



DELOS Network of Excellence on Digital Libraries with a focus on the Preservation Cluster

Andreas Rauber

Vienna University of Technology

<http://www.ifs.tuwien.ac.at/~andi>



Outline

- Principles of NoE's in FP6
- DELOS Overview
- DELOS Clusters
- DELOS Preservation Cluster



EU IST FP6 and NoE's

- 6 Framework Program IST
- 2 new measures:
 - IP: Integrated Project
 - NoE: Network of Excellence
- NoE's:
 - Integrate research
 - Grant to budget



DELOS Overview

- NoE on Digital Libraries
- Cultural heritage
- Builds on FP5-DELOS
- January 2004, 4 years duration
- Cost estimate: 15.7 Mio EUR
- EU contribution: 6 Mio EUR
- 47 partners, 13 countries
- 287 Researchers, 143 PhD Students



DELOS overview (2)

- Administrative Coordinator:
Bruno LeDantec, ERCIM, France
- Scientific Coordinator:
Costantino Thanos, CNR, Italy
- Advisory Board: 5 external experts
- Scientific Board: WP Coordinators
- WP Steering Committee per Cluster
- Virtual D-Lib Center
- Members General Assembly



DELOS Clusters

- **DLA:** Digital Library Architecture
- **IAP:** Information Access and Personalization
- **A/V-NTO:** Audio-Visual and Non-Traditional Objects
- **UIV:** User Interfaces and Visualization
- **KESI:** Knowledge Extraction and Semantic Interoperability
- **PRESERV:** Preservation
- **EVAL:** Evaluation



Cluster 1: Digital Library Architecture

- Coordinator:
Hans-Jörg Scheck, ETH Zürich, Switzerland
- Goal: DL infrastructure that is
scalable, customizable, and adaptive
- 3 Focus areas:
 - Service-Oriented Architectures
 - Peer-to-Peer Data Management
 - Grid-Computing Middleware



Cluster 2: Information Access and Personalization

- Coordinator:
Yannis Ioannidis, Univ. of Athens, Greece
- Goal: establish framework for information access and personalization
- 3 Focus areas:
 - Information Access:
interaction with a single information provider
 - Information Integration:
interaction with multiple information providers
 - Personalization:
customization of information and interaction to the user



Cluster 3: Audio-Visual and Non-Traditional Objects

- Coordinator:
Stavros Christodoulakis, TU Crete, Greece
Alberto DelBimbo, Univ. Firenze, Italy
- Goal: research on new applications for DLs with audio-visual and non-traditional objects
- 3 Focus areas:
 - Metadata capture multimodal information extraction
 - Interaction with audio-visual DLs
 - Management of audio-visual content, storage, retrieval



Cluster 4: User Interfaces and Visualization

- Coordinator:
Tiziana Catarci, Univ. degli Studi di Roma "La Sapienza", Italy
- Goal: DLs as information-enriched environments
- 2 Focus areas:
 - User requirements for diff. stakeholders
 - User interface and visualization design



Cluster 5: Knowledge Extraction and Semantic Interoperability

- Coordinator:
Liz Lyon, UKOLN, Univ. of Bath, UK
- Goal: application of vocabularies for object description and cross-domain integration
- 4 Focus areas:
 - Open access to digital repositories of data and information
 - Provenance of data and information
 - Semantic Web, ontologies, and metadata schema registries
 - Knowledge extraction



Cluster 5: Preservation

- Coordinator:
Seamus Ross, HATII, Univ. Glasgow, UK
- Goal: Develop methods to ensure long-term preservation and accessibility of digital objects
- 3 Focus areas:
 - Digital preservation testbed
 - File formats, classification, and typologies
 - Document functionality and behaviour metrics



Cluster 6: Evaluation

- Coordinator:
Norbert Fuhr, Univ. Dortmund, Germany
- Goal: Establish evaluation models and methods for DLs
- 2 Focus areas:
 - Develop evaluation models, methods, and testbeds
 - Support evaluation initiatives, such as
CLEF: cross-language evaluation forum
INEX: initiative for the evaluation of XML retrieval



Preservation Cluster: Organization

■ Partners:

- HATII, Univ. of Glasgow, UK (*Seamus Ross*)
- IFS, Vienna Univ. of Technology, Austria (*Andreas Rauber*)
- University of Urbino, Italy (*Maria Guercio*)
- University of Cologne, Germany (*Manfred Thaller*)
- Austrian Academy of Sciences, Austria (*Dietrich Schüller*)
- UKOLN, Univ. of Bath, UK (*Michael Day*)
- National Archives, The Netherlands (*Hans Hofman*)

■ 1st Workshop in Vienna, Austria , May 12 2004



Preservation Cluster: Tasks

- Digital Preservation and Testbed Forum
- Designing, Deploying and Managing Digital Repositories
- File Formats, Classification, and Typology
- Documentation of Functionality and Behaviour Metrics
- Enabling the Integration of Digital Preservation Architectures



Preservation: Task 1

- Digital Preservation Testbed Forum
- Coordinator:
Hans Hofman, National Archives, Netherlands
- Actions:
 - Establish a framework for a digital preservation testbed environment
 - Produce metrics for testing and validating digital preservation strategies
 - Establish mechanisms for ensuring comparability between testbed environments, including a testbed test data set



Preservation: Task 2

- Designing, Deploying, and Managing Digital Repositories
- Coordinator:
Seamus Ross, HATII, Univ. Glasgow, UK
- Actions:
 - Contribute to development of digital repository frameworks and mechanisms for validating suitability of repository implementations
 - Evaluate systems and storage models for digital repositories



Preservation: Task 3

- File Formats, Classification, and Typology
- Coordinator:
Maria Guercio, Univ. Urbino, Italy
- Actions:
 - Contribute to the development of file format registries and mechanisms for their use
 - Define relationships between file format types and preservation methods
 - Assess the viability of producing generic metrics to measure viability of preservation approach



Preservation: Task 4

- Documentation of Functionality and Behaviour Metrics
- Coordinator:
Andreas Rauber, VUT, Austria
- Actions:
 - Define framework for documenting behaviour and functionality
 - Develop an overview of attributes of functionality and behaviour to be represented and mechanisms for representing them
 - Assess the viability of automating the process of functionality and behaviour verification



Preservation: Task 5

- Enabling the Integration of Digital Preservation Architectures
- Coordinator:
Manfred Thaller, Univ. Cologne, Germany
- Actions:
 - Develop the requirements for a preservation functionality modelling tool
 - Develop method for modelling preservation functionality



Conclusions

- DELOS NoE on Digital Libraries
- Jan. 2004 - Dec. 2007
- 7 Clusters covering the broad scope of Digital Library research
- Integrating Research within Europe
- Establish cooperation with additional partners inside and outside Europe

<http://www.delos.info>