The Strongest Link: Libraries and the Web of Linked Data

Gillian Byrne & Lisa Goddard Memorial University of Newfoundland

Emerging Technologies in Academic Libraries 2010 Trondheim, Norway - April 2010



What do Libraries need to do?



1. Use the RDF data model to publish structured data on the Web.

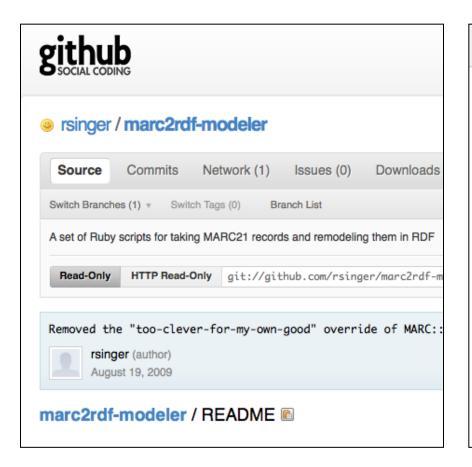
2. Use RDF links to interlink data from different data sources.



Library RDF Converters

MARC to RDF





MARC/MODS RDFizer

This is an utility tool to convert MARC records (both in MA to a MODS representation and then from MODS to RDF.

How do I use it?

You launch the RDfizer from the command line by giving it records and a folder where to dump the resulting data.

But before you run it, you have to get the source code and b works on all platforms with freely available tools).

How do I get the source code?

You need a Subversion client. Type svn in your shell and so not, go to the Subversion web site and get one.

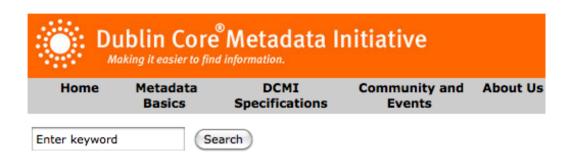
OAI to RDF



Discussion East History Simile OAI-PMH RDFizer This is an utility tool to convert the metadata contained in an OAI-PMH-capable Search repository to RDF. NAVIGATION [edit] » Main Page How do I use it? » Recent changes » Help You launch the RDfizer from the command line by giving it the URL of content TOOLBOX repository that supports OAI-PMH and the folder to where you want the harvested » What links here RDF to be dumped and the tools does the rest. » Related changes » Upload file But before you run it, you have to get the source code and build it (don't worry, it's » Special pages easy and works on all platforms with freely available tools). » Printable version [edit] How do I get the source code? You need a Subversion client. Type svn in your shell and see if you have one

Dublin Core to RDF





Expressing Dublin Core metadata using the Resource Description Framework (RDF)

Creator: Mikael Nilsson

KMR Group, NADA, KTH (Royal Institute of Technology), Swede

Andy Powell

Edusery Foundation, UK

Pete Johnston

Edusery Foundation, UK

Ambjörn Naeve

KMR Group, NADA, KTH (Royal Institute of Technology), Swede

Date 2008-01-14

Issued:

Identifier: http://dublincore.org/documents/2008/01/14/dc-rdf/

DC Elements

xmlns:dc="http://purl.org/dc/elements/1.1/

DC Terms

xmlns:dcterms="http://purl.org/dc/terms/"

DC Abstract Model

xmnls:dcam="http://purl.org/dc/dcam/"

Simile RDFizers



eart

Ok, I'm interested, what RDFizers are there?

Here is the list of the RDFizers that we have built so far:

- JPEG -> RDF scans a folder for JPEG files, parses the EXIF and IPCT metadata found in those files and dumps an RDF/N3 representation of it into a file.
- MARC/MODS -> RDF transforms MARC records from Z39.2 format into MODS and then from MODS to an RDF representation of MODS.
- OAI-PMH -> RDF harvests an OAI-PMH repository and transforms the captured metadata in an RDF representation thru pluggable XSLT stylesheets.
- OCW -> RDF harvests metadata from the MIT OpenCourseWare web site and transforms it into an RDF representation of IEEE LOM.
- EMail -> RDF transforms email mbox files into RDF/XML.
- BibTEX -> RDF transforms BibTEX files into RDF/XML.
- POM -> RDF transforms Maven POM (Project Object Model) files into RDF/N3.
- DEB -> RDF extracts the metadata from a Debian software package and generates an RDF representation.
- CRW -> RDF extracts the metadata from a Canon RAW image file and generates an RDF representation.
- Flat -> RDF converts classic unix text database files, like /etc/passwd, into RDF/N3.



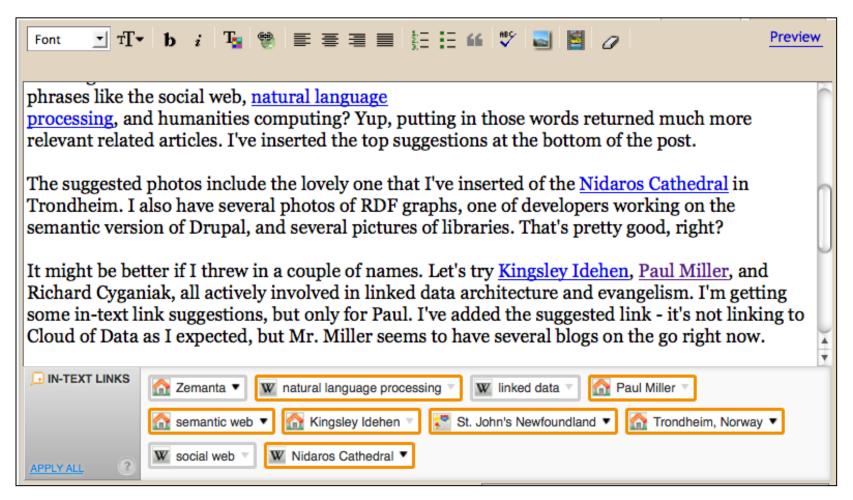
RDF Publishing Tools

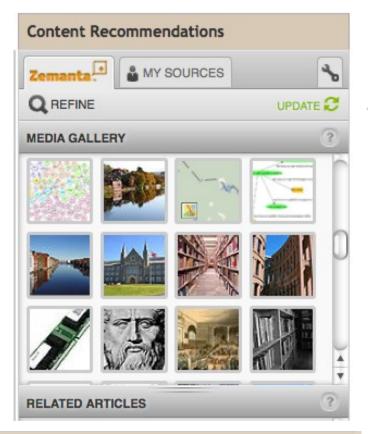


 Many popular web publishing tools now have RDF & semantic capabilities.

Semantic Blogging: Zemanta







Related Media



Related Articles RELATED ARTICLES Understanding the Semantic Web - 3 2 WEEKS AGO DOMAINMACHER.COM Web of knowledge: the Semantic Web 8 HOURS AGO HEYJUDE.WORDPRESS.COM Zemanta at Semantic meetups in April 1 YEAR AGO ZEMANTA.COM Tools to create relevant context to content 16 HOURS AGO BETATALES.COM It's All Semantics: Open Data, Linked Data & T READWRITEWEB.COM G 1 WEEK AGO Semantic Web und Linked Open Data. Eine Bil 2 DAYS AGO SLIDESHARE.NET & Talking with David Siegel about 'Pull' and the S 3 WEEKS AGO CLOUDOFDATA.COM G What will the semantic Web mean for social me SMARTBLOGS.COM G 1 WEEK AGO

Semantic Web, Zemanta, Resource Description Framewo

LABELS APPLY ALL

Semantic Web
Paul Miller
Kingsley Idehen

Linked Data
Trondheim
Nidaros Cathedral

Zemanta
Knowledge management

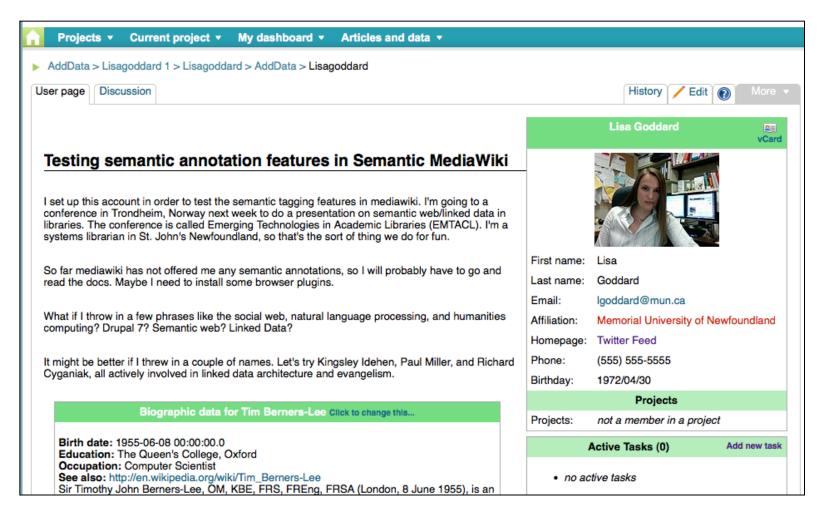
Resource Description Framework

Related Tags



| | | Change view € Lisagoddard Log out | | |
|---------------------------------|---|--|-------------|------------------------------|
| SMW Semantic Enterprise Wiki | | Search this wiki | | Go Search |
| ↑ Projects ▼ Current proje | ct ▼ My dashboard ▼ Articles and | data ▼ | | |
| ► Main Page > UserLogin > Lisag | oddard | | | |
| User page Discussion | | | | History ✓ Edit More ✓ |
| Enter person data | | | | |
| First name*: | | | | |
| Last name: | | | | |
| Picture: | | | Upload file | |
| Email: | Here you can upload a picture of the user. | | | |
| Affiliation: | | | | |
| | The autocompletion will suggest existing organizations | in the wiki. | | |
| Homepage (include 'http://'): | | | | |
| Homepage label (optional): | | | | |
| Phone number: | | | | |
| Birthday: | April ‡ 2010 | | | |
| People this person knows: | | | | |
| | Enter a comma delimited list of persons. (Auto-complete | es on pages in the category 'Person'.) | | |
| Specify the project you are cu | rrently working on | | | |
| Current project: | | | | |
| | | | | |

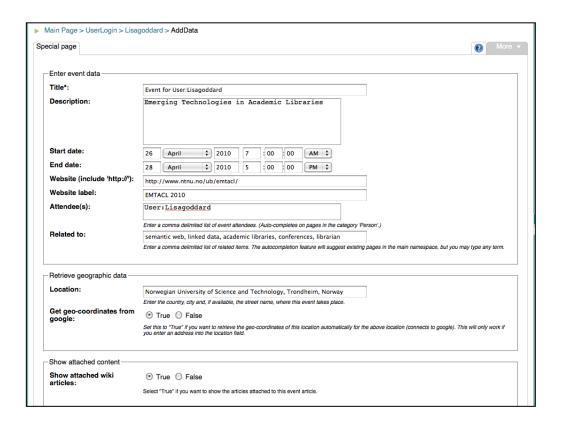






```
RDF feed at
Facts about Lisagoddard (1)
                        Affiliation Memorial University of Newfoundland + Q
                        Birth date 30 April 1972 + Q
                   Current project Libraries & Linked Data + Q
                       Firstname Lisa + Q
                     HasCategory Category:Person + Q
               HasGeocoordinates 49°27'25.181"N, 48°36'42.694"W + Q
                      Homepage http://twitter.com/lisagoddard + Q
                          Knows Jennifer Lokash + Q, Gillian Byrne + Q, and Tim Berners-Lee + Q
                       Lastname Goddard + Q
                         Location Pedagogues Close, St. John's, Newfoundland + Q
                           Mbox lgoddard@mun.ca + Q
                           Name Lisa Goddard + Q
                                  (555) 555-5555 + 9
                           Phone
                      User image
```





Event for User:Lisagoddard

iCal

Description: Emerging Technologies in Academic

Libraries

Details

Start: 2010/04/26 07:00:00 AM

End: 2010/04/28 05:00:00 PM

Homepage: EMTACL 2010

People attending

User:Lisagoddard

Related items

semantic web, linked data, academic libraries, conferences, librarian

Location of Event for User:Lisagoddard 1

Location: Norwegian University of Science

and Technology, Trondheim,

Norway

Geographic coordinates:

63.4244477°N, 10.4182722°E

If you want to retrieve the geo-coordinates with google then first activate the Google web service. After that open this article with the "edit with form"-tab and set "Get geo-coordinates from google" true.

Drupal 6 CMS





Documentation | Download

Home » Download » Modules

Maintainers for Resource Description Framework (RDF)

- miglius 1 commit last: 8 weeks ago, first: 8 weeks ago
- scor 1 commit last: 18 weeks ago, first: 18 weeks ago
- Arto 340 commits last: 31 weeks ago, first: 2 years ago
- febbraro 1 commit last: 1 year ago, first: 1 year ago

View all committers

Issues for Resource Description Framework (RDF)

To avoid duplicates, please search before submitting a new issue.

Search Advanced search

All issues 51 open, 85 total **Bug reports** 25 open, 44 total

Subscribe via e-mail

Resource Description Framework (RDF)

View

CVS instructions

Arto - October 10, 2007 - 14:39

Modules · Developer · RDF

RDF is a W3C standard for modeling and sharing distributed knowledge based on a decentralized open-world assumption. Any knowledge about anything can be decomposed into triples (3-tuples) consisting of subject, predicate, and object; essentially, RDF is the lowest common denominator for exchanging data between systems.



This module provides comprehensive RDF functionality and interoperability for the Drupal 6.x platform. For more information, read the introductory posting or watch the demo video. Be sure to subscribe to the Semantic Web group on groups.drupal.org to keep up with the latest happenings.

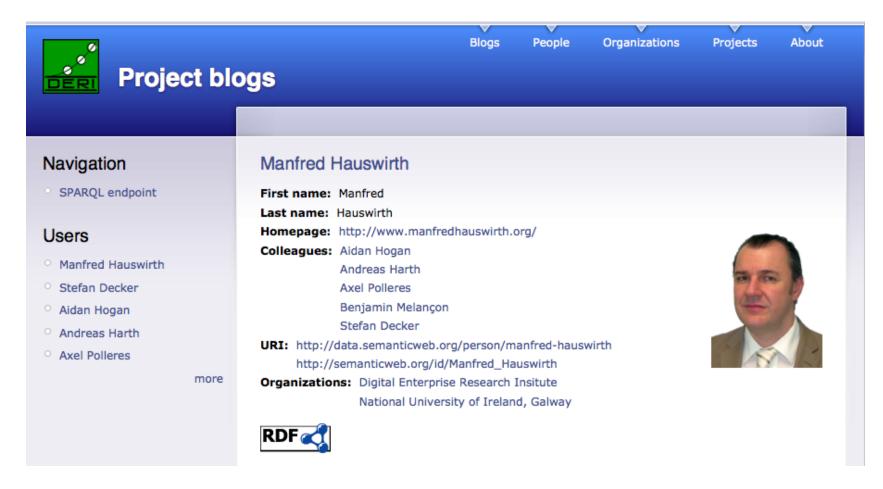
The module requires PHP 5.2 or newer, makes use of the ARC2 library if available, and will integrate with the Views, FeedAPI, Feed Element Mapper, Location, and Services modules if they are installed. For adding **SPARQL** query support, see the related **SPARQL** project.

Projects that rely on this module as a dependency include Calais, File Framework, FeedAPI RDF and the Relations and DAV APIs and their spin-offs such as File Relations Server.

This project is being developed by Arto Bendiken, Miglius Alaburda, Ben Lavender, Jeff Miccolis, Frank Febbraro and Stéphane Corlosquet. Development has been in part sponsored by OpenBand and MakaluMedia.

Drupal 7 with RDFa





| <u>VisiNav</u> | VisiNav |
|---|--|
| manfred hauswirth ⋈ Knows ⋈ | manfred hauswirth Knows Made |
| Detail List Table NRSS | Detail List Table Timeline NRSS |
| Axel Polleres http://www.polleres.net/foaf.rdf#me@ | Transforming co-NP Checks to Answer Set Computation by Mehttp://dblp.l3s.de/d2r/resource/publications/conf/agp/EiterP03 document InProceedings 2003 |
| Person Spatial Thing Person Benjamin Melançon http://srvqal65.deri.ie/projectblogs/node/2#this | Context Dependent Reasoning for Semantic Documents in Sine http://data.semanticweb.org/workshop/ssws/2008/paper/main/6@document Post InProceedings |
| Person Spatial Thing Person | polleres-feier http://data.semanticweb.org/conference/eswc/2006/paper/polleres |
| Stefan Decker http://www.deri.ie/about/team/member/Stefan Decker http://www.deri.ie/about/team/member/Stefan Decker http://www.deri.ie/about/team/member/Stefan Decker http://www.deri.ie/about/team/member/Stefan Decker http://www.deri.ie/about/team/member/Stefan Decker http://www.deri.ie/about/team/member/Stefan Decker | http://www.polleres.net/ document Colored This is the homepage of Axel Polleres. I currently work as a senior research Galway, where I am afffiliated with the Digital Enterprise Research Institute (|
| Aidan Hogan http://sw.deri.org/~aidanh/foaf/foaf.rdf#Aidan H | 2007-06-25 debruijn-lausen http://data.semanticweb.org/conference/eswc/2006/paper/debruijn |
| Person Spatial Thing Person | paper-119 http://data.semanticweb.org/conference/eswc/2007/paper-119@ |



Library RDF Publishing Tools

Dspace & RDF







Search DSpace@MIT

● Search DSpace@MIT ● This Collection

Advanced Search

Browse

All of DSpace@MIT

Communities & Collections
By Issue Date
Authors
Titles
Subjects

This Collection

By Issue Date
Authors
Titles
Subjects

My Account

<u>Login</u> Register

Links

About DSpace@MIT

Home → Abdul Latif Jameel Poverty Action Lab (J-PAL) → J-PAL Datasets

Women as Policy Makers: Evidence from a Randomized Policy Experiment in India

Show full item record

Citable URI: http://hdl.handle.net/1721.1/39126

Title: Women as Policy Makers: Evidence from a Randomized Policy Experiment in India

Author: Raghabednra Chattopadhyay; Esther Duflo

Issue 2007-10-05

This data set uses political reservations for women in India to study the impact of women's leadership on policy

decisions. Using a dataset we collected on 265 village councils in West Bengal and Rajasthan, we compare the type of public goods provided in reserved and unreserved village?s councils. Data sets based upon information provided

by GP Pradhans, local villagers, and the 1991 Indian Census

URI: http://hdl.handle.net/1721.1/39126

Other Identifiers: hdl:1902.1/USBFNOMLAT

Keywords: gender, decentralization, affirmative action, political economy, gender, decentralization, affirmative action, political

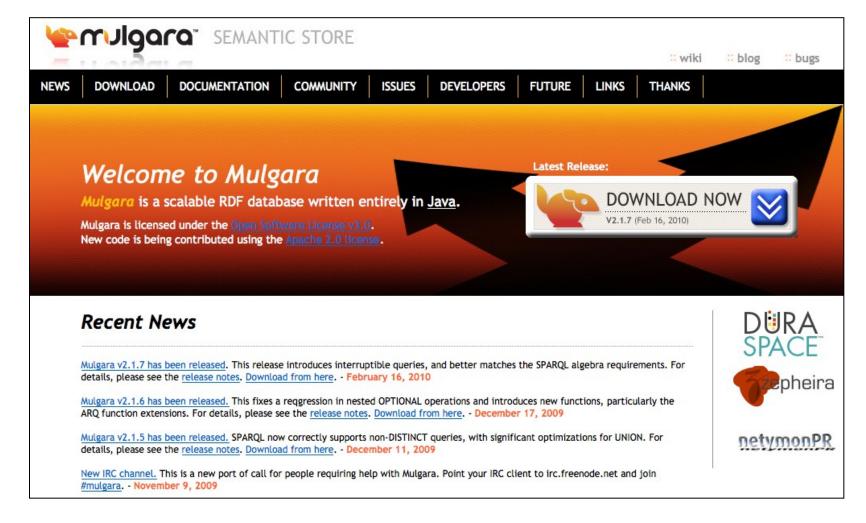
economy

Date:

Abstract:

Fedora & RDF





Fedora & RDF





Browse Contribute Technical Help



ORA Journal Article: "em>: adding emotion to strategy in understanding British Pakistani transnational marriages"

Tinyurl.com link: http://ora.ouls.ox.ac.uk/objects/uuid:96efaceb-fcc8-46db-94c9-c2e0bd99d34d

Member of collection Journal Articles

Title: Rishtas: adding emotion to strategy in understanding British Pakistani transnational marriages

Abstract: The popularity of transnational marriages that in most cases involve first cousins or other kin distinguishes Pakistanis from other British South Asian groups. In this article we explain the popularity of such marriages. We seek to complement accounts that stress kinship obligations and socio-economic strategy by showing that transnational marriages are also motivated by the emotional ties of kinship. Central to this analysis is a focus on the Urdu/Panjabi concept of *rishta*, which conveys ideas about a 'good' match and about emotional connections between people. Our attention to emotional discourse between siblings, between parents and children and between prospective spouses in the context of marriage arrangements augments the understanding of what is at stake for those involved in transnational marriages. Our analysis also complements accounts that emphasize parental exegesis by offering a multigenerational perspective.

Author: Alison Shaw

(Alison Shaw)

Institution

University of Oxford

Faculty/Department

Medical Sciences Division - Public Health

Research Group

Ethox Centre

Downloads

No Fulltext or other downloads available

Download record information as

CSV

JSON

(beta service)

Link to this page:

(What is a QR code?)



Fedora & RDF



Reference: Alison Shaw; Katharine Charsley, (2006). *Rishtas*: adding emotion to strategy in understanding British Pakistani transnational marriages. *Global Networks*, **6** (4), 405-421

Link to this archived copy: http://ora.ouls.ox.ac.uk/objects/uuid:96efaceb-fcc8-46db-94c9-c2e0bd99d34d

Relationships for "em>: adding emotion to strategy in understanding British Pakistani transnational marriages":

View full list as RDF in format:

HTML Lite HTML Full RDF/XML N-Triples N3 Turtle

Disclaimer and Data Protection statement | Accessibility statement | Download Copyright guide (100kB PDF) | Take-down procedure and

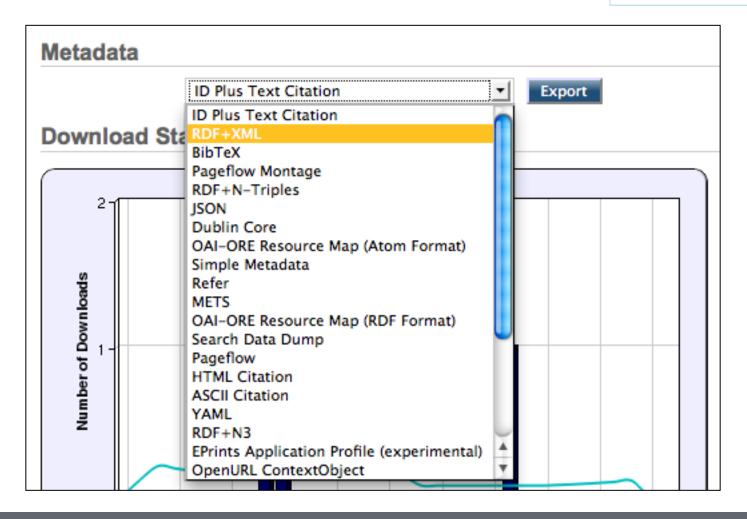
Eprints & RDF



| Southampt | of On | | ् Search | Enter keywords here | go |
|---------------------------------|--------------------------|---|----------------|--------------------------|--|
| School of Electron | | | | | |
| and Computer So | cience | Home UG Study MSc Admissions PG Opportunition | es Research Bu | usiness People Alumni Co | ontact Intranet |
| University of Southampton > ECS | > Research > Publication | <u>15</u> | | | <u>Login</u> |
| ECS Research | 3store: Effic | cient Bulk RDF Storage | | | |
| Research Groups | Harris, S. and Gibb | pins, N. (2003) 3store: Efficient Bulk RDF Storage. | | RESEARCH THEMES | |
| Researcher Profiles | , | sills, itt (2005) Societ Elitacine Balletia. Scotlager | | THEMES | |
| Research Themes | Download | | | | |
| Graduate School | The second | | | | |
| Seminars | Postscrip PS 286Kb | <u>c</u> | | INDUSTRIAL 🦣 | |
| Research Facilities | PS TOTAL | | | PARTNERSHIPS 7 | |
| Centres and Institutes | Abstract | | | | A ST |
| Latest Technologies | | | | | 101 |
| Publications | | and deployment of practical Semantic Web es technologies for the storage and retrieval of | | APPLY ONLINE | |
| | | robust and scalable. In this paper, we describe | | FOR A PhD | |
| Publications Home | | orage and query engine developed within the | | % | VIII |
| This weeks new additions | | ge Technologies project, and discuss the design nisations behind it which enable the efficient | | | |
| Search | | RDF knowledge bases. | | RESEARCH | THE PARTY OF THE P |
| Browse by research group | Cuantana | Stanban Hawis Nicholas Cibbins | | PROSPECTUS | 4 6 7 |
| Browse by year | Item Type: | Stephen Harris, Nicholas Gibbins Other | | PDF (7MB) | |
| Intranet Tools | | H.2.8 Database Applications H.3.3 Information Search | and | A. | |
| Add publications | | Retrieval I.2.0 Artificial Intelligence, General | unu | | |
| Modify REF2013 Information | Research | Intelligence, Agents, Multimedia | | | |

Eprints & RDF





Libraries & RDF



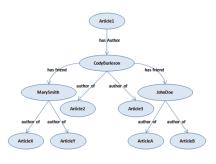
- Plenty of tools already exist to allow libraries to expose data as RDF.
- Become aware, experiment, work with vendors to develop semantically compliant tools.

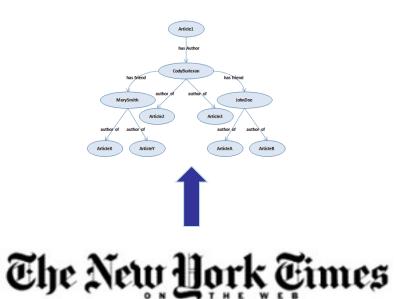
RDF Linking

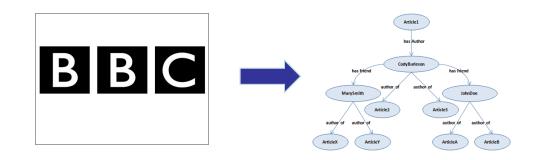






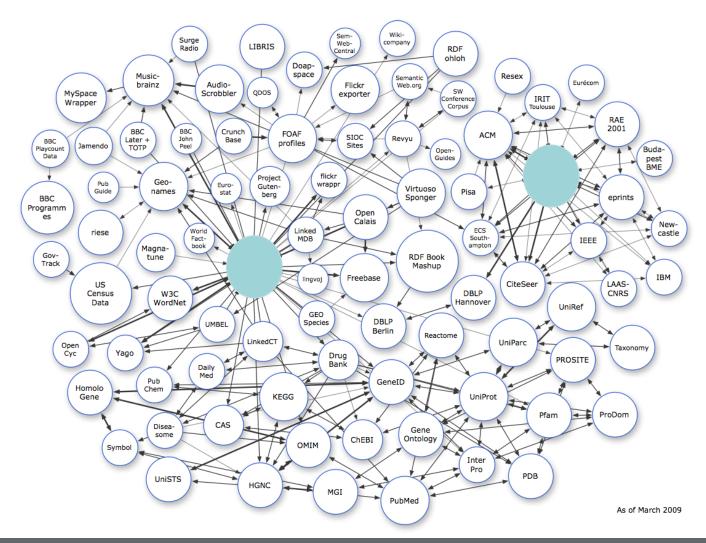






Linking Hubs





Library Linking Hubs



- Reuse existing URIs for entities & concepts.
- Connect resources to external data published by other data sources.

Subject linking: loc.id.gov



Details Visualize **Fjords** URI: http://id.loc.gov/authorities/sh85048937#concept Type: Topical Term Alternate Labels: Fiords **Broader Terms:** Glacial landforms LC Classification: GB454.F5 Created: 1986-02-11 Last Modified: 1987-12-31 12:44:36 Similar concepts from other vocabularies: http://stitch.cs.vu.nl/vocabularies/rameau/ark:/12148/cb12009563w Alternate Formats: RDF/XML, N-Triples, JSON

Virtual International Authority File



| Search | |
|------------------------------------|--|
| Select Field: Select Index: Names | Search Terms: sigmund freud Search |
| Selected Covers | Freud, Sigmund,, 1856-1939 ФРЕЙД, ЗИГМУНД, 1856-1939 В сегит, זיגמונד, 1856-1939 Freud, Sigmund |

RDF Book Mashup



Book Search Results for "interpretation of dreams freud"

Search for books: interpretation of dreams freud Go

Note: You can use an RDF-aware user agent (e.g. Browser) to explore the RDF based Linked Data (Metadata) associated



The Interpretation Of Dreams

Sigmund Freud

http://www4.wiwiss.fu-berlin.de/bookmashup/books/8562022489



Signmud Freud's The Interpretation of Dreams - Freud's seminal exploration of human nature (Discus

Sigmund Freud, James Strachey

http://www4.wiwiss.fu-berlin.de/bookmashup/books/



THE INTERPRETATION OF DREAMS - Freud's Seminal Exploration of Human Nature

Sigmund (James Strachey Transl.) Freud

http://www4.wiwiss.fu-berlin.de/bookmashup/books/

Linked Periodicals Data



Work Employment & Society

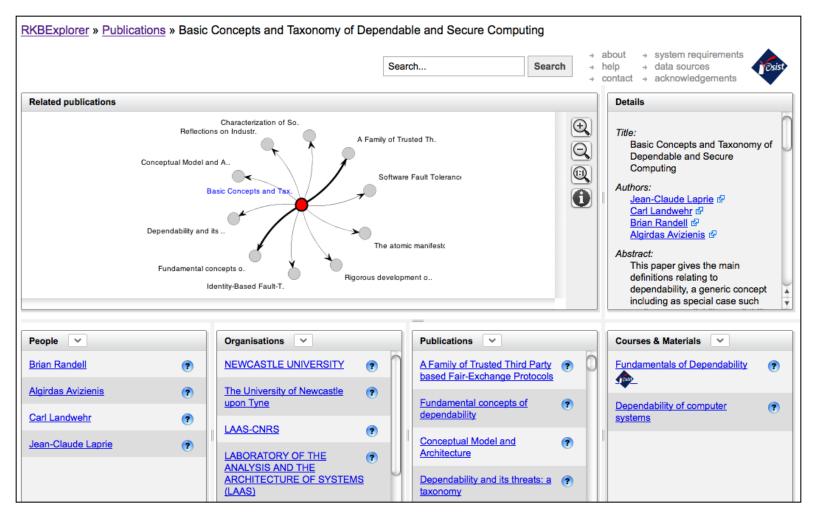
http://periodicals.dataincubator.org/journal/work-employment-and-society

RDF/XML JSON Turtle

| | Search |
|------------------|--------------------------------|
| <u>Titles</u> | Work Employment & Society |
| | Work, Employment & Society |
| Type | bibo:Journal |
| <u>Publisher</u> | organization:sage-publications |
| <u>Subjects</u> | authorities:sh85065928 |
| | authorities:sh85065946 |
| | authorities:sh85148133 |
| <u>Subjects</u> | Arbeidssociologie |
| | Industrial relations |
| | Industrial sociology |
| | Relations industrielles |
| | Sociologie industrielle |
| | Travail |
| | Work |
| <u>Homepage</u> | http://wes.sagepub.com |
| <u>ISSN</u> | 0950-0170 |

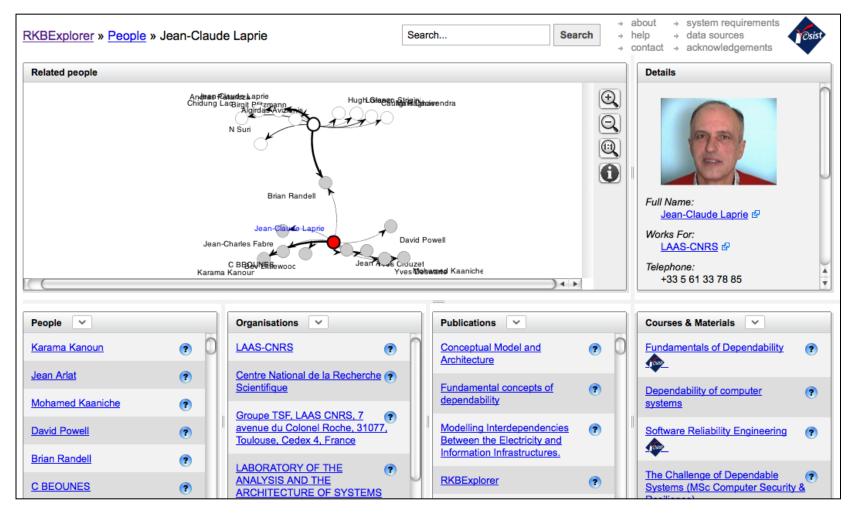
RKBExplorer - Publication





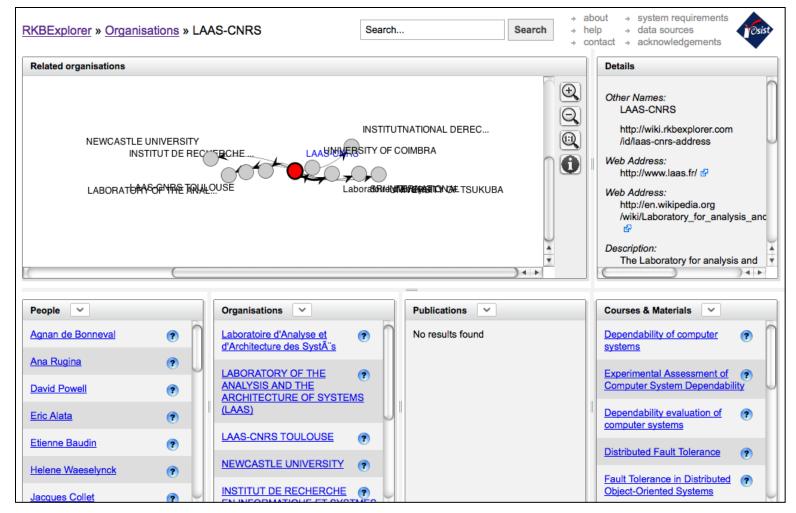
RKBExplorer - Person





RKBExplorer - Organization





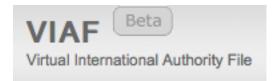






















What's the promise?



- Better, smarter discovery
- Enriched content
- Enhanced personalization

Smarter linking



Deviance and crime in colleges and universities: What goes on in the halls of ivy. Title: Authors: Hickson, Mark, III Deviance and crime in colleges and universities: what goes on in the halls of ivy Roebuck, Julian B. Personal Author: Hickson, Mark. Title: Deviance and crime in colleges and universities : what goes on in the halls of ivy / by Mark Hickson III and Julian B. Roebuck. Source: Springfield, IL, US: Cha Publication info: Springfield, Ill.: Charles C Thomas, c2009. Physical descrip: xiv, 253 p.; 26 cm. ISBN: 978-0-398-07879-9 (Ha Subject term: Universities and colleges--United States--Sociological aspects. 978-0-398-07880-5 (Pa Subject term: Universities and colleges--Corrupt practices--United States. Subject term: College discipline--United States. Language: English Subject term: Deviant behavior--United States. interdisciplinary typolog Keywords: Subject term: College students--United States--Psychology. drinking; date rape; as Bibliography note: Includes bibliographical references and index. Added author: Roebuck, Julian B. Abstract: (from the cover) This L ISBN: 9780398078799 (hard) shootings were aberrat ISBN: 0398078793 (hard) binge drinking, date rap ISBN: 9780398078805 (pbk.) behavior and crime in ISBN: 0398078807 (pbk.) including coaching beh behavior, sexual issue commercialism at the e pressures of external a This volume aims to present a complete picture of deviant behavior and crime at universities, based on the authors' personal experiences from 1945-2007 and news accounts in the Chronicle of Higher Education from 2004-2007, and other sources. From a sociological viewpoint, the authors examine fraternity deviance and crime that deviance, including hazing, binge drinking, and date rape; gambling and cheating in sports; plagiarism, sexual issues, tenure issues, false reports, and bul academic would rather expense of learning, intellectual scandal, and research conflict of interest. Other groups investigated include donors and governing boards. They also ident all rights reserved) has degrees in sociology and law, has taught at Auburn U., Mississippi State U., the American U., and the U. of Alabama at Birmingham. Roebuck, a forme Subjects: *Antisocial Behavior; *Colleges; *Criminal Behavior; *School Environment; *Taxonomies; Campuses; Classroom Environment; Crime; Educational Administration; Higher Education; Morality; Social Behavior Classification: Classroom Dynamics & Student Adjustment & Attitudes (3560) Criminal Behavior & Juvenile Delinquency (3236)

Publication Type: Bo

Population:

Age Group:

Intended Audience:

Format Covered:

Book, Authored Book

Adulthood (18 yrs & older) (300)

Psychology: Professional & Research (PS)

Human (10)

Print

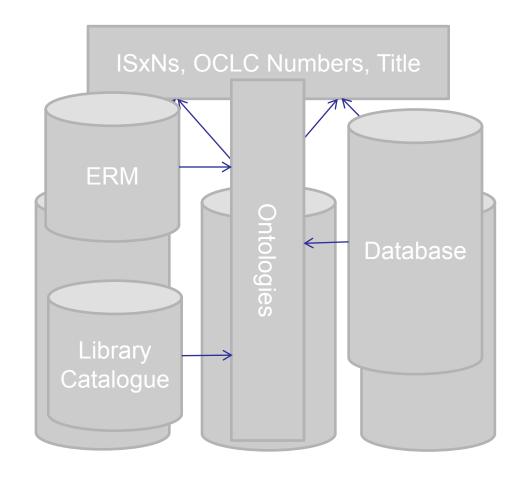
Release Date: 20100118

Accession Number: 2009-17252-000

/.MUN.CA

Data integration





Disambiguation





Madonna at Raphael's nightclub (NSFW)

Raphael's Madonna (NSFW)



Related Works to Relationships



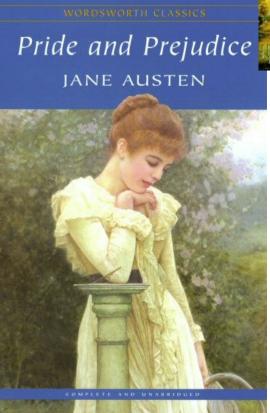
The Confession of Farwilliam Dance



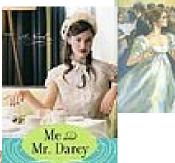
PRIDE and PRESCIENCE



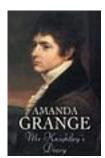


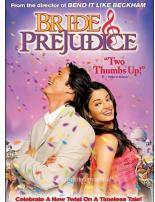






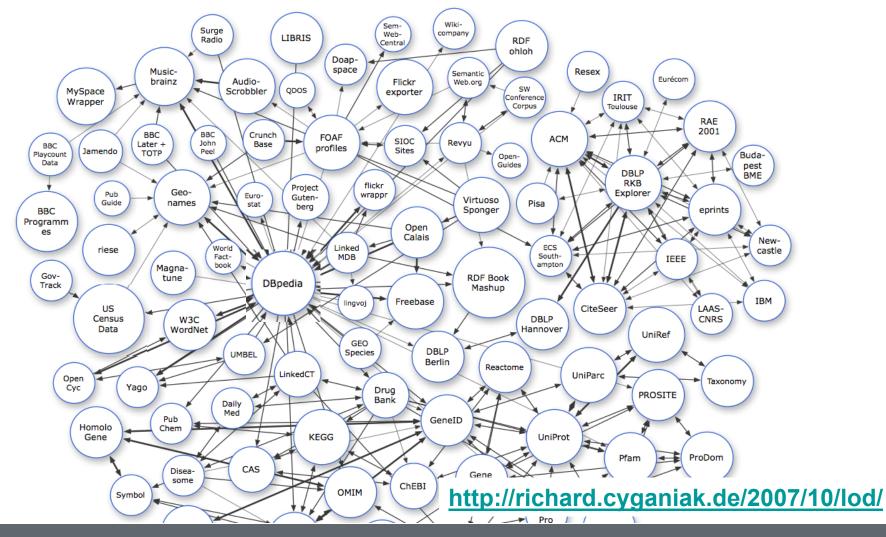






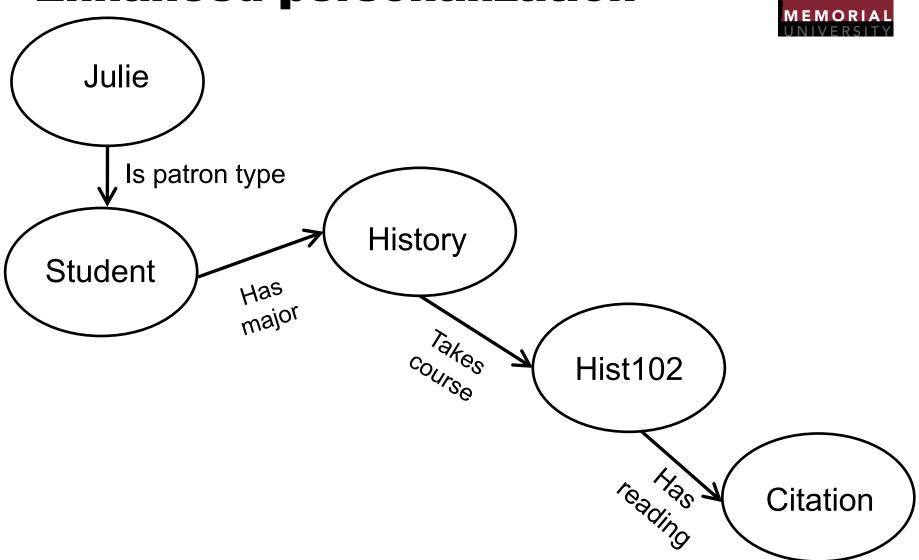
Enriched content





Enhanced personalization





The Holy Grail?





What are the obstacles?



- Trust
- Data ownership
- It's...well...hard

Trust

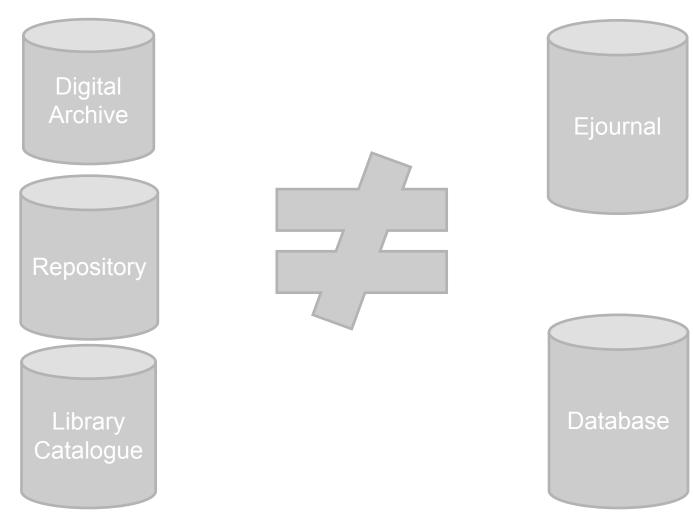


The largest hurdle to library adoption of Linked Data, though, may not be educational or technological ... The sticking point for librarians may be an issue of trust.

Ross Singer, "Linked Data Now!"

Data ownership





Rocking the foundations



- MARC
- RDA
- DCMI/RDA Task Group

What can we do...now?



- Eric Miller noted in a 2004 talk that libraries have four major roles in the semantic web:
 - exposing collections use Semantic Web technologies to make content available;
 - 2. web'ifying thesaurus/mappings/services;
 - 3. sharing lessons learned;
 - 4. persistence.

Exposing collections





</metadata>

```
.org/OAI/2.0/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.openarchives.org/OAI/2.0/OAI-PMH.xsd">
sponseDate>
="oai_dc" set="cns">http://collections.mun.ca/cgi-bin/oai.exe</request>

s/0</identifier>
>
```

v.openarchives.org/OAI/2.0/oai_dc/" xmlns:dc="http://purl.org/dc/elements/1.1/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" penarchives.org/OAI/2.0/oai_dc/ http://www.openarchives.org/OAI/2.0/oai_dc.xsd">

```
<ac:title>cover</ac:title>
       <dc:relation>(4.7 MB) -- http://collections.mun.ca/PDFs/cns/FF_1015_C57.pdf</dc:relation>
       <dc:identifier>http://collections.mun.ca/u?/cns,0</dc:identifier>
     </ai dc:dc>
    </metadata>
  </record>
- <record>
  - <header>
     <identifier>oai:collections.mun.ca:cns/1</identifier>
     <datestamp>2005-10-17</datestamp>
     <setSpec>cns</setSpec>
    </header>
   - <oai_dc:dc xmlns:oai_dc="http://www.openarchives.org/OAI/2.0/oai_dc/" xmlns:dc="http://purl.org/dc/elements/1.1/" xmlns:xsi="http://www.w3.org/2001
       xsi:schemaLocation="http://www.openarchives.org/OAI/2.0/oai_dc/ http://www.openarchives.org/OAI/2.0/oai_dc.xsd">
       <dc:title>Inside Cover</dc:title>
       <dc:identifier>http://collections.mun.ca/u?/cns,1</dc:identifier>
     </oai_dc:dc>
    </metadata>
  </record>
     <identifier>oai:collections.mun.ca:cns/2</identifier>
     <datestamp>2005-10-17</datestamp>
     <setSpec>cns</setSpec>
    </header>
   - <oai_dc:dc xmlns:oai_dc="http://www.openarchives.org/OAI/2.0/oai_dc/" xmlns:dc="http://purl.org/dc/elements/1.1/" xmlns:xsi="http://www.w3.org/2001
       xsi:schemaLocation="http://www.openarchives.org/OAI/2.0/oai_dc/ http://www.openarchives.org/OAI/2.0/oai_dc.xsd">
       <dc:title>Opening Page</dc:title>
       <dc:identifier>http://collections.mun.ca/u?/cns,2</dc:identifier>
     </oai_dc:dc>
```



web'ifying thesaurii, etc.



Cataloguing

Descriptive cataloguing

Authority control (Local)

Subject analysis

Charging/discharging (library materials)

USF Circulation

Circulation

UF Borrowing (library materials)

Charging /discharging (Library materials)

Lending (library materials)

Loans (library materials)

Holds (library materials) (Local)

Loan periods (Local)

Recall (library materials) (Local)

Renewals (Local)

Reserve materials (Local)

Citations (Local)

UF Bibliographic citations

Classification

Classification schemes

Controlled vocabularies

Collection development

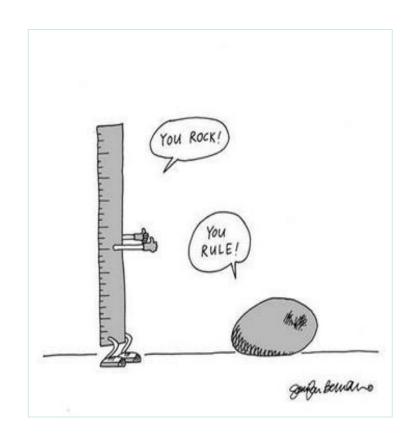
Selection of materials

Colleges and universities

Computer searching USE Online searching <rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#" xmlns:rdfs="http://www.w3.org/2000/01/rdf-schema#" xmlns:skos="http://www.w3.org/2004/02/skos/core#"> <skos:Concept rdf:about="http://staff.library.mun.ca/staff/staffdir/libweb/controlled/concept/13" /> <skos:prefLabel>Circulation</skos:prefLabel> <skos:altLabel>Borrowing</skos:altLabel> <skos:altLabel>Loans</skos:altLabel> <skos:scopeNote>Refers to functions related to circulating material, not the administrative department.</skos:scopeNote> <skos:narrower rdf:resource="http://staff.library.mun.ca/staff/staffdir/libweb/controlled/concept/38"/> <skos:narrower rdf:resource="http://staff.librarv.mun.ca/staff/staffdir/libweb/controlled/concept/103"/> <skos:narrower rdf:resource="http://staff.library.mun.ca/staff/staffdir/libweb/controlled/concept/16"/> <skos:inSchemerdf:resource="http://staff.library.mun.ca/staff/staffdir/libweb/controlled"/> </skos:Concept> </rdf:RDF>

Sharing lessons





Persistence



