



IST-2004-507482 Knowledge Web Realizing the Semantic Web

SIXTH FRAMEWORK PROGRAMME PRIORITY 2 INFORMATION SOCIETY TECHNOLOGIES

2-monthly Management Report

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Knowledge Web: Realizing the Semantic Web

<u>Introduction</u>

July and August have been relatively quiet months in terms of network interaction. The holiday period is not the period for network meetings; work mainly progressed locally at the network nodes.

The major network activity was the summer school in Spain, which turned out to be an enormous success. Both tutors and students were enthusiastic. The local organizers from UPM provided an extremely nice location and made sure the hands-on work could be done with the help of a pile of hardware and software. Enrico Motta and his team had organized a good mix of tutors and invited speakers. The practical work and the social program made sure the week provided a variety of mental and physical exercise. I want to thank all involved in this enterprise.

In September meetings will be help for the Industry area in Trento and for the Research and Education area in Manchester. On 24-Sep-04 there is an informal review planned in Galway. Also, the exchanges in the context of the Virtual Research Centre will then really take off.

Guus Schreiber Scientific Coordinator (per 01-March-04)



Second European Summer School in Madrid



Industry Area

1. Progress, Work Packages 1.1/1.2/1.3/1.4/1.5/1.6

Management O2I

The main focus has been put during the last two months on the KW portal, the Industry Board, the Use Cases collection and the knowledge processing analysis, the joint cooperation with NoE Rewerse and other NoE like AgentLink, the first technology show detailed report and lastly the starting study on benchmarking. All main documents (report and summary progress slides) are available on the KW portal.

WP 1.1 Industrial Application Needs

The WP tasks will produce 4 deliverables: Industry Board and MoU (D1.1.1), Applications needs (D1.1.2), Knowledge Processing needs (D1.1.3) and Business Cases fulfillments (D1.1.4)

D 1.1.1 Board Members List, MoU

Progress:

- Board v1 and Early Access Policy as reported in D 1.1.1 v1
- Industry Board extension is underway
- Industry organization in economical sectors and categorization of the Industry board members
- Early Access Policy for final approval by EPMB (17.09.2004) and signature started
 Status: submitted to the PO

D1.1.2 Prototypical Use Cases

Progress:

- Intermediate internal draft of Use Cases sent to KW end of July
- Start populating each economical sector with business cases
- Revised presentation of the business cases for a better communication to Industry
- F2F meetings with each industry board member to be started

D 1.1.3 Typology of Ontology-Based Processing Tasks

Progress:

- Knowledge Processing needs and basic components analysis on 6 scenarios done
- Needs "walk-through" illustrative examples for better communication and test
- D 1.1.3 initiated

D 1.1.4 System Requirements

Progress: Knowledge requirements for Business cases implicitly initiated in relation with D1.1.3

WP 1.2 Evaluation for Technology Selection

D1.2.1 Evaluation of Utility Tools

Progress: An ad hoc meeting on benchmarking has been organized. This meeting is aimed with integrating all benchmarking activities in KWeb (WP1.2, WP2.1, WP2.2, etc.) #Action-point:# WP2.1 agreed to send their benchmarking method (towards scalability and performance of ontology tools) to WP1.2, deadline: 3/10/2004. #Action-point:# WP1.2 agreed to test this method against 2 ontology tools, and to send feedback to WP2.1, deadline 30/10/2004. ==> On schedule



D1.2.2 Report on Framework Requirements Analysis

Progress: due M12; no progress yet

D1.2.3 Methods for Ontology Evaluation

Progress: Ontology content evaluation and usability (led by UKARL): A classification of the existing methods to ontology content evaluation was presented by Mustafa Jarrar. A preliminary structure of D1.2.3 was presented by Jens Hartmann. It has been decided that D1.2.3 will be a synthesis of the existing approaches to ontology content evaluation. #Action-point:# The first draft of D.1.2.3 should be ready by November 15.==> On schedule

Meetings

3rd O2I workshop 9-10 September, Trento next meeting: 18-19 November, Berlin (to be confirmed)

WP 1.3 Technology Recommendations

D 1.3.1 Best Practices and Guidelines for Industry

Progress: A questionnaire for collecting best practices from the users and developers of SW applications is being developed by Luigi Lancieri (FT). This questionnaire will be developed and distributed in three iterations. #Action-point:# The first draft of the questionnaire will be ready by November 15 and it will be presented in the next O2I meeting. #Action-point:# The set of questions (in the first iteration) will be collected and approved by (12 selected SW researchers and industry partners), and it will be tested by 5 users. ==> On schedule.

D 1.3.2 Identification of Standards

Progress: An extended version of the OntoRoadMap (ontology metadata) was presented by M. Carmen Suarez-Figueroa (UPM). New metadata elements were proposed during the meeting. The final set of metadata elements will be proposed for standardization. #Action-point:# The structure of D1.3.2 will be prepared and circulated to the WP members before 19/9/2004. #Action-point: # The first draft of D1.3.2 will be ready before 10/11/2004 (before the next meeting).

==> On schedule.

D 1.3.3 Report on Requirements of OOA

Progress: The general goals of OOA have been discussed and agreed. The requirements for setting up OOA (D1.3.4) are under development. FUBerlin agreed to contribute to D1.3.4. #Action-point:# The first draft of D1.3.4 will be ready before the end of this year. ==> On schedule

Meetings

next meeting: 18-19 November, Berlin (to be confirmed)

WP 1.4 Promotion of Ontology Technologies

On 09-Sep-04, the WP leader presented a report on progress and issues at the KWEB meeting in Trento. Following a summary of the presentation:

- Short description of the deliverables in order to ensure common understanding.
- General findings, observations and conclusions of D1.4.3 The Report on the First International Technology Road Show.



- The following recommendations were made in the deliverable:
 - 1. WP 1.4 should focus more on semantic applications rather than semantic tools
 - 2. A call out to KWEB partners to explore the possibility for the development of a user driven web-based repository for semantic applications
 - 3. A recommendation to develop a semantic application identification template which enumerates central features of the technology in a simple standardized list.

These recommendations could be further explored in D 1.4.1 All these recommendations are market related.

D1.4.1 Technology Roadmap

Progress:

- D 1.4.3 will serve as input to D 1.4.1, the Technology Roadmap. It was stated that this is
 obviously not sufficient input, as this would not provide a mission. France Telecom will
 provide Roadmap examples used in Industries.
- A first draft of the deliverable is planned to be ready at the end Sept. As the deadline is end of Dec, this is considered within the timeline.
- Deri NUIG will be contacted for input and distribution of work (DERI NUIG committed itself to this deliverable).

D1.4.2 Business Cases and Success Stories

Progress: No progress with respect to last report. It was decided that restriction to one business case is not sufficient, although a long list should be avoided. It was restated that the deliverable needs to focus strongly marketing elements as creative layout and industry appealing style. In addition, it was remarked that figures on business benefits would be very useful, although difficult to option.

D1.4.3 Report on International Technology Roadshow

Status: on schedule

WP 1.5 Cross-Network Cooperation

During these two months, cross-networking workshops and dissemination workshops are well planned and prepared. To list:

- EPMB of KW finally decided not to join KM2004 event (November, Amsterdam). While Rewerse will attend and has the booth. KW and RW will have the joint flyer to disseminate during the event. Currently the design of joint flyer is on the good progress.
- KW O2I Industrial cluster workshop has been planned and will be held in Trento from September 9-10, 2004.

Mainly, the highly active joint collaboration between KW and RW is very well going on. The regular teleconference and email exchange happened among the members. The main activities are:

- The cross reference of KW and Rewerse website has been established.
- Defining the joint cooperation goals
- Planning for the joint industrial days in 2005. The first plan draft has been discussed. Currently we are on the progress for the cost plan.
- Exchanging expected or planned events of each Network for 2004 and 2005
- Designing joint flyer
- Exchanging potential collaborating other NoEs and IPs between RW and KW.
- Planning joint industrial track in the future summer school in 2005 or 2006.



Other NoE:

- with AgentLinkIII, one general paper about KW has been submitted to the newsletter of AgentLink.
- Concrete discussion on the joint collaboration between KW and AgentLink, such as
- Application requirement or use case
- Technology recommendations and standards (setting up a regular column on SW technology in newsletter), where University of Liverpool will be the editor and the contribution from KW members are very welcome.
- Promotion tool repository and best practices for deployment (AgentLink is considering to use KW website technology to restructure their website). Exchanging the planed future events are going on.
- With aceMedia, KW will join and give the presentation in the workshop organized by aceMedia: European Workshop on the Integration of Knowledge, Semantic and Digital Media Technologies, Nov 25-26, 2004, Royal Statistical Society, London, UK

Others:

- Planning 2005 KW summer school in Austria (the proposal for acquiring Austrian funding has been submitted early August. Currently it is under the review). We are asking around 50K€ funding.
- Quality review of Del1.4.3
- KW logo has been appeared in the main page of ISWC2004 homepage as the sponsors.
- Preparing the slides for WP1.5 for the O2I industrial cluster workshop in Trento
- University of Liverpool has given the KW presentation in the Opennet meeting in New York, July 2004.

D 1.5.1 Project Presentation and Showcase

Status: completed

D 1.5.2 Report on joint education and training activities with cooperating networks

Progress: This is currently in good progress. Some joint events in this year have already been identified and prepared. Plan for next year has been currently discussed and planned, especially with Rewerse. Most of the activities need to reported in this deliverables are detailed stated above (scientific and technical aspects). Input will also come from DE-D2 (for training and education from KW education cluster) and DT-D2 (for training and education from KW industrial cluster).

DE-D2 Joint deliverable by Knowledge Web and REWERSE, Co-operation with Knowledge Web/VISWE on graduate education. The deliverable includes agreements and co-operation plans.

Progress: The close collaboration between Rewerse and Knowledge Web education cluster has been going on very well. The joint learning system infrastructure has been currently under the discussion and will be set up soon by University of Hannover. Four scenarios for specifying requirements for VISWE have been defined. The portal of teaching courses in the domain of Semantic Web has been installed already. Onsite visit between Rewerse and KW educational cluster is in July 2004.

D T-D2 Joint deliverable by Knowledge Web and REWERSE, Co-operation with Knowledge Web and other NoE on industrial competence centers and VISWE. The deliverable reports on possibilities and presents co-operation plans.

Progress: Frequent teleconferences between RW and KW industrial cluster are going on as scheduled. Currently the following consensus has been reached among these two NoEs:



Possible exchange of business scenarios (draft early version D 1.1.2 from KW sent to RW) Put first version of industrial board online Distribute D1.1.1 and D1.1.2 for internal comments

Meetings

- The eleventh international conference in AI: methodology, systems, applications and semantic web challenges, Sept 2-4, 2004.
- Foaf workshop, Sept 1-2, 2004, Galway, Ireland
- Semantic Web Workshop, SIGIR2004, July 25-29, 2004, Sheffield, UK.
- Application of Semantic Web technologies to Web communities workshop, ECAl2004, August 23, 2004, Valencia, Spain.
- Joint event between KW and aceMedia: European Workshop on the Integration of Knowledge Semantic and Digital Media Technologies, Nov 25-26, 2004, Royal Statistical Society, London, UK
- KW involved event: 3rd International Semantic Web Conference, Nov, 2004, Japan
- Joint summer school between AgengLinkIII and KW: 6th European Agent Systems Summer School, Liverpool, UK, 5 - 9 July 2004.
- KW industrial workshop: OTM2004 Industry Program Workshop on business applications of Semantic Web and Grid Computing, Larnaca, Cyprus, 25-29 Oct, 2004.
- International Workshop on Semantic Web Technologies in Electronic Business (SWEB2004) 12/13 October 2004, Berlin, Germany
- Next KW industrial cluster meeting, Sep 2004, Trento, Italy.

WP 1.6 Semantic Portal Infrastructure

The semantic portal activities performed during the reporting period are:

A) Regarding Software:

- UPM has improved the portal functionalities.
- UPM has performed maintenance tasks for the KW portal.
- FT has produced a new page for accessing industrial content inside the portal. UPM has integrated this page
- with the KW main portal (http://kw.dia.fi.upm.es/O2I/).

B) Regarding ontologies:

- UPM and NUIG are working to perform the interoperability between the information stored in the KW Portal and the information using FOAF [www.www.foaf-project.org].
- UPM has developed a first draft of the T-REX ontology in order to include in the future researcher exchange information in the portal.

Others:

- Agentlink III is evaluating the KW Portal Technology (ODESeW) for building their portal.
 A person from UPM is in Southamptom helping the agentlink team on this task.
- The Integration of the Magpie tool [http://kmi.open.ac.uk/projects/magpie] and the KW Portal has started
- UPM is working in an architecture to integrate semantic information. Its first goal will be the OntoWeb and Knowledge Web portals integration.
- During the FOAF meeting in Galway, NUIG and UPM have discussed how to integrate
 the information expressed in FOAF in the portal. Right now, half of the work for
 importing the information is already done. This scenario will be used as an experiment



to build an architecture for importing/exporting information with other resources (like OntoWeb document information).

D 1.6.1 Portal requirements analysis and system design

Progress: This task is currently in good progress. During the last months we started to specify all the portal requirements using UML. The main sections of the deliverable are:

- 1. Global view of the Semantic Portal domain
- 2. Actors
- 3. Business use cases
 - 3.1. Editing
 - 3.2. Navigation
 - 3.3Administration
 - 3.3.1. User Management
 - 3.3.2. Permission Management
 - 3.3.3. Ontology Publish Management
 - 3.3.4. Attribute Ordering
 - 3.3.5. Instance Description
 - 3.4. Web Designing
 - 3.5. Interoperability
 - 3.6. Ontology Development (Ontology Repository)

D 1.6.2 Portal Ontology

Progress: UPM updated D 1.6.2 with the changes proposed by the QA person in charge of reviewing it.. D1.6.2 was also delivered on time

D 1.6.3 Portal Versions

Progress: The first version of the portal was deployed in the last February. Since that day, the portal has evolved and is being continuously updating with new content.

D 1.6.4 Portal contents Releases

Progress: Since the first release of the portal in February, the content of the portal has been updated and its information has been maintained: the documents, deliverables, meetings and events.

Meetings

Asunción Gómez-Pérez presented the KW portal on an UPM-W3C meeting on June 30 2004 at UPM

Bilateral meeting between UPM and NUIG during the FOAF workshop, Sept 1-2, 2004, Galway, Ireland.

Angel Lopez-Cima visited Southampton University to install and deployed ODESeWv2.0 for constructing the next AgentLink portal. 24th-30th August and 6th – 10th September.

2. Deviations

Please find below the updated project efforts for UIBK and UniTr. These updatesdfigures will be taken in account in the tables **3. Resources**

	Up	Updated Project effort for the reporting period (person-months)										
							Total					
	1	Jan/Feb										



2	March/April	 	 1.00	1.00	 2.00
3	May/June	 	 2.00	1.50	3.50

Up	Updated Project effort for the reporting period (person-months)										
UniTr WP 1.1 WP 1.2 WP 1.3 WP 1.4 WP 1.5 WP 1.6						Total					
1	Jan/Feb		0.16					0.16			
2	March/April	0.26						0.26			
3	May/June	0.19						0.19			

3. Resources

Pro	Project effort for the reporting period (person-months)									
	articipant's hort name	WP 1.1	WP 1.2	WP 1.3	WP 1.4	WP 1.5	WP 1.6	Total		
1	UIBK				0.50	1.50		2.00		
2	EPFL							0.00		
3	FT	0.42	0.00	0.49	0.00	0.00		0.91		
4	FU Berlin	0.50		0.20				0.70		
5	FUB					0.00		0.00		
6	INRIA		0.10					0.10		
7	CERTH					0.55		0.55		
8	L3S		0.00			0.20		0.20		
9	NUIG				0.00		0.00	0.00		
10	OU					0.00	0.00	0.00		
11	UPM			0.38		0.00	1.33	1.71		
12	UKARL		0.25	0.25		0.50		1.00		
13	Liv Univ					0.00		0.00		
14	VUM		0.20	0.10	0.10	0.20		0.60		
15	USFD			0.02		0.04		0.06		
16	UniTn	0.36	0.00					0.36		
17	VU			0.50				0.50		
18	VUB	0.62	0.47	0.47	0.47			2.03		
	TOTAL	1.90	1.02	2.41	1.07	2.99	1.33	10.72		

4. Cumulative

Status of deliverables											
Deliverable	Current status (completed/ underway)	On schedule (yes/no)	Original completion date	Actual/planned completion date							
D1.1.1	submitted to PO	-	Jun-04	Jun-04							
D1.1.2	started	-	Jun-05	Jun-05							
D1.1.3	started	yes	Dec-04	Dec-04							
D1.1.4	started	yes	Dec-04	Dec-04							
D1.2.1	started	yes	Jun-05	Jun-05							



				1
D1.2.2	started	yes	Jun-05	Jun-05
D1.2.3	underway	yes	Dec-04	Dec-04
D1.3.1	underway	yes	Jun-05	Jun-05
D1.3.2	underway	yes	Dec-04	Dec-04
D1.3.3	underway	yes	Jun-05	Jun-05
D1.4.1	underway	yes	Dec-04	Dec-04
D1.4.2	underway	yes	Jun-05	Jun-05
D1.4.3	underway	yes	Dec-04	Dec-04
D1.5.1	completed	-	Feb-04	Feb-04
D1.5.2	underway	yes	Jun-05	Jun-05
E-D2	underway	yes	Jun-05	Jun-05
T-D2	underway	yes	Jun-05	Jun-05
D1.6.1	underway	yes	Dec-04	Dec-04
D1.6.2	submitted to PO	yes	Jun-04	Jun-04
D1.6.3	underway	-	Jun-05	Jun-05
D1.6.4	underway	-	Jun-05	Jun-05

Participant's short name	Old Total, carried over from last Report (updated figures)	This period's Total	New TOTAL
UIBK	8.50	2.00	10.50
EPFL	0.00	0.00	0.00
FT	7.98	0.91	8.89
FU Berlin	2.05	0.70	2.75
FUB	0.20	0.00	0.20
INRIA	0.10	0.10	0.20
CERTH	0.10	0.55	0.65
L3S	0.30	0.20	0.50
NUIG	1.30	0.00	1.30
OU	0.00	0.00	0.00
UPM	8.93	1.71	10.64
UKARL	1.50	1.00	2.50
Liv Univ	0.60	0.00	0.60
VUM	1.85	0.60	2.45
USFD	2.52	0.06	2.58
UniTn	0.61	0.36	0.97
VU	0.00	0.50	0.50
VUB	3.22	2.03	5.25
TOTAL	39.76	10.72	50.48

AppendixMeeting records and participants lists, conference/workshop proceedings, Available on http://knowledgeweb.semanticweb.org etc.



Research Area

1. Progress, Work Packages 2.1/2.2/2.3/2.4/2.5/2.6

WP 2.1 Scalability

D 2.1.1 State-of-the-Art on Scalability

The first deliverable D 2.1.1 "Survey of Scalability Techniques for Reasoning with Ontologies" was reviewed by the quality officer and controller. Both reviewers expressed their opinion about the high quality of the deliverable and assisted us a good work. After finishing the state-of-art the three main streams of this working package go in more detailed work. In the approximation part we investigated the theoretically proposed ideas in practical situations. Therefore we implemented a small platform where different approaches of approximating description logic reasoning can be evaluated. First results seem promising. This implementation can also serve as a benchmark environment to test the different scenarios. In the benchmark part a very general benchmark procedure was developed which guides through a benchmark activity. This general procedure can be instantiated according to different needs in different scenarios and must not be specialized to this scalability working package. Therefore we organize a common benchmark meeting in a sense of a vertical activity, who everybody from different working packages can attend who is faced with benchmarking. Because of the strong relationship to the industrial needs the benchmarking session is organized together with the O2I meeting in Trento. Goal of this meeting will be a shared understanding of benchmarking and the elaboration of cooperate work between different working packages. Both parts will provide a deliverable until the end of this year. Although the deliverable of the third modularization part must be finished in the middle of the next year, this part also starts their work with a general email discussion.

D 2.1.2 Report on Methods for Reasoning, Using Knowledge Compilation, Language Weakening, Approximate Deduction

Progress: due in M12

D 2.1.3 Report on Modularization of Ontologies

Progress: due M18

D 2.1.4 Specification of Methodology, General Criteria and Test Suites for Benchmarking

Ontology Building Tools Progress: due in M12

WP 2.2 Heterogeneity

July has been the occasion to polish and deliver D 2.2.1 and 2.2.3. This consumed most of the energy of the group. It has also been the occasion to work further on the design and test of the first "Ontology Alignment Contest" for the EON workshop in November and to participate to this contest for several member of the group. Last, it has been the occasion to participate (for several member of the group) to the Information Interpretation and Integration Conference (I3CON) evaluation.

This makes that the preparatory material for designing test for ontology alignment (D 2.2.4) is well advanced.

D 2.2.1 Specification of Framework

Status: submitted to PO



D 2.2.2 Specification of Benchmarking Methodology

Progress: due in M12

D 2.2.3 State-of-the-Art on Current Alignment Techniques

Status: submitted to PO

D 2.2.4 Description of alignment implementation

Progress: due in M18

Meetings

- Co-organized ECAI workshop on "Semantic middleware for interoperability on the grid and the web" (official KW workshop), August 2004. Two groups presented papers there.
- Paper presented at ECAI, by Jérôme Euzenat and Petko Valtchev, "Similarity-based ontology alignment in OWL-Lite", August 2004 Two groups participated (and appear in the program committee) of the Information Interpretation and Integration Conference (I3CON) which features a benchmark of ontology alignment algorithms.
- Several groups are working towards the Dagstuhl seminar on "Semantic integration and interoperability" to be held in September 2004. We are preparing the EON Ontology alignment contest to be presented at ISWC, Hiroshima in November 2004 (official KW workshop).

WP 2.3 Dynamics

D 2.3.1 Specification of a Methodology for Ontology Syntactic and Semantic Versioning

D 2.3.2 Specification of Knowledge Acquisition and Modelling of the Process of the Consensus

Progress: Cooperation with the MarkOnt project, an effort for developing a widely accepted ontology for digital libraries has been initialized. The collaborative development of the MarkOnt ontology will provide requirements and serve as a use case for ontology versioning and organizing the process of consensus.

The versioning system architecture was defined, its components and the interfaces between the components identified and requirement lists compiled. The system architecture and the requirement for its components and interfaces is the guideline for the definition of the ontology versioning method. The RDF-diff-programme was integrated into the eclipse development tool for viewing the differences between ontology versions.

WP 2.4 Semantic Web Services

The detailed workplan of the Semantic Web Services workpackage as agreed during Amsterdam meeting remains on track. Workpackage 2.4 in Knowledge Web project remains focused on supporting the research efforts in bringing Semantic Web Services to its full maturity.

D 2.4.1 Semantic Requirements for Web Service Description

D 2.4.2 Definitions of Semantics for Web Service Discovery and Composition

D 2.4.3 State-of-the-Art on Agent-Based Services

July and August were holiday months for many of the partners and none meeting has been reported in that time. At the end of August workpackage partners started planning for the next F2F meeting in Manchester. Till the end of the previous reporting period (end of June 2004), the internal deliverable D1 has been finished and in July has been reviewed by an external



reviewer. Some minor changes must be still incorporated into main document as suggested by external reviewer, but the internal deliverable is already available at the Knowledge Web portal. The structure of three deliverables, which are due M12, has been already proposed. NUIG and UBIK continue their active participation in the Web Services Modelling Ontology (WSMO), Web Services Modelling Language (WSML) and Web Services Modelling Execution (WSMX) working groups, which almost directly cover some of the work required by other workpackages of the Knowledge Web project. Based on work for WSML working group, some of the partners managed already to achieve quite impressive progress on discovery and composition of the Semantic Web Services.

D 2.4.4 Guidelines for the Integration of Agent-Based Services and Web-Based Services Progress: due in M18

WP 2.5 Semantic Web Language Extensions

The work in WP2.5 is on track. The first deliverable D2.5.1 "Specification of Coordination of Rule and Ontology Languages" has been reviewed by the quality officer and controller, who claim that the deliverable has very good quality. The work on the second deliverable D2.5.2 has started. We had a virtual kick-off meeting (using AccessGrid) for D2.5.2. The first version of the TOC of D2.5.2 has been set up.

D 2.5.1 Specification of Coordination of Rule and Ontology Languages Status: submitted to PO

D 2.5.2 Report on Query Language design and standardization

Progress: due in M12

Meetings: Virtual meeting (using AccessGrid) on July 21, 2004

WP 2.6 Towards a Virtual Research Center

D 2.6.1 Report on Budget Allocation

D 2.6.2 Report on Research exchange and Collaboration

D 2.6.3 Report on Workshop and Conference Organization

D 2.6.4 Report on the Research Advance

The work in WP2.6 is on track. During the reporting period the initial promotion of the T-Rex program for researcher exchange has been further pushed and first feedback from partners gives evidence that the program will be instantiated by partners in the intended manner. All deliverables are due in M12. No delay is currently foreseen.

2. Deviations

WP 2.1 A valuable evaluation of the investigated approximation techniques needs a functional implementation environment. Our small environment base on programs of third parties (e.g. the description logic reasoner FACT and RACER). Both programs are in a prototypical state and can cause some problems. Although the developers of the systems do their best this may cause some delay in the approximation part. But at the moment we see this part in time.

WP 2.3 The planned empirical work was replaced by the cooperation with the MarcOnt project and its requirements. This will save time for the technical development.



Please find below the updated project efforts for UIBK and UniTr. These updated figures will be taken in account in the tables **3. Resources**

Up	Updated Project effort for the reporting period (person-months)											
UIBK WP 2.1 WP 2.2 WP 2.3 WP 2.4 WP 2.5 WP 2.6 Total							Total					
1	Jan/Feb											
2	March/April			2.00	2.00			4.00				
3	May/June			2.00	2.00			4.00				

Up	Updated Project effort for the reporting period (person-months)										
	UniTr	WP 2.1	WP 2.2	WP 2.3	WP 2.4	WP 2.5	WP 2.6	Total			
1	Jan/Feb		2.46		0.08			2.54			
2	March/April	0.25	2.65		0.19			0.26			
3	May/June	0.16	1.31		0.3		0.03	1.79			

3. Resources

	o. Resources											
Pro	ject effort for t	the reporting	g period (pe	erson-month	ıs)							
	Participant's short name	WP 2.1	WP 2.2	WP 2.3	WP 2.4	WP 2.5	WP 2.6	Total				
1	UIBK			2.50	2.00			4.50				
2	EPFL	0.50	0.40		1.40			2.30				
3	FT						0.00	0.00				
4	FU Berlin				0.40		0.10	0.50				
5	FUB		0.30	0.20		1.00	0.00	1.50				
6	INRIA	0.10	1.15	0.22		0.15	0.00	1.62				
7	CERTH	0.20	0.20	0.70		0.70		1.80				
8	L3S	0.00				0.00		0.00				
9	NUIG		0.00	0.00	0.50			0.50				
10	OU							0.00				
11	UPM	0.44	0.21	0.31			0.08	1.04				
12	UKARL	0.50	0.25	0.50			0.25	1.50				
13	LivUni			0.00	0.00			0.00				
14	VUM	0.00	0.00		0.00	0.00		0.00				
15	USDF		0.02	0.05				0.07				
16	UniTn	0.16	0.21		0.27		0.31	0.95				
17	VU	0.50	0.30	0.30		0.20		1.30				
18	VUB	0.32	0.16				0.16	0.64				
	TOTAL	2.72	3.20	4.78	4.57	2.05	0.90	18.22				



4.Cumulative

Status of delivera	Status of deliverables									
Deliverable	Current status (completed/ underway)	On schedule (yes/no)	Original completion date	Actual/planned completion date						
D 2.1.1	submitted to PO	yes	Jun-04	30-Jun-04						
D 2.1.2	underway	yes	Dec-04	15-Dec-04						
D 2.1.3	underway	yes	Jun-05	15-Jun-05						
D 2.1.4	underway	yes	Dec-04	15-Dec-04						
D 2.2.1	submitted to PO	yes	Jun-04, Dec-04	21-Jun-04						
D 2.2.2	underway	yes	Dec-04	13-Dec-04						
D 2.2.3	submitted to PO	yes	Jun-04	21-Jun-04						
D 2.2.4	underway	yes	Jun-05	13-Jun-05						
D 2.3.1	underway	yes	Dec-04	10-Dec-04						
D 2.3.2	underway	yes	Dec-04	10-Dec-04						
D 2.4.1	underway	yes	Dec-04	30-Oct-04						
D 2.4.2	underway	yes	Dec-04	30-Oct-04						
D 2.4.3	underway	yes	Dec-04	30-Oct-04						
D 2.4.4	underway	yes	Jun-05	30-April-05						
D 2.5.1	submitted to PO		Jun-04							
D 2.5.2	underway	yes	Dec-04	31-Dec-04						
D 2.6.1	underway	yes	Dec-04	17-Dec-04						
D 2.6.2	underway	yes	Dec-04	12-Dec-04						
D 2.6.3	underway	yes	Dec-04	12-Dec-04						
D 2.6.4	underway	yes	Jun-05	30-Jun-05						

Participant's short name	Old Total, carried over from last Report (updated figures)	This period's Total	New TOTAL	
UIBK	14.50	4.50	19.00	
EPFL	6.30	2.30	8.60	
FT	0.00	0.00	0.00	
FU Berlin	3.00	0.50	3.50	
FUB	1.85	1.50	3.35	
INRIA	10.15	1.62	11.77	
CERTH	0.80	1.80	2.60	
L3S	0.60	0.00	0.60	
NUIG	6.30	0.50	6.80	
OU	0.00	0.00	0.00	
UPM	3.49	1.04	4.53	
UKARL	3.25	1.50	4.75	
LivUni	0.30	0.00	0.30	
VUM	8.50	0.00	8.50	



USDF	0.72	0.07	0.79
UniTn	7.42	0.95	8.37
VU	3.10	1.30	4.40
VUB	1.40	0.64	2.04
TOTAL	71.68	18.22	89.90

AppendixMeeting records and participants lists, conference/workshop proceedings, etc.: Available on http://knowledgeweb.semanticweb.org



Education Area

1. Progress, Work Packages 3.1/3.2/3.3

WP 3.1 Foundations for Virtual Institute for Semantic Web Education (VISWE)

D 3.1.1 Specification of VISWE tasks and goals

Progress: This document has been finished including the comments from FU Berlin and the Quality assessors. The finally four described scenarios have been found useful for other deliverables within the education area (D3.2.1, D3.2.3) as well as outside of it (e.g., within the education activity of the NoE REWERSE).

Status: submitted to the PO

D 3.1.2 Organizational and Legal Structure of VISWE

Progress: Activities towards 'Organizational structure and legal form of VISWE' have been continued by exploring other possibly related approaches and documents on the Bologna process of creating a European Higher Education Area (EHEA).

D 3.1.3 MoU, VISWE

Progress: due in M18

WP 3.2 Educational Content and Event Provision

D 3.2.1 Learning unit collection

Progress: This deliverable has been created as a collection of the material, gathered by the questionnaire sent out in the previous report period. This report also includes available courses from the NoE REWERSE. These courses have been classified according to the four scenarios, created in D 3.1.1 of WP 3.1. Furthermore, USFD has worked on adapting some of their course material to the context of Knowledge Web, and FU Berlin has added learning units from Semantic Web Information Day.

Status: submitted to PO.

D 3.2.2 Report on Educational Events

Progress: FU Berlin is organizing a Semantic Web Information Day and has sent out two sets of invitations to PhD students in the region Berlin-Brandenburg for the PhD student network, collected 12 interested people, made initial plans for kick-off meeting in October.

D 3.2.3 Report on core curricula in Ontology and Semantic Web

Progress: The 'Report on Core Curricula in Ontology and Semantic Web' reports about an initial approach to use the available learning resources for the four scenarios described in D 3.1.1. As a result, there is quite some material available for creating a shared master as well as for supporting so-called Communities of Practice, e.g. PhD students which learn by themselves. Status: submitted to the PO.

D 3.2.4 MSc Curriculum Progress: due in M18

D 3.2.5 MoU regarding Curriculum

Progress: due in M18

D 3.2.6 Summer School Progress: due in M18



WP 3.3 Semantic Delivery Platform

D 3.3.1 Report on the agreed metadata standard for learning units Status: submitted to PO

D 3.3.2 v1 Basic infrastructure available provides initial learning unit collection from task 3.2.3 Progress: Work continues on the population of the EducaNext repository. L3S has continued configuration and adaptation of the EducaNext platform for Knowledge Web. Status: submitted to PO

D 3.3.3 Prototype of Advanced Learning Platform Progress: due M18; Work continues on producing a new architecture for the Magpie semantic browser. A group to create the ontology of the Semantic Web Studies domain needed by Magpie will be set up in the near future.

D 3.3.4 Report on Collaboration with IMS and ProLEARN Progress: due M12; Contacts have been made within the Open University between participants in the two projects. This collaboration has so far mainly been on administrative matters. Members of L3S are also in contact with members of other consortia.

Meetings

The Second European Summer School On Ontological Engineering And The Semantic Web (SSSW-2004) was held in Cercedilla, Spain from 18th to 24th July. The school was organized by Enrico Motta and Arthur Stutt (OU) and Asuncion Gomez-Perez (UPM).

The school was well attended and enjoyed by tutors and students alike.

The following strands were included:

- Ontologies: Theory, methods and tools
- Human Language Technologies and Machine Learning for the Semantic Web
- Semantic Web Services

An important aspect of the school was the inclusion of hands-on sessions to consolidate theory coupled with a mini-project as a means of integrating the various ideas and tools. There were also several invited talks.

Note that while a Summer School was scheduled for month 18 as part of D3.2.6, it was felt that it would be better to have one this year so as to keep continuity with the Ontoweb sponsored school in 2004. Plans are already being made for a school in 2005."

Also, a one-day video-conference with the EducaNext providers on customization for the Knowledge Web context has taken place.

2. Deviations

Please find below the updated project efforts for UniTr. These updated figures will be taken in account in the tables **3. Resources**



Up	Updated Project effort for the reporting period (person-months)										
Uni	UniTr										
1	Jan/Feb										
2	March/April	0.03						0.03			
3	May/June	0.19		0.22				0.40			

3. Resources

Project effort for the	ne reporting period	(person-months)		
Participant's short name	WP 3.1	WP 3.2	WP 3.3	TOTAL
UIBK				0.00
EPFL				0.00
FT				0.00
FU Berlin	0.10	0.70		0.80
FUB	0.10	0.10		0.20
INRIA		0.75		0.75
CERTH	0.00	0.00		0.00
L3S	0.20	0.70	0.50	1.40
NUIG	0.00			0.00
OU	0.00	0.00	1.00	1.00
UPM	0.00	4.09		4.09
UKARL	0.25	0.25		0.50
LivUni		0.00		0.00
VUM		0.00		0.00
USDF		0.02		0.02
UniTn	0.00		0.00	0.00
VU		0.30		0.30
VUB	0.16			0.16
TOTAL	0.81	6.91	1.50	9.22

4. Cumulative

4. Cumulative											
Status of deliver	Status of deliverables										
Deliverable	Current status (completed/ underway)	On schedule (yes/no)	Original completion date	Actual/planned completion date							
D3.1.1	submitted to PO	yes	Jun-04	30-Jun-04							
D3.1.2	underway	yes	Dec-04	15-Dec-04							
D3.1.3	not started	-	Jun-05	30-Jun-05							
D3.2.1 v1	submitted to PO	yes	Jun-04	15-Jun-04							
D3.2.1 v2	started	yes	Jun-05	15-Jun-04							
D3.2.2	underway	yes	Dec-04	15-Dec-04							
D3.2.3	submitted to PO	yes	Jun-04	15-Jun-04							
D3.2.4	underway	yes	Jun-05	15-Jun-05							



D3.2.5	not started	-	Jun-05	15-Jun-05
D3.2.6	underway	yes	Jun-05	15-Jun-05
D3.3.1	submitted to PO	yes	Jun-04	30-Jun-04
D3.3.2 v 1	submitted to PO	yes	Jun-04	30-Jun-04
D3.3.2 v2	underway	yes	Dec-04	Dec-04
D3.3.3	underway	yes	Jun-05	Jun-05
D3.3.4	underway	yes	Dec-04	Dec-04

Participant's short name	Old Total, carried over from last Report (updated figures)	This period's Total, carried over from	New TOTAL
UIBK	0.00	0.00	0.00
EPFL	0.00	0.00	0.00
FT	0.00	0.00	0.00
FU Berlin	1.25	0.80	2.05
FUB	0.84	0.20	1.04
INRIA	4.90	0.75	5.65
CERTH	0.00	0.00	0.00
L3S	9.10	1.40	10.50
NUIG	0.30	0.00	0.30
OU	10.00	1.00	11.00
UPM	2.29	4.09	6.38
UKARL	1.00	0.50	1.50
LivUni	0.10	0.00	0.10
VUM	0.40	0.00	0.40
USDF	0.16	0.02	0.18
UniTr	0.43	0.00	0.43
VU	0.20	0.30	0.50
VUB	0.46	0.16	0.62
TOTAL	31.43	9.22	40.65

Appendix

Meeting records and participants lists, conference/workshop proceedings, etc. Available on http://knowledgeweb.semanticweb.org



Management

1. Progress, Work Packages 4.1/4.2/4.3/4.4

WP 4.1 Operational Management

The following people have been officially suggested by to the PO to serve as reviewers for Knowledge Web:

Ms. Marie Georges, ILOG, Gentilly, France Prof. Esteban Zimanyi, Universite Libre de Bruxelles, Belgium Dr Aldo Gangemi, Institute of Cognitive Sciences, CNR Rome, Italy

A pre-review meeting is scheduled for the beginning of December 2004 and is being prepared.

D 4.1.1 EC reporting

Progress: The 2-monthly Management Report March/April was officially accepted by the PO and will be made public on the Knowledge Web portal. The Activity Report January-June 2004 was completed according to the contract. All deliverables due M6 were collect on time. A printed and an electronic version of the Activity Report and of all deliverables due M6 have been submitted to the PO. Information for the compilation of the 2-monthly Management Report July/August has been gathered and processed. The preparation of the report has been gathered.

D 4.1.2 Report on Audit regime

Progress: due in M12.

D 4.1.3 Public Report

Progress: The information gathered for the compilation of the 2-monthly Management Report January/February 2004, March/April 2004 and the Activity Report January-June 2004 were archived and will later used in the generation of the annual Public Report.

WP 4.2 Financial Management

D 4.2.1 Financial and accounting report

Progress: Information on the procedure of financial audits and the availability of external auditors has been gathered.

WP 4.3 Technical Management

D 4.3.1. Technical report

Progress: Information from area managers on activities and progress have been gathered.

WP 4.4 Legal and Knowledge Management

D 4.4.1 Consortium Agreement

Status: There were no changes in the Consortium Agreement. An addendum regulating early access and early release policy is being discussed.

D 4.4.2 Setting up legal Entities

Progress: due in M12



WP 4.5 Society and Gender Issues

D 4.5.1 Report on Gender Action Plan Progress: The report is being planned.

D 4.5.2 Report on Public Engagement

Progress: due in M18

WP 4.6 Self-Assessment, Risk Analysis and Market Watch

D 4.6.1 Report on self-Assessment, risk analysis and Market Watch Progress: The report is being prepared by gathering relevant information.

Meetings and Phone conferences

4th PMB phone conference, 17-Sep-04

2. Deviations

Please find below the updated project efforts for UIBK. These updated figures will be taken in account in the tables **3. Resources**

Up	Updated Project effort for the reporting period (person-months)										
UIBK WP 4.1 WP 4.2 WP 4.3 WP 4.4 WP 4.5 WP 4.6 Total								Total			
1	Jan/Feb			-0.70			-0.10	-0.80			
2	March/April		0.50		0.10			0.60			
3	May/June	1.00	0.50				0.80	2.30			

3. Resources

Project effort for the rep	Project effort for the reporting period (person-months)									
Participant's short name	WP 4.1.	WP 4.2	WP 4.3	WP 4.4	WP 4.5	WP 4.6	TOTAL			
UIBK	1.10	1.00	0.75	0.50		0.25	3.60			
EFPL							0.00			
FT							0.00			
FU Berlin							0.00			
FUB							0.00			
INRIA	0.05		0.05				0.10			
CERTH							0.00			
L3S			0.20			_	0.20			
NUIG							0.00			
OU			0.00	0.00			0.00			



UPM	0.44		0.00		0.00		0.44
UKARL			0.25				0.25
LivUni							0.00
VUM			0.30		0.05		0.35
USFD							0.00
UniTn							0.00
VU			0.40				0.40
VUB			0.16				0.16
TOTAL	1.59	1.00	2.11	0.50	0.05	0.25	5.50

4. Cumulative

Status of deliverables							
Deliverable	Current status (completed/ underway)	On schedule (yes/no)	Original completion date	Actual/planned completion date			
Fact sheet	completed	-	31-Jan-04	31-Jan-04			
D4.1.1	underway	yes	31-Dec-04	31-Dec-04			
D4.1.2	underway	yes	31-Dec-04	31-Dec-04			
D4.1.3	underway	yes	31-Dec-04	31-Dec-04			
D4.2.1	underway	yes	31-Dec-04	31-Dec-04			
D4.3.1	underway	yes	31-Dec-04	31-Dec-04			
D4.4.1	completed	-	31-Dec-03	31-Dec-03			
D4.4.2	underway	yes	31-Dec-04	31-Dec-04			
D4.5.1	underway	yes	31-Dec-04	31-Dec-04			
D4.5.2	not started	-	30-Jun-05	30-Jun-05			
D4.6.1	underway	yes	31-Dec-04	31-Dec-04			

Participant's short name	Old Total, carried over from last Report	This period's Total, carried over from	New TOTAL
UIBK	11.10	3.60	14.70
EFPL	0.00	0.00	0.00
FT	0.00	0.00	0.00
FU Berlin	0.00	0.00	0.00
FUB	0.00	0.00	0.00
INRIA	1.45	0.10	1.55
CERTH	0.00	0.00	0.00
L3S	0.30	0.20	0.50
NUIG	0.00	0.00	0.00
OU	0.00	0.00	0.00
UPM	1.82	0.44	2.26
UKARL	0.50	0.25	0.75
Liv Uni	0.00	0.00	0.00
VUM	0.60	0.35	0.95



USFD	0.00	0.00	0.00
UniTr	0.00	0.00	0.00
VU	0.60	0.40	1.00
VUB	0.45	0.16	0.61
TOTAL	16.82	5.50	22.32

AppendixMeeting records and participants lists, conference/workshop proceedings, etc.: Available on http://knowledgeweb.semanticweb.org