Access IT Training

- Two year European project funded under the Culture 2007-13 programme
 - May 2009 April 2011
- Work in the project will lead to development of necessary skills and competences to:
 - digitize cultural works
 - aggregate them
 - and make available on-line
 - in a way which is compliant with Europeana standards and infrastructure

- Access IT will initiate work to resolve those problems
 - on a sustainable basis
 - in the three target countries
 - Greece
 - Serbia
 - Turkey
 - by transferring expertise and successful approaches in use elsewhere in Europe
 - to create centres of competence
 - by creating a practical model for training and implementation.

- will deliver a unique package of practical training and skills development, supported by clear guidance
- to enable smaller, local cultural organizations to maximize the opportunities provided by the new technologies
 - to most effectively deliver and disseminate arts and cultural offerings to the citizens of Europe
- PSNC, represented by its Digital Libraries Team, is a main technical/knowledge partner in this project

Access IT project partners:

- MDR Partners (UK) the coordinator
- Veria Central Public Library (Greece)
- City Library of Belgrade (Serbia)
- Hacettepe University (Turkey)
- Poznan Supercomputing and Networking Center (Poland)

Poznań Supercomputing and Networking Center

- Established in 1993
- Affiliated by the Institute of Bioorganic Chemistry, Polish Academy of Sciences



- Currently
 - 5 divisions
 - 200 employees
- Participated in almost 50 EU-funded projects, 5 as coordinator, currently around 15 ongoing projects



Poznań Supercomputing and Networking Center

- High performance computing center
- Center for security of computer networks and systems
- Poznań city network operator (POZMAN)
- Operator of the Polish Optical Internet PIONIER network
- Research and development center in:
 - Next generation networks
 - Grid systems and high performance computing
 - Portals and content management systems
 - PSNC Network Services Department
 - PSNC Digital Libraries Team (<u>http://dl.psnc.pl/</u>)





- Ongoing projects
 - dLibra software for digital libraries
 - Developed since 1999
 - The most popular digital library software in Poland
 - Around 40 publicly available digital libraries
 - Up to date list available at <u>http://dlibra.psnc.pl/biblioteki/</u>
 - Recently deployments in Sweden (Goeteborg) and Ukraine (Lviv)
 - Project website: <u>http://dlibra.psnc.pl/</u>

- Ongoing projects
 - dMuseion software for digital museums
 - Developed since 2009
 - Project in the prototype phase
 - Close cooperation with National Museum in Warsaw
 - Project website: <u>http://dmuseion.psnc.pl/</u>

Ongoing projects

- Digital Library of Wielkopolska
 - First digital library based on the dLibra software
 - Available since 2002/10/01
 - The largest Polish digital library (~98 ooo of digital objects)
 - Maintained by <u>Poznań Foundation of Scientific Libraries</u> and PSNC
 - Content provided by many different institutions (libraries, archives, museums, ...) from the Wielkopolska region
 - <u>http://www.wbc.poznan.pl/</u>

Ongoing projects

- PIONIER Network Digital Libraries Federation
 - Aggregates metadata from all Polish digital libraries compatible with the OAI-PMH protocol
 - Currently around 50 digital libraries regional and institutional
 - Up-to-date list at <u>http://fbc.pionier.net.pl/owoc/oai-hosts</u>
 - Allows to search the aggregated metadata of digital objects (~345 000 objects) and digitisation plans
 - Exposes the aggregated metadata via the OAI-PMH protocol for projects like Europeana
 - Available since 2007/06
 - Website: <u>http://fbc.pionier.net.pl/</u>

Ongoing projects

- EuropeanaLocal
 - eContentPlus project
 - Objective: "EuropeanaLocal will work with the EDL Foundation to establish efficient and sustainable processes through which local and regional institutions can easily make their content available to Europeana, adopting and promoting the use of its infrastructures, tools and standards"
 - Duration: June 2008 May 2011
 - Project website: <u>http://www.europeanalocal.eu/</u>
 - PSNC role in the project:
 - Regional coordinator for Poland
 - Project Management Board member

- Ongoing projects
 - ACCESS IT
 - Culture 2007-2013 project
 - Objective: You know it already ^(C)
 - Duration: May 2009 April 2011
 - Website coming soon...
 - PSNC role in the project:
 - Main "knowledge partner"



Digital Libraries in Poland

- Overall number of digital objects
- \checkmark around 345 thousands

Number of active digital libraries:

✓ around 50

+ **several other digital libraries** in the phase of planning, configuration or initial content uploading

Number of cooperating institutions:

 Several hundreds of libraries, museums and archives





Types of digital objects

- 61% newspapers/magazines
- 6% books
- 33% other...
 - Postcards
 - Photos
 - Articles
 - Old prints
 - Drawings
 - Maps

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Timeline for objects from Polish digital libraries



- And why are we here this week?
 - The training workshop should establish a corpus of expertise for at least one centre of competence in each country and participants will be selected by the co-organising partner in each country with that end in view

And why are we here this week?

- The group created by this training will, working in cooperation with the co-organising Partners, develop, translate and test an adapted version of the training and support resources which can be used at local level in institutions seeking to create and share digital cultural content
- The experts trained at the training workshop will act as an ongoing resource and online reference point (centre of competence) for colleagues in the cultural sector

The main problem challenge

- How to fit something that can be a subject of master studies into a three day training (in such nice place)?
 - That is why the training is backed-up with the list of supporting on-line resources
 - That is why the training mentions the basics and indicates the directions of further work that should be done by trainees
 - We hope that you will hear something interesting from us in the following days
 - We are open to any remarks and suggestions how this tutorial should be enhanced
 - Remember: it will be your support resources

- What is all this digitisation about and which objects should be digitised?
 - This introductory part of the tutorial is aimed to present a general overview of the digitization process. We will present exemplary organizational models for digitization which can be adapted to suit the needs of most cultural heritage institutions. This part will also introduce a set of criteria used to choose which objects should be digitized in the first place. Digital-born material will be also considered. We will also mention Intellectual Property Rights (IPR) related issues because this is one of the factors which have to be considered in the digitization planning and further use of digitized objects. The problem of coordination of large scale digitization process done be similar institutions will be also addressed.

How to digitize objects?

This part covers wide variety of issues associated with digitization of analogue objects and further processing of their digital representations. In the first place the tutorial will present recommendations coming from various European projects and networks (e.g. Minerva). We will briefly present digitization hardware and software currently used in Polish digital libraries (scanners, cameras, OCR/graphical software etc.) to give an insight in a vast variety of possible solutions which might be used. This part of the tutorial is also aimed to formulate factors which determine what digital format should be used, depending on available resources. We will also introduce the distinction between presentation and preservation form of digital resources.

- How to create a digital repository?
 - Digital libraries and repositories can be built on top of various software solutions including proprietary and open source systems. This part of tutorial will describe general overview of the functionality of such software, including self-archiving and other advanced features focused on end-user involvement. We will also present open source systems, like Greenstone or DSpace which might be used to create digital repositories. We will also describe what kind of IT/hardware infrastructure is necessary to set up a digital repository. This part of tutorial will introduce the findings of EuropeanaLocal best practice network in terms of establishing OAI-PMH enabled repository - including software package prepared by EuropeanaLocal technical partners.

How to describe digital objects?

This chapter will describe widely used metadata schemas used for diverse resources in different domains. This will give participants a broad perspective on various problems associated with creation of interoperable, high quality metadata. Some of the problems which one can encounter during the preparation of metadata include organization of digital object in collections, choice of metadata schemas for different types of resources, utilization of the most accurate vocabularies and measurement of the quality of metadata. Well structured metadata can significantly improve access to large collections, allowing the creation of tools like faceted search, multilingual hierarchies and other advanced searching and browsing capabilities.

- How objects and metadata from digital repositories can be reused?
 - This part will be focused on the automated reuse of objects and metadata from digital repositories. We will present an overview of the OAI-PMH protocol and the interaction model behind it. We will show some basic and advanced utilization scenarios with existing examples (e.g. OAlster, Manuscriptorium). We will also describe why the aggregation of metadata improves access to resources.

- How to (and why) prepare a repository for Europeana?
 - Europeana will be the most important access point to European cultural and scientific heritage. We will present an overview of Europeana goals and we will try to describe the functionality offered to its users. This part of tutorial will also reason the Europeana importance and describe possible models of cooperation with Europeana, as described in the "Europeana Content Strategy". We will also present an in depth overview of the current Europeana metadata schema (Europeana Semantic Elements) and its mapping guidelines.

- How to set up a metadata aggregator?
 - This chapter defines and describes a concept of metadata aggregator and its role in the promotion and large-scale interoperability of digital resources. We will describe existing technical solutions in this area. This part will also include a short technical demo, showing how an aggregator can be deployed and how it gathers information about objects and institutions using the OAI-PMH protocol.

- Should I know something more about digital preservation?
 - This part of the tutorial describes some advanced issues associated with long term preservation of resources. We will describe properties of the IT infrastructure which have to be satisfied in order to cope with requirements of high availability and long term preservation. This includes backup and archiving infrastructure, migration path for chosen preservation formats and integrity of preserved digital resources. Tutorial will also describe findings from various European projects like Digital Preservation Europe, which formulates a special check lists helping to answer the question, if given repository is able to store content in the long term perspective (e.g. DRAMBORA).

- Why to evaluate accessibility and usability of digital repositories?
 - This part is aimed to show how important usability and accessibility issues are, also in the context of digital repositories. We will try to describe common pitfalls and some general workarounds. We will also give a brief overview of chosen usability testing methodologies.

What comes next?

In this part we will show the most promising findings in the area of knowledge organization systems, semantic web and information retrieval. This part is aimed to show what might be done with well structured metadata and how metadata is related to concepts like Web 3.0. We will also cover some scenarios which involve user generated content and it is application in terms of social OCR, folksonomies, geotagging, rephotography etc.

And finally... the trainers for this training ③



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