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

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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

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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 Studii 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 accessability 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