

Components developed in the SEKT project

This table lists all the components developed as part of the SEKT project. These are chiefly software modules; however also included are the PROTON ontology and an ontology-annotated corpus available for research and test purposes.

Component	Owner	Functionality	Platforms and Languages	Form of distribution	Freely available / commercial, restrictions	Open source
Components used both at ontology design time and at run time						
PROTON ontology	OntoText Lab (http://www.ontotext.com/)	PROTON is a light-weight upper-level ontology	OWL-DLP	OWL description, set of OWL files http://proton.semanticweb.org	Freely available	Open source
KAON2	AIFB, University of Karlsruhe (http://www.aifb.uni-karlsruhe.de)	KAON2 is an infrastructure for managing OWL-DL and SWRL ontologies. KAON2 provides the following features: - an API for programmatic management of OWL-DL and SWRL ontologies, - a stand-alone server providing access to ontologies in a distributed manner, - an inference engine for answering queries, - a module for extracting ontology instances from relational databases (available soon).	Platform independent Java	http://kaon2.semanticweb.org/	Freely available for research purposes	Open source (under discussion)
Text-Garden	Jozef Stefan Institute (http://www.ijs.si/)	Software Suite for dealing with unstructured data – in particular it covers (1) analysis of multiple modalities (such as text, social networks, images, video), (2) cross modal analysis, (3) components for text and network visualization, (4) scalable implementations of many standard and newer analytic methods from the field of machine learning, text mining, kernel methods etc.	<i>Windows, Linux (partly), working on Matlab, Jjava, Phyton interfaces</i>	Instalation package, binaries www.textmining.net	Free for research purposes	No
OntoClassify	Jozef Stefan Institute (http://www.ijs.si/)	System for scalable classification into large topic ontologies (e.g. used for DMOz and Inspec)	<i>Windows</i>	Web service	Free web service	No
Components used at ontology design time						
<i>Ontology editing</i>						
OntoGen (OntoGenesis)	Jozef Stefan Institute (http://www.ijs.si/)	Software tool for semiautomatic ontology generation from text. Current version supports building taxonomies, future versions will support building ontologies with multiple relationships.	<i>Windows</i>	Installation Package	Free binaries	No

Plugin for Text2Onto	ontoprise GmbH (http://www.ontoprise.de)	Graphical interface allowing to use Text2Onto [by AIFB] to extract ontologies into OntoStudio	Java	Currently binary	Freely available for non-commercial use	no
<i>Document annotation</i>						
OntoOffice Word Plugin	ontoprise GmbH (http://www.ontoprise.de)	MS Word™ plugin for automated Annotation based on GATE based on OntoOffice platform	Windows	binary	Currently commercial	no
Excel Plugin	ontoprise GmbH (http://www.ontoprise.de)	Excel Plugin to annotate Excel spreadsheets (according to simple annotation patterns) in order to use them as instance base	Windows + Java-based extensions to OntoStudio (or supporting libraries)	binary	Currently commercial	No
<i>Ontology mediation</i>						
OntoMap Plugin	ontoprise GmbH (http://www.ontoprise.de)	graphical tool for ontology mappings with interfaces to FOAM and the mapping store	Java	Currently binary	Freely available for non-commercial use	no
FOAM – Framework for Ontology Alignment and Mapping	AIFB, University of Karlsruhe (http://www.aifb.uni-karlsruhe.de)	FOAM allows the alignment of two OWL-DL ontologies. Identifying equal entities is achieved through comparisons with a large number of ontology features and similarity measures. A threshold then determines which pairs should be finally aligned. Through machine learning or additional user interaction results outperform recent methods for alignment.	Java 1.5.0 KAON2 OntoMap/OntoStudio	source code and binaries, see: http://www.aifb.uni-karlsruhe.de/WBS/meh/foam	The FOAM basic system is freely available, not OntoMap	The FOAM basic system is open source, but not OntoMap or KAON2
Ontology mapping store v.0.4	OntoText Lab (http://www.ontotext.com/)	Representation of ontology mappings in terms of: id, name, source and target ontologies, description, version. Storage and retrieval of ontology mappings	Windows, Linux, Java: JDK 1.4.2 or 1.5	Distributed as source code and binary library (JAR) http://www.omwg.org/tools/omapstore/	Freely available, free source code; internally uses Apache Lucene IR engine	No, Free source code available
Ontology Mapping API	University of Innsbruck (http://www.uibk.ac.at/)	API to parse/serialize the SEKT Ontology Mapping Language	Java Based	A jar file http://dome.sourceforge.net/snapshot/mappingLanguage.jar	Freely under the General Public Licence	GNU General Public License
<i>Ontology evolution</i>						
OWL Evolution	AIFB,	OWL Evolution is a software component that	Platform	http://www.aifb.uni-	Freely available with no	Open source

(evOWLution)	University of Karlsruhe (http://www.aifb.uni-karlsruhe.de)	supports the methods for the consistent evolution of OWL ontologies. It builds on top of the KAON2 ontology management infrastructure. The implementation includes evolution strategies for various fragments of ontology languages, including OWL-DL, OWL-Lite and OWL-DLP, as well evolution strategies for logical consistency. Additionally it allows to plug-in further evolution strategies for structural consistency (to support additional sublanguages), logical consistency, and user-defined consistency. The OWL Evolution strategies can also rely on contextual information such as the confidence annotations of Text2Onto to guide the evolution process.	independent Java	karlsruhe.de/WBS/pha/owlevolution/	restrictions	
Components used at run time						
<i>Ontology-based information extraction and annotation</i>						
Ontology-based Information Extraction	NLP group, University of Sheffield (http://nlp.shef.ac.uk/)	Information Extraction from text with respect to a given ontology	Any platform supporting Java	Open-source, as part of GATE distribution http://gate.ac.uk/	GNU LGPL license, freely available	GNU LGPL
Controlled Language Information Extraction	NLP group, University of Sheffield (http://nlp.shef.ac.uk/)	Information extraction from controlled language for improved accuracy	Any platform supporting Java	TBD	TBD	TBD
Massive automatic annotation (KIM platform)	OntoText Lab (http://www.ontotext.com/)	KIM is a software platform for automatic semantic annotation , indexing and retrieval	Java 1.4, Linux/Windows /Solaris	Installation package, http://www.ontotext.com/kim/KIM-downloads.html	Commercial; Freely available for research and evaluation purposes	http://www.ontotext.com/kim/KIM-licence-agreement.html
OWLIM	OntoText Lab (http://www.ontotext.com/)	Fast light-weight OWL-DLP semantic repository	Java (tested on JDK1.4.2, 1.5.0 – Linux and Windows); OWL-DLP, RDFS	Both as source-code and binary http://www.ontotext.com/owlim/	Freely available, but dependent on proprietary rule engine (IRRE) for which a free, non-open source copy is provided	LGPL
<i>Reasoning</i>						
PION	Department of Computer Science, vrije Universiteit,	Reasoner for inconsistent ontologies: aims to give heuristically plausible answers for ontologies where traditional reasoners collapse under inconsistency.	Prolog	Source code http://wasp.cs.vu.nl/s/ekt/	Freely available	No restrictions on use

	Amsterdam (http://www.cs.vu.nl)					
DION	Department of Computer Science, vrije Universiteit, Amsterdam (http://www.cs.vu.nl)	Reasoner for heuristically locating the source of inconsistencies in an ontology	Prolog	Source code http://wasp.cs.vu.nl/sect/	Freely available	No restrictions on use
Mupster	Department of Computer Science, vrije Universiteit, Amsterdam (http://www.cs.vu.nl)	Reasoner for algorithmically pinpointing the source of inconsistencies in an ontology	Java	Source code http://wasp.cs.vu.nl/sect/	Freely available	No restrictions on use
XDIG	Department of Computer Science, vrije Universiteit, Amsterdam (http://www.cs.vu.nl)	Prolog implementation of the de-facto standard DIG interface for Description Logic Reasoners (e.g. implemented by Racer, KAON, Pellet and others). This is the first (only?) Prolog implementation of this interface. Prolog is gaining importance as a Semantic Web platform, in particular with the SWI Prolog infrastructure.	Prolog	Source code http://wasp.cs.vu.nl/sect/	Freely available	No restrictions on use.
<i>Knowledge access</i>						
Device Independence Framework (DIWAF)	BT (http://www.bt.com)	Software framework for developing device independent web applications	Java Servlet application (Windows, Linux)	Either	No Restrictions	<i>GNU General Public License</i>
OntoSum	NLP group, University of Sheffield (http://nlp.shef.ac.uk/)	Generates natural language summaries from ontologies.	<i>Any language supporting web services.</i>	web service	Available free to SEKT partners	No
Search and Browse	BT (http://www.bt.com)	Search and Browse using semantic queries based on ontologically described data	Java Servlet application (Windows, Linux)	Installation package	No restrictions within consortium	<i>No</i>
Visualization Component	iSOCO (http://www)	A tool for visualization of ontologies using the approach of distinguish between how to visualize	Linux, Windows. Java	Binary distribution	Free for research	Open Source. GPL license with iSOCO's Copyright

	.isoco.com)	from what to visualize	and Java 3D.			
Knowledge sharing tool	BT (http://www.bt.com)	Share URLs with members of a community, and retrieve relevant pages.	Windows PC, Internet Explorer plug-in toolbar	Installation package	Commercial	
SEKTBar	Jozef Stefan Institute (http://www.ijs.si/)	Internet Explorer plugin for monitoring user activities at the client side and server side components for collaborative filtering support – the software builds user profiles from users' activities, shares them in collaborative mode and exports them into PROTON	Windows	Installation Package	Free binaries (plugin)	No
Document Atlas	Jozef Stefan Institute (http://www.ijs.si/)	Software for visualization and interactive browsing of textual documents – it supports 2D view and 3D (VRML) view to the contents of visualized documents	Windows	Installation package	Free binaries	No
<i>Run-time platform</i>						
SIP (SEKT Integration Platform)	Empolis GmbH (http://www.empolis.com)	Semantic Processing Platform	Java Windows XP, Linux, Solaris, other Unix platforms on demand	CD-ROM	Freely available (no source code)	No
Component developed for testing and benchmarking purposes						
Ontology annotated corpus	NLP group, University of Sheffield (http://nlp.shef.ac.uk/)	Textual corpus annotated wrt Proton	XML files	Available on request from USFD;	Free for research, upon request	N/A