KnixSOM Method for Information Resource Management

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KnixSOM is an alternative method for information resource management. KnixSOM is a method for organizing metadata based documents into a meaningful maps for exploration and search. KnixSOM is based on the SOM (Self-Organizing Map) algorithm that is used to automatically organize the documents onto a plane so that contently related documents appear close to each other.

Document maps are constructed by using SOM_PAK, a non-commercial software package developed at Helsinki University of Technology in Laboratory of Computer and Information Science. An interface written in JAVA2 applets is used to control the programs in the SOM_PAK. Document map is automatically created and converted into generic XML format and into SVG for visual presentation.

KnixSOM is connected to a Knixmas database (part of Knixmas project, EU-Inco N 977113), which is a relational model database implemented in Oracle SQL server. The database contains metadata instances about research documents, so that each document is processed as an independent entity that has no relation to other document metadata instances. The document metadata is organized into groups and elements according to the Dublin Core document metadata specification.