



## SIS - TMS

### Thesaurus Management System

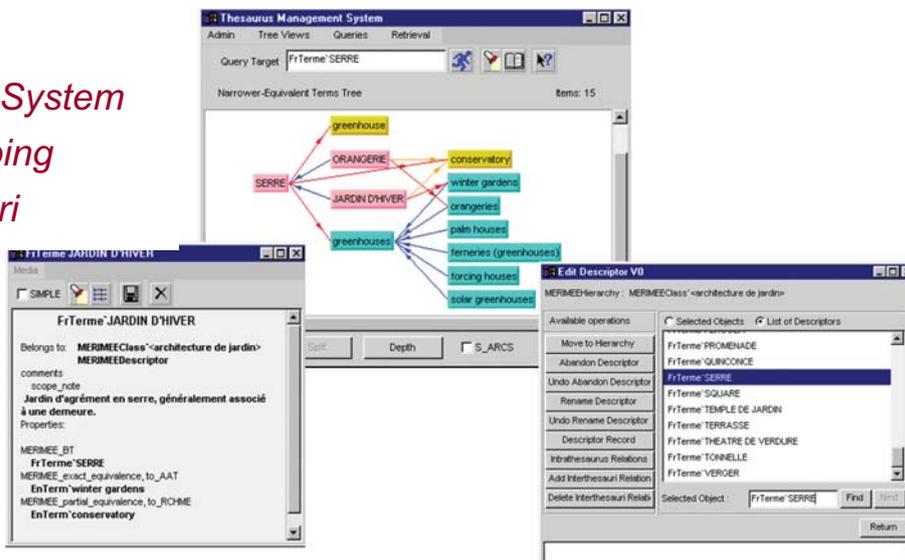
#### A system for developing multilingual thesauri

The SIS-TMS Thesaurus Management System is a tool for developing multilingual thesauri. The main features of the SIS-TMS are its capability to store, develop and access multiple thesauri and their interrelations under one database schema, to create any relevant view thereof and to specialize dynamically any kind of relation into new ones. It has several innovative features. It allows to be maintained multiple, multilingual thesauri and their interrelations in one logical database.

Different teams can cooperatively maintain multiple systems of semantic relations on a shared body of terms and concepts. Moreover, user groups may specialize the semantics of thesaural relationships and add custom fields.

The graphical user interface allows for unconstrained navigation within and between different thesauri. It supports predefined queries and graphical views in order to identify concepts for cataloguing or querying, identify translations or equivalent expressions for information access in a heterogeneous environment and, control the quality and the logical consistency of a system of inter-linked thesauri. These distinct features of SIS-TMS equip field researchers with an elegant visual tool for studying the discrepancies in the structure of different thesauri. Such structural discrepancies usually originate not only from scope or viewpoint diversification but also from cultural differences.

The SIS-TMS server can be integrated in a distributed, heterogeneous environment. As a discrete component, it can eliminate cumbersome implementation of thesaurus management features in collection databases and library systems through its Application Programming Interface.



It further allows automatic term expansion and translation in a distributed access environment. This use requires consistency of the equivalence relations established between thesauri. The means of consistency control provided are a unique feature of SIS-TMS.

The SIS-TMS schema is based on the principles of the ISO 2788 and ISO 5964 standards for monolingual and multilingual thesauri. It is the outcome of co-operation with cultural organizations such as the Getty Information Institute, the user group of the European project AQUARELLE and others.

More details about the system can be found at:  
<http://www.ics.forth.gr/isl/r-d-activities/sis-tms.html> and complete documentation at:  
<http://www.ics.forth.gr/isl/manuals/manuals.html>

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### **INFORMATION SYSTEMS LABORATORY (ISL)**

*The Information Systems Laboratory combines expertise in knowledge representation and reasoning, database systems, net-centric information systems, and conceptual modelling. Its principal research challenge is to succeed in the transition from traditional information systems, such as information retrieval systems, database and workflow management systems, to semantically rich, large-scale, adaptive information systems. Such systems are characterised by large-scale semantic interoperability, massive distribution, and high level autonomy and self-adaptation.*

*Besides conducting theoretical work on the above issues, ISL carries out applied research in a number of application domains, including cultural informatics, biomedical informatics, e-learning, e-commerce and IT security. Work in these domains has a strong interdisciplinary character, since it includes the aspect of understanding and modelling the respective domain through an appropriate conceptualisation. Overall, ISL aims to provide enabling technologies for the emergence of the information society and the knowledge economy.*

### **CENTER FOR CULTURAL INFORMATICS (CCI)**

*The Centre for Cultural Informatics (CCI) brings together skills in knowledge representation, ontology engineering, knowledge organisation systems, database technology and web technology with expertise in archaeology, museum documentation and management, site and monument management, art conservation, archives and libraries, thesaurus and dictionary management and other cultural disciplines.*

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