



OM Tools Fair

part of the

SDK OM Workgroup

meeting in Grenoble, 7-8 April

Atanas Kiryakov

7 Apr, 2005

Purpose

- To **raise the awareness** within SDK about the OM software within SEKT, DIP, and KnowledgeWeb projects.
- **All sorts of OM software**: tools, components, frameworks, APIs, and any other software infrastructure
- The tools of interest include the following species:
 - Ontology editors, development, mapping and evolution environments;
 - Ontology repositories, servers, and reasoners;
 - APIs, component implementations, parsers, validators.

Format

- Overview of the tools developed within each of the projects, including architectural notes.
- **Tool presentations:**
 - Introduction – developers, projects, standards, and other tools;
 - References to conceptual work;
 - Functionality – major features, capabilities, limitations;
 - Architecture, customization and integration options;
 - Performance and Scalability;
 - Status, recommended stable version, development plans;
 - References: web sites, SourceForge, lists, documentation;
 - Demonstration.
- **One-to-one** demonstrations and discussions.
- **Interoperability discussion** –dependencies, requirements, integration points, etc.

Agenda (I)

Thursday, Apr 7th

16:30-18:30

Atanas Kiryakov

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Peter Haase

Raul Garcia Castro

Damyan Ognyanov

min

120

Architectures, APIs, Repositories

10

Introduction: Format and Objectives

15

DIP OM approach, architecture, and tools

15

SEKT OM approach, architecture, and tools

40

Benchmarking the interoperability of ontology development tools

40

ORDI and WSMO4J

Friday, Apr 8th

9:00-10:15

Peter Haase

Damyan Ognyanov

min

75

Repositories and Reasoners

60

KAON2; dlpconvert, evOWLution, Oyster p2p ontology repository

15

OWLIM - OWL DLP support in Sesame



Agenda (II)

Friday, Apr 8th (ctd)

| | min | |
|--------------------|------------|--|
| 10:15-10:30 | Coffee | |
| 10:30-12:30 | 120 | Repositories, Versioning, Mapping |
| Andreas Harth | 40 | YARS |
| Raul Garcia Castro | 30 | WebODE and ODEMapster |
| Atanas Kiryakov | 10 | Ontology Mapping Store API |
| Adrian Mocan | 40 | Ontology Mapping within WSMX |
| 13:00-14:00 | Lunch | |
| 14:00-15:30 | 90 | Versioning, Mapping and Alignment, Discussion |
| Jacek Kopecky | 40 | DIP Ontology Versioning Library |
| Jerome Eusenat | 40 | Ontology Alignment API |
| Rudi Studer | 10 | Wrap-up of the SDK OM Workgroup Meeting |



Tools Overview

| Tool | From | Functionality | Dependent on Tools | Supported Standards | SDK Projects |
|---------------------|-----------|--|--------------------|--------------------------------------|----------------|
| ORDI, wsmo4j | Ontotext | API, Middleware, Repository | | WSMO, WSML, RDF, OWL | DIP SEKT(?) |
| KAON2 | FZI, AIFB | Reasoner, Ontology API, Repository, Command line | | OWL DL and DLP, SWRL, WSML DL (soon) | DIP SEKT |
| evOWLution | AIFB | Evolution | KAON2 | | SEKT |
| Oyster | AIFB, UPM | Metadata Repository | Swapster | | KWeb |
| OWLIM | Ontotext | Repository and Reasoning | Sesame | OWL DLP- | SEKT |

Tool Overview (II)

| Tool | From | Functionality | Dependent on Tools | Supported Standards | SDK Projects |
|-----------------------------------|----------|---|--------------------|--|--------------|
| WebODE | UPM | Ontology Editor, API, Reasoning, Repository | Ciao Prolog | RDF(S), DAML+OIL, OWL, XML, CARIN, UML, Protégé-2000 | KWeb |
| YARS | DERI.IE | Repository | Jena (weak) | RDF | DIP |
| Ontology Mapping Store API | Ontotext | Ontology Mapping Store | wsmo4j (weak) | Ontology Mapping Lang. | SEKT |
| WSMX Data Mediation | DERI.IE | Ontology Mapping Tool and Store | wsmo4j | Ontology Mapping Lang. | DIP |

Tool Overview (III)

| Tool | From | Functionality | Dependent on Tools | Supported Standards | SDK Projects |
|------------------------------------|---------------------------|----------------------|--------------------|---------------------|--------------|
| Ontology Versioning Library | DERI.AT | Version Management | wsmo4j | WSML | DIP |
| Ontology Alignment API | INRIA (and Uni. Montreal) | Ontology Alignment | WonderWeb OWL API | OWL, RDF XML | KWeb |
| | | | | | |
| <u>Not presented:</u> | | | | | |
| Ontology Mapping | DERI.AT | Ontology Mapping API | wsmo4j | Ontology Mapping L. | DIP |

Integration Issues (I)

Issues which worth attention:

- Integration of Logical Expression handling to wsmo4j?
 - DIP internal
- Ontology Alignment API <> Ontology Mapping IP
 - KWeb to DIP/SEKT
- Ontology Mapping Store API <> Ontology Mapping IP
 - SEKT <> DIP

Integration Issues (II)

- YARS <> ORDI and KAON2 <> ORDI
 - DIP internal
 - There is principle understanding
- WebODE <> SDK ?
- Oyster <> SDK ?