Weaving the Web of Science
HyperJournal and the impact of the Semantic Web on scientific publishing

ELPUB2006

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ELPUB2006, 14-16 June 2006
Michele Barbera <barbera@netseven.it>, Francesca Di Donato <didonato@sp.unipi.it>
Summary

- The HyperJournal project
- Scientific publishing and the (semantic?) Web
- HyperJournal as a tool for “scholars as readers” as well as “scholars as authors”
HyperJournal at ELPUB 2006
Submitted by bart on June 12, 2006 - 13:35.

HyperJournal is going to be presented at ELPUB 2006, Bansko, Bulgaria. See you there! :)

HyperJournal 0.5b Released
Submitted by bart on March 22, 2006 - 16:45.

HyperJournal 0.5b (Beta) codename "Snowdomes" has been released.
This version features:
- Revamped interface, templates and styles.
- Advanced roles for publishing workflow.
- Issues management.
- Basic "plugout" web service.
- Several bug fixes.
You can download it from the download section of this site.

Italian translation of the user manual
Submitted by bart on February 21, 2006 - 16:41.

An Italian translation of HyperJournal 4 Dummies. A beginner's guide to HyperJournal has been released today. The italian version, HyperJournal 4 Dummies, is a guide specifically written to be downloaded from the documentation section of the website.
The vision

- HyperJournal is different from other journal publishing softwares.

- HyperJournal is trying to introduce innovations in the model and in the process of scientific publishing (we will see some examples).

- HyperJournal is truly Open Source. There are many (more or less :-) ) active developers, you can access the source code, you can easily contact us (mailing list, wiki, irc) and even (surprise!) find some documentation.

- HyperJournal users are brave pioneers !!! :-)

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Development model

Groupement de Recherche Européen Plus
HYPER-LEARNING

Initial Founding: ~ 25,000 Euro

Development, Advocacy, Commercial services

And other “enterprise commercial partners” (see www.hjournal.org)

HyperJournal Association. Volunteers!!!
(see association.hjournal.org)

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A little experiment

- Data collected during the last 3 months, doing research on semantics of functional programming languages and compilers at the Laboratoire d'informatique de l'Université de Paris 13. Logic, computation and reasoning group.

**Total number of articles read: 9**

where did we found the articles?

<table>
<thead>
<tr>
<th>Project sites and personal homepages</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social bookmarking (delicious, cite-u-like)</td>
<td>4</td>
</tr>
<tr>
<td>Blogs and forums</td>
<td>2</td>
</tr>
<tr>
<td>Journals (printed or electronic)</td>
<td>0</td>
</tr>
</tbody>
</table>

Total number of references found: 136

Cross references (to articles belonging to the set):

1

Who are the references for? the reader or the reviewers???
Journals: our vision

- Journals as (strictly) domain specific repositories.
  Journals should publish (in a different section), rejected articles along with machine readable metadata (RDF) about the review process, who made it, the individual reviewers ratings.

- Electronic Journals should publish raw experimental data along with the text instead of hiding the semantics of data into unstructured documents!!!
  In many domains, textual descriptions not complemented with (machine understandable) raw data about the experiment are useless (think of physics, life sciences, earth sciences, ...). It’s not possible to replicate the experiment without raw data, and being able to replicate experiments is the heart of science!

Journals should become once again tools for readers, not only for authors.

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Semantic query answering

Please find me (michele barbera) all the articles written by any co-author of an author who is present in my colleagues’s trusted lists. Please ignore John’s and his research team members list, I don’t trust him very much :-)

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Step1: who are my colleagues?
don’t forget to exclude John and the members of his research team!

My home page.

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Step 1: who are my colleagues?
don’t forget to exclude John and the members of his research team!

Michele Barbera

foaf:name

John Foo

colleagueOf

Francesca Di Donato

foaf:name

Mario Rossi

foaf:name

research group

Algoritmics

www.johndoe.org

www.mariorossi.org

www.didonato.org

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Step 1: who are my colleagues?
don’t forget to exclude John and the members of his research team!

Michele Barbera

John Foo

Francesca Di Donato

Mario Rossi

Luigi Bianchi

Algoritmics

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Michele Barbera <barbera@netseven.it>, Francesca Di Donato <didonato@sp.unipi.it>
Step 2: retrieve and merge their trust lists.
Step 2: retrieve and merge their trust lists.
Step 2: retrieve and merge their trust lists.

www.mariorossi.org

Mario Rossi

foaf:name

colleagueOf

TRUST_RELATION

colleagueOf

trusts

Author Z

trust level

8

www.didonato.org

Francesca Di Donato

foaf:name

colleagueOf

TRUST_RELATION

colleagueOf

trusts

Author Y

trust level

8

TRUST_RELATION

10

Mario Rossi

foaf:name

TRUST_RELATION

colleagueOf

colleagueOf

trusts

trust level

8

Author Z

foaf:name

TRUST_RELATION

trusts

trust level

8

Author Y

foaf:name

TRUST_RELATION

trusts

trust level

8
Step 3: connect to the library and find coauthors of author Y and author Z

www.mylibrary.org

<table>
<thead>
<tr>
<th>Article</th>
<th>Author</th>
<th>Co-authors</th>
<th>Download</th>
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<tbody>
<tr>
<td>234</td>
<td>lou reed</td>
<td>mario rossi, author Y</td>
<td></td>
</tr>
<tr>
<td>235</td>
<td>jimi hendrix</td>
<td>luigi bianchi, author Z, marco verdi</td>
<td></td>
</tr>
<tr>
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<td>john lennon</td>
<td>paul mc cartney</td>
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The larger amount of semantically-structured data is freely available on the web, the more evident it is the usefulness of intelligent agents. The more useful they are, the more people will be willing to publish semantically-structured metadata.
Solving the bootstrap problem

- Persuade people to publish structured metadata in RDF (xml is bad bad bad bad!!!)

- Automatic extraction of hidden semantics
Open Publishing Made Easy!

thank you!!!
<info@hjournal.org>

P.S: We are always looking for developers, programmers and non programmers. Join us at www.hjournal.org