

Metadata Processing

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DML-CZ Metadata

- **article: authors, title, abstract, language ...**
- issue: name, date, volume number
- serial: name, periodicity, languages used, description ...
- similar articles: number between 0 and 1 that represents similarity
- references

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Visualization

“the visual representation of large-scale collections of non-numerical information”

so far *Mathematica Bohemica* is visualized

data conversion has preceded to the visualization

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Data Conversion to RDF

- selecting only the appropriate data for visualization
- assigning IDs for articles, issues, journals and authors
- adding short titles for the visualization
- conversion of the `lang` attribute according to RFC 3066 section 2.3

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RDF Server

- Joseki¹ (just a few lines in config and `./bin/rdfserver`)
- so far running on `neptun04`
- so far data are stored in a *file*
- provides SPARQL for queries

¹<http://joseki.sourceforge.net>

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SPARQL

result of query is either

- a projection (using SELECT, similar to SQL SELECT)
- a graph (using CONSTRUCT)

Example:

```
CONSTRUCT { ?x ?y ?z }  
WHERE { ?x ?y ?z .  
  FILTER( ?x = dmlcz:vector )  
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Interaction between Visual Browser and HTML page

- Java \longleftrightarrow HTML (via Java Applet methods)
- better comfort: AJAX²
- processing results of SPARQL queries
result is a graph, conversion to HTML using XSLT \leftarrow not an easy job

²Asynchronous Javascript And XML

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Demo

Conclusion and Future Work

Visual Browser provides an alternative interface to the library data.

Is it useful? Will it be attractive for users?

Is this alternative interface inspirational for NLP?

Future work comprises processing all the DML-CZ data.