

The Semantic Web Superstar Challenge Candidate

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Motivation

- ***Numerous different search fields ask too much of the casual user***
 - ***Idea: simplified User Interface***
 - ***The System matches the search terms automatically to the correct group***
 - ***Integration of numerous semantic data sources***
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Our goal

- Semantically extended search engine
 - Extremely easy User Interface
 - Search terms are extended with the help of a topic hierarchy
 - Search results may be filtered by properties
 - Import of arbitrary RDF-data
 - Integration of the data into the results
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Use Case: Author

- Papers
 - Research topics
 - Co-Authors
 - References
 - Papers of Co-Authors
 - Website
 - FOAF-file
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Use Case: Paper

- PDF-Link
- Research topic
- Authors
- References
- DC-Metadata

Use Case: Research topic

- Papers
- Authors
- Topic-Hierarchy

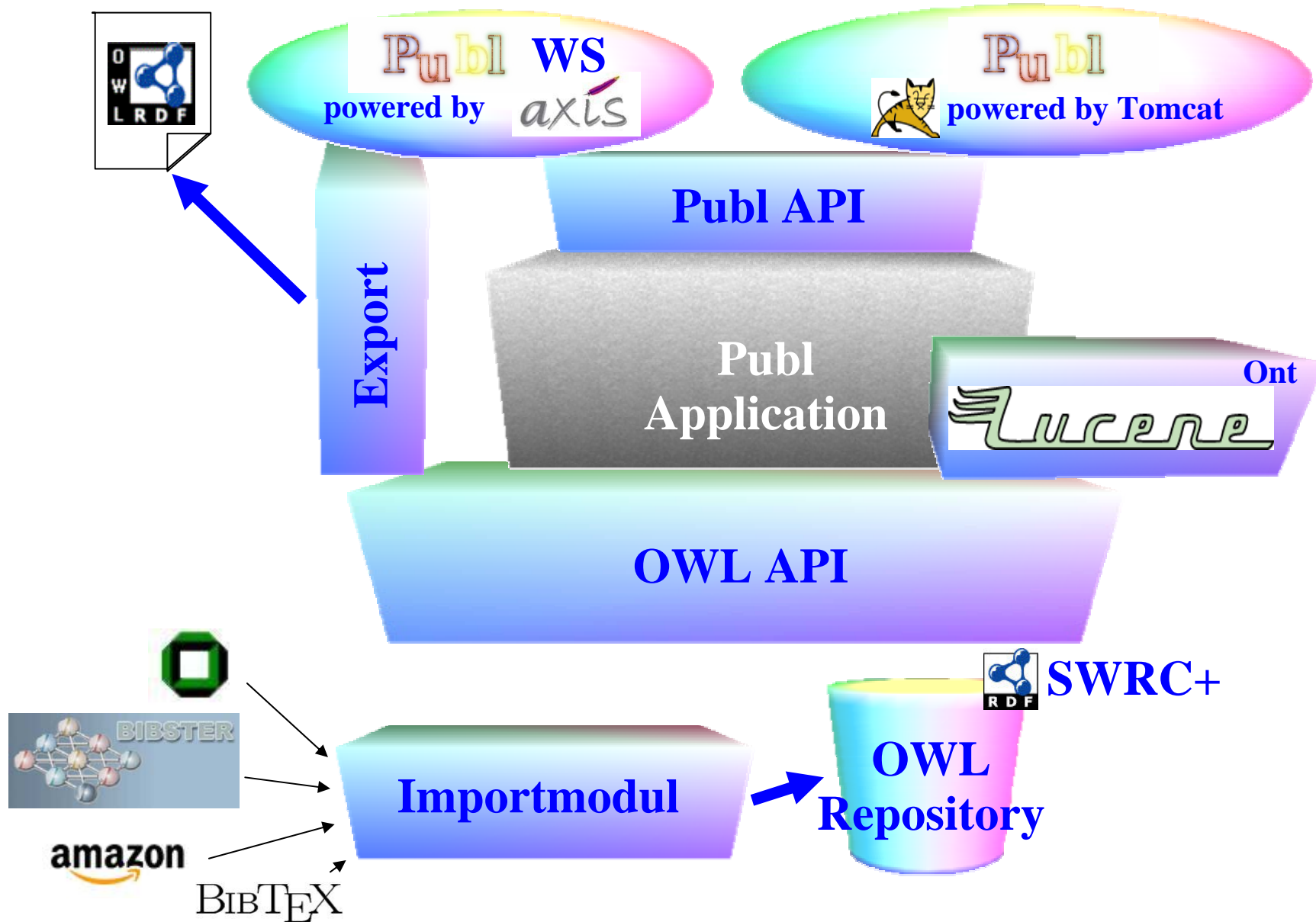


The Silver Bullet

Publ1



Architecture

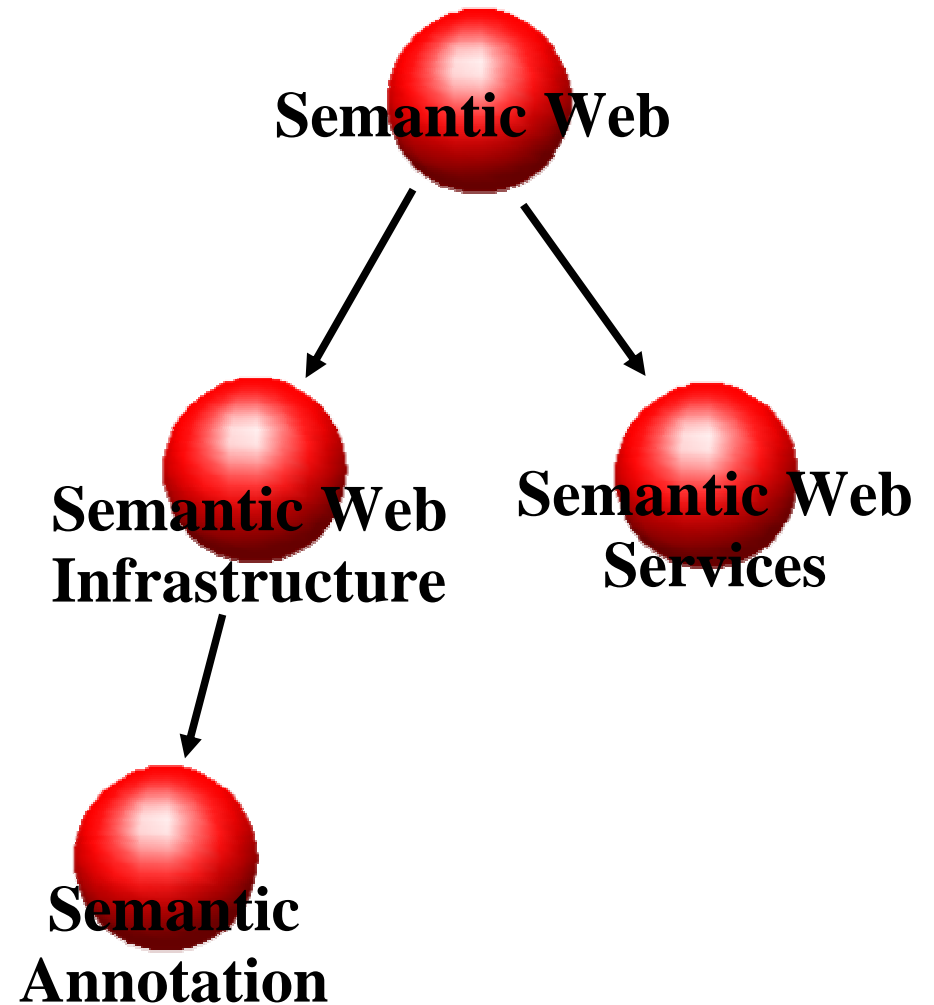


SWRC+

- SubTopicOf
 - Among instances of Topic
 - Transitive
 - SuperTopicOf
 - Inverse of SubTopicOf
 - To remain OWL Lite
 - More information (e.g. FOAF-Link)
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Lucene^{Ont}

Searches also in related topics according to topic hierarchy



What did we realise?

- ***Export of all AIFB-Publications***
 - ***OWL API used***
 - ***Lucene^{Ont} adapted to OWL API***
 - ***Servlet around Lucene^{Ont}***
 - ***Apache Tomcat as Servlet Container***
 - ***Publ API made available as Web Service***
 - ***Apache Axis used for Web Service***
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Outlook

- ***Integration of more data sources***
 - ***Bibster***
 - ***Amazon***
 - ***BibTex***
 - ***Wikipedia***
 - ***FOAF***
 - ***Data of other SWRC candidates***
 - ***Export in OWL Lite***
 - ***Boolean Operators in Query***
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Thank you

Any questions?

