Knowledge Index Manager

Jean Delahousse and Pascal Auillans

Mondeca (http://www.mondeca.com)

1 Short Description

Mondeca is the editor of KIM[1], a software solution for content and knowledge organization, which allows companies to: access quickly and precisely data and documents available in the enterprise and/or on the Web; federate scattered document resources; index and organize document content managed in different applications; build knowledge bases; customize access to information according to each user profile.

2 Areas of Application

Mondeca software is used for legal, medical, technical documentation, expert database, human resources management, marketing survey, mapping of financial structures, cultural publications, sports database. . . In all those applications KIM acts as an organizer and navigation tool to access external documents and data. Hierarchical and non-hierarchical semantical links between Topics of the index enable to build hierarchical organization of information but also of knowledge database. Organization vocabulary is customized depending on the needs of the users.

Mondeca largest clients include such companies as EDF, TNO-FEL (Dutch center for applied research), Supercomputer Center of San Diego University.

3 Layout Algorithms and Layout Features

Hierarchical drawings lead to the conception of a new orientation driven planarization algorithm which produces an upward drawing with at most one bend per edge. This polynomial algorithm may probably be enhanced into a linear time one by a suitable modification of our planarity algorithm, relaxing the DFS condition on the traversal tree.

4 Architecture

The software relies on three main components : Information Network Repository, Information Network Navigation Engine for edition, filtering and publication, Graphic Server[2] built on Pigale library from EHESS.

---

[1] free demo at
http://semantopic.mondeca-publishing.com/semantopic/pregen/html/anonymous/
[2] freely available at ftp://pr.cams.ehess.fr/pub/pigale.tar.gz

4.1   Programming Language

C++, Java (EJB, J2EE), Pliant[3] and XML (SVG, Topic Maps, XSLT).

4.2   Operating System

Windows NT, Linux/Unix with J2EE application server and Oracle.

5   Interfaces

XML for publication, XTM and RDF (available 2002) for database interchange.
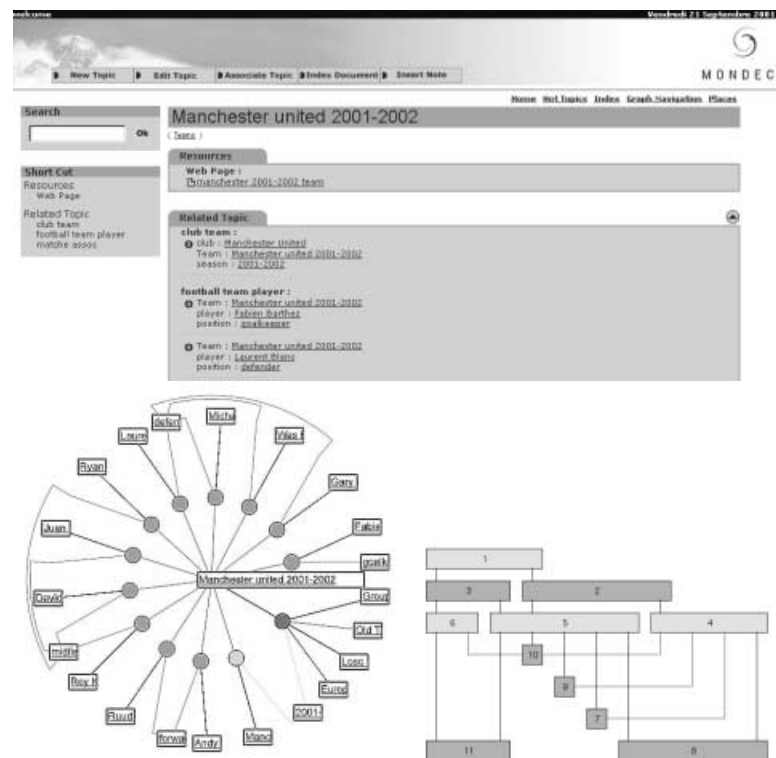
6   Screenshots

Fig. 1. Screenshot of the centered topic screen, of a hierarchical and a polar drawing.

---

[3] http://pliant.cx