

Hacking the figshare API to Create Enhanced Metadata Records

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Background

This poster will showcase a proof of concept method for marking up figshare records with enhanced RDF metadata using the figshare API (docs.figshare.com)

Method

RDF and steps

By creating standalone app “figmeta”, the curator is able to edit private or version public records by attaching a readme metadata record exposed as metadata.json-ld

In this example, figshare metadata is converted to VIVO-ISF ontology (using the figshare API and RDFlib Python library) -- This work was done in collaboration with FORCE2016 and OpenVIVO

Any other files in a figshare article that also contain RDF are added to the graph

Updating a figshare record with RDF

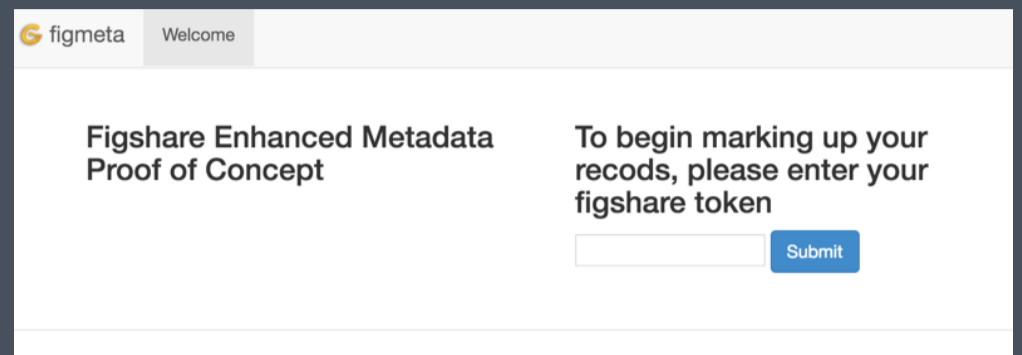
Post graph back to “figmeta” post in RDF/XML graph (the template used here is from <http://rdforms.com/editors/dcat/>)

Triples not already stored in figshare API graph, are stored in separate file against the figshare record: metadata.json-ld

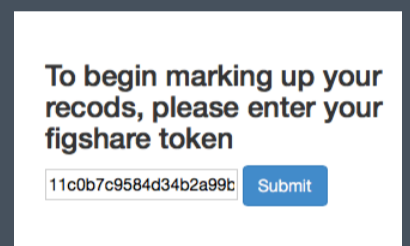
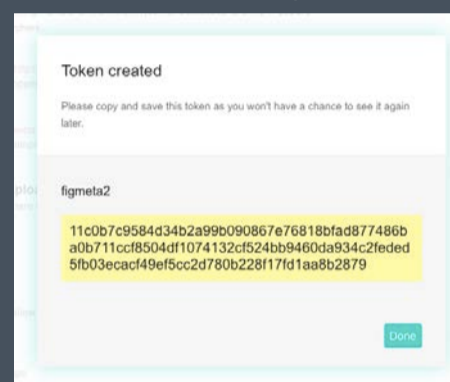
metadataGraph = submittedGraph - figshareAPI graph

A Community Collaboration

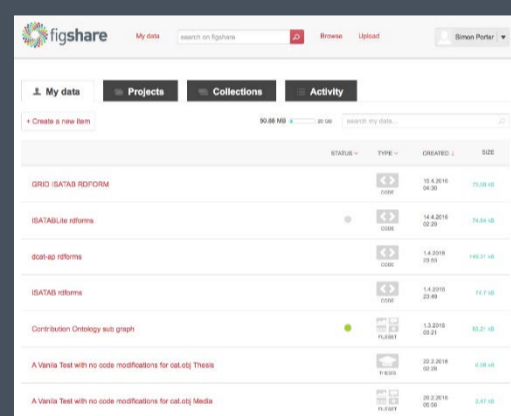
Working out the right way to express a figshare record as RF would not have been possible without collaboration with the VIVO and Force2016 community. We are especially grateful to Mike Conlon, Project Director VIVO, for making available the code that was used to load figshare records into OpenVIVO from the FORCE2016 figshare portal available on Github.



Users can request an API token directly from the figshare GUI

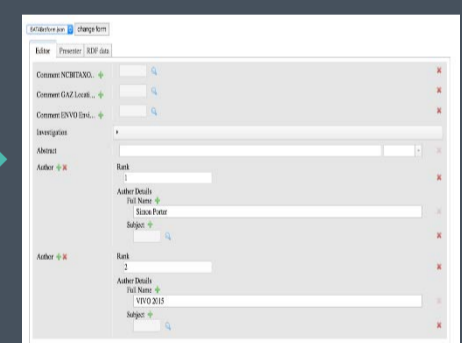
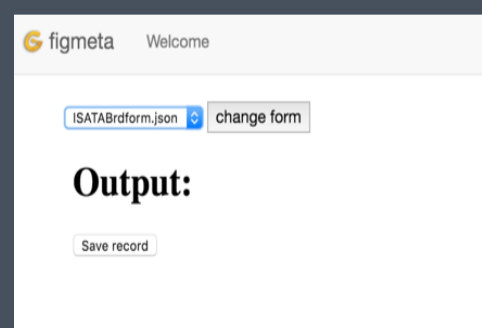


All user data on figshare is now accessible in figmeta



id	title	doi
3146386	dcat-rdf-form	
3146383	ISATAB rdf-form	
3079975	Contribution Ontology sub graph	10.6084/m9.figshare.3079975
2567200	A Vanilla Test with no code modifications for cat.obj Thesis	
2494210	A Vanilla Test with no code modifications for cat.obj Media	
2209717	An item entered in by the front end Filesset	
2195016	New draft item Poster	
2074567	New draft item Paper	
2062545	A Picture of a Cat Presentation	
2062542	Grass measurements Thesis	

figmeta then allows curators to add enhanced [mapped] metadata and associate that metadata as a separate record to the file. We used rdforms (rdforms.org) to facilitate RDF data entry



Results

Producing metadata in RDF from a figshare record using figmeta:



See original poster at:

<https://doi.org/10.6084/m9.figshare.3210220.v1>