

Apache STANBOL

The project formally known as Apache FOO
ApacheCon Atlanta - November 2010



Semantic extensions for CMS

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STANBOL code comes out of the EC-funded IKS project

IKS - Interactive Knowledge Stack for Semantic Content Management Systems

















IKS is co-funded by the European Union and develops
new technology for intelligent content management

ApacheCon
NORTH AMERICA 2010

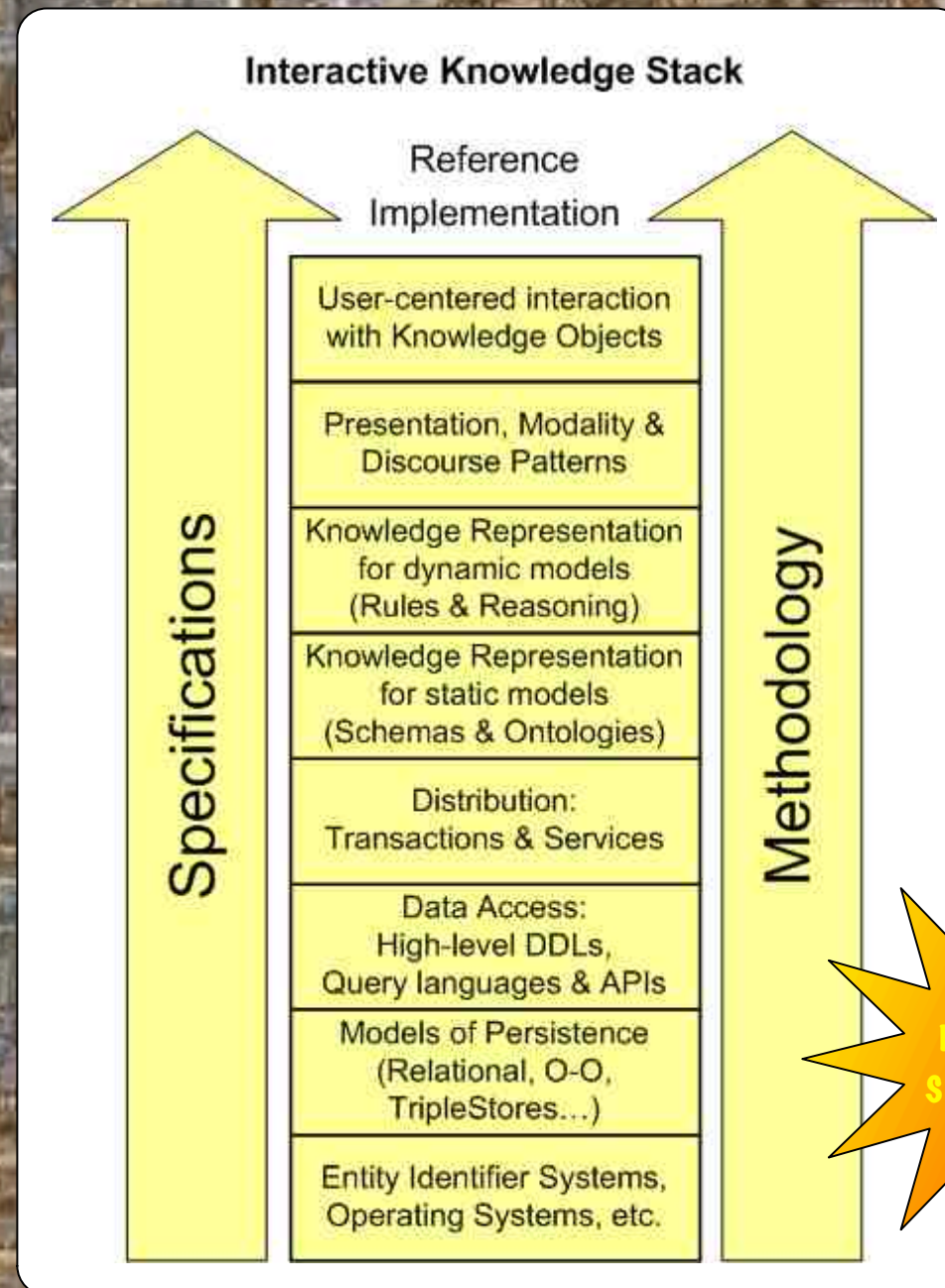
● Day
Day Software
is now part
of Adobe



The IKS Consortium

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<p>Consiglio Nationale delle Ricerche (CNR)</p> 	<p>Software Quality Lab Universität Paderborn</p>  
<p>Software Research and Development Consultancy Ltd (SRDC)</p> 	<p>Hochschule Furtwangen </p>
<p>Nuxeo Sa.</p> 	<p>Alkacon Software GmbH</p> 
<p>TXT Polymedia</p> 	<p>Pisano Holding GmbH</p> 
<p>Nemein Oy</p> 	<p>Day Software AG</p> 

IKS - revolutionary semantic CMS stack?



maybe just 4 layers?

rocket science?

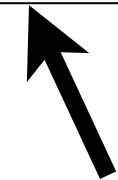


stanbol.FISE - RESTful semantic engine

IKS FISE semantic engine



Register content item
Get/update semantic view
Execute query



RESTful
interface

Existing
CMS

plugins infrastructure

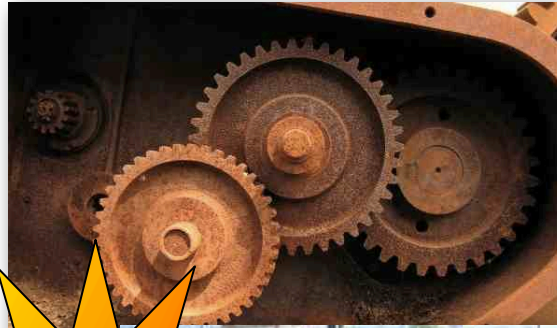


stanbol.FISE semantic engine vision

RESTful interface
Engine Framework
Basic Plugins

Later:
Semantic Plugins
Rocket Science...

IKS semantic engine



Register content item
Get/update semantic view
Execute query

RESTful
interface

Existing
CMS

infrastructure

Semantic
Plugins
API

industrial partners

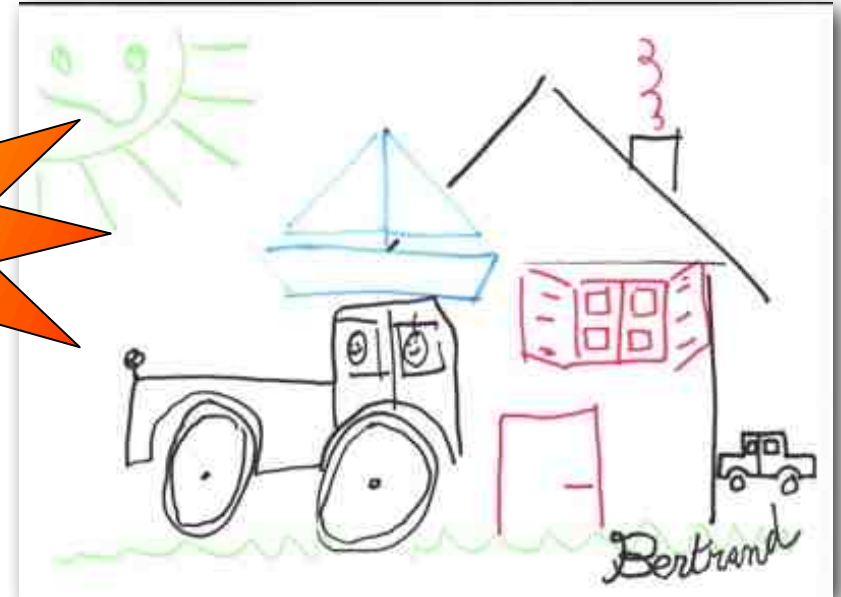
researchers



Pictures: mconnors, jusben on morguefile.com



stanbol.FISE: semantic images similarity



POST both images to FISE (runs alongside your CMS)

Semantic Engines «see» maybe, tomorrow :-) objects (car, house, boat etc.)

Semantic metadata: rich links between content objects.

Researchers plug in better semantic engines.

More on dev.day.com: <http://x42.ch/03.00.01>



stanbol.KRES: Knowledge Representation and Reasoning

Exploit semantic web **ontologies**, **rules** and inference systems (**reasoners**)

following a **pattern-based approach**:

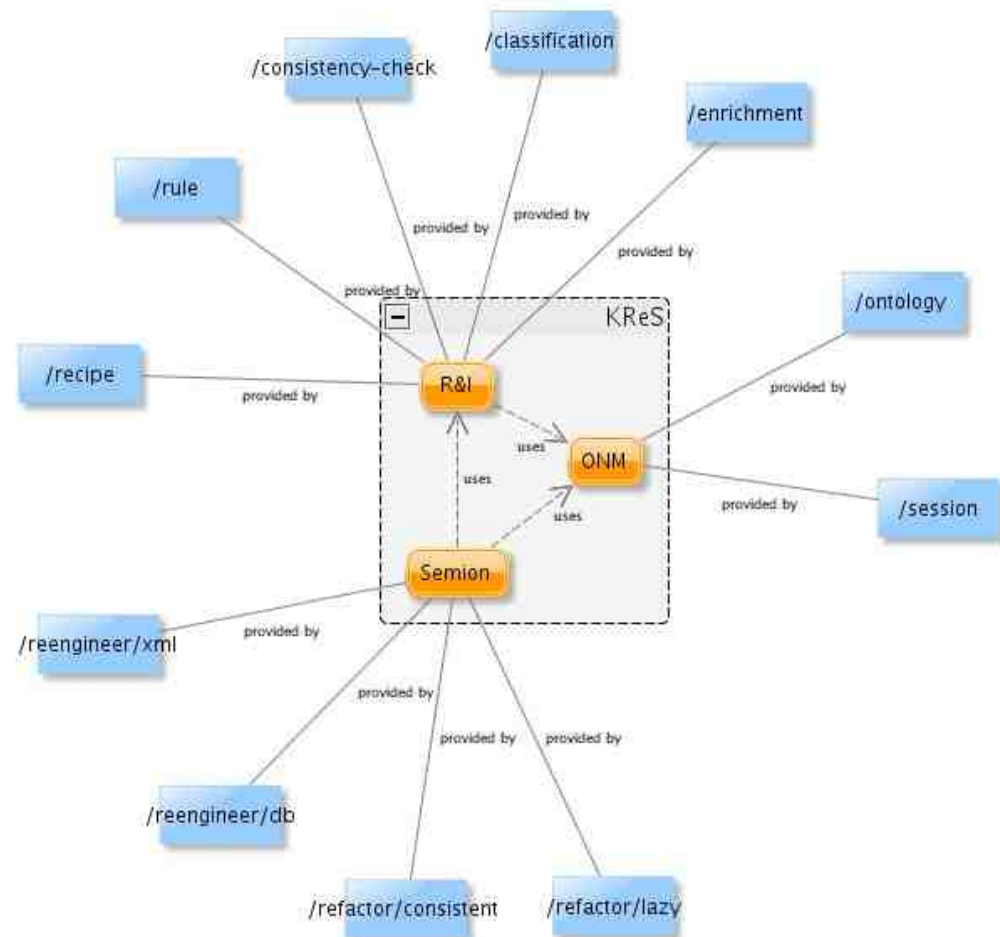
- ontologies are grouped in 'scopes'
- rules are packed in 'recipes'

and then, also:

- **reengineer** non-RDF resources (XML and DBMS) to RDF
- **refactor** RDF graphs using rules

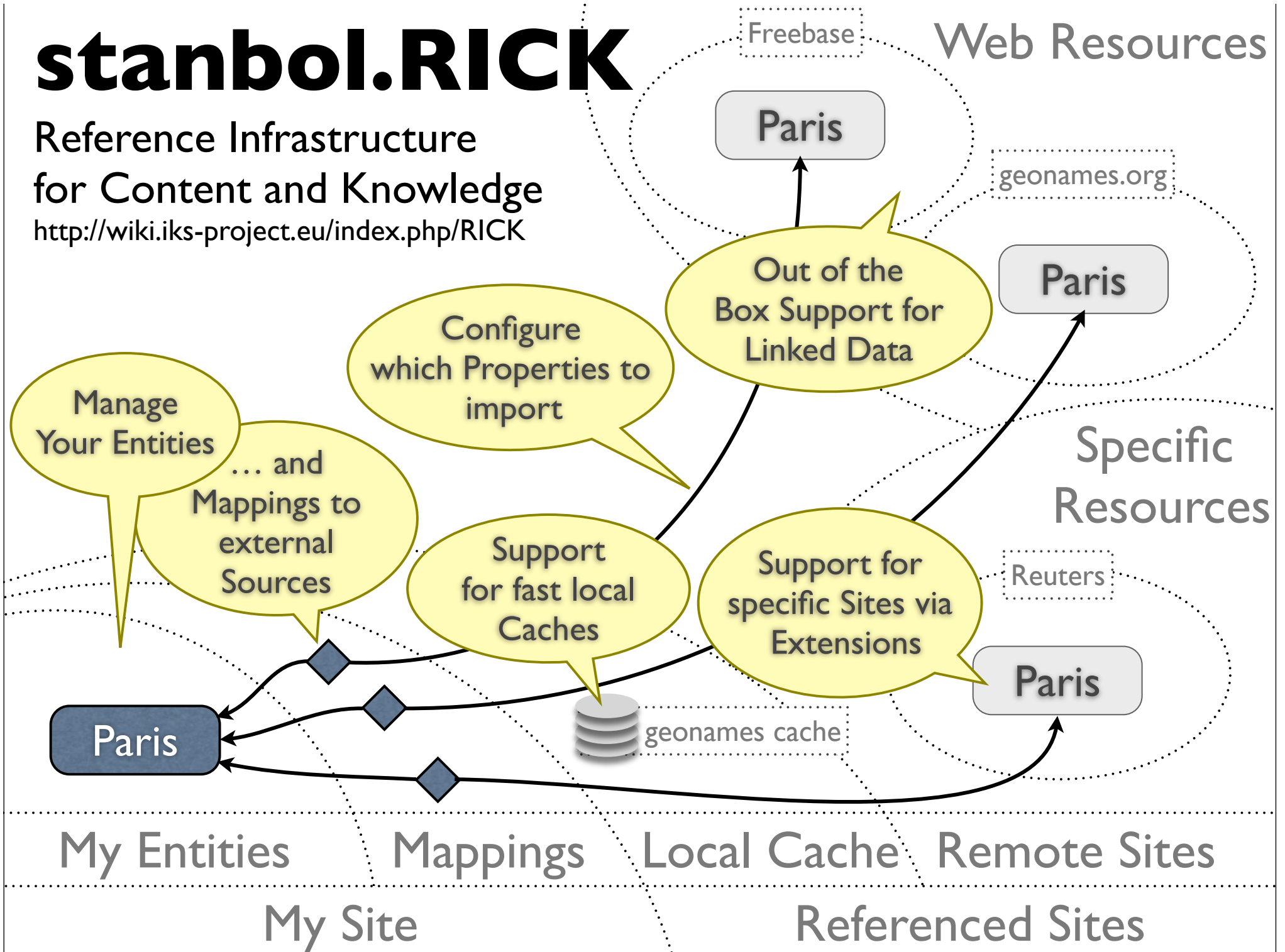
Atomic services -> **RESTful** services

Standards: RDF, OWL, SWRL, SPARQL, OWLLink ...

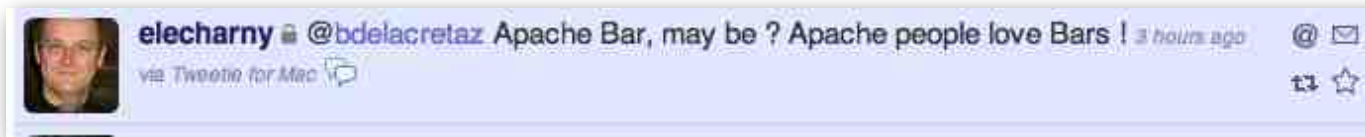


stanbol.RICK

Reference Infrastructure
for Content and Knowledge
<http://wiki.iks-project.eu/index.php/RICK>



Apache STANBOL: what's next?



Apache FOO incubation proposal

Abstract

Apache FOO is a modular software stack and reusable set of components for semantic content management.

FOO is a temporary name, the project team is still working on a final name.

Join the fun at

<http://wiki.apache.org/incubator/StanbolProposal>

general@incubator.apache.org

more info at

<http://iks-project.eu>
I'm @bdelacretaz on Twitter



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