VIVO/Vitro system architecture for creating linked open data regarding scholarship

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Session Type

- Digital Poster

Abstract

VIVO is a popular open source application for representing an institution's scholarship. VIVO uses open ontologies and produces linked open data using Vitro, a general purpose semantic web engine that can manage linked data using any collection of ontologies. Using VIVO and Vitro, an institution can gather metadata regarding its scholarship in a standard, open metadata format, using the VIVO-ISF ontology, use that data to enhance scholarship at its institution, and share that data with others to advance open science. VIVO sites use VIVO data for expert finding, social network analysis, program evaluation and the study of research impact. In this poster we will show how VIVO uses Vitro to create, use and share linked open data regarding scholarship, the software components of each, and the applications of each. The poster will support drill down through the various components to enhance understanding of the how the components fit together and relate to other systems in the scholarly ecosystem at the institution and beyond.

Conference Themes

- Supporting Open Scholarship, Open Data, and Open Science
- Repositories of high volume and/or complex data and collections
- Integrating with the Wider Web and External Systems

Keywords

Semantic web, enterprise architecture, ontologies for metadata, repository integration

Audience

Digital strategists, developers, enterprise architects

Background

The conference themes are supported by presenting material regarding tools for creating open metadata regarding scholarship, documenting integrations of repositories of high volume, and showing how external systems can be aligned into common information models to enhance open scholarship.

Poster content

The poster will display annotated system architecture diagrams showing the various components of Vitro and VIVO. The poster will support drill down into the components for additional detail regarding each component. The digital poster is an ideal format for this material, allowing the reader to explore the architecture in the order and pace that is best suited to their interests. Following the presentation, the material will be archived in the VIVO documentation wiki, using an analogous click-through representation.

Conclusion

Open scholarship can be further enabled by creating linked open data regarding the scholarship of an institution and sharing that data. VIVO with its underlying technology Vitro, is a platform for creating linked open data regarding scholarship from repositories, institutional systems, and the wider web, and sharing it with the world. Understanding the VIVO/Vitro system architecture will help institutional architects deploy systems that create more linked open data regarding scholarship.

References

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