



TEN Competence

Building The European Network for Lifelong Competence Development

WP5 – KRSM system

- Partners

- Giunti Interactive Labs (GILABS, WP leader)
- Software de Base S.A. (Altran)
- University of Hannover (UHANN - L3S)
- Institut Europeen d'Administration des Affaires (INSEAD)
- Sofia University (SU)



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Overview

- **Objective**

The central need addressed by TENCompetence is to provide ubiquitous and lifelong adapted access to facilities that support the creation, storage, use and exchange of formal and informal knowledge and learning resources



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Overview

- **Scope**

To research and develop innovative methods and technologies for the creation, storage, use and exchange of **knowledge resources** related to lifelong competence development.”



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Overview

- **Tasks**

- Research on models and methods for KRSM
- Develop scenarios and use cases
- Propose KRSM system architecture
- Develop KRSM prototype
- Evaluate the usability of KRSM system



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Models and methods for KRSM

- **Knowledge Resources Taxonomy**

The goal of this taxonomy is to identify the main types of knowledge resources supported by the TENCompetence framework, stored in the TENCompetence repository, and used by the Knowledge resource sharing and management (KRSM) component.

The KRSM will be able to work mainly with knowledge resource types contained in this taxonomy. Also, for each such knowledge resource type, a set of available tools for editing will be maintained.



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Knowledge Resources Taxonomy

- Picture / Graphics
- Movie / Video
- Audio
- Animation
- Multimedia presentation
- Digital repository
- User
- Unit of Learning
- Learning Object
- Content Package
- (LD) Template – Chunk
- (QTI) Test



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Knowledge Resources Taxonomy

- Unit of Assessment
- Examination
- Check List
- Practice exam
- Experiment
- Interview
- Observation
- Competence standard
- Curricula standard
- Training programmes standard
- Competence Development Programme
- Learning path



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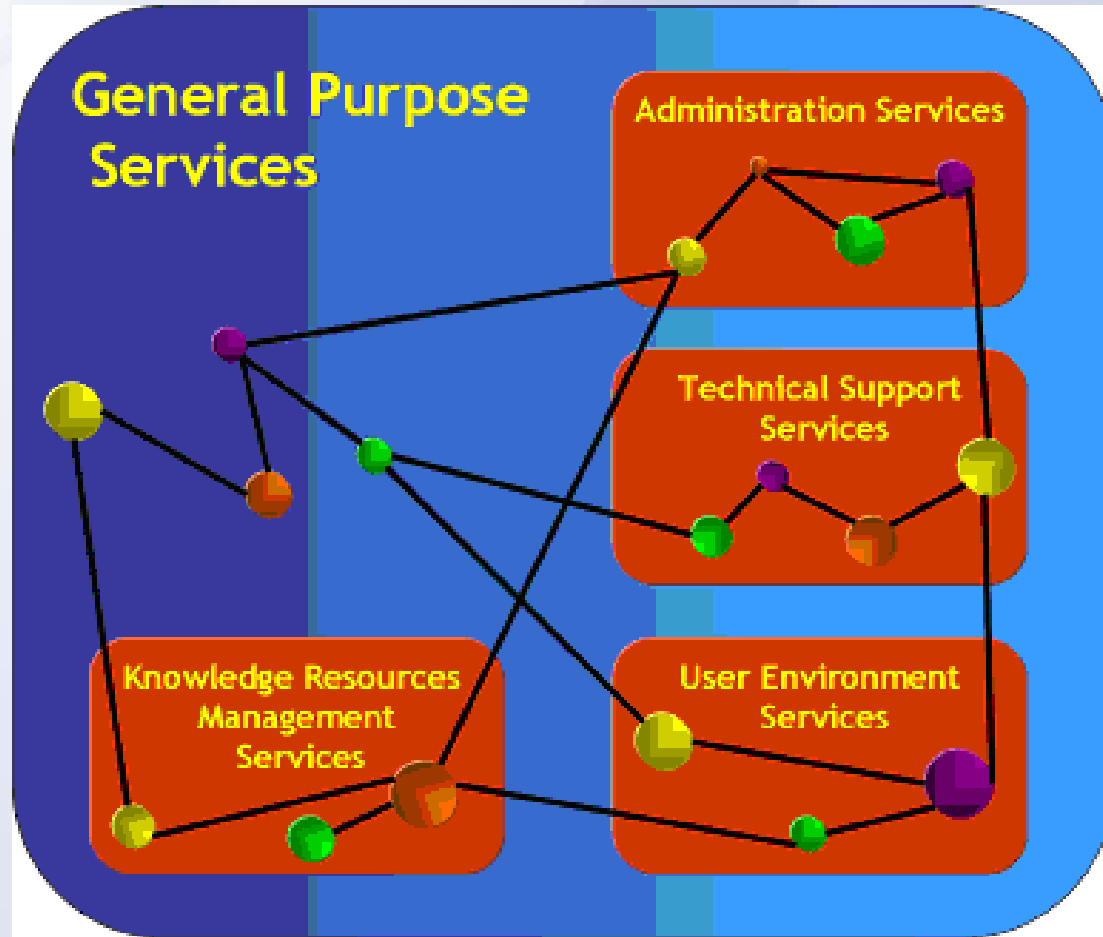
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Taxonomy of TENCompetence Services

- There are five major groups of services according to their purpose:
 - general purpose services
 - administration services
 - technical support services
 - knowledge resources management services
 - user environment services



Taxonomy of TENCompetence Services



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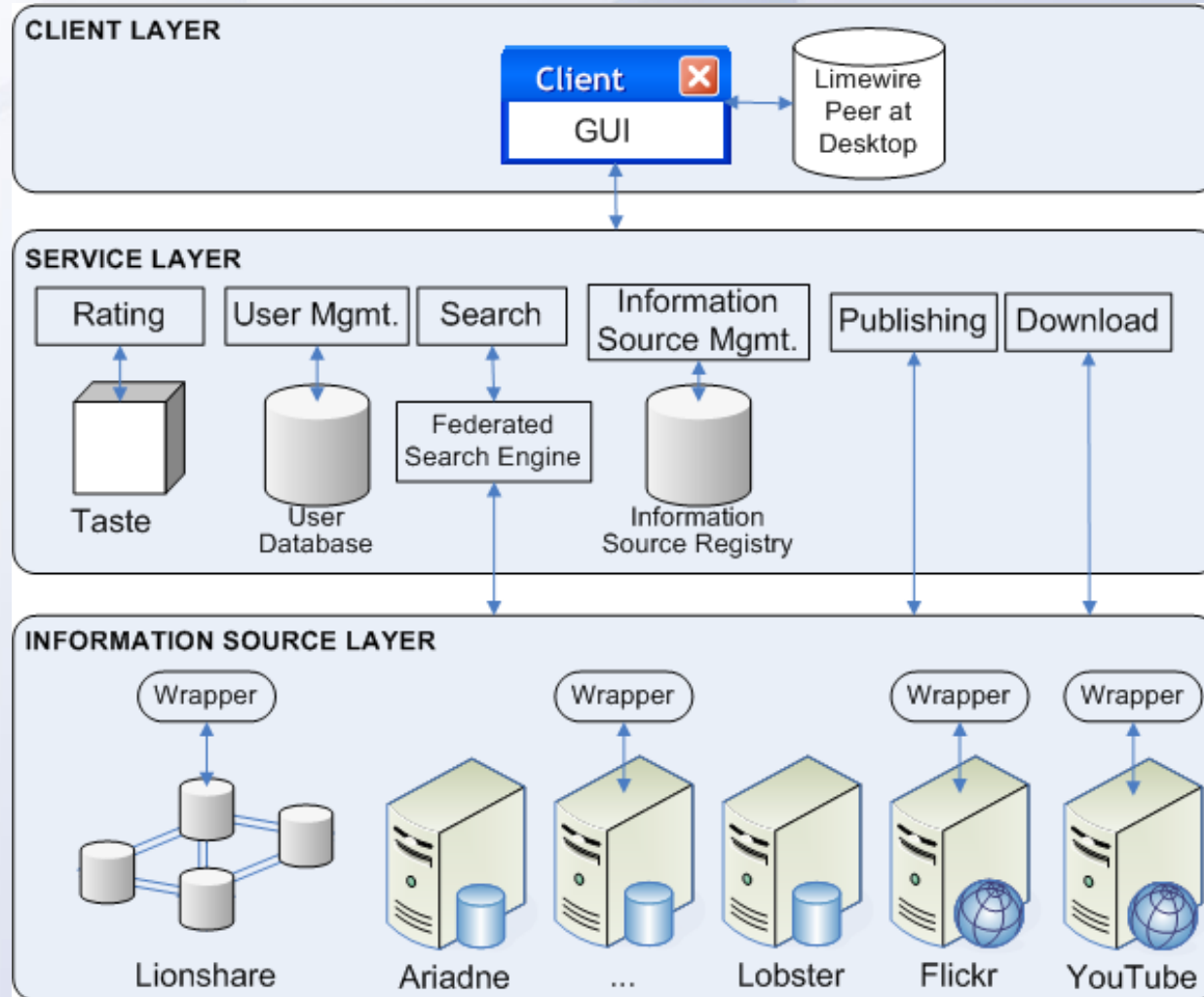
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Use Cases

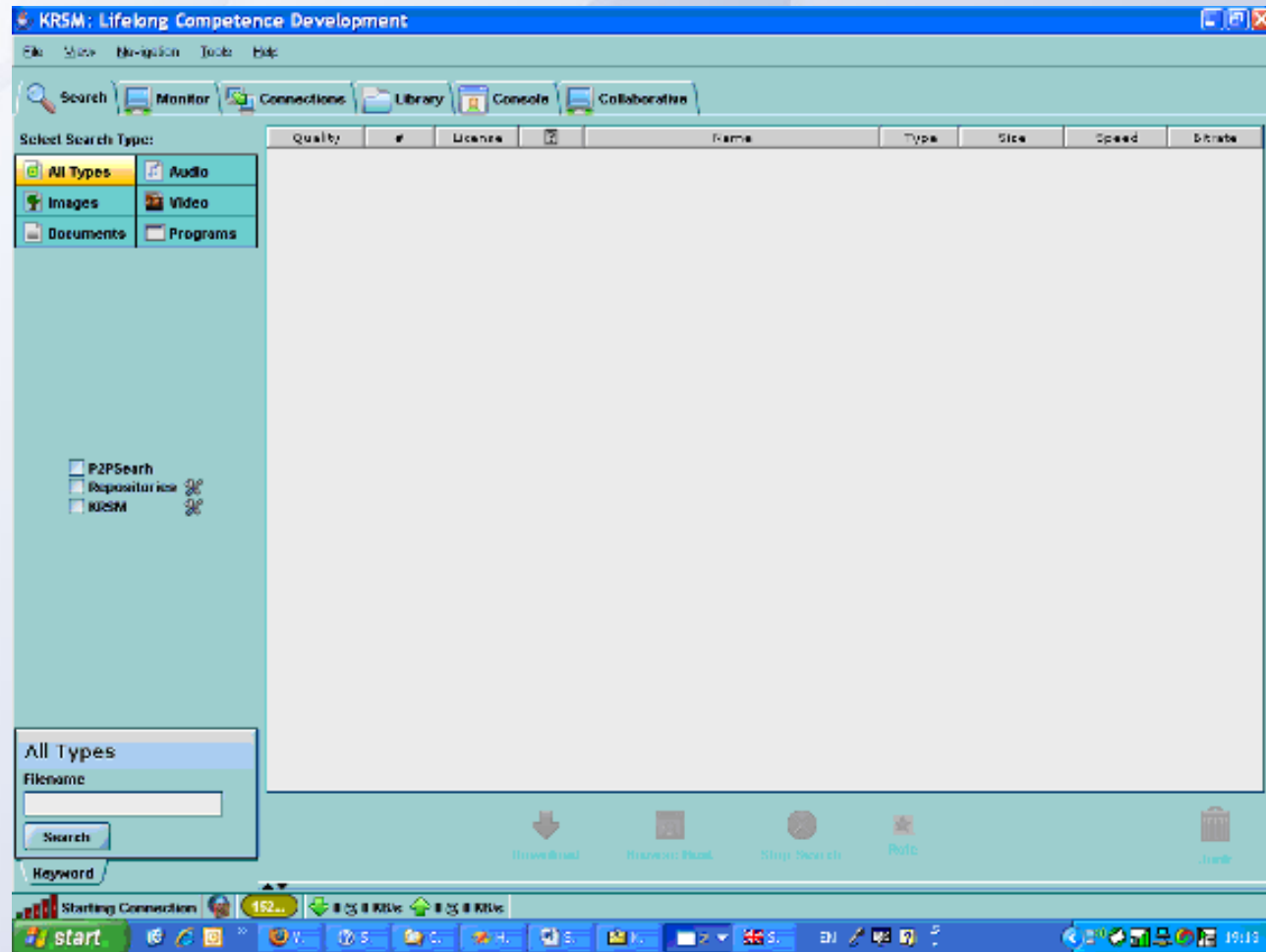
- **Authoring**
 - *Create a knowledge resource*
 - *Delete of a knowledge resource*
 - *Edit a knowledge resource*
 - *Import a knowledge resource*
 - *Export a knowledge resource*
- **Sharing**
 - *Share a knowledge resource*
 - *Set access privileges to a resource*
 - *Validate user privileges*
- **Storing**
 - *Store a knowledge resource*
 - *Add a new repository*
- **Access and Usage**
 - *Discover resources*
 - *Browse resources*
 - *Search resources*
 - *Access (retrieve) a resource*
 - *Rate a quality of a resource*



KRSM Architecture



KRSM Prototype



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KRSM Prototype

KRSM: Lifelong Competence Development

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P2PSearch
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 KRSM

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KRSM Prototype

KRSM: Lifelong Competence Development

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Evaluation of KRSM prototype

- **Objectives**
- To check the quantity and complexity of the system, identifying clearly new developments and re-usability of existing components;
- To check the quality of the software system;
- To check the impact of the system (what is the added value)
- To check to what extent the KRSM components meet the functional requirements of the system.



Future work

- Model the relations among resources and explore new discovery concepts
- Review of web KMs tools
- Design and develop the KRSM tools and services
- Evaluation of the models of interaction and their usability



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