SEKT: Semantically Enabled Knowledge Technologies



D12.1.1. Web Site and Mailing Lists

Thomas Gabel, York Sure, and Johanna Voelker (Institute AIFB, University of Karlsruhe)

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Abstract.

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This document accompanies the SEKT web site and mailing lists. Important features of the web site, which consists of a public and a private part, as well as open issues are being described. A brief overview summarizes the existing mailing lists available for SEKT and some subscription details are presented. Both, web site and mailing lists, are up-and-running from the beginning of the project and are subject to continuous improvement.

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British Telecommunications plc.

Orion 5/12, Adastral Park Ipswich IP5 3RE UK Tel: +44 1473 609583, Fax: +44 1473 609832 Contactperson: John Davies E-mail: john.nj.davies@bt.com

Jozef Stefan Institute

Jamova 39 1000 Ljubljana Slovenia Tel: +386 1 4773 778, Fax: +386 1 4251 038 Contactperson: Marko Grobelnik E-mail: marko.grobelnik@ijs.si

University of Sheffield

Department of Computer Science Regent Court, 211 Portobello St. Sheffield S1 4DP UK Tel: +44 114 222 1891, Fax: +44 114 222 1810 Contactperson: Hamish Cunningham E-mail: hamish@dcs.shef.ac.uk

Intelligent Software Components S.A.

Francisca Delgado, 11 - 2 28108 Alcobendas Madrid Spain Tel: +34 913 349 797, Fax: +49 34 913 349 799 Contactperson: Richard Benjamins E-mail: rbenjamins@isoco.com

Ontoprise GmbH

Amalienbadstr. 36 76227 Karlsruhe Germany Tel: +49 721 50980912, Fax: +49 721 50980911 Contactperson: Hans-Peter Schnurr E-mail: schnurr@ontoprise.de

Vrije Universiteit Amsterdam (VUA)

Department of Computer Sciences De Boelelaan 1081a 1081 HV Amsterdam The Netherlands Tel: +31 20 444 7731, Fax: +31 84 221 4294 Contactperson: Frank van Harmelen E-mail: frank.van.harmelen@cs.vu.nl

Empolis GmbH

Europaallee 10 67657 Kaiserslautern Germany Tel: +49 631 303 5540, Fax: +49 631 303 5507 Contactperson: Ralph Traphöner E-mail: ralph.traphoener@empolis.com

University of Karlsruhe, Institute AIFB

Englerstr. 28 D-76128 Karlsruhe Germany Tel: +49 721 608 6592, Fax: +49 721 608 6580 Contactperson: York Sure E-mail: sure@aifb.uni-karlsruhe.de

University of Innsbruck

Institute of Computer Science Techikerstraße 13 6020 Innsbruck Austria Tel: +43 512 507 6475, Fax: +43 512 507 9872 Contactperson: Jos de Bruijn E-mail: jos.de-bruijn@deri.ie

Kea-pro GmbH

Tal 6464 Springen Switzerland Tel: +41 41 879 00, Fax: 41 41 879 00 13 Contactperson: Tom Bösser E-mail: tb@keapro.net

Sirma AI EOOD (Ltd.)

135 Tsarigradsko Shose Sofia 1784 Bulgaria Tel: +359 2 9768, Fax: +359 2 9768 311 Contactperson: Atanas Kiryakov E-mail: naso@sirma.bg

Universitat Autonoma de Barcelona

Edifici B, Campus de la UAB 08193 Bellaterra (Cerdanyola del Vallès) Barcelona Spain Tel: +34 93 581 22 35, Fax: +34 93 581 29 88 Contactperson: Pompeu Casanovas Romeu E-mail: pompeu.casanovasquab.es

Executive Summary

This document accompanies the SEKT web site and mailing lists. Important features of the web site as well as open issues are being described. The web site is divided into two parts, viz. the public web space which contains all kinds of information about the project and the private web space which is accessible only for SEKT members and contains project internal documents.

A brief overview summarizes the existing mailing lists available for SEKT and some subscription details are presented.

Both, web site and mailing lists, are up-and-running from the beginning of the project and are subject to continuous improvement.

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Introduction

This document accompanies the SEKT web site and mailing lists. The aim of this task 12.1.1 in SEKT is on the one hand to present the project and related issues to the outside world and on the other hand to support the internal communication and content exchange among partners.

In chapter 2 we describe important features of the web site as well as open issues. The web site is divided into two parts.

- The public web space which contains all kinds of information about the project
- The **private web space** which is accessible only for SEKT members and contains project internal documents

In chapter 3 we give a brief overview of the existing mailing lists available for SEKT. Furthermore some subscription details are presented.

Both, web site and mailing lists, are up-and-running from the beginning of the project and are subject to continuous improvement. In chapter 4 we show open issues, briefly sketch an envisioned solution and conclude with resulting next steps.

SEKT Web Site

The main objectives of the SEKT web site at its current stage of development is to publicize the benefits of semantically-enabled knowledge management, to publicize the SEKT project itself, to make available public domain SEKT deliverables and to serve as an SEKT internal content management platform.

2.1 External Web Site

Figure 2.1 shows a screenshot of the SEKT site's main page.

The current site is structured into three main parts (topics) each of which includes a number of sub-pages with information related to the respective topic:

- Project Sites
- Research & Development Sites
- Information Sites

So far, the web site has had an average number of page views of about 38 per day.

Project Sites

Project sites include a general overview on the project, the SEKT vision, a list of project partners involved, as well as a depiction of the project structure.

Furthermore, a link to SEKT's internal pages and content management system is provided. Note, that a login and password are required to enter the internal pages (see Section 2.2).



Figure 2.1: SEKT External Site

Research & Development Sites

In this section of the site the visitor is informed about topics related to research and development going on in SEKT. So far, a description of relevant background technologies, i.e. ontology and metadata technology, human language technology, and knowledge discovery is provided.

Information Sites

In this section information sources related to SEKT are provided. These involve a facility to subscribe to the public SEKT newsletter, a collection of project-related web sites, events co-organized by the project, and a member list of the SEKT advisory board.

Moreover, this is the location where (future) public domain deliverables and publications will be available.

2.2 Internal Web Site

SEKT's internal web pages are intended to

• distribute project internal materials for project members,

- publish confidential deliverables,
- collect presentations, minutes, and additional material from meetings.

SEKT's internal pages are based on the ZOPE¹ content management system. ZOPE is an open source application server for building content management systems, sharing documents in intranets, portals, and custom applications.

In order to access the internal pages it is necessary to obtain an account (username and password), that must be provided when entering the internal pages as shown in Figure 2.2. Requests for setting up an account may be sent by email to Thomas Gabel (tga@aifb.uni-karlsruhe.de).



Figure 2.2: Entry to the Internal Pages

Figure 2.3 shows the current state of the internal pages and of some of the documents available for all project members. For example, the agenda for the first quarterly review in Ljubljana (29/30 March 2004) can be found at Meetings/SEKT Review Q1 2004/SEKT Q1 Agenda.doc.

Here, members may

• proceed to the SEKT mailing list site (cf. Chapter 3)

http://www.zope.org

- enter the ZOPE file management system to add content, e.g. to add files to a specific folder (see below),
- use the upload manager to upload files (see below),
- download specific documents by clicking on them.

SEKT Internal Pages

SEKT Mailing List
Filesystem Management ZOPE The tree shows the files, their owner, and the date of the last modification. Expand All Collapse All
 A dministration Collection of Suggested SEKT Readings (zip-11mb) (tga : February 03, 2004, 16:43) Forms Meetings 2003-02-14 SEKT Proposal Kickoff London 2004-01-19 SEKT Kick-off London SEKT review Q1 2004 SEKT review Q1 2004 SEKT O1 Agenda (paul.warren : March 16, 2004, 16:45) NEW case study workshop March 2004 Upload-Manager (thje : March 11, 2004, 11:10) NEW bimonthly reporting 2004 contractual documentation
``@ <u>index_html</u> (ysu : February 03, 2004, 16:43) ⊞ □ working documents



Using the ZOPE File Management System

The ZOPE file management system provides project members with rich functionalities to add new content and to modify existing content. For example, it is possible to add or delete files as well as to edit HTML documents. To enter the ZOPE file management system one may use the corresponding link on the internal pages (cf. Figure 2.3 or directly go to http://sekt.semanticweb.org/private/manage.

Figure 2.4 shows the interface of the ZOPE file management system, which contains an overview of the folder structure on the left hand side, the contents of the selected folder in the right, and an (opened) drop-down list from which certain elements to be added may be chosen (e.g. choose "File" to upload a file).

🗿 Zope on http://km.aifb.uni-karlsruhe.de _ Microsoft Inte	rnet Explorer	DE German (Germany) 😰 📜	FX
File Edit View Favorites Tools Help			At
🔇 Back • 🕥 • 💌 🖻 🏠 🔎 Search 📩 Favorito	es 🜒 Media 🥝 🔗 🍓 🔯 + 🛄 🕻	§ 🗄 🗭 🖏	
Address 📓 http://km.afb.uni-karlsruhe.de/projects/sekt/manage			🗸 🋃 Go Links 🎽
Search - Google - Aka	vista + Ask Jeeves AlltheWeb + LookSmart Files -	🕸 Customize 者 My Button 🌈 Highlight	
ZOPE			Logged in as pha Zope Quick Start 👻 Go
Sekt	Contents View	Properties Security	Undo Ownership Find
È acl users			
euactivities_files	Folder at /projects/sekt		Hel
eustructure_files			
presentations			Select type to add 🖌 🖌 🖌 🖌
🖻 🛄 private			CMF Core Content
Administration			CMF Event
U Forms	Type Name	5128	CMF Site
I Meetings		I KB	CMF Topic Objects CMECalendar Tool
2003-02-14 SEKT Proposal Kickoff London		18 Kb	CMFDefault Content
2004-01-19 SEKT Kick-off London	📋 🐚 Image2.jpg 🍠	17 Kb	CMFDefault Tool
- Boards	acl_users (User Folder)		Content Type Registry
ExploitationBoard	🔲 🖾 all.css 🥒	1 Kb	DTML Document
TechnicalManagementBoard	🔲 🗋 biglogo.gif 🥒	4 Kb	DTML Method
Partner Introductions	🔲 📓 bodybg-eu.gif 🦻	1 Kb	ExtImage
	🔲 📓 bodybg-rd.gif 🤌	1 Kb	External File
contractual documentation	🔲 💊 dummy 🥒	1 Kb	External Method EAO Base
readings	🔲 🖸 eu.css 🤌	1 Kb	FAQ Entry
© Zope Corporation	□ □ kieuactivities.html ⊅	6 Kh	FSCounter
Refresh	C C euactivities files		Filesystem Directory View
		0.1/h	Folder
		6 KD	HOW-TO
		7 KB	Image
		15 KB	Knowledge Base
			Local File System
	🔲 🔟 head-1-eu.gif 🧷	1 Kb	Mail Host
	🔲 🗋 head-1-rd.gif 🌶	1 Kb	Page Template
	🔲 📓 head-1-ri.gif 🧷	1 Kb	2003-11-17 17:54
	🔲 🖺 head-2-eu.gif 🖉	1 Kb	2003-11-17 17:54
	🔲 📓 head-2-rd.gif 🖉	1 Kb	2003-11-17 17:54
	🔲 📓 head-2-ri.gif 🤌	1 Kb	2003-11-17 17:54
	n 🖻 head-3-eu.gif 🌶	1 Kb	2003-11-17 17:54
	□ Shead-3-rd.gif Ø	1 Kh	2003-11-17 17:54
	□ Shead-3-ri.gif 2	1 Kb	2003-11-17 17:54
		IND	2000 11 11 17.04

Figure 2.4: Interface of the ZOPE File Management System

Upload Manager

The upload manager (see Figure 2.5) mentioned provides a facility to easily upload documents to a desired destination folder, which is probably easier to handle than the ZOPE file management system.

The upload manager's form requests you to choose the destination folder (to which the respective file shall be uploaded), to select the file on your local machine, and to provide a descriptive title for it. Please, also check the corresponding check box, if the file exceeds the size of 100kb.

SEKT Internal Pages ---- Upload-Manager

Note: For uploading larger files (>100kb) please check the corresponding check box in Step 2.

Step 1:	Please choose the folder in which this file should be put:		
	🗉 🗀 Administration 🔘		
	🗄 🗀 Forms 🔿		
	🗄 🗀 Meetings 🔿		
	🗄 🛅 bimonthly reporting 2004 🔘		
	🙂 🗀 contractual documentation 🔘		
	🙂 🗀 working documents 🔘		
Sten 2.	Please select your local file you want to unload.		Durchsuchen
Step 2.	ricuse select your form me you whit to uplotte.	Check here, iffile size exceeds 100kb.	
Step 3:	Please provide a title for the file you want to upload (required):		
	Uploar		
	Powe		
		JE	

Figure 2.5: Upload Manager

FTP Access

When intending to share a larger number of documents, it is cumbersome to upload each file individually (e.g. by using the upload manager or the ZOPE file management system). Therefore, it is also possible to access the SEKT internal pages via FTP. Use the following connection parameters:

- Host: aifbapollo.aifb.uni-karlsruhe.de/projects/sekt/
- Port: 8021
- Login/Password: your login and password for the SEKT internal web pages
- Passive Mode: yes (required!)

SEKT Mailing Lists

3.1 Overview

Several mailing lists related to the SEKT project are available – each one targeting a different audience and having different goals. The lists cover audiences from SEKT internal project members such as 'working lists' per technical work package to facilitate communication on a technical level as well as an overall mailing list for all partners and also a news list for external partners who are interested to be informed about recent advances. A brief description of each list as well as the respective number of currently subscribed members (as per 23th of March, 2004) is given by table 3.1.

Name	Members	Description
sekt	70	The general SEKT mailing list.
sekt-br	25	For PMB and TMB representatives.
sekt-ab	33	For the advisory board.
sekt-wp1	9	Lists for technical work packages.
sekt-wp2	12	
sekt-wp3	12	
sekt-wp4	8	
sekt-wp5	8	
sekt-wp6	9	
sekt-wp10	15	For the legal case study.
sekt-case	23	For case studies and methodology.
sekt-news	17	For public news about SEKT. A quarterly newsletter
		will be send to all members of this list.

Table 3.1: SEKT Mailing Lists

3.2 Subscription

Subscribing to any of the mailing lists mentioned in table 3.1 is straightforward:

- Go to the web site http://www.aifb.uni-karlsruhe.de/mailman /listinfo/(LIST-NAME).
- Fill out the subscription form by entering your email address and the password you would like to use.
- After pressing the *subscribe* button you will receive an email requesting your confirmation.
- Once you have confirmed, the subscription request has to be approved by the list moderator, who will inform you about her decision via email.

Alternatively, subscriptions to sekt-news can also be performed by visiting the SEKT web site http://sekt.semanticweb.org/. The link *News*, which can be found in the *Information* section leads to a short description of the SEKT newsletter and a link to the above mentioned subscription form.

Conclusion

4.1 Open Issues

The SEKT web site was operational from the very beginning of the project. The core mailing list was running even before the project started to provide a platform during the proposal preparation. Further lists were created according to a well-defined discussion process. They now are up and running and cover all currently foreseen requirements for mailing lists.

However, since the project is moving from the very early into productive stages, the web site offers room for improvement into different directions.

- Firstly, the navigational structure so far fitted well to the existing content. As the project is moving on, further requirements quite naturally occur and need to be reflected in the design and implementation of the portal. Primarily this includes the top level navigation structure, but also some extended functionalities (such as e.g. the following one).
- Secondly, being a very prominent project in the Semantic Web area, the aim is to provide *semantically annotated* content. During the course of the project the developed SEKT technologies might be used also at the web site (as a show case). However, being at the very beginning of the project, we suggest to re-use, adapt and extend technology which was developed for the OntoWeb thematic network (see http://www.ontoweb.org) in a continuous effort [SSV+01b, SSV+01a, MSSV02, HSVS03, HS04].

We will now briefly introduce the implemented OntoWeb approach which is based on the SEAL conceptual architecture for SEmantic portALs.

4.2 The Seal Approach in OntoWeb

4.2.1 The Core SEAL Approach

SEAL (cf. [MSS⁺02]), the AIFB conceptual architecture for building Semantic Portals, has been developed to use ontologies as key elements for managing community web sites and web portals. The ontology supports queries to multiple sources, but beyond that it also includes the intensive use of the schema information itself allowing for automatic generation of navigational views¹ and mixed ontology and content-based presentation. The core idea of SEAL is that Semantic Portals for a community of users that contribute *and* consume information [SAD⁺00] require web site management *and* web information integration. In order to reduce engineering and maintenance efforts SEAL uses an ontology for semantic integration of existing data sources as well as for web site management and presentation to the outside world. SEAL exploits the ontology to offer mechanisms for acquiring, structuring and sharing information by means of semantic annotations [HS02] between human and/or machine agents. Thus, SEAL combines the advantages of the two worlds briefly sketched above.

4.2.2 SEAL in OntoWeb

The approach in OntoWeb enhances the core SEAL approach with a sophisticated framework for **integrating knowledge** and shows how this approach can be applied on **existing portals**. Besides, it provides the ability to set up a very *scalable infrastructure* which can be *distributed and interconnected* across the web with other participants.

Generally, the approach consists of several conceptual layers which are presented in figure 4.1. The http://www.ontoweb.org portal is implemented on top of ZOPE², i.e. the same baseline technology is used as for the internal SEKT website.

The depicted layers can be seen as knowledge workflows from the bottom, viz. integration, towards the top, viz. the final visualization of knowledge e.g. in a web browser.

- The *Knowledge Integration* layer holds a set of modules, each module being able to handle a specific information source. For instance, the database module handles in- and output requests to specific databases.
- The *Knowledge Processing* layer, creates content instances and provides a set of knowledge processing methods, e.g. publishing workflows.
- The representation of knowledge is handled in the Knowledge Representation layer

¹Examples are navigation hierarchies that appear as has-part-trees or has- subtopic trees in the ontology.

²see http://www.zope.org

Access HTML RDF(S) OWL	Forms Navigation			
Organisation	API Search / Query Load-Balancing			
Representation Knowledge Evolution Ontology-based Knowledge Repository				
Processing and Publication	Review / Manager			
Integration Documents, Databases Semantic Files	Content Semantic Portals			

Figure 4.1: Building blocks of our Semantic Portal framework

by using ontologies and associated knowledge representation languages such as RDF(S) or OWL ([BG04, SWM04]).

• The next layer is the *Knowledge Organisation* layer which provides methods for indexing and search functionalities. item Finally, the *Knowledge Access* layer defines methods for presenting content in different output formats and defines interaction interfaces.

4.3 Conclusion

We will proceed to improve the services provided by the web site and the mailing lists. Next steps include the proposal of a new navigational structure and the development of a migration plan to move from the current web site to a 'semantically enriched' web site.

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