

Half-Day Tutorial

Linked Open Data for Libraries

Linked Open Data (LOD) or Linked Data is a way of publishing data on the Web in accordance with principles designed to facilitate linkages among datasets, element sets, and value vocabularies. It aims to encourage reuse, reduce redundancy, enable network effects to add value to data, as well as to create Web of Data in addition to the existing Web of Documents. A variety of data could be published as LOD including library data. The LOD approach offers significant advantages over current practices for creating and delivering library data while providing a natural extension to the collaborative sharing models historically employed by libraries. In addition, the approach supports multilingual functionality for data and user services, such as the labeling of concepts. LOD provides opportunities for creative innovation in digital scholarship and participation. Libraries should embrace it. The Library of Congress announced in October 2011 that the future of bibliographic control will be based on LOD principles and the Resource Description Framework (RDF) will be the basic data model.

This tutorial provides an introduction to LOD and its application in libraries. It covers the basic concepts and principles of LOD. It will give a detailed explanation of the technology stack used in LOD, namely, Uniform Resource Identifier (URI), HTTP, RDF and RDF Schema. Recent application of LOD by major libraries such as the Library of Congress, the British Library and the Swedish National Library will be presented. The relationship between LOD and the Functional Requirements for Bibliographic Records (FRBR) as well as the Resource Discovery and Access (RDA) will also be discussed, pointing out to the future of library catalogs.

Tutorial Outline:

1. Library Innovation and Linked Open Data (LOD)
2. Principles of LOD
3. LOD Technology Stack
 - Uniform Resource Identifier (URI)
 - HTTP
 - Resource Description Framework (RDF)
 - RDF Schema
4. LOD and Catalogs
 - Functional Requirements for Bibliographic Records (FRBR)
 - Resource Discovery and Access (RDA)
 - FRBR and RDA using LOD
 - OCLC's WorldCat and LOD
 - Future Catalogs
5. Case Studies
 - The Library of Congress
 - The British Library
 - The Swedish National Library

Tutor's Biodata

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Dr. Vilas Wuwongse has joined the Department of Electrical and Computer Engineering, Faculty of Engineering, Thammasat University, Thailand, as a Professor since August 2012. Before that he was a Professor of Computer Science and Information Management at the Asian Institute of Technology, Thailand, where he had served as a faculty member for 30 years. He obtained his B.Eng., M.Eng. and D.Eng. from Tokyo Institute of Technology, Japan in 1977, 1979 and 1982, respectively. He is the Thai National Representative to IFIP's Technical Committee 6. He was a Co-Chair of the Program Committee of ICADL2005. His research interests include information representation, digital libraries, semantic web and linked data. He has developed HyLib, a hybrid library management system which combines 3 open source systems: an integrated library system, Koha, a digital library system, DSpace, and a resource discovery system, VuFind. He has written and edited 5 books and over 150 journal and conference papers. His first paper on Resource Description Framework (RDF) and metadata, entitled *RDF Declarative Description (RDD): A Language for Metadata*, appeared in the Proceedings of the 2001 International Conference on Dublin Core and Metadata Applications and the Journal of Digital Information, Vol. 2, No. 2 (2002).