Linked Data Query Wizard

A Novel Interface for Accessing SPARQL Endpoints

Patrick Hoefler, Michael Granitzer,
Eduardo Veas, Christin Seifert

Linked Data on the Web (LDOW) @ WWW 2014
2014-04-08

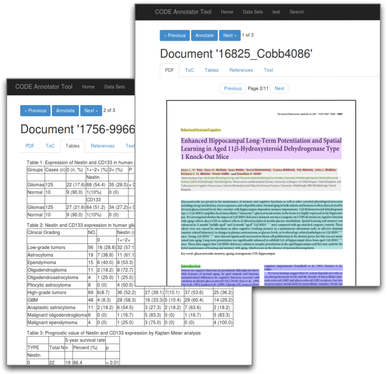
The presented work has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement number 296150.

CODE

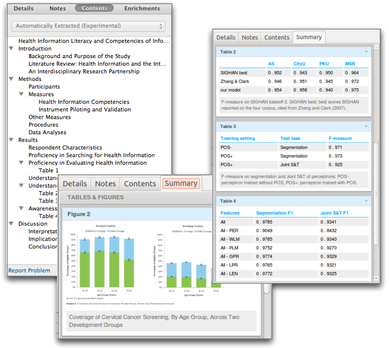
Commercially Empowered
Linked Open Data Ecosystems in Research

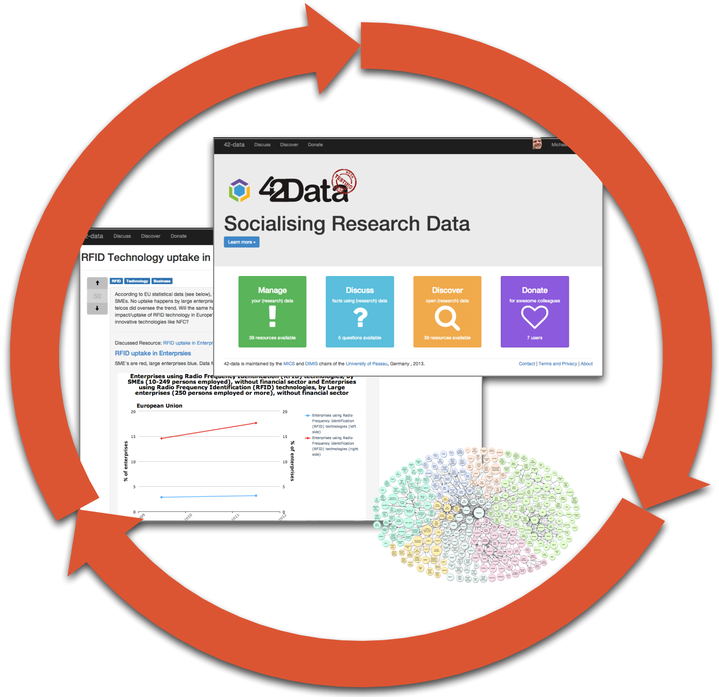
code-research.eu

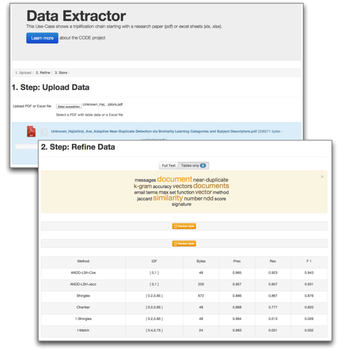
CODE



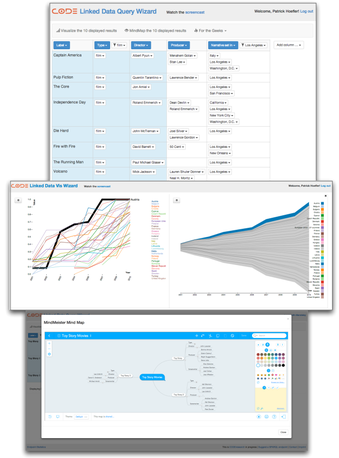
Fact Extraction



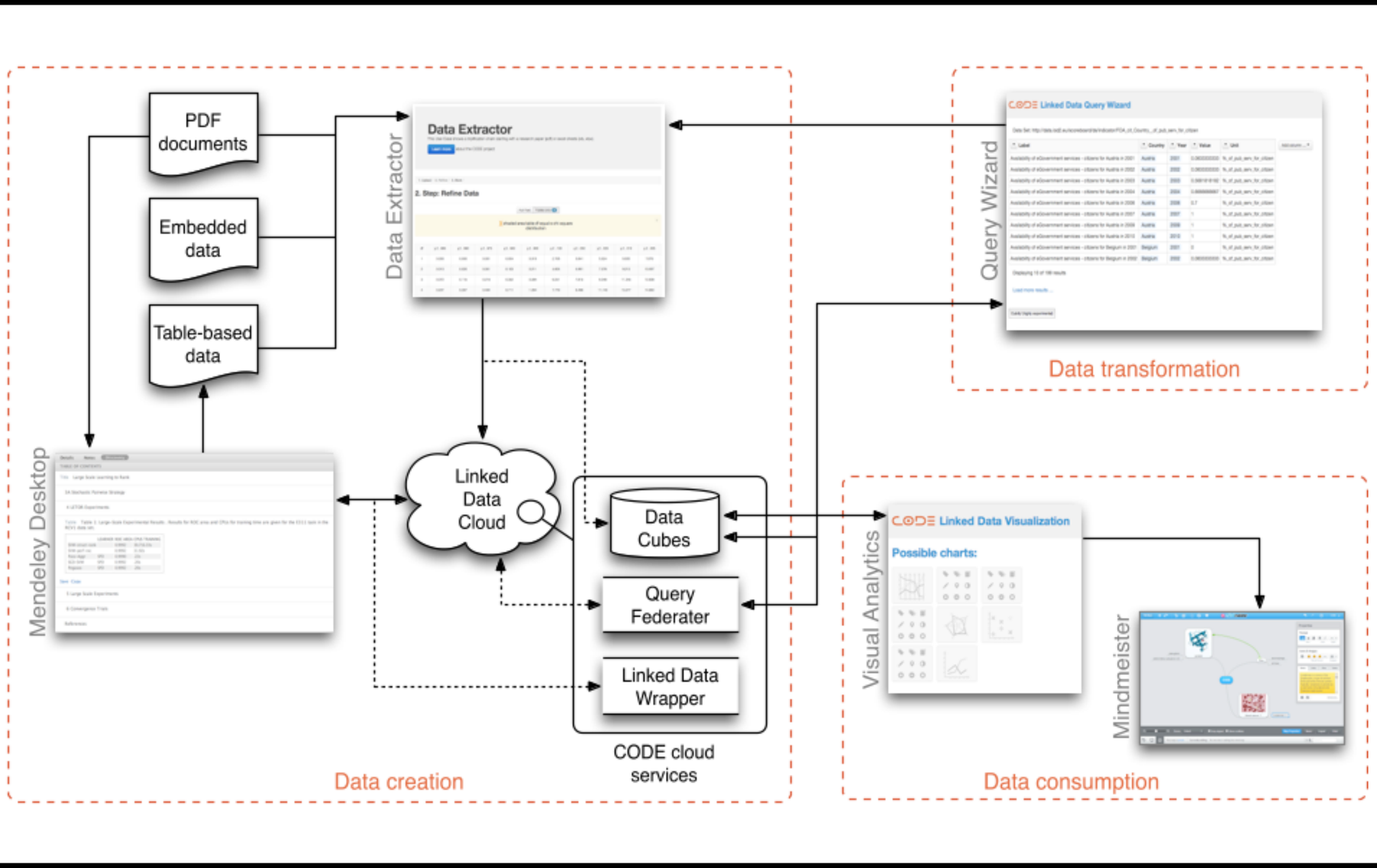


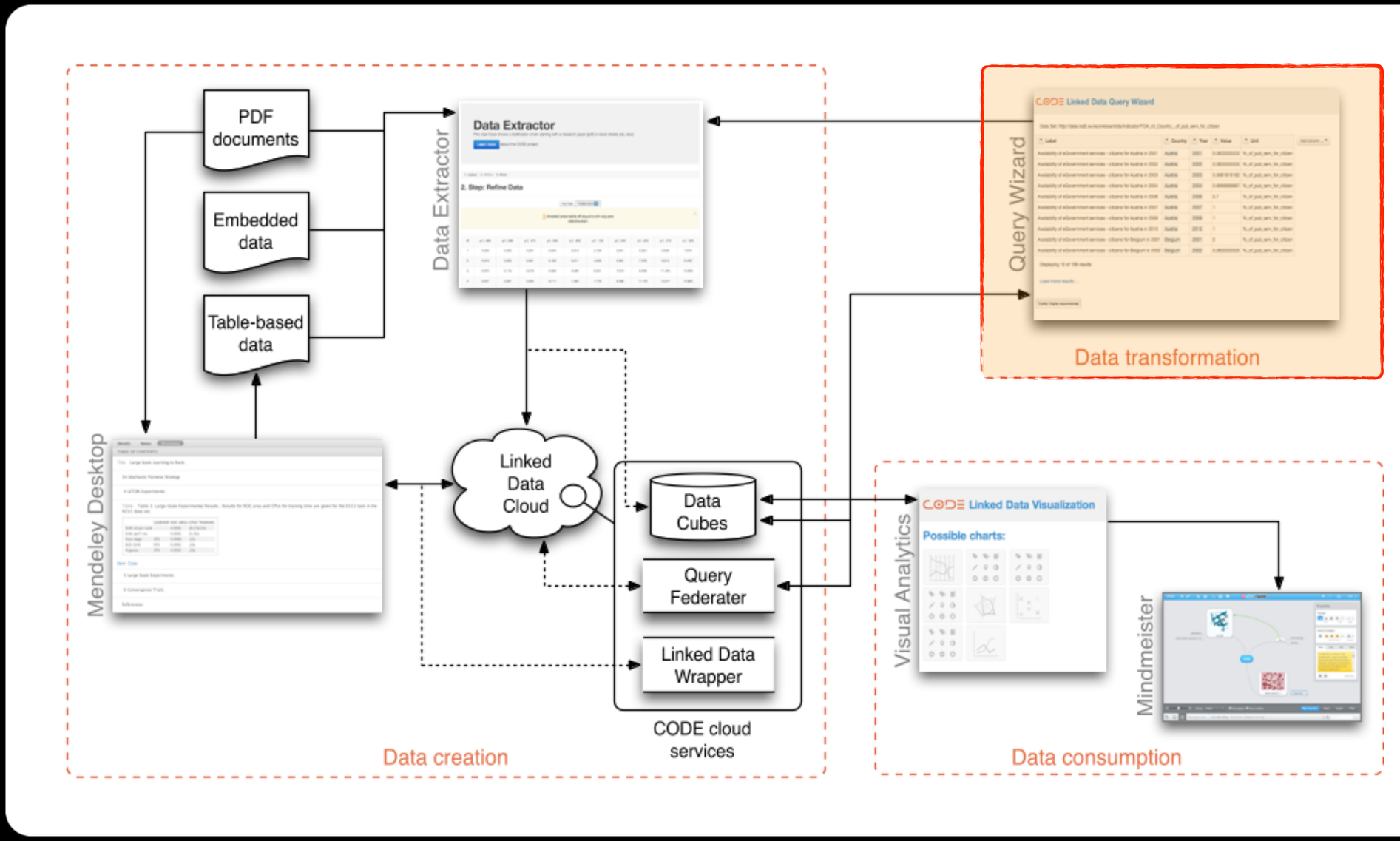


Data Integration & Visual Analytics



Share & Commercialize


PDF documents
Embedded data
Table-based data
Data Extractor
Data Extractor
2. Step: Refine Data
Query Wizard
CODE Linked Data Query Wizard
Data transformation
Mendeley Desktop
Linked Data Cloud
Data Cubes
Query Federater
Linked Data Wrapper
CODE cloud services
Data creation
Visual Analytics
CODE Linked Data Visualization
Possible charts:
Mindmeister
Data consumption


PDF documents
Embedded data
Table-based data
Data Extractor
Data Extractor
2. Step: Refine Data
Query Wizard
CODE Linked Data Query Wizard
Data transformation
Mendeley Desktop
Linked Data Cloud
Data Cubes
Query Federater
Linked Data Wrapper
CODE cloud services
Data creation
Visual Analytics
CODE Linked Data Visualization
Possible charts:
Mindmeister
Data consumption

Linked Data Query Wizard

- **Search Linked Data**
  in SPARQL endpoints
  using simple full-text search

- **Explore Available Datasets**
  provided as RDF Data Cubes

CODE Linked Data Query Wizard Watch the screencast Welcome, Patrick Hoefler! Log out

Search Linked Data

DBpedia Search

or

Show Available Datasets

EU Open Data

EU Open Data

More info at http://open-data.europa.eu/ **151 datasets**

- % of basic public services for citizens, which are fully available online
- % of basic public services for enterprises, which are fully available online
- % of disadvantaged people who are regular internet users (at least once a week)
- % of distinct organisations participating in FP7-ICT projects for the first time

Endpoint Statistics This is CODEresearch in progress | Suggest a SPARQL endpoint | Contact | Imprint

Linked Data Query Wizard

- **Results are displayed as a table**
  similar to spreadsheet applications
  - **Rows → Subjects**
  - **Columns → Predicates**

- **Filters can be set**
  according to column type
  (text, URI, number, date)

CODE Linked Data Query Wizard Watch the screencast Welcome, Patrick Hoefler! Log out

Visualize this dataset | MindMap the 10 displayed results | Aggregate this dataset | For the Geeks

% of basic public services for citizens, which are fully available online
No description available
(Source: EU Open Data)

Country	Year	Value	Unit	Label	Add column ...
Austria	2001	0.0833333333	%_of_pub_serv_for_citizen	Availability of eGovernment services - citizens for Austria in 2001	
Austria	2002	0.0833333333	%_of_pub_serv_for_citizen	Availability of eGovernment services - citizens for Austria in 2002	
Austria	2003	0.5681818182	%_of_pub_serv_for_citizen	Availability of eGovernment services - citizens for Austria in 2003	
Austria	2004	0.6666666667	%_of_pub_serv_for_citizen	Availability of eGovernment services - citizens for Austria in 2004	
Austria	2006	0.7	%_of_pub_serv_for_citizen	Availability of eGovernment services - citizens for Austria in 2006	
Austria	2007	1	%_of_pub_serv_for_citizen	Availability of eGovernment services - citizens for Austria in 2007	
Austria	2009	1	%_of_pub_serv_for_citizen	Availability of eGovernment services - citizens for Austria in 2009	
Austria	2010	1	%_of_pub_serv_for_citizen	Availability of eGovernment services - citizens for Austria in 2010	
Belgium	2001	0	%_of_pub_serv_for_citizen	Availability of eGovernment services - citizens for Belgium in 2001	
Belgium	2002	0.0833333333	%_of_pub_serv_for_citizen	Availability of eGovernment services - citizens for Belgium in 2002	

Displaying 10 of 199 results

Load 10 more results Load 100 more results

CODE Linked Data Query Wizard

Watch the screencast

Welcome, Patrick Hoefler! Log out

Save the 3 displayed results to the Q&A Portal | Visualize the 3 displayed results | MindMap the 3 displayed results | For the Geeks

Label	"toy story"	Director	Starring	Tom Hanks	Budget ($)	Gross ($)	First appearance of	Add column ...
Toy Story		John Lasseter	Annie Potts Don Rickles Erik von Detten Jim Varney John Morris (actor) John Ratzenberger Laurie Metcalf Tim Allen Tom Hanks Wallace Shawn		30,000,000	361,958,736	Buzz Lightyear Sheriff Woody	
Toy Story 2		John Lasseter	Joan Cusack Kelsey Grammer Tim Allen Tom Hanks		90,000,000	485,015,179	Jessie (Toy Story) List of Toy Story characters	
Toy Story 3		Lee Unkrich	Blake Clark Don Rickles Estelle Harris Joan Cusack Jodi Benson John Morris John Ratzenberger Michael Keaton Ned Beatty Tim Allen Tom Hanks Wallace Shawn		200,000,000	1,063,171,911		

Linked Data Query Wizard

- **Users can explore Linked Data**
  by “focusing” on an entity

- **Users can easily aggregate**
  RDF Data Cubes
  displaying average, count, maximum,
  minimum and sum of selected values

Linked Data Query Wizard

- **Linked Data can be visualized**
  using the CODE Visualization Wizard

- **Result tables can be turned into Mind Maps with a single click**
  using the MindMeister mind mapping service

Linked Data Query Wizard

Try the prototype yourself at

code.know-center.tugraz.at

Put the data into context at

42-data.org

Thanks :)

Questions?