An Ontopia Factsheet

Ontopia Knowledge Suite™

Topic Maps Application Development Platform

An overview of the OKS product components, features, and benefits

Connect your information and knowledge using the OKS: the leading application development platform for Topic Maps. The OKS is the world's most mature and comprehensive suite of Topic Maps tools, consisting of interrelated components that address every aspect of the topic map project life cycle, including topic map creation (both automated and manual), validation, maintenance, storage, querying, and end-user delivery.

The core of the OKS is the Engine, an SDK for Java programmers. Built on top of this, the Navigator and Web Editor Frameworks allow web developers to create powerful applications without the need for Java programming. Utilities support the autogeneration of topic maps. An API and a Web Services interface ensure easy integration with existing systems. Free sampler tools can be used for training and prototyping.

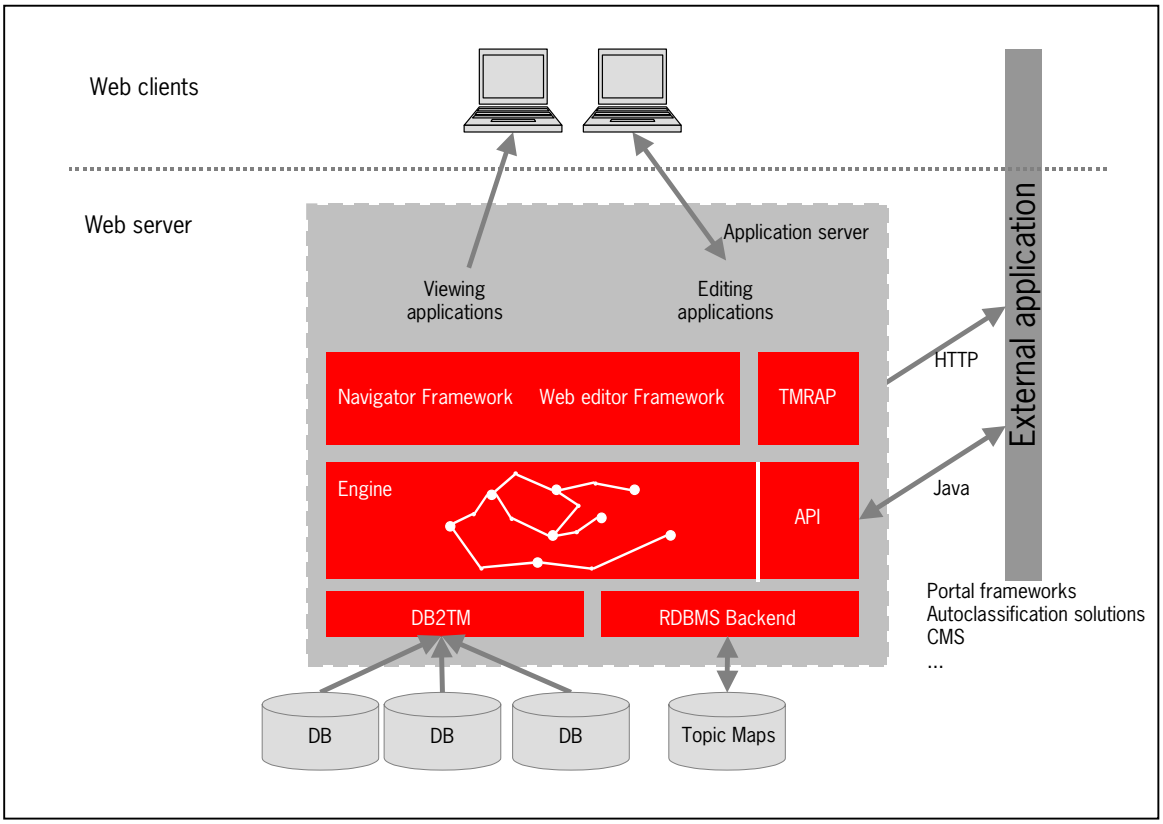

Figure 1 - OKS technical architecture

Ontopia Topic Maps Engine

The Engine is the heart of the OKS. It implements the concepts described in the Topic Maps standards and is made available as a Java SDK.

The Ontopia Topic Maps Engine handles all the difficult aspects of Topic Maps development on behalf of applications. The SDK lets applications load topic maps from XML documents, store topic maps in databases, modify, query, and access topic maps, and generally do all an application may need to do with a topic map.

The engine has a core Topic Maps API which all applications use to access topic map data, regardless of where those data are stored. Thus, whether the topic map is in-memory or stored in a database is all the same to the application.

Engine platform features

Feature	Description
Standards compliance	Supports open industry standards like Java, XML, J2EE, ISO 13250 Topic Maps, XTM 1.0, and RDF.
Platform	Pure Java. Runs on any platform that has JDK 1.3 (or higher).
Test Suite	Automated test suite for quick and easy testing of the engine in new environments.
Java API	Rich and scalable API . Consistent across implementations (i.e., in-memory, or database). Support for TMAPI.
Internation-alization	Full internationalization, support for all character encodings.
Operating Systems	Windows (98, 2000 and XP), Linux (RedHat, SuSE and Debian) and Sun Solaris.
J2EE support	J2EE-compliant toolkits enable easy development and deployment of applications.
JAAS support	Standard module for user authentication in application servers.
Database storage	Persistent and scalable storage of topic maps in relational DBs, including Oracle™ and Post-greSQL, using JDBC and SQL.

Engine Topic Maps features

Feature	Description
Import	XTM, LTM, and RDF formats.
Export	XTM, LTM, and RDF formats.
Querying	Powerful semantic query engine, Tolog, for structured search, sim-plified application development, and top performance.
Merging	Ability to merge arbitrary topic maps, using subject identifiers or name-based.
Validation	Semantic validation of topic maps using the Ontopia Schema Language.
Full-text search	Integration with Lucene and Oracle Text provides full-text search capabilities at no extra cost. Can also be integrated with Verity, FAST, etc.

Ontopia Navigator Framework

The Navigator Framework is a framework for building J2EE-compliant web applications for browsing topic maps, including Topic Maps-based web portals. An example implementation of this product is available as a free, stand-alone, generic Topic Maps browser, the Omnigator (see below).

Navigator Framework features

Feature	Description
JSP support	Version 1.1 and higher; JSP 2.0 recommended).
Tag libraries	The Navigator framework tag library is closely integrated with tolog and provides a ready-to-use mechanism to extract and present information from the topic map in web applications.
Extensibility	Can be integrated with other tag libraries, including JSTL.
Reference implemen-tations	Includes source code for a number of reference implementations.

The Omnigator

The Omnigator is a free application built on top of the Navigator Framework that allows users to load and browse any conforming topic map, including their own, and even including RDF documents.

Designed primarily as a teaching aid to help new-comers understand the Topic Maps concepts, it is also an extremely useful tool for debugging topic maps and for building demo applications. You can download it from the Ontopia website or test it out online.

Much of the functionality in the Omnigator takes the form of plug-ins, all of which can be used in custom applications built using the Navigator Framework:

Feature	Description
Customize	Change the appearance of your topic map using the Model/View/ Skin mechanism.
Edit	Modify the topic map in Ontopoly (see below).
Export	Export the current topic map to XTM, LTM, or RDF.
Filter	Provide user-defined views of the topic map based on scope.
Search	Index and search your topic map using a full-text search engine.
Google it!	Experience how exploiting the semantic information in your TM improves Google searches.
Merge	Merge two or more topic maps.
Query	Specify Tolog queries and execute them against your topic map.
RDF2TM	Map RDF properties to Topic Maps constructs and view your RDF as though it were a topic map.
Reload	Reload a modified topic map from disk with a single click.
Statistics	Generate a report for your topic map showing its "vital statistics".
Validate	Check your topic map for semantic validity using OSL.
Vizigate	View and navigate your topic map through a visual interface.

Download the Omnigator from
http://www.ontopia.net/download/freedownload.html

The Vizigator

The most eye-catching addition to the product in 2005 was the Vizigator, a tool for visualizing knowledge structures. The Vizigator is a graphical topic map browser. It includes two components: the VizDesktop, used by application designers to control colours, shapes, fonts, and icons, and the VizLet, a Java applet that can be embedded in OKS applications.

Feature	Description
Visual User interface	Based on an open-source graph-based graphical user interface called TouchGraph.
VizDesktop	A configuration tool for application designers to determine the graphical display of a topic map structure.
VizLet	Reusable applet component which can be integrated with other web applications.
VizPlugin	An example implementation based on the VizLet component, integrated with the Omnigator for viewing the current topic visually.

Ontopia Web Editor Framework

The Web Editor Framework simplifies the development of custom web applications for collaborative editing of topic maps. It extends the Navigator Framework with support for actions that modify the content of the topic map, making it easy to connect user interface elements to topic map modification actions. Ontopia's new, general purpose Topic Maps editor, Ontopoly, was built using the Web Editor Framework (see below).

Feature	Description
JSP support	Version 1.1. and higher; JSP 2.0 recommended.
Tag libraries	The Web Editor Framework comes with an extensive library of actions which are ready to use and can be extended based on your own requirements.
Multi-user editing	Full support for locking and transactions when using the RDBMS backend.

INTRODUCING: ONTOPOLY!

OKS release 3.0 (January 2006)

Ontopoly is an exciting new component of the forthcoming 3.0 release in early 2006. Ontopoly is a self-configuring, ontology-driven Topic Maps editor. A topic map consists of both an ontology and an instance of that ontology. With Ontopoly, you can edit each of these.

Constraints specified on the ontology are used to drive the interface for editing the instance, resulting in a very user-friendly tool that requires no knowledge of topic maps on the part of the person authoring the instance.

The first release of Ontopoly will support all the core concepts in the Topic Maps standard, with more planned for upcoming releases. The following features will be included in 3.0:

Feature	Description
Import	From XTM, LTM, and RDF. System-related information is added upon import and may be removed on export.
Export	To XTM, LTM, and RDF. System-related information may be removed on export.
Create	Create new ontologies and topic maps from scratch.
Preview	Preview topic maps in Omnigator
Supported TM features in v 3.0	Ontologies, constraints, topics, names, associations, occurrences, types, identifiers.

COMING SOON… (Q1 and Q2 2006)

- Web Services: TMRAP, a WS for integrating Topic Maps with other applications
- DB2TM: A tool for mapping relational data directly to topic maps in order to merge it with other data
- Portlets: Support for the JSR 168 Portlet Specification for interoperability between Portals
- OKP: A low-cost, Topic Maps-driven CMS (in partnership with OfficeNet, Norway)

Only Connect…
www.ontopia.net

Software Editions

The components comprising the various editions and licenses of the OKS are subject to change.

	Editions		
Components	Personal	Professional	Enterprise
Engine	Yes	Yes	Yes
Query Engine	Yes	Yes	Yes
Omnigator	Yes	Yes	Yes
Ontopoly	Yes	Yes	Yes
VizPlugin	Yes	Yes	Yes
VizDesktop	–	Yes	Yes
VizLet	–	Yes	Yes
SchemaTools	–	Yes	Yes
Full-text	–	Yes	Yes
Navigator Framework	–	Yes	Yes
Web Editor Framework	–	Yes	Yes
RDBMS backend	–	–	Yes

Prices

This pricelist is current as of December 2005.

	License type	
Edition	Developer	Runtime
Personal	€ 500	€ 5,000
Professional	€ 2,000	€ 20,000
Enterprise	€ 3,000	€ 30,000
Support & maintenance: 20% of list price per annum.		
OEMs, source code licenses, bulk orders: Special terms apply. Contact sales@ontopia.net.		
Academic licenses: 50% discount (available for academic, research and charitable organizations).		
Research licenses: Cost of support & maintenance only.		

With the new version 3.0 release Ontopia will extend its free offerings to provide an integrated set of tools called OKS Samplers, containing the Omnigator, the Vizigator, and Ontopoly.