Aligning to External Ontologies

bf:Agent rdfs:subClassOf foaf:Agent.

Entails every bf:Agent is a foaf:Agent.

http://lov.okfn.org/dataset/lov/vocabs/bf



Ontology Extensions

Art Objects Cartographic Moving Image Performed Music Rare Materials

https://wiki.duraspace.org/x/VQJxB

Ontology Extensions

Art Objects Cartographic Moving Image Performed Music Rare Materials

Ontology Extensions

Art Objects Cartographic Moving Image Performed Music Rare Materials Ontology Outputs (Selection - forthcoming)

BIBFRAME v.2 Assessment Ontology Pattern Documents Metadata Application Profile Target Ontology MARC-2-Target Ontology Mapping





Acknowledgements Many Colleagues at:

Columbia, Cornell, Harvard, Princeton & Stanford as well as the Library of Congress & many other institutions

Far too many to list individually; particular credit to: Christina Harlow (Cornell University) Rebecca Younes (Cornell University)

Steven Folsom, Harvard University <u>http://orcid.org/0000-0003-3427-5769</u> steven_folsom@harvard.edu

Jason Kovari, Cornell University http://orcid.org/0000-0002-7090-9071 jak473@cornell.edu