

2016-06-26 VIVO Updates

Conference early bird deadline extended to Tuesday June 28. And the conference program is available on line! And we have a new keynote, Dario Taraborelli of Wikidata! Register today at <http://vivoconference.org>

VIVO 1.9 beta is coming. VIVO 1.9 introduces [Apache Maven](#) to VIVO and uses Maven to simplify VIVO builds, code development, and resolution of dependencies. Using Maven, dependencies can be declared in the VIVO release, and resolved at build time from the [Maven Central Repository](#), simplifying the build process and code maintenance. VIVO 1.9 addresses more than 25 reported issues with VIVO and introduces a capability map for expert finding and research discovery.

Call this Thursday. At 1 PM Eastern US time, VIVO will have a call regarding VIVO 1.9 documentation. A new documentation wiki is being planned. The new wiki would focus on documentation for VIVO 1.9. The existing Wiki would remain to facilitate all community VIVO activities, as it does now. Only technical documentation would make its way to the new space, to be organized as preserved as a version specific technical manual. The meeting will be held on WebEx [here](#). If you are interested in VIVO technical documentation, please join the call!

American Library Association Meeting. Saturday I had the pleasure of attending my first American Library Association meeting in Orlando. I gave a presentation on OpenVIVO (see [Figshare](#)), saw presentations on the current work in linked data in libraries – with libraries considering how to move from current record-based approaches to the entity-based (person, organization, work) approach of linked data. I met with friends from Lyrasis and Thomson Reuters. ALA 2016 had 18,000 registrants and a huge exhibit area. A full trip report is available [here](#).

Persistent Identifiers. OpenVIVO, as you may know, makes extensive use of persistent identifiers. Persistent identifiers allow accurate identification of entities – people, organizations, works, journals, concepts and dates. In each case, OpenVIVO uses an entity URI that contains the persistent identifiers for the entity. OpenVIVO uses the letter "a" in URI rather than the default "individual" to shorten URI. Here's a summary of the persistent identifiers in use in OpenVIVO:

- **People – ORCID.** In OpenVIVO, if a person does not have an ORCID, they can not be in the system. This eliminates the disambiguation problem, as well as providing usernames and passwords for OpenVIVO through the ORCID OAuth service. Finally, use of the ORCID public API insures that works in OpenVIVO from ORCID are publicly available. Person in OpenVIVO has a URI that includes their ORCID. For example: <http://openvivo.org/a/orcid0000-0002-1304-8447>
- **Journals – ISSN.** OpenVIVO uses a collection of more than 44,000 journals, each with a print ISSN. The data was created by the OpenVIVO team by matching a list of CrossRef journal titles with ISSN with a list of journal titles with ISSN from PubMed. The union of the two sets of data was used. RDF was created for the journals with URIs for each journal that look like <http://openvivo.org/a/jou.0028-4793>. Data properties include title, abbreviation, print ISSN and electronic ISSN.
- **Works can be identified by DOI or PubMed ID (PMID).** A work identified by a DOI has URI that looks like: <http://openvivo.org/a/doi10.1101/048744>. A work identified by a PMID has a URI that looks like: <http://openvivo.org/a/pmid11569568>. All works are identified by either DOI or PMID. Services exist to assign DOI to software (eg, [Zenodo](#)), presentations (eg [Figshare](#)) and datasets (eg [DataCite](#)) with metadata provided by CrossRef. Many other services exist to provide DOI to content, and many local repositories assign DOI. Reliance on DOI and PMID simplifies OpenVIVO. Metadata for DOI comes from CrossRef exclusively, regardless of the type of work or the source of the original DOI. Metadata for PMID comes from PubMed.
- **Organizations.** OpenVIVO partnered with Digital Science to create RDF from the Grid data, an open license dataset of the world's research organizations available for download at no charge from Digital Science. The Grid data contains more than 58,000 research organizations and is being updated each month. Data values include contact information, preferred and alternate labels, latitude and longitude, organizational type and much more. See <http://grid.ac> for a complete description of GRID. GRID assigns GRID identifiers to each research organization. Software for converting the GRID data to RDF and a set of RDF for the GRID data is available from GitHub at <https://github.com/OpenVIVO/grid-rdf>
- **Dates - dates have persistent identifiers based on their values and precisions.** "2006-10-01" indicates a dateValue with a year month day precision, and has the URI <http://openvivo.org/a/date2006-10-01>. Similarly, "2006-10" indicates a dateValue with year month precision and the URI <http://openvivo.org/a/date2006-10>. Predictably, "2006" indicates a dateValue with year precision and URI <http://openvivo.org/a/date2006>. OpenVIVO is preloaded with all dates of these three precisions in the range 1960 to 2030. You can find a set of date RDF that you can use in your VIVO at GitHub at <https://github.com/OpenVIVO/date-rdf>, along with software with generating date RDF of this kind.
- **Concepts.** Open VIVO uses the FAST terminology for research areas. This operates a little different from the previous cases. When a profile owner wishes to indicate one of their research areas, they select the card catalogue icon by research areas on their profile. They are presented with their current research areas from FAST, if any, and a button marked "Add Concept." Clicking Add Concept provides a search box for the FAST external vocabulary service. The user can type text, and matching FAST concepts are returned. The user can select concepts to be added to the user's research. OpenVIVO supports only the FAST vocabulary. No concepts are preloaded into VIVO. Concepts are added as they are selected by users. To date, over 300 concepts have been selected and added. Each concept has a URI that looks like <http://openvivo.org/a?uri=http%3A%2F%2Fid.worldcat.org%2Ffast%2F1045995>, which is referencing the FAST term URI <http://id.worldcat.org/fast/1045995>

Many VIVO sites extend the ontology to record persistent identifiers in common use at their institution. Perhaps the most common extension is for the local employee number and/or netid. Recording this identifier in VIVO simplifies matching of VIVO person entities to data about people provided by the institution, which may include employment records, grant records, teaching records, mentoring and other activities. Many VIVO sites imbed persistent identifiers in URIs, as OpenVIVO does.

The choices made by the OpenVIVO project to use persistent identifiers and to provide open, reusable RDF for common entities can be used by VIVO sites to simplify and standardize the RDF for VIVO sites. More work is needed to implement this approach in future releases of VIVO. Interested in helping? Contact [Graham Triggs](#) or [Mike Conlon](#).

Go VIVO!

Mike

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