



LOD BRASIL
LINKED OPEN DATA

19a21 novembro 2014

Tecnologias para Publicação de LOD (GoogleRefine)

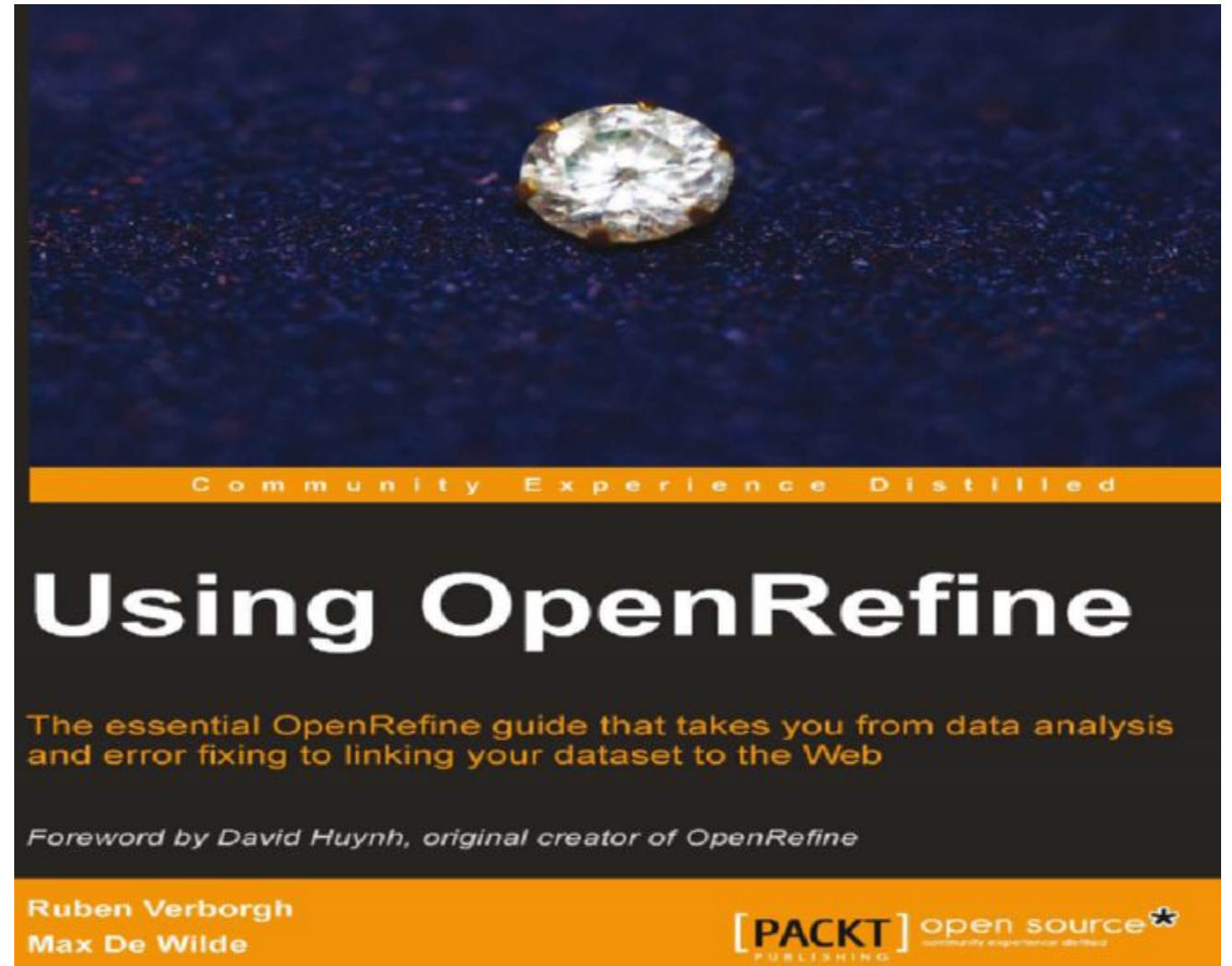
Sandro Rautenberg

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Agenda

- Why do we use the OpenRefine ?
- Diving into OpenRefine;
- Analyzing and Fixing Data;
- Advanced Data Operations;
- A potential use of OpenRefine in LOD; and
- Some useful LOD info.



Why do we use the OpenRefine ?

Get an overview what's in.
Click yourself through the LOD2-Stack below!

```
graph TD; A[Manual revision/authoring] --> B[Inter-linking/Fusing]; B --> C[Classification/Enrichment]; C --> D[Quality Analysis]; D --> E[Evolution/Repair]; E --> F[Search/Browsing/Exploration]; F --> G[Extraction]; G --> H[Storage/Querying]; H --> A;
```

Evolution / Repair

Zemanta LODrefine

LODGrefine is based on a powerful tool Google Refine, but customized for the needs of LOD2 project. While Google Refine itself allows to load data, understand it, clean it up, reconcile it, and augment it with data from Freebase or any other (registered) service, LODGrefine has already integrated extensions, which provide additional functionalities especially suited for working with Linked Open Data.

[VISIT WEBSITE](#)

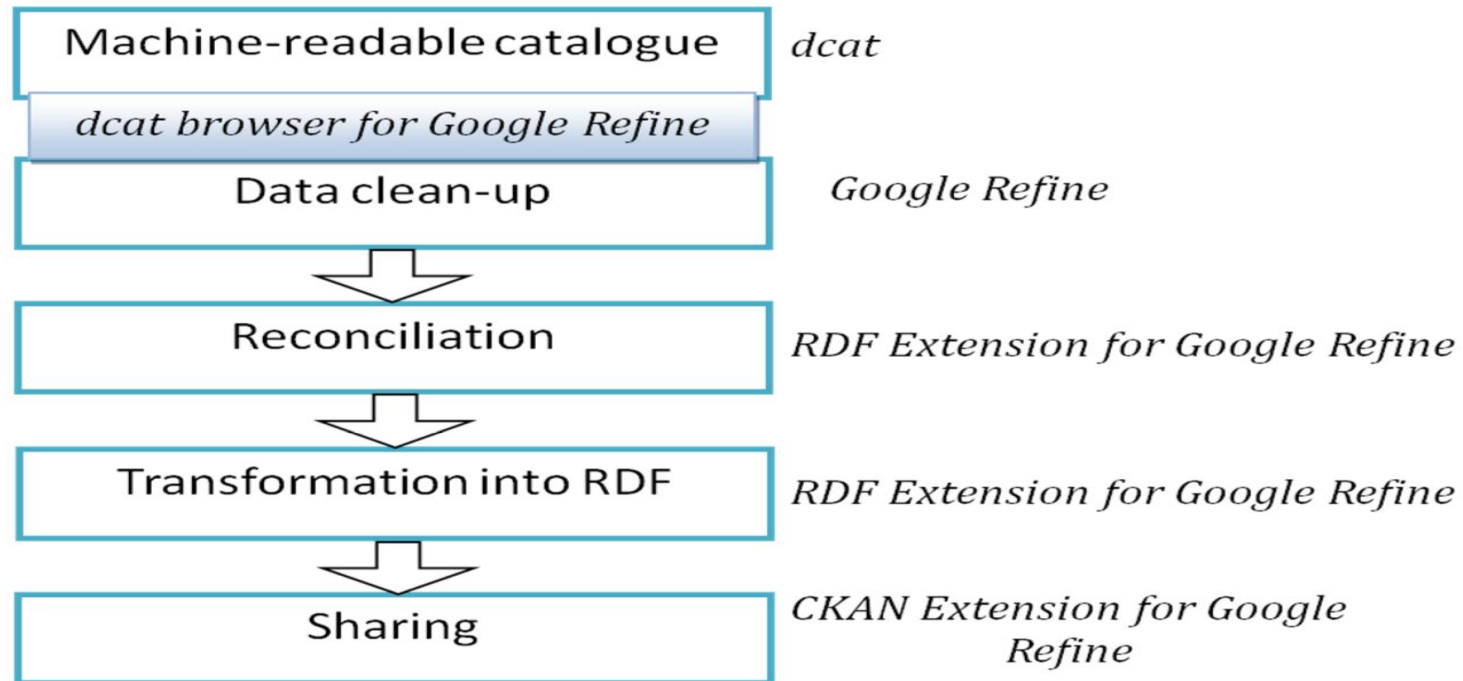
Additional components ↘, with cross life cycle functions.

The LOD2 stack comprises tools from the LOD2 partners and third parties.

Why do we use the OpenRefine ?

A Publishing Pipeline for Linked Government Data

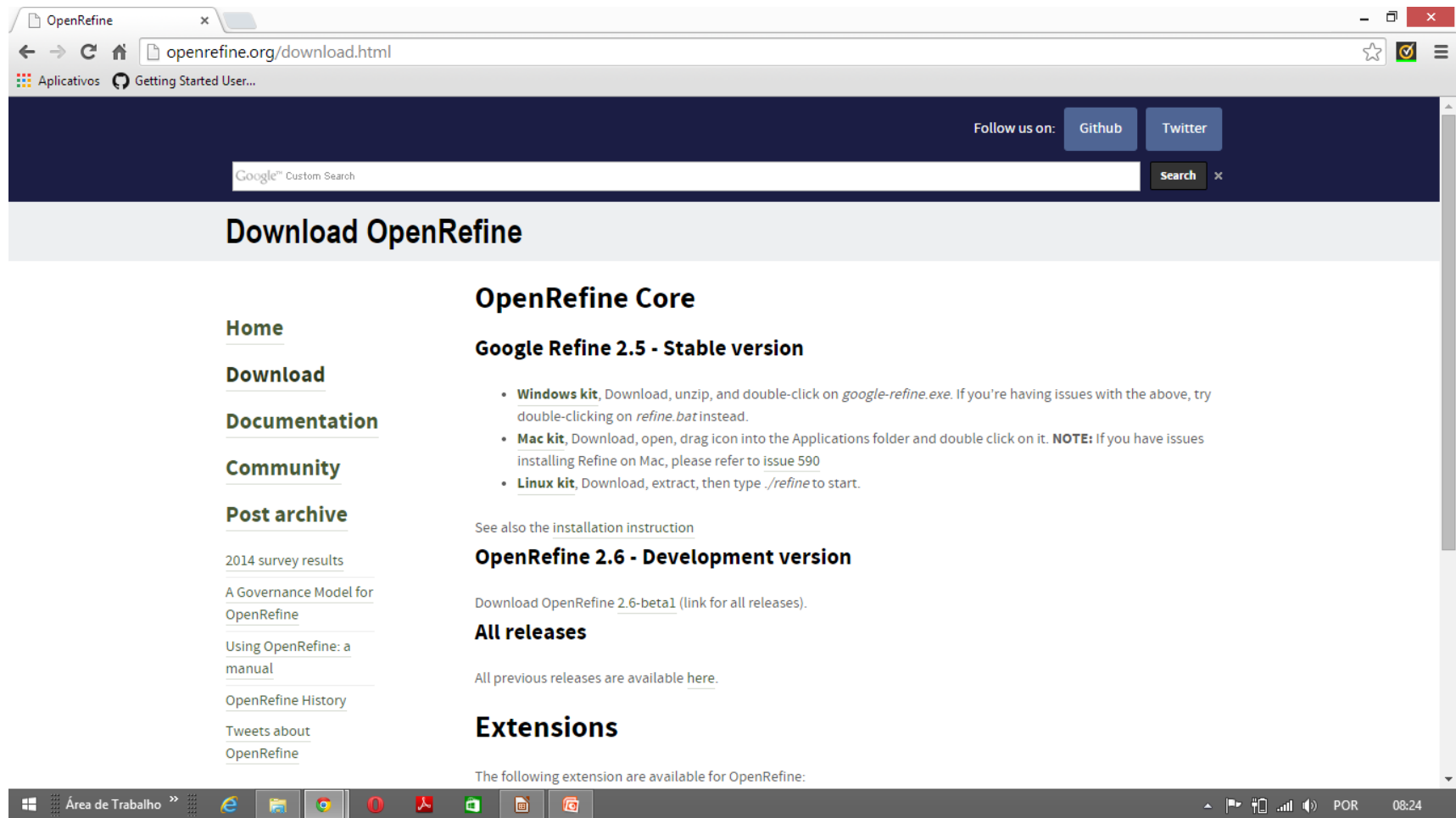
Fadi Maali¹, Richard Cyganiak¹, and Vassilios Peristeras²



Diving into OpenRefine


- Recipe 1 – installing OpenRefine;
- Recipe 2 – creating a new project;
- Recipe 3 – exploring your data;
- Recipe 4 – manipulating columns;
- Recipe 5 – using the project history; and
- Recipe 6 – exporting a project.

Installing OpenRefine



Creating a new project

- go to the path of ./refine and run it;
- on a browser: <http://localhost:3333/>;



The screenshot shows the Refine web interface. At the top left is the logo "Refine^{OPEN}" with a diamond icon and the tagline "A power tool for working with messy data." Below the logo is a navigation menu with three items: "Create Project" (highlighted in blue), "Open Project", and "Import Project". The main content area is titled "Create a project by importing data. What kinds of data files can I import?" and lists supported formats: "TSV, CSV, *SV, Excel (.xls and .xlsx), JSON, XML, RDF as XML, and Google Data documents are all supported." Below this, there is a section for "Get data from" with four options: "This Computer", "Web Addresses (URLs)", "Clipboard", and "Google Data". The "This Computer" option is selected, and it includes a "Choose Files" button (with "No file chosen" text next to it) and a "Next »" button.

Exploring your data

1 75814 rows

2 Show as: **rows** records Show: 5 10 25 50 rows

3

▼ All		▼ Record ID	▼ Object Title	▼ Registration Nu	▼ Description.	▼ Marks
★	🗨	1.	267220	Rocket motor on loan from Roswell Museum and Art Center, USA	L2106-3/1	Rocket motor, liquid fuelled combustion chamber, steel / aluminium wrapped tubes with insulation, included in flight of Dec 26 1928, Robert H Goddard, USA, 1928 (Roswell Acc No: 1958-28-12)
★	🗨	2.	346260	Fragment of moon rock on loan from National Aeronautics and Space Administration (NASA), USA	L4115/1	Fragment of lunar sample (moon rock), NASA No.61016.116 (011) and box, weight of rock 89 grams, collected by Apollo 16

4

Manipulating columns

- Collapsing and expanding columns;
- Moving columns;
- Renaming columns; and
- Removing columns;

Tip: select the column “all” to perform operations on several columns

Using the project history

Facet / Filter
Undo / Redo 2

Extract...
Apply...

Filter:

0. Create project

1. Move column Registration Number to position 1

2. Rename column Description. to Description

3. Remove column Provenance (Production)

4. Reorder rows

5. Remove 3 rows

```
[
  {
    "op": "core/column-move",
    "description": "Move column Registration Number to position 1",
    "columnName": "Registration Number",
    "index": 1
  },
  {
    "op": "core/column-rename",
    "description": "Rename column Description. to Description",
    "oldColumnName": "Description.",
    "newColumnName": "Description"
  }
]
```

Exporting a project

Export project
Tab-separated value
Comma-separated value
HTML table
Excel
ODF spreadsheet
Triple loader
MQL Write
Custom tabular exporter...
Templating...
RDF as RDF/XML
RDF as Turtle

Analyzing and Fixing Data

- Recipe 1 – sorting data;
- Recipe 2 – faceting data;
- Recipe 3 – detecting duplicates;
- Recipe 4 – applying a text filter;
- Recipe 5 – using simple cell transformations; and
- Recipe 6 – removing matching rows.

Sorting data

Sort by Record ID

Sort cell values as

text case-sensitive

numbers

dates

booleans

Position blanks and errors

Valid values

Errors

Blanks


Drag and drop to re-order

smallest first largest first

OK Cancel

Sorting data

All			Record ID	Object Title
★	🗨️	1.	267220	Rocket motor on loan from Roswell Museum and Art Center, USA
★	🗨️	2.	346260	Fragment of moon rock on loan from National Aeronautics and Space Administration (NASA), USA
★	🗨️	3.	267098	F-1 rocket engine on loan from National Air and Space Museum (NASM), USA



All			Record ID	Object Title
★	🗨️	75813.	7	10002 [Timber] Samples (two in sections, polished on one side and hinged):- ... (SB).
★	🗨️	75812.	9	10004 Collection of minerals consisting of agates, quartz laminated & crystallised etc.; Liverpool Plains District, New South Wales (SB). 1 spec. surface polished B.fl. Case 637, Bay 14 (LC).
★	🗨️	75811.	14	A didactic display illustrating pearl button manufacture.

Sorting data

Show: 5 10 25 50 records **Sort** ▼

▼ Object Title	▼ Registrati	Provenance (Pr
10002 [Timber] Samples (two in sections, polished on one side and hinged):- ... (SB).		
10004 Collection		

Remove sort

Reorder rows permanently

By Record ID ▶ Sort...

By Object Title ▶ Reverse

By Registration Number ▶ Remove sort

Faceting data

Categories change

7 choices Sort by: name **count** Cluster

- Photographic prints|Photographs 2336
- Botanical specimens|Timber Samples 1785
- Vases|Ceramics 1483
- Glass plate negatives|Gelatin dry plate negatives|Photographs 1342
- Glass plate negatives|Photographs 1329
- Medals|Numismatics 1147
- Glass plate negatives 1127

Facet by choice counts

Categories change reset

1,000.00 — 2,400.00

Height change

1313 choices Sort by: name **count** Cluster

- 164 mm 1368
- 215 mm 400
- 90 mm 339
- 165 mm 331
- 200 mm 319
- 100 mm 300
- 150 mm 300
- 60 mm 293
- 50 mm 292
- 120 mm 279
- 80 mm 278
- 130 mm 266

Record ID change reset

0.00 — 510,000.00

Numeric 75811 Non-numeric 3 Blank 0 Error 0

Production Date change reset

1880-02-26 00:00:00 — 00:00:00

Time 79 Non-Time 19820 Blank 55915 Error 0

3 matching records (75814 total)

Show as: **rows** records Show: 5 10 25 50 records

All	Record ID	Object Title	Registration Nu	Description.	Marks	Pro
<input type="checkbox"/>	16594.	<input type="text" value="Data type: text"/>				
<input type="checkbox"/>	50359.					

Apply Apply to All Identical Cells Cancel

Enter Ctrl-Enter Esc

Detecting duplicates (hands on)

Registration Number | Facet | Customized facets | Duplicates facet;
| Facet | Customized facets | Facet by blank.
add a third facet, a simple text facet this time

The screenshot displays three facets for the 'Registration Number' field in GoogleRefine. Each facet has a title bar with a close button (X), the field name, and options for 'change', 'invert', and 'reset'. Below the title bar, the facet shows the number of choices and the current sort order (name and count).

- Facet 1:** 2 choices, sorted by name and count. The 'false' option has 75533 items, and the 'true' option has 163 items. An 'exclude' button is visible next to the 'true' option.
- Facet 2:** 2 choices, sorted by name and count. The 'false' option has 163 items, and the 'true' option has 118 items. An 'exclude' button is visible next to the 'false' option.
- Facet 3:** 79 choices, sorted by name and count. A 'Cluster' button is visible. The list shows the following items and counts:
 - 86/1147-3 6
 - 2008/37/1 3
 - 2004/43/1 2
 - 2004/82/1 2
 - 2007/56/25 2

Applying a text filter

The screenshot shows the 'Facet / Filter' panel in GoogleRefine. At the top, there are tabs for 'Facet / Filter' and 'Undo / Redo'. Below the tabs are three buttons: 'Refresh', 'Reset All', and 'Remove All'. The main section is titled 'Object Title' with a close button (X). A text input field contains the value 'USA'. At the bottom, there are two checkboxes: 'case sensitive' (checked) and 'regular expression' (unchecked).

Applying a text filter

Regular Expressions and GREL

`\bU.?S.?A\b` (with the regular expression box selected)

Using simple cell transformations

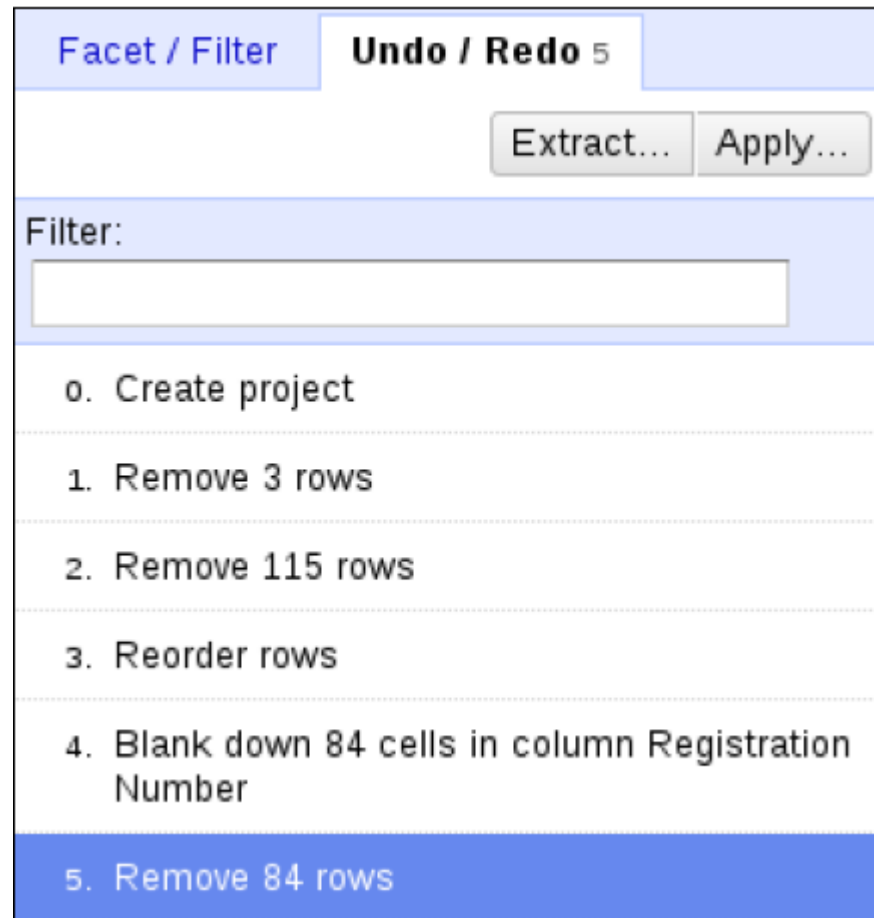
Trim leading and trailing whitespace
Collapse consecutive whitespace
Unescape HTML entities
To titlecase
To uppercase
To lowercase
To number
To date
To text
Blank out cells

Removing matching rows

The screenshot shows the GoogleRefine interface. On the left, the 'Facet / Filter' panel is active for 'Record ID'. It displays a histogram with a range from 0.00 to 510,000.00. Below the histogram, there are checkboxes for 'Numeric' (75811), 'Non-numeric' (3), 'Blank' (0), and 'Error' (0). The 'Non-numeric' checkbox is checked. On the right, the main table shows '3 matching rows (75814 total)'. The table has columns for 'All', 'Record ID', 'Object Title', and 'Registration Number'. The first row is highlighted, and a context menu is open over it, showing options: 'Facet', 'Edit rows', 'Edit columns', 'View', 'Star rows', 'Unstar rows', 'Flag rows', 'Unflag rows', and 'Remove all matching rows'. The 'Remove all matching rows' option is highlighted in blue.

Registration Number | Facet | Customized facets | Facet by blank.
 Number | Facet | Customized facets | Duplicates facet

Removing matching rows



Facet / Filter Undo / Redo 5

Extract... Apply...

Filter:

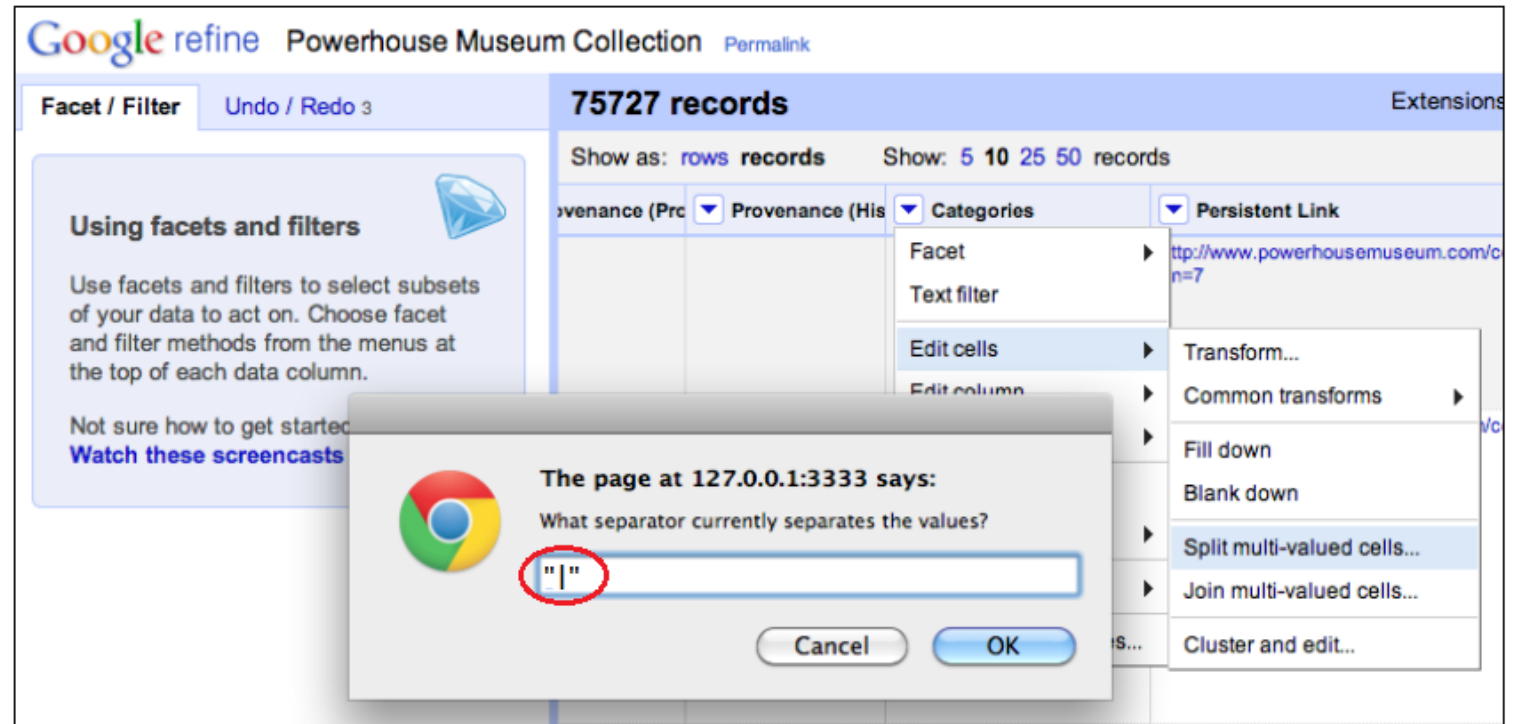
0. Create project
1. Remove 3 rows
2. Remove 115 rows
3. Reorder rows
4. Blank down 84 cells in column Registration Number
- 5. Remove 84 rows**

Advanced Data Operations

- Recipe 1 – handling multi-valued cells;
- Recipe 2 – alternating between rows and records mode;
- Recipe 3 – clustering similar cells;
- Recipe 4 – transforming cell values;
- Recipe 5 – adding derived columns;
- Recipe 6 – splitting data across columns; and
- Recipe 7 – transposing rows and columns.

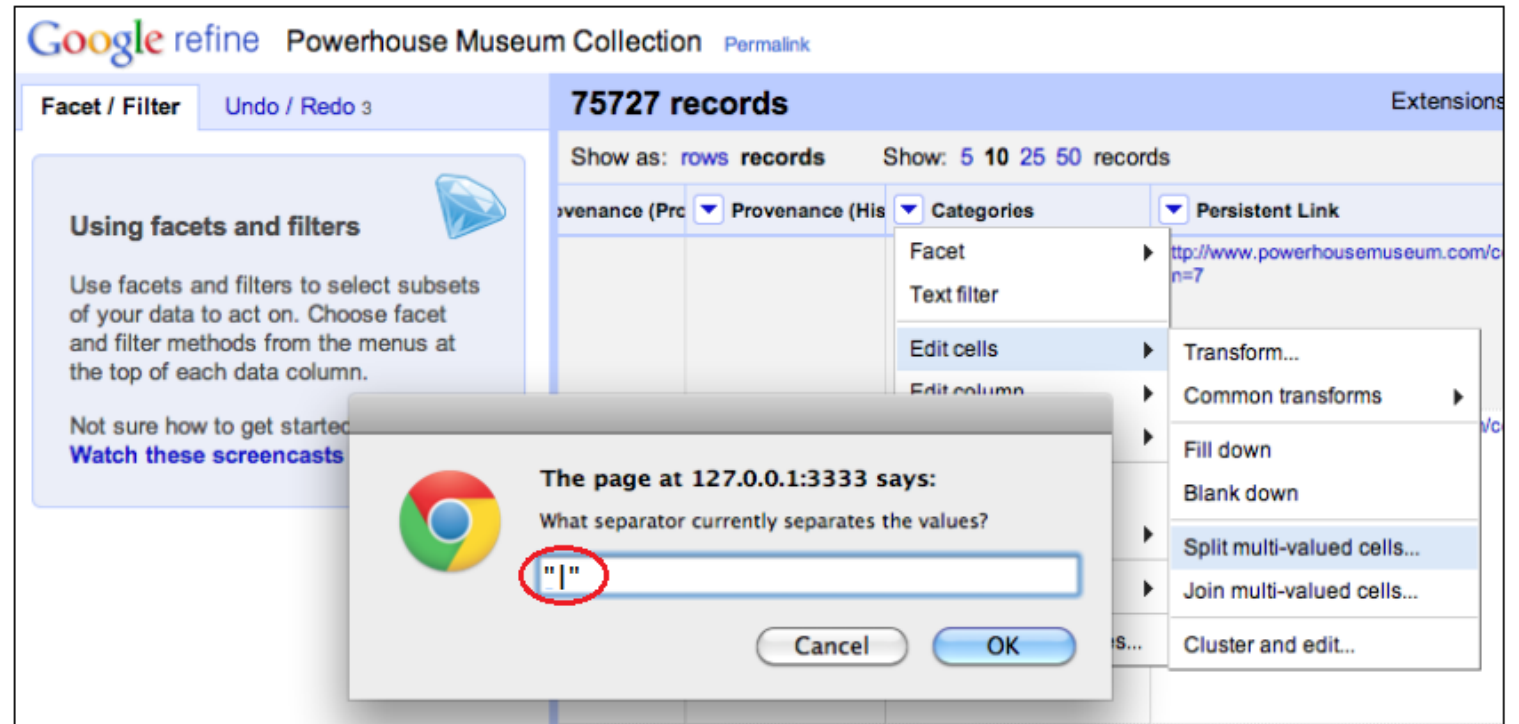
Handling multi-valued cells

- Categories > Facet > Text Facet
- Categories > Edit Cells > Split multi...
- Split by “|”



Handling multi-valued cells

- Categories > Facet > Text Facet
- Categories > Edit Cells > Split multi...
- Split by “|”



Handling multi-valued cells

- Change “Clothing and Dress” to “Clothing”
- Merge the data back ...
Categories > Edit cells > Join multi ...
- Tip: use a comma and space “, ”

The screenshot shows the Google Refine interface for the Powerhouse Museum Collection. The 'Facet / Filter' section on the left shows a list of categories, with 'Clothing and Dress' (7279 items) selected. A dialog box is open over the table, allowing the user to edit the selected cell's content to 'Clothing'. The table displays columns for Record ID, Object Title, and Registration Number. The selected record has Record ID 7 and Object Title '10002 [Timber] Samples (two in sections, polished on one side and ...'. The 'Apply' button is highlighted, indicating the change is being confirmed.

Alternating between rows and records mode

The image shows two screenshots of the Google Refine interface. The top screenshot is in 'rows' mode, displaying a table with 12 rows. The bottom screenshot is in 'records' mode, displaying a table with 5 records. A red arrow points from the 'Record ID' column in the top screenshot to the 'Record ID' column in the bottom screenshot, illustrating the transition between the two modes.

170311 rows

Show as: **rows** records Show: 5 10 25 50 rows

All	Record ID	Object Title	Categories	Persistent Link	
☆ ↻	1.	7	0002 [Timber] Samples (two in...	Botanical specimens	http://www.powerhousemuseum.com/collection/database/?irn=7
☆ ↻	2.		Numismatics		
☆ ↻	3.	9	0004 Collection of minerals c...	Mineral samples	http://www.powerhousemuseum.com/collection/database/?irn=9
☆ ↻	4.		Specimens		
☆ ↻	5.		Mineral Samples-Geological		
☆ ↻	6.	14	didactic display illustrain...	Didactic displays	http://www.powerhousemuseum.com/collection/database/?irn=14
☆ ↻	7.		Pearl shells		
☆ ↻	8.		Buttons		
☆ ↻	9.				
☆ ↻	10.	29	0014 Botanical recep		
☆ ↻	11.	35	002 1 coal-vase, Glo		
☆ ↻	12.				

Google refine Powerhouse Museum Collection Permalink

Facet / Filter Undo / Redo 6

Refresh Reset All Remove All

8011 matching records (75736 total) Extensions: Named-entity recognition Freebase RDF

Show as: **rows** records Show: 5 10 25 50 records « first < previous 1 - 50 next > last »

All	Record ID	Object Title	Categories	Persistent Link	
☆ ↻	1.	7	0002 [Timber] Samples (two in...	Botanical specimens	http://www.powerh...
☆ ↻			Numismatics		
☆ ↻	1477.	9150	000/66/100 Badges (7), metal/...	Badges	http://www.powerh...
☆ ↻			Numismatics		
☆ ↻	1686.	9556	000/86/1 Badges (7), AIDS awa...	Badges	http://www.powerh...
☆ ↻			Numismatics		
☆ ↻	1687.	9564	000/86/2 Badges (3), child ca...	Badges	http://www.powerh...

Categories change invert reset

4934 choices Sort by: name count Cluster

- Numismatics 8041 exclude
- Ceramics 7391
- Clothing and Dress 7279
- Photographs 7115
- Pictorials 4928
- Glass plate negatives 3906

Alternating between rows and records mode

- Categories > Facet > Text Facet;
- Change “Show as” to record mode;
- Sort Facet “Categories” by count;
- Select “Numismatics”;
- All > Edit Rows > Star rows
- Press Reset all;
- Change “Show as” to row mode;
- What’s happened with the stars? (See categories selected by)
- Try to select “Numismatics” and “Medals” in row mode and record mode

Clustering similar cells

- Categories > Edit Cells > Cluster and edit...

Cluster & Edit column "Categories"

This feature helps you find groups of different cell values that might be alternative representations of the same thing. For example, the two strings "New York" and "new york" are very likely to refer to the same concept and just have capitalization differences, and "Gödel" and "Godel" probably refer to the same person. [Find out more...](#)

Method: **key collision** Keying Function: **fingerprint** 27 clusters found

Cluster Size	Row Count	Values in Cluster	Merge?	New Cell Value
2	973	<ul style="list-style-type: none"> • Audio and Visual Equipment (968 rows) • Audio and visual equipment (5 rows) Browse this cluster	<input type="checkbox"/>	Audio and Visual Equipme
2	644	<ul style="list-style-type: none"> • Photographic Equipment (611 rows) • Photographic equipment (33 rows) 	<input type="checkbox"/>	Photographic Equipment
2	608	<ul style="list-style-type: none"> • Food and Drink (607 rows) • food and drink (1 rows) 	<input type="checkbox"/>	Food and Drink
2	85	<ul style="list-style-type: none"> • Office Equipment (78 rows) • Office equipment (7 rows) 	<input type="checkbox"/>	Office Equipment
2	2279	<ul style="list-style-type: none"> • Documents (2278 rows) • documents (1 rows) 	<input type="checkbox"/>	Documents
2	912	<ul style="list-style-type: none"> • Musical Instruments (907 rows) • Musical instruments (5 rows) 	<input type="checkbox"/>	Musical Instruments
2	95	<ul style="list-style-type: none"> • Material technology (89 rows) • Material Technology (6 rows) 	<input type="checkbox"/>	Material technology
2	143	<ul style="list-style-type: none"> • Medicines (141 rows) 	<input type="checkbox"/>	Medicines

Rows in Cluster: 0 — 8100

Average Length of Choices: 9 — 28

Select All Deselect All Merge Selected & Re-Cluster Merge Selected & Close Close

Transforming cell values

- Categories > Edit cells > Transform...

Custom text transform on column Categories

Expression Language Google Refine Expression Language (GREL)

`value.replace(";", " ", " ")` No syntax error.

Preview History Starred Help


row	value	value.replace(";", " ", " ")
1.	Botanical specimens Numismatics	Botanical specimens Numismatics
2.	Mineral samples Specimens Mineral Samples-Geological	Mineral samples Specimens Mineral Samples-Geological
3.	Didactic displays Pearl shells Buttons Didactic Displays	Didactic displays Pearl shells Buttons Didactic Displays
4.	Scientific Instruments	Scientific Instruments
5.	Coal boxes Domestic Equipment-Home	Coal boxes Domestic Equipment-Home

On error keep original Re-transform up to times until no change
 set to blank
 store error

OK Cancel

Adding derived columns

- Categories > Edit Column > Add column based on this...;
- Enter “Categories Count”;
- Command “value.split(“,”).length()”



The screenshot shows a facet window titled 'Category Count' with a 'change' link. It displays 14 choices, sorted by name and count. A 'Cluster' button is visible. The data is as follows:

Choice	Count
1	4261
12	1
13	2
14	1
15	1
17	1
2	53306
3	13166
4	4003
5	427
6	153
7	25
8	16
9	3
(blank)	448

Facet by choice counts

Splitting data across columns

- Provenance (Production) > Edit column > Split into several ...

Split column Provenance (Production) into several columns

How to Split Column	After Splitting
<input checked="" type="radio"/> by separator	<input checked="" type="checkbox"/> Guess cell type
Separator <input type="text" value=","/> <input type="checkbox"/> regular expression	<input checked="" type="checkbox"/> Remove this column
Split into <input type="text" value=""/> columns at most (leave blank for no limit)	
<input type="radio"/> by field lengths	
<input type="text" value=""/>	
List of integers separated by commas, e.g., 5, 7, 15	
<input type="button" value="OK"/>	<input type="button" value="Cancel"/>

Transposing rows and columns

- Height > Transpose > Transpose Cells across columns into...

Transpose Cells Across Columns into Rows

From Column	To Column	Transpose into
Record ID Object Title Registration Number Description. Marks Production Date Provenance (Production) Provenance (History) Categories Persistent Link Height Width Depth Diameter Weight License info	Width Depth Diameter Weight License info (last column)	<input checked="" type="radio"/> Two new columns Key column <input type="text" value="Dimension"/> (containing original columns' names) Value column <input type="text" value="Measurement"/> (containing original cells' values) <input type="radio"/> One column <input type="text"/> <input type="checkbox"/> prepend the original column's name to each cell followed by <input type="text" value=":"/> before the cell's value <input checked="" type="checkbox"/> Ignore blank cells <input type="checkbox"/> Fill down in other columns

A potential use of OpenRefine in LOD

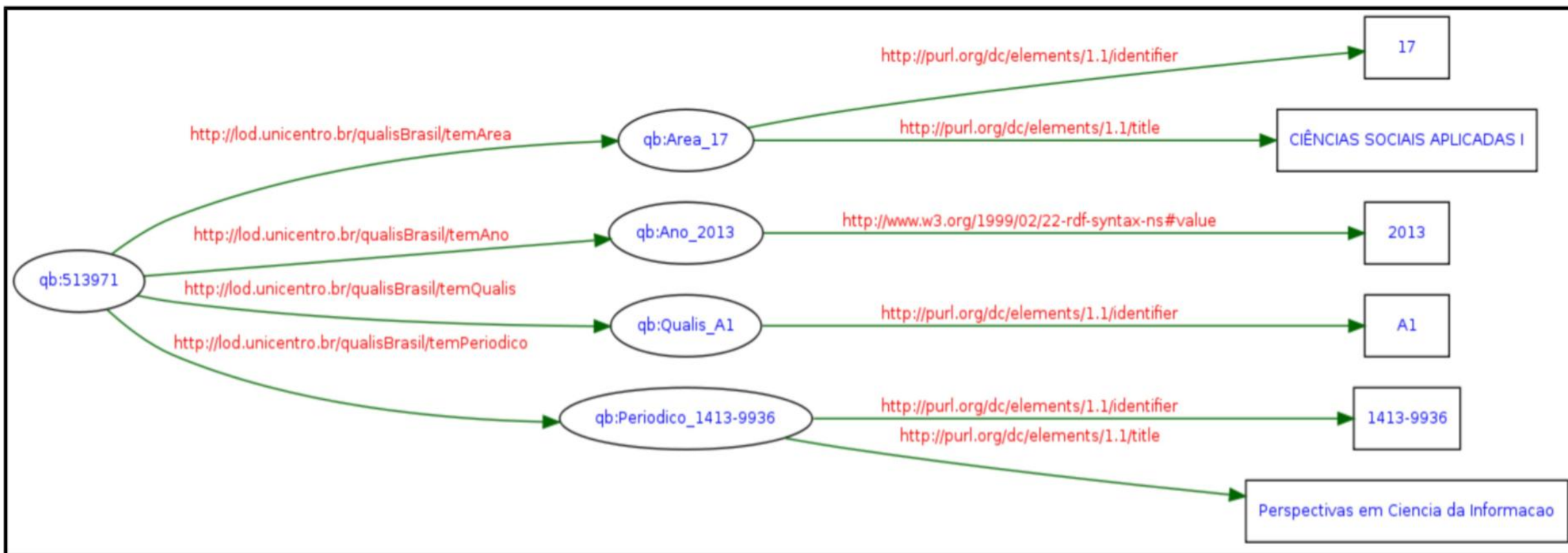


Figura 2: grafo de representação da Listagem 1.
 Fonte: elaborado pelos autores a partir de (W3C, 2014).

A potential use of OpenRefine in LOD

```

01 <?xml version="1.0" encoding="UTF-8"?>
02 <rdf:RDF
03   xmlns:dc="http://purl.org/dc/elements/1.1/"
04   xmlns:rdfs="http://www.w3.org/2000/01/rdf-schema#"
05   xmlns:owl="http://www.w3.org/2002/07/owl#"
06   xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
07   A xmlns:qb="http://lod.unicentro.br/qualisBrasil/">
08
09   <rdf:Description rdf:about="qb:Area_17">
10     B <dc:identifier rdf:datatype="http://www.w3.org/2001/XMLSchema#int">17</dc:identifier>
11     <dc:title xml:lang="pt">CIÊNCIAS SOCIAIS APLICADAS I</dc:title>
12   </rdf:Description>
13
14   <rdf:Description rdf:about="qb:Ano_2013">
15     C <rdf:value rdf:datatype="http://www.w3.org/2001/XMLSchema#int">2013</rdf:value>
16   </rdf:Description>
17
18   <rdf:Description rdf:about="qb:Qualis_A1">
19     D <dc:identifier>A1</dc:identifier>
20   </rdf:Description>
21
22   <rdf:Description rdf:about="qb:Periodico_1413-9936">
23     E <dc:identifier>1413-9936</dc:identifier>
24     <dc:title>Perspectivas em Ciencia da Informacao</dc:title>
25   </rdf:Description>
26
27   <rdf:Description rdf:about="qb:513971">
28     <qb:temPeriodico rdf:resource="qb:Periodico_1413-9936"/>
29     F <qb:temArea rdf:resource="qb:Area_17"/>
30     <qb:temAno rdf:resource="qb:Ano_2013"/>
31     <qb:temQualis rdf:resource="qb:Qualis_A1"/>
32   </rdf:Description>
33 </rdf:RDF>

```

Listagem 1: código-fonte em RDF – exemplo de descrição de recursos

Fonte: elaborado pelos autores.

A potential use of OpenRefine in LOD

The screenshot shows a web browser window with the URL `lodunicentro.aksw.org`. The page title is "Consultas". There are three tabs: "Artigos Periódicos", "Evolução Artigos Periódicos", and "Qualis Jornais/Revistas". The "Qualis Jornais/Revistas" tab is active. Below the tabs is a "Filtros" section with the following settings:

- Área: INTERDISCIPLINAR
- Ano: 20
- Qualis: Selecionar tod

An "Aplicar" button is located to the right of the filters. Below the filters is a table of results. The table has 5 columns: ISSN, Revista, Área, Ano, and Qualis. The table shows 10 rows of data, all with a Qualis rating of A1. The table is paginated, showing "1 of 10" results.

ISSN	Revista	Área	Ano	Qualis
0149-1423	AAPG Bulletin	INTERDISCIPLINAR	2013	A1
0360-0300	ACM Computing Surveys	INTERDISCIPLINAR	2013	A1
1557-7295	ACM Transactions on Mathematical Software	INTERDISCIPLINAR	2013	A1
1944-8244	ACS Applied Materials & Interfaces (Print)	INTERDISCIPLINAR	2013	A1
1936-0851	ACS Nano	INTERDISCIPLINAR	2013	A1
1547-5905	AIChE Journal	INTERDISCIPLINAR	2013	A1
0269-9370	AIDS	INTERDISCIPLINAR	2013	A1
0001-2343	ARSP. Archiv für Rechts und Sozialphilosophie	INTERDISCIPLINAR	2013	A1
1939-3792	AUTISM RES	INTERDISCIPLINAR	2013	A1
1742-7061	Acta Biomaterialia	INTERDISCIPLINAR	2013	A1

Some useful LOD info (1/5)

- WWW – World Wide Web Conference;
- ESWC – European Semantic Web Conference;
- ISWC – International Semantic Web Conference;
- ICSC - IEEE International Conference on Semantic Computing; and
- I-Semantics – International Conference on Semantic Systems.

Some useful LOD info (2/5)

- Journal of Semantic Web;
- Semantic Web Journal;
- <http://aksw.org>; and
- <http://lod2.eu/Welcome.html>.

Some useful LOD info (3/5)

CIÊNCIA SEM FRONTEIRAS
BOLSISTAS PELO MUNDO

País: Alemanha ✕ Área: Todas
Modalidade: Todas Limpar Filtros

Alemanha

Bolsas Implementadas	Bolsas Vigentes
5611	3501

A Deutsches Zentrum für Luft - und Raumfahrt
<http://www.dlr.de/en/>
Linder Hohe
Koln, 51147, Alemanha
Total de Bolsistas: 2

B Deutsches Zentrum für Neurodegenerative Erkrankungen e.V.
<http://www.dzne.de/>
Ludwig-Erhard-Allee 2
Bonn, 53175, Alemanha
Total de Bolsistas: 1

C Did Deutsch-Institut - Frankfurt am Main
<http://www.did.de/>
Gutleutstrasse 32,
Frankfurt am Main, 60329, Alemanha
Total de Bolsistas: 58

D Did Deutsch-Institut - Munich

Universität Leipzig
<http://www.zv.uni-leipzig.de/>
Leipzig, 04109, Alemanha

Bolsistas:	
Doutorado Sanduíche no Exterior:	9
Doutorado no Exterior:	9
Graduação Sanduíche no Exterior:	66
Pós-Doutorado no Exterior:	6
Total:	90

Filtros: Alemanha;

Bolsistas Vigentes Todos os Bolsistas

Dados atualizados até Agosto/2014
Dados cartográficos ©2014 Basarsoft, GeoBasis-DE/BKG (©2009), Google; baseado em BCN IGN Espanha

Some useful LOD info (4/5)

Ciro Baron Neto



Possui graduação em Engenharia de Computação pela Universidade Estadual de Ponta Grossa (2009) e mestrado em Computação Aplicada pela Universidade Estadual de Ponta Grossa (2014). Atualmente é bolsista pesquisador doutorando da Universität Leipzig.

André Valdestilhas



Masters degree in Science at area of Computer Engineering by the Technological Institute of Aeronautics (ITA-Brazil), holds a degree in Computer Science from the University of Great Abc (2003). He has experience in Computer Science, with an emphasis on Software Engineering and Multimedia, acting on the following subjects: Natural Language Processing (NLP), Computer Vision, Affective Computing, Interactive Digital Television, HCI and Multilateration algorithms applied to the system Automatic Dependent surveillance.

Diego Nascimento Esteves da Silva



Possui graduação em Sistemas da Informação pelo CEFET/RJ (2009), pós-graduação em Engenharia de Sistemas pela Universidade Federal do Rio de Janeiro - UFRJ (2010) e mestrado em Engenharia de Sistemas e Computação pelo Instituto Militar de Engenharia - IME (2014). Especialização em ambiente Microsoft (Microsoft Certified Professional). Atualmente cursa doutorado integral em Engenharia de Computação na Universidade de Leipzig (Alemanha) com foco em Aprendizado de Máquina e Processamento de Linguagem Natural.

Edgard Luiz Marx



Edgard Luiz Marx é Mestre e candidato a Doutor em Informática pela Universidade de Leipzig-Alemanha. Graduou-se em Informática pela PUC-RIO em 2006 despertando interesse pelo tema Governo Eletrônico. Trabalhou durante seis anos em um dos maiores laboratório de pesquisa da América Latina, Tecgraf, atuando no projeto e desenvolvimento de Sistemas de Informações Geográficas de onde se destaca: a participação no desenvolvimento cooperativo de bibliotecas de código aberto como Geotools e Terralib junto ao INPE; no desenvolvimento de sistemas de uso exclusivo da Petrobrás e Liquigás, como INFOPAE e INFOPAE-MÓVEL; em sistemas de monitoramento de veículos urbanos de transporte coletivo para a M2M; dentre outros. Em 2010 juntou-se ao grupo de pesquisas em Publicação de Dados Abertos ministrando cursos e tutorias junto ao W3C. Edgard também é técnico em administração pela escola de negócios do SEBRAE (ETFG) e atualmente dedica parte do seu tempo ao Instituto de Pesquisa e Desenvolvimento Albert Schirmer que visa impulsionar o desenvolvimento do nordeste mineiro.

Sandro Rautenberg



é Bacharel em Ciências da Computação pela Fundação Universidade Regional de Blumenau (1996), mestre em Engenharia de Produção pela Universidade Federal de Santa Catarina (1998) e doutor em Engenharia do Conhecimento pela Universidade Federal de Santa Catarina (2009). Atualmente, realiza estágio pós-doutoral na Universidade de Leipzig - Alemanha, com ênfase no desenvolvimento Ontologias para Linked Open Data. É professor não-titular da Universidade Estadual do Centro-Oeste (UNICENTRO) do Bacharelado em Ciência da Computação e do Mestrado Profissional em Administração (PPGADM). Tem experiência na área de Ciência da Computação, com ênfase em Inteligência Computacional, atuando principalmente nos seguintes temas: Ontologias, Sistemas Imunológicos Artificiais, Redes Neurais Artificiais.

Some useful LOD info (5/5)

The screenshot shows the AKSW website with the following elements:

- Navigation:** CONTACT, BLOG, INTERNAL AREA, IMPRINT. A search bar is present.
- Hosted by:** UNIVERSITÄT LEIPZIG.
- Funded by:** Bundesministerium für Bildung und Forschung, DAAD, DFG.
- News:** AKSW Colloquium "Towards an Open Question Answering Architecture" conference pre-presentation on Monday, August 18 in P702 about a month ago by Konrad Höffner. Towards an Open Question Answering Architecture On Monday, August 18 ,13.30, Edgard Marx, will give a pre-presentation of his Semantics' conference talk about the accepted paper Towards an Open Question Answering
- Current funded projects:** ART-e-FACT, BIG, BioASQ, Electronic Resource Management, GeoKnow, GOLD, LinkingLOD, LOD2.
- Featured projects:** Catalogus Professorum, DBpedia, DBpedia SPARQL Benchmark.
- Image:** A large photograph of the modern glass and steel building of the University of Leipzig.

Thank you !!!

Sandro Rautenberg
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Professor DECOMP/UNICENTRO
Bolsista Ciência sem Fronteiras

Projeto: Modelo de conhecimento para desenvolvimento de aplicações *Linked Open Data baseado em ontologias*
(Processo nº 18228/12-7)



LOD BRASIL

LINKED OPEN DATA

19a21 novembro 2014

Realização



UNIVERSIDADE FEDERAL
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SANTA CATARINA

Apoio

