THEMAS - Thesaurus Management System

Overview

Thesaurus Management System – THEMAS, is an open source Web based system for creating, managing and administering multi-faceted multilingual thesauri according to the principles of ISO 25964-1 and ISO 25964-2 standards.

The distinct features of the system include: management and administration of semantic relationship types within thesaurus concepts, ease of navigation among interconnected terms, extensive search capabilities, multiple presentation displays of concepts and their context and more. THEMAS can be adjusted to fit the needs of any domain of research, through customizable system configuration options for: the activation / deactivation of integrated consistency controls, the user interface language, the thesaurus dominant language, the set of translation languages, the customization of graphical representation and so on. The workflow control offered by the system harnesses well defined user roles in order to facilitate the orderly evolution of the managed thesauri. It allows for the collection of knowledge from a large number of users, while smaller groups of users with domain expertise in the target thesaurus can be assigned responsibility for the approval, correction or rejection of any contribution, thus ensuring data correctness and thesauri consistency. Thesauri data – either as a whole thesaurus or as a result of an arbitrary search – are made available to users online and all thesauri data are exportable in machine-readable form in order to enable their easy integration into diverse information systems deploying thesauri. The system provides XML import, export, and SKOS export, and can also provide on demand SKOS import. The internal schema used is generally more detailed and flexible than SKOS.

Target Domains

THEMAS targets any group or community (in areas like library science, biology, medicine etc.) that needs to establish and maintain thesauri, taxonomies, or domain specific terminology.
The senior members of the THEMAS development team have **extensive experience** in thesaurus management projects going back to 1998. Some of the notable projects run by the team include: SIS-TMS, a multi-lingual thesauri management and development system, Aquarelle, an information system managing distributed multimedia information of cultural heritage, Semantic Index System (SIS), a tool for describing and documenting large evolving varieties of highly interrelated data, concepts and complex relationships. These projects have been developed in collaboration with a number of internationally renowned organizations including Getty Research Institute, English Heritage, the Greek National Centre for Documentation. Recently, we are also leading the thesaurus management working group of the DARIAH European Research Infrastructure a collaboration of 17 European countries aiming at the development of infrastructure for digital research.

THEMAS was developed according to the principles that were developed and evolved during the aforementioned projects. This ensures that future development work will allow THEMAS’ extension with useful functionalities supported by the underlying model such as management of thesauri interrelationships, ad-hoc presentations of arbitrary views of the network, release management etc.

THEMAS is therefore a unique tool for the analysis of the logical structure and consistency of thesauri and a world class solution for consistently managing a set of correlated terminology resources for classification and data access in a distributed environment.

The software itself is offered as an Open Source solution. Our experienced team offers consulting, maintenance, migration, integration and adaptation service to clients upon request and at standard labour rates.

**More information** on the system is available at: [http://www.ics.forth.gr/isl/THEMAS](http://www.ics.forth.gr/isl/THEMAS)

**Demo video** of THEMAS user interface and features is available at: [http://www.ics.forth.gr/isl/THEMASDemo](http://www.ics.forth.gr/isl/THEMASDemo).