

An Open Collaborative Virtual Archive Environment

Objectives

The objective of CYCLADES is to develop advanced Internet accessible mediator services to support scholars both individually and as members of networked communities when interacting with large interdisciplinary electronic (e-print)

archives. Such archives are important vehicles for the dissemination of preliminary results and non-peer reviewed "grey literature". Most archives focus on information dissemination within disciplinary or institutional communities. However, scientific research is now oriented towards an interdisciplinary approach. Scholars and scientists thus need to easily retrieve information from diverse sources, and to communicate and collaborate across traditional community boundaries. CYCLADES aims at supporting the transition of e-print systems into genuine building blocks of a transformed scholarly communication model by developing a set of leading edge technologies providing innovative methods for information access, dissemination, sharing and collaborative work.

The proposed open archives environment consists of two components: the archives and the services. CYCLADES will base the development of the service environment on the US Open Archives initiative (OAI) specifications. In particular, a core set of cross-archive value-added services will be developed to constitute a federation of independent but interoperable services. According to this approach, a service provides a functionality and can either work independently or can communicate and collaborate with other services to offer a new value-added service. The Service Environment will provide OAI compliant functionality.

Key features

The main CYCLADES services are:

Access: supports harvest-based information gathering, plus indexing and storage of gathered information in a local database.

Query and Browse: develops plans for the execution of user queries. An ad-hoc or a profile-based user query will be decomposed into more simple sub-queries to be sent to the Access service for execution. The results of the sub-queries are fused and returned to the user. A browse facility is also supported.

Collection: provides mechanisms for dynamically building meaningful collections.

Personalization: supports information personalization on the basis of single user profiles, and of an individual's behaviour as a member of a community.

Recommendation: provides recommendations to satisfy information needs of a user by exploiting both user and community profiles.

Collaborative Work: supports collaboration between members of virtual communities. Community working areas are created to use the OAI content in collaborative work.

Partners

CNR-IEI, Consiglio Nazionale delle Ricerche-Istituto di Elaborazione dell'Informazione, Italy

and Mathemetics, France



ICS- FORTH, Foundation for Research and Technology, Institute of Computer Science, Greece

Fraunhofer Gesellschaft, Institute for Applied Information Technology , Germany

University of Dortmund, Department of Computer Science, Chair VI, Information Retrieval Group, Germany













Duration

From 1 February 2001 to 31 July 2003.

Budget

Overall budget: 2 151 523 Euro

Contribution from the European Commission: 1 200 555 Euro



Contact

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