FP6-027705 NEPOMUK Project Synopsis
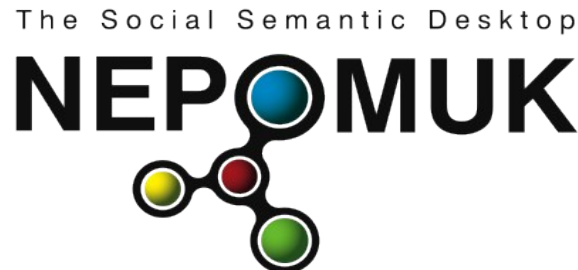
NEPOMUK – the Social Semantic Desktop

Networked Environment for Personal Ontology-based Management of Unified Knowledge

NEPOMUK brings together researchers, industrial software developers, and representative industrial users, to develop a comprehensive solution for extending the personal desktop into a collaboration environment which supports both the personal information management and the sharing and exchange across social and organizational relations. This solution is called the *Social Semantic Desktop*.

1 Impact

NEPOMUK addresses the every-day activities of individual knowledge workers.

The social semantic desktop will support the *personal* aspects of knowledge work by developing tools for knowledge articulation and visualization, the interfaces and data structures of the personal semantic web, and integration of personal work process support. It will support the *social* aspects of communication, distributed collaboration, and social exchange by providing solutions for distributed search and storage and of semantic social networks and knowledge exchange.

NEPOMUK aims at maximum possible uptake by concentrating on integrative and open architectures and actively promoting community involvement.

The project delivers a freely available open-source framework for social semantic desktops, and a rich set of standardized interfaces and reference implementations. The project result will form the basis for commercial exploitation via consulting activities (introducing the new possibilities of knowledge work support to users), tool development (integrating new services into the framework), and application-specific solution development (adapting the social semantic framework to the needs of particular or branch-specific industrial application scenarios).

2   NEPOMUK main innovations

Human knowledge work mainly consists of the reception, interpretation and structuring of information, the explicit articulation of thoughts in suitable representations (like texts and pictures), and the sharing, exchange and discussion of such resources with other people. The way people proceed in this is heavily influenced by the tools they use: The personal workspace – and the personal computer in particular – support and reflect the individual ways of information processing, thought articulation, and knowledge sharing across social and organizational networks.

NEPOMUK intends to realize and deploy a comprehensive solution – methods, data structures, and a set of tools – for extending the personal computer into a collaborative environment, which improves the state of art in online collaboration and personal data management and augments the intellect of people by providing and organizing information created by single or group efforts. This solution is called the *Social Semantic Desktop*. This enhanced personal workspace (the Desktop) will be Semantic since it will give information a well-defined meaning, making it processable by the computer. It will be Social since it will support the interconnection and exchange with other desktops and their users.

Main visible results of NEPOMUK are

1. the architecture and implemented middleware of the Social Semantic Desktop, published as open-source software and where relevant submitted to semantic web standardization processes,

2. an active scientific and user community that adopts the results of NEPOMUK and continues to extend them to their needs,

3. a set of reference solutions in use at SAP, PRC, or Institut Pasteur, and a body of documented experience and methodological know-how gained in their application domains.

3   More details

More details on NEPOMUK are found on the project website http://nepomuk.semanticdesktop.org

NEPOMUK is part of the overall scientific and technical vision gathered under http://www.semanticdesktop.org

4   Administrative details

Start Date – End Date	01. January 2006 – 31. December 2008
Duration	36 months
Total EU funding	11.500.000 EUR

5 NEPOMUK project partners

- German Research Center for Artificial Intelligence – DFKI GmbH, Kaiserslautern, Germany
- International Business Machines (IBM) – IBM Product Distribution Ltd., Ireland
- SAP AG, Germany
- Hewlett-Packard Galway Ltd, Galway, Ireland
- Thales SA, France
- PRC Group – The Management House S.A., Greece
- EDGE-IT, France
- Cognium Systems, France
- National University of Ireland, Galway, Ireland
- Ecole Politechnique Fédérale de Lausanne, Switzerland
- Forschungszentrum Informatik an der Universität Karlsruhe, Germany
- L3S Research Center, Hannover, Germany
- Institute of Communication and Computer Systems of the National Technical University of Athens, Greece
- Kungliga Tekniska Högskolan, Sweden
- Università de la Svizzera Italiana, Switzerland
- Irion Management Consulting GmbH, Germany

6 Contact persons

For further information please contact:

Dr. Ansgar Bernardi,

DFKI GmbH, Trippstadter Str. 122, 67663 Kaiserslautern, Germany

Tel. +49-631-20575-105

Email: info@nepomuk.semanticdesktop.org