

VIVO: a system for research discovery

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Software

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Summary

VIVO [Pronunciation: vee-voh] is member-supported, enterprise open source software and an ontology for representing scholarship. VIVO supports recording, editing, searching, browsing and visualizing scholarly activity. VIVO encourages research discovery, expert finding, network analysis and assessment of research impact. VIVO is easily extended to support additional domains of scholarly activity (Börner, Conlon, Corson-Rikert, & Ying Ding, 2012).

VIVO uses an ontology to represent people, papers, grants, projects, datasets, resources, and other elements of research and scholarship as linked open data. The ontology can be used to create RDF that can be loaded into VIVO. VIVO RDF data is easily exported for use in other applications.

VIVO includes Vitro (Project, 2019), a domain-free engine for managing linked open data, the JFact reasoner (“JFact DL Reasoner,” 2018), SolR (“Apache Solr -,” 2019) for search, SPARQL query (“SPARQL Query Language for RDF,” 2008), Jena as a triple store (“Apache Jena -,” 2011), supporting both TDB (“Apache Jena - Apache Jena - TDB,” 2019) and SDB (“Apache Jena - SDB - persistent triple stores using relational databases,” 2019) on MySQL (“MySQL,” 2019), uses D3 (Bostock, 2015) for visualizations, and provides multiple APIs, including Triple Pattern Fragments (Verborgh et al., 2016) for rapid remote access to specified data.

Using VIVO, organizations can represent the activities and accomplishments of their scholars as linked open data, and share that data with others.

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