

Islandora and Linked Open Data

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Islandora & Linked Open Data

- Islandora Open Source Software and Community
- Linked Open Data (LOD)
- Islandora Strengths and Weaknesses in LOD
- Future Islandora development impacting LOD

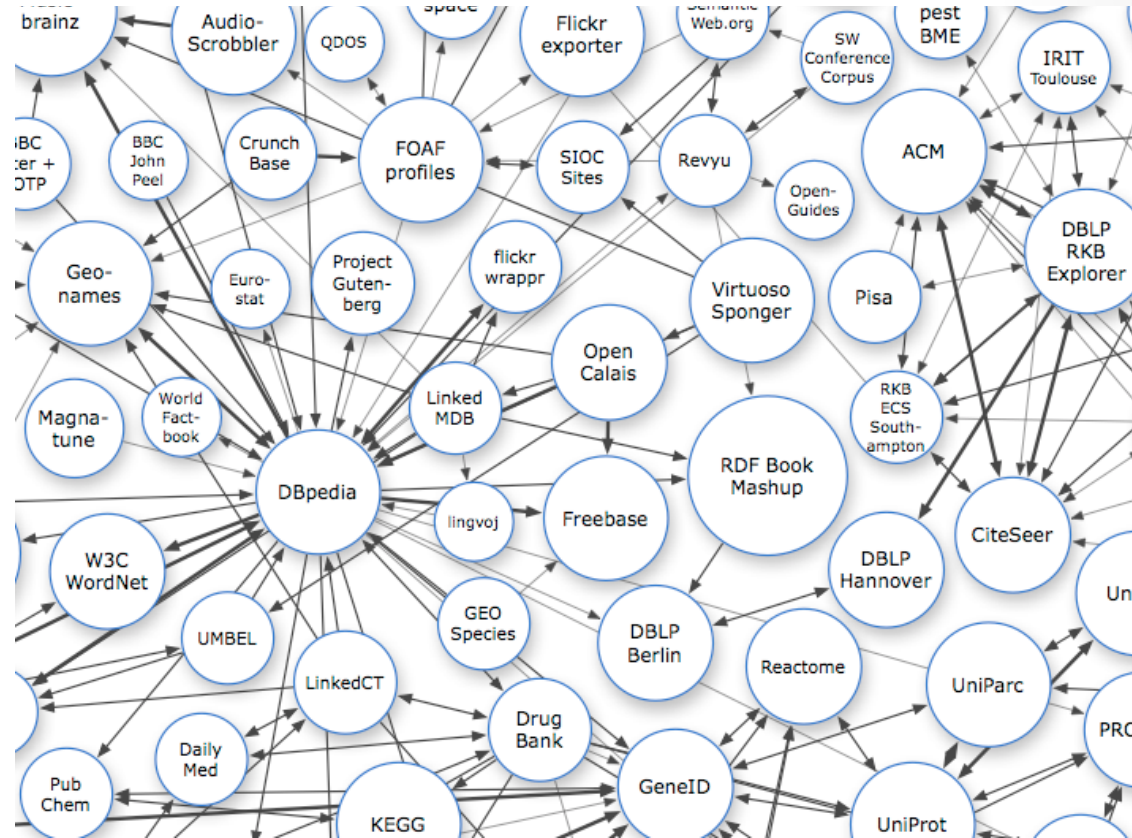
Open Source Software Community



<http://islandora.ca/islandora-installations>

Linked Open Data – the Basics

- Connecting related data on the web using three main tools
 - HTTP – on the web
 - URI – identifiers
 - RDF - group of specifications for modeling information




<http://linkeddata.org/>


Linked Open Data and Islandora – RDF

Baby on beach


View IP Embargo Manage MARCXML



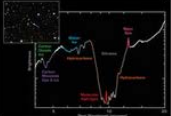
Part of: Compound Object (5 objects) manage parent
Next
Baby on beach




Baby Lobster




Spectrum from Faint Galaxy



Sprinkler



Happy Daysz



Description

Baby walking on beach on north shore of Prince Edward Island.

In collections

- Basic Image Collection

Details

Bookmark

Bookmark:

- Select bookmark list - Add bookmark

```
<rdf:RDF xmlns:fedora="info:fedora/fedora-system:def/relations-external#" xmlns:fedora-model="info:fedora/fedora-system:def/model#" xmlns:islandora="http://islandora.ca/ontology/relext#" xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#">
```

```
<rdf:Description rdf:about="info:fedora/islandora:66">
```

```
<fedora-model:hasModel rdf:resource="info:fedora/islandora:sp_basic_image"></fedora-model:hasModel>
```

```
<fedora:isPartOf rdf:resource="info:fedora/islandora:92"></fedora:isPartOf>
```

```
<islandora:isSequenceNumberOfislandora_92>1</islandora:isSequenceNumberOfislandora_92>
```

```
<fedora:isPartOf rdf:resource="info:fedora/islandora:121"></fedora:isPartOf>
```

```
<islandora:isSequenceNumberOfislandora_121>2</islandora:isSequenceNumberOfislandora_121>
```

```
<fedora:isMemberOfCollection
```

```
  rdf:resource="info:fedora/islandora:sp_basic_image_collection"></fedora:isMemberOfCollection>
```

```
<fedora:isConstituentOf
```

```
  rdf:resource="info:fedora/islandora:277"></fedora:isConstituentOf>
```

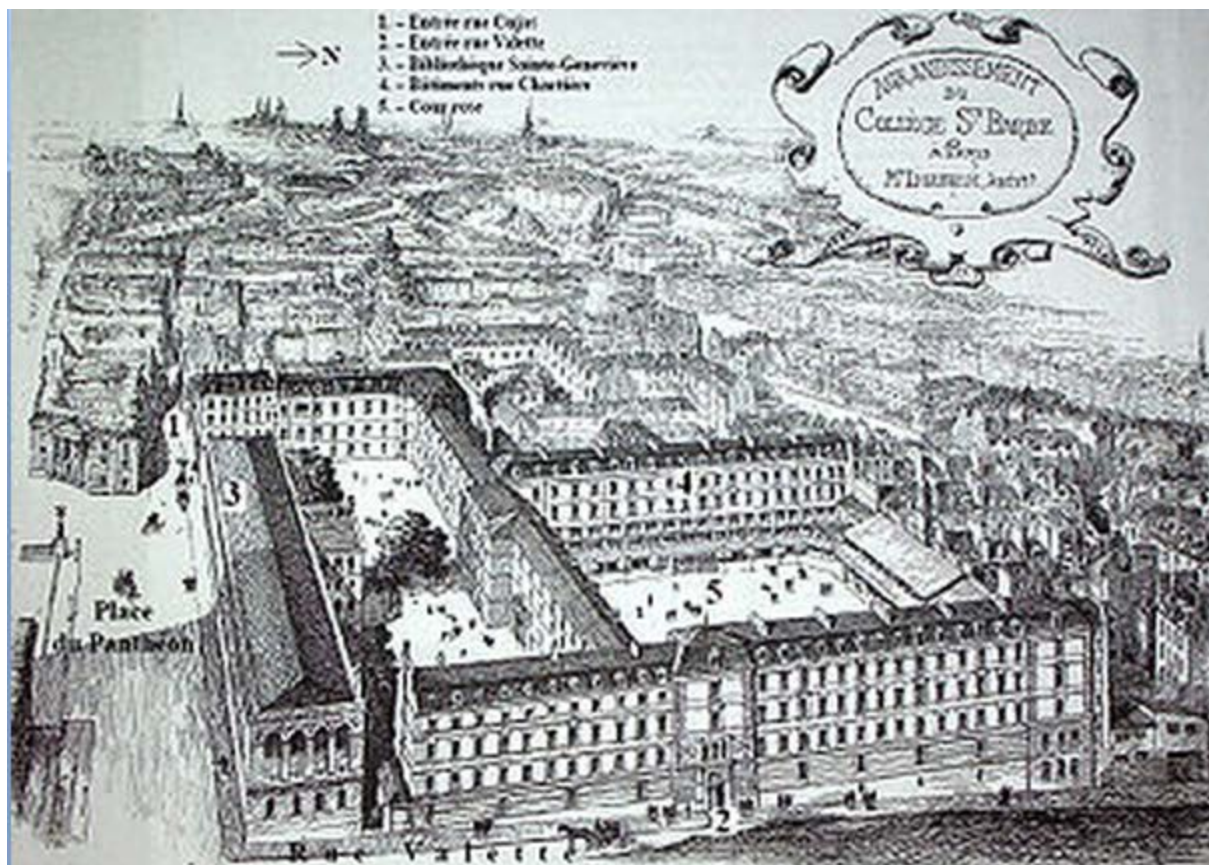
```
<islandora:isSequenceNumberOfislandora_277>2</islandora:isSequenceNumberOfislandora_277>
```

```
</rdf:Description>
```

```
</rdf:RDF>
```


<http://sandbox.discoverygarden.ca/islandora/object/islandora%3A66#>

LOD and Islandora – Custom RDF - Delft



```
<rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#">
  <rdf:Description rdf:about="info:fedora/po:10">
    <isMemberOfCollection xmlns="info:fedora/fedora-system:def/relations-external#"
      rdf:resource="info:fedora/collection:koloniaal_erfgoed"></isMemberOfCollection>
    <hasModel xmlns="info:fedora/fedora-system:def/model#"
      rdf:resource="info:fedora/model:Organization"></hasModel>
    <prefName
      xmlns="http://www.library.tudelft.nl/ns/rdf/bio/">Collège
      Sainte-Barbe</prefName>
    <instanceOfConcept
      xmlns="http://www.library.tudelft.nl/ns/rdf/core/"
      rdf:resource="info:fedora/aat:300312285"></instanceOfConcept>
    <locatedIn
      xmlns="http://www.library.tudelft.nl/ns/rdf/core/"
      rdf:resource="info:fedora/gn:2988507"></locatedIn>
    <shortMetadata
      xmlns="http://www.library.tudelft.nl/ns/rdf/internal/">pid:po:10\_/type:Organization\_/label:Collège Sainte-Barbe\_/_place:gn:2988507\_/_concept:aat:300312285</shortMetadata>
  </rdf:Description>
</rdf:RDF>
```

The Repo




Colonial architecture & town planning

Explore European colonial architecture after 1850







The digital repository seeks to combine digital library expertise with the expertise of international scholars specialised in colonial architecture and urbanism. The main objective is to play a central role in the current renaissance

Search


wolff schoemaker 

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Find on map



Colonial architecture & town planning

Villa Isola *Bumi Siliwangi*



AAT concept	villas [country houses, rural houses, ...], grand hotels , universities [buildings]
Person	Wolff Schoemaker, C.P. [architect]
Location	Jalan Setyabudi, Bandung
Construction date	1933
References	en.wikipedia.org

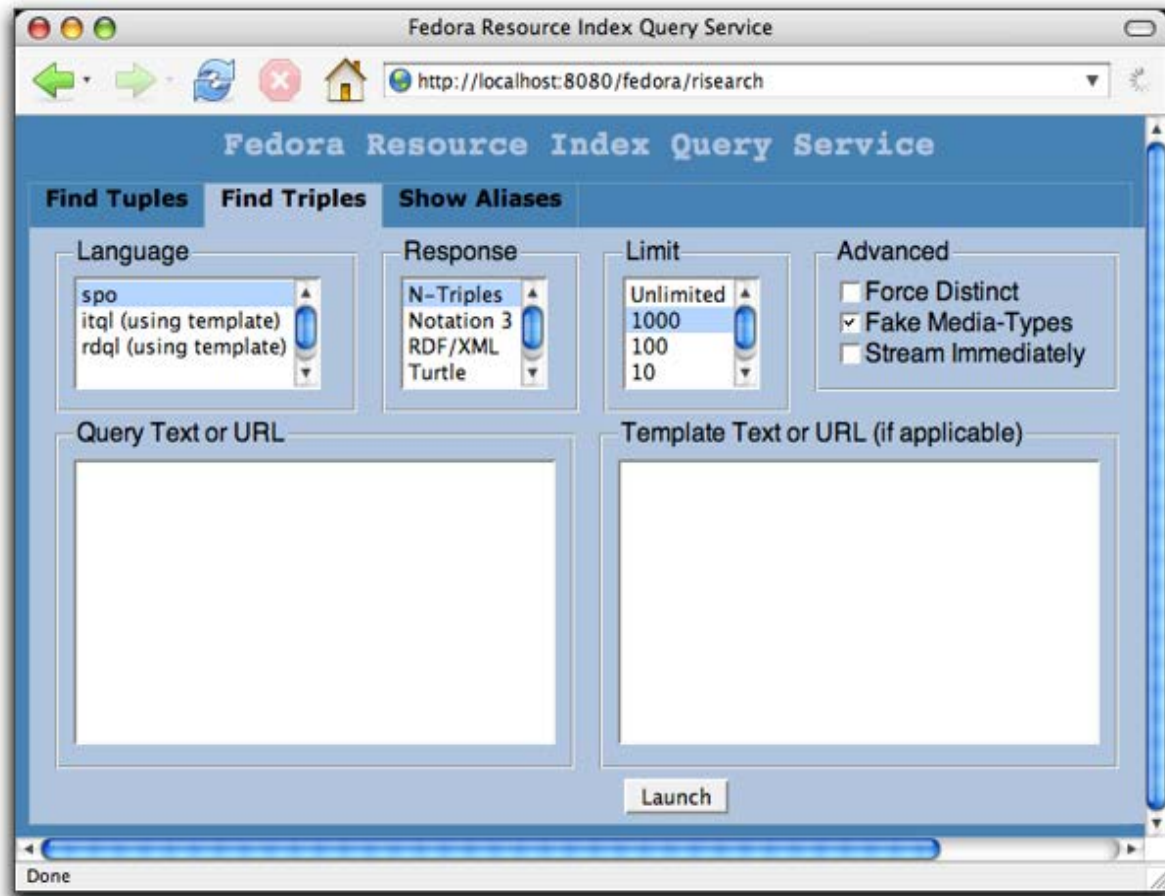
Share Save to list Export Cite

Colonial architecture & town planning

Find on map
Lorem ipsum dolor



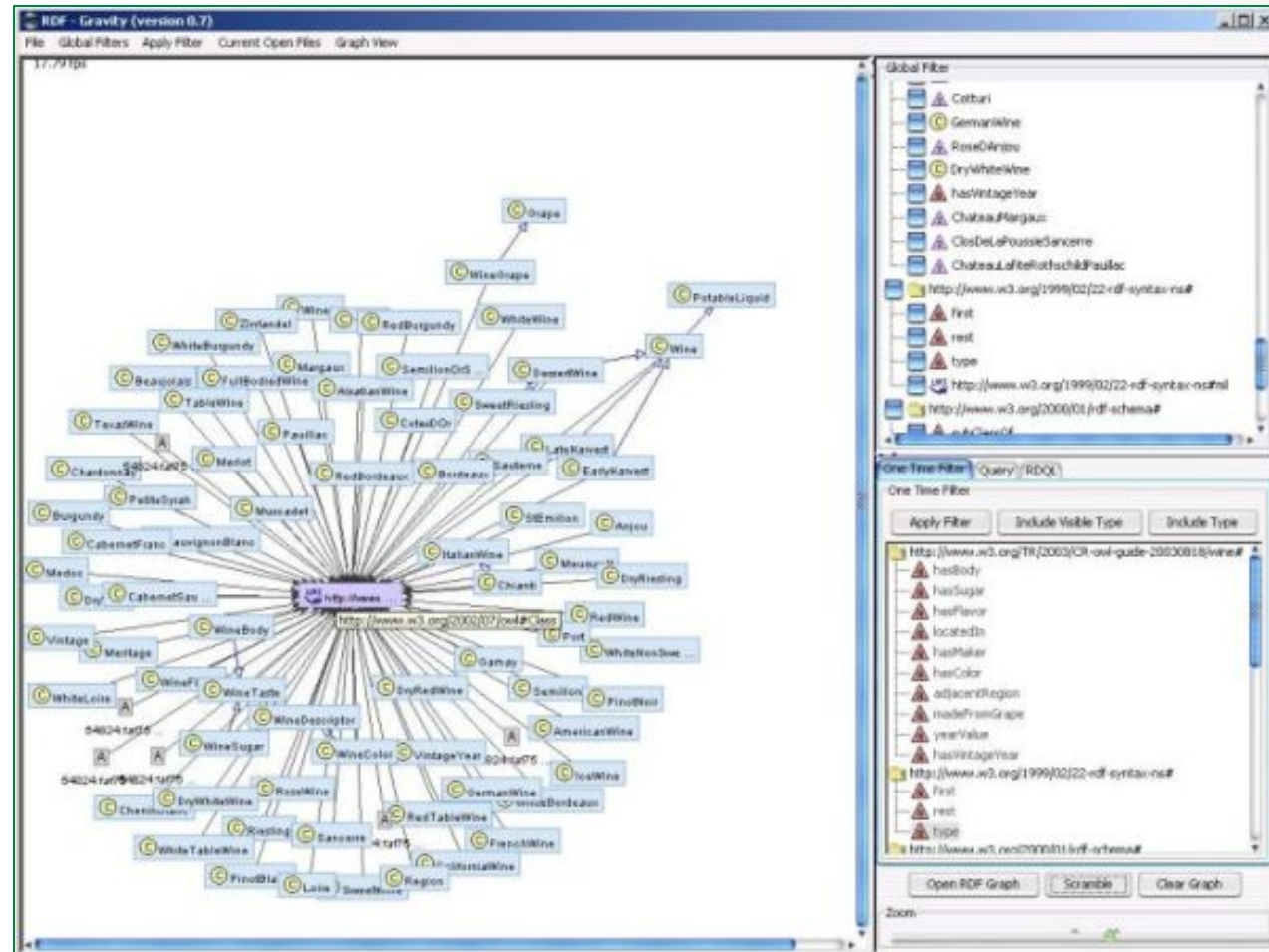
LOD and Islandora – Resource Index



- Indexes RDF as part of the Resource Index.
- Provides unified "graph" of the objects and their relationships
- It can be queried using RDQL or ITQL

LOD and Islandora - Weaknesses

- Islandora's RDF
 - Not easily available to other frameworks
 - Accessible only via
 - query to the resource index directly
 - Islandora Rest API
 - Exporting



<http://semweb.salzburgresearch.at/apps/rdf-gravity/>

LOD and Islandora – What's Next?

- Delft project goes 'live' in September
- Other adopt new functionality – generalize it.
- Tell us – is this a priority?
- Discuss improvements – is a Sparql end point feasible?
Recommended?

LOD & Islandora – Future Developments

- New modules are being developed by the community
 - EasyLOD
 - Creates an RDF description corresponding to an existing MODS XML record.
 - Islandora Sync
 - Created Drupal Node for Fedora objects
 - Opportunities for creating RDFa
 - LoC subject authority module
 - Built during Islandora Camp in New York

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