Libraries in partnership with research

E(nhanced)-research and the future role and tasks of research libraries

Dr. Norbert Lossau
Niedersächsische Staats- und Universitätsbibliothek Göttingen

Academica 2008

4 November 2008,
Tartu University/Library
Topics

- Setting the Scene: e-Science/e-Research/e-Humanities and the need for new research infrastructures
- Digitisation for the Arts and Humanities: technology, collections and workflows
- Open access and Digital Repository Networks: a new digital research infrastructure
- Grid based research infrastructures and new tools
- The future role of research libraries
- Characteristics of future library services
Göttingen State and University Library of Lower Saxony

- 1734 founded
- Largest research library in the 18th century in Europe ("Library of the Enlightenment")
- Historical “National Library” for the 18th century
- Among the 5 major research libraries in Germany
- More than 4,000 visitors (only in the central Campus library)
- One department: national digitisation centre (Göttinger DigitalisierungsZentrum, GDZ)
- A leading Open Access Institution in Germany
- Nationally and internationally leading in developing digital services and information infrastructures (like Repository networks, Grid-tools for Humanities)
Niedersächsische Staats- und Universitätsbibliothek, Historische Forschungsbibliothek

Photos: Ronald Schmidt, Göttingen

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Heyne-Forschungsleesesaal, SUB Göttingen

Photos: Ronald Schmidt, Göttingen

Lossau
Niedersächsische Staats- und Universitätsbibliothek,
Zentrale Campus - Bibliothek

Photos: Ronald Schmidt, Göttingen

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Emergence of a New Science Paradigm

- Thousand years ago – **Experimental Science**
  - Description of natural phenomena
- Last few hundred years – **Theoretical Science**
  - Newton’s Laws, Maxwell’s Equations...
- Last few decades – **Computational Science**
  - Simulation of complex phenomena
- Today – **eScience or Data-centric Science**
  - Unify theory, experiment, and simulation
  - Using data exploration and data mining
    - Data captured by instruments
    - Data generated by simulations
    - Data generated by sensor networks
  - Scientist analyzes databases/files
  - Commercial and academic applications

(With thanks to Jim Gray)

Acknowledgments go to Tony Hey, VP Microsoft, 2007
e-Science

e-Science describes new ways of performing research, that are characterised by collaborative, networked generation of knowledge, widespread scientific communication and shared use of physically distributed resources and enabled through ICT-technologies.

Knowledge is not any longer only the knowledge of individuals but global, networked knowledge.

e-Science can be applied to all disciplines (e-Research).
From the presentation:

*Data behind a Publication: an astronomer’s view*

Wolfgang Voges, Max Planck Institute for Extraterrestrial Physics with contributions from Carlson, Genzel, Hasinger, Lemson, Springel, Szalay

Golm, 30 March 2006
The Virtual Observatory

Astronomer → User Interface

Middleware Layer “Virtual Telescope”

Find all old radio galaxies in the range of $0.4 < z < 0.7$ that lie within 2' of an extended x-ray source.

There are 125 galaxies with the following coordinates. Thank you for using the VO today.

Data Access Layer

Metadata Services

Archive Information Services

Compute Services

Metadata Services

Other Services

Telescopes

Simulations

Satellites

Antennas

Data

Jürgen Renn, Max Planck Institute for the History of Science, March 29, 2006
The Digital Pantheon Project, Bern, CH

http://www.karmancenter.unibe.ch/pantheon

- Cooperation of archeologists, mathematicians, art historians, computer scientists, science historians

- Goal: To carry out research about the Pantheon, collaboratively, using digital technologies and the World Wide Web

- One instrument (among others): Digital 3D Modell of the Pantheon, 540.000.000 points (9 GB data), created through laser scanning, comprises coordinates of all points and the colours of the surface
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Starting point for library activities

„What scientists/scholars really need ...“

- Comprehensive access to all relevant information sources, if possible from their desktops
- Access to specific editions of resources (e.g. Historians, Philologists)
- Intuitive tools and instruments (software services) to work with documents and data (analysis, annotation, filtering, sequencing)
- Quality, timely dissemination (publishing) of research results
- Long-term access to research results
- TIME to research!
Roles of (research) libraries

1. Guarantee open access to scientific information
2. Secure scholarly and cultural heritage and make it worldwide accessible
3. Organise, structure and network knowledge on the web
4. Secure long-term access to knowledge, incl. digital ressources
5. Act as „trendscouts“ and build up competence centres for research information infrastructures
The Göttingen Digitisation Centre (GDZ)

3 Tischscanner (A2, 300ppi Farbe=
1 Scanroboter (A3, 300ppi, ab Jul 07)
1 Buchscanner (A3, 600ppi bitonal)
2 Tischscanner (A3, 600ppi bitonal)
1 Kartenscanner (A0, 600ppi Farbe)
1 Grazer Buchwinne

Plus 1 Treventus Scan-Roboter

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Efficient workflow: the basis of mass digitisation

- Initial Development of SUB Göttingen, now partnership with the SLUB Dresden
- More than 25 libraries want to re-use GOOBI, incl. Staatsbibliothek Berlin

Technical information
- Web based
- Written in Java
- Unicode encoding
- Open source
- Reusable for several scientific-workflow scenarios
- METS based internal metadata schema (configurable)
Modular architecture of GOOBI
Why METS?
The new paradigm: connecting content

Past
Project Websites
Repositories

Present
Portal Websites
Federated Search
**Work flow status of every volume**

<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
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<tbody>
<tr>
<td>1</td>
<td>Application for a licence</td>
</tr>
<tr>
<td>2</td>
<td>inventory of the printed version</td>
</tr>
<tr>
<td>3</td>
<td>ZDB entry</td>
</tr>
<tr>
<td>4</td>
<td>library entry for the local OPAC</td>
</tr>
<tr>
<td>5</td>
<td>standardisation of the journal title</td>
</tr>
<tr>
<td>6</td>
<td>process creation (on the volume level)</td>
</tr>
<tr>
<td>7</td>
<td>creation of the Tiff-Header</td>
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<tr>
<td>8</td>
<td>scanning of the images</td>
</tr>
<tr>
<td>9</td>
<td>quality control</td>
</tr>
<tr>
<td>10</td>
<td>image post-processing</td>
</tr>
<tr>
<td>11</td>
<td>completeness check of the Zentralblatt data on the article level</td>
</tr>
<tr>
<td>12</td>
<td>import of the Zentralblatt metadata</td>
</tr>
<tr>
<td>13</td>
<td>check and revision of the bibliographic data by the tool</td>
</tr>
<tr>
<td>14</td>
<td>import of the Russian metadata</td>
</tr>
<tr>
<td>15</td>
<td>processing of bibliographic metadata on the article level</td>
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<tr>
<td>16</td>
<td>capture of the structure data (pagination recording, additional capture of missing structure data, creation of the metadata structure)</td>
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<tr>
<td>17</td>
<td>revision import Zentralblatt</td>
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<tr>
<td>18</td>
<td>final checking on the volume level and metadata release</td>
</tr>
<tr>
<td>19</td>
<td>automatic generation of the SICI</td>
</tr>
<tr>
<td>20</td>
<td>data export</td>
</tr>
<tr>
<td>21</td>
<td>import into local DMS or repositories</td>
</tr>
<tr>
<td>22</td>
<td>acknowledgement of the PURL</td>
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</table>
Exporting METS

Document model with two structures

Link to several files

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<METS:div TYPE="page" ID="phys0002" DMDID="dmdphys0002">
  <METS:fptr FILEID="bitonal0001"/>
  <METS:fptr FILEID="hires0001"/>
</METS:div>
```

Link to page area

```
<METS:div TYPE="column" ID="phys0003" DMDID="dmdphys0002">
  <METS:fptr>
    <METS:area FILEID="bitonal00000001" COORDS="40x40x150x250"/>
  </METS:fptr>
</METS:div>
```
Integrated image viewer (AJAX driven)

OCR integration
Statistics and controlling

Statistical evaluation: Status of volumes

-Identifier Germanisation = 125
-Image nachbearbeitung = 291
-Buchrückgabeschach = -52
-Qualitätskontrolle = 109
-Scan = 111
-Bibliographische Arbeiten (ZBV, 208, Buchbearbeitung) = 2
-Datenbankaufbau (alle Bände) = 1
-Strukturdokumentation = 4
-Kernstruktur = 2
-Entwicklung des MasterImages (textverarbeitung) = 11
-Lexikonschau = 1
-Images entspiegeln = 2

Hits: 775

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Statistical evaluation: Duration of the steps

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</table>

Lossau
Presentation layer: TYPO 3 / Lucene

Customizable design and features
BibForge

developing libraries
Open access and Digital Repository Networks: a new digital research infrastructure

Free and unrestricted access to sciences and human knowledge representation worldwide, incl. cultural heritage

\[\text{Berlin Declaration, Oct/2003}\]

Requires an interoperable, trusted, long-term repository infrastructure

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Selected Activities and Projects

Open Access

- German Information Plattform [www.open-access.net](http://www.open-access.net) (Production)
- OA at Universities: Repositories, University Press (D) (Production)
- OAPEN (EU) (Project)
- PEER (EU) (Project)

Open Access - Infrastructures

- DRIVER (EU) (Production und Project)
- OA-Netzwerk, OA-Statistik (DINI, D) (Projects)
- DARIAH (EU) (Projekt)
Der freie Zugang zu wissenschaftlicher Information

Informationsplattform

Home
Willkommen auf der Informationsplattform open-access.net!

Die Informationsplattform open-access.net hat das Ziel, den steigenden Informationsbedarf zum Thema Open Access zu decken. Sie bündelt belastbare verstreute Informationen und bereitet diese für verschiedene Zielgruppen und Szenarien spezifisch auf.

Die open-access.net sukzessive entlang der Rückmeldungen und Bedürfnisse der Nutzer und Nutzer der Plattform weiterentwickelt werden soll, freuen wir uns über Kommentare und Ergänzungen. Zögern Sie daher nicht, uns eine E-Mail mit Ihren Fragen und Anregungen zu schicken!

Wir möchten Sie zudem einladen, sich in unserem Expertenforum (im Form einer moderierten Mailingliste) an den aktuellen Diskussionen zum Thema Open Access zu beteiligen.

Anmeldung zur Mailingliste


Anmeldung ab sofort möglich

Inhalte von open-access.net

Was genau ist eigentlich Open Access? Open Access steht für den unerschränkten und kostenlosen Zugang zu wissenschaftlicher Information im Internet. Auf open-access.net finden Sie Informationen zu den...
Informationsplattform Open Access: Startseite - Microsoft Internet Explorer

AUSTAUSCH
Mailingliste
News
Links
Kalender
Downloads
Presse


Open Access ist ein sehr aktuelles und zukunftsweisendes Thema, das weltweit große Unterstützung findet. Gründe für Open Access sind unter anderem die erhöhte Sichtbarkeit und damit die erhöhte Wirksamkeit wissenschaftlicher Teile. Dagegen stehen aber auch die häufig geäußerten Vorbehalte gegen Open Access z.B. bezüglich der Flüchtigkeit und mangelnden Auffindbarkeit digitaler Daten.


Die Fraunhofer-Gesellschaft, die Helmholtz-Gemeinschaft und die Max-Planck-Gesellschaft leisten intensiven Beitrag zum Open-Access-Auslauf.
Open Access

How can I publish Open Access at Göttingen University?

What are the costs involved?

What can I do as author to publish Open Access?

Is there a future for Open Access?
Details

Library Sciences
Greenberg, Jane and Wolfgang Klas (Ed.)

Metadata for Semantic and Social Applications
Proceedings of the International Conference on Dublin Core and Metadata Applications, 22-26 September 2008
Metadata is a key aspect of our evolving infrastructure for information management, social computing, and scientific collaboration. DC-2008 will focus on metadata challenges, solutions, and innovation in initiatives and activities underlying semantic and social applications. Metadata is part of the fabric of social computing, which includes the use of wikis, blogs, and tagging for collaboration and participation. Metadata also underlies the development of semantic applications, and the Semantic Web — the representation and integration of multimedia knowledge structures on the basis of semantic models. These two trends flow together in applications such as Wikipedia, where authors collaboratively create structured information that can be extracted and used to enhance access to and use of information sources. Recent discussion has focused on how existing bibliographic standards can be expressed as Semantic Web vocabularies to facilitate the integration of library and cultural heritage data with other types of data. Harnessing the efforts of content providers and end-users to link, tag, edit, and describe their information in interoperable ways ("participatory metadata") is a key step towards providing knowledge environments that are scalable, self-correcting, and extensible. DC-2008 will explore conceptual and practical issues in the development and deployment of semantic and social applications to meet the needs of specific communities of practice.
GoeScholar – The institutional repository of Göttingen University

GoeScholar stellt die Forschungsergebnisse der Universität Göttingen freizur Verfügung. Der Publikationsserver macht damit die Arbeiten der Göttinger Wissenschaftler weltweit sichtbar und erleichtert die wissenschaftlichen Fachcommunity.


GoeScholar bietet ein breites Spektrum an qualitätsgeprüften Publikationen. Begutachtete Artikel, Beiträge aus Sammelwerken und Monografien finden sich hier ebenso wie die Beiträge aus der Georgia Augusta und Publikationen aus der begutachteten Sparte des Universitätsverlages.


+++Under reconstruction+++
Fakultät für Geowissenschaften und Geographie / Geowissenschaftliches Zentrum

Sammlungen in diesem Bereich

» Georgia Augusta - Fakultät für Geowissenschaften und Geographie - 1
» Monographien - Fakultät für Geowissenschaften und Geographie - 0
» Postprints - Fakultät für Geowissenschaften und Geographie - 95
» Sammelbände - Fakultät für Geowissenschaften und Geographie - 0

Die "Weichteilbelemniten" des Posidonienschiefer (Untertertiär, Untere Muschelkalk) von Holzmaden (Baden-Württemberg) sind Fälschungen

Morphologie einiger Süßwasserspongien (Baikalospongia bacillifera, Lubomirskia baicalensis, Swartschewskia papyracea) des Baikal-Sees (Sibirien, Rußland)

Carbonate mounds of Morocco; IGCP 380 field workshop October 24 - November 1, 1999

Histological investigations of organisms with hard skeletons; a case study on siliceous sponges

Palaeobiological reconstructions of selected Spincizoan Sponges from the Cassian Beds (Lower Carnian) of the Dolomites (Northern Italy)
Postprints - Fakultät für Geowissenschaften und Geographie (95 Dokumente)

  - Titel in Google scholar

  - Titel in Google scholar

  - Titel in Google scholar

Ressourcen vom Autor "Tschinkel, Yuri"

  - Titel in Google scholar

  - Titel in Google scholar

  - Titel in Google scholar

  - Titel in Google scholar

  - Titel in Google scholar

  - Titel in Google scholar

- Tschinkel, Yuri (1997): Height zeta functions.
  - Titel in Google scholar

  - Titel in Google scholar

  - Titel in Google scholar
**DRIVER’s Vision**

All research institutions in Europe and worldwide make all their research publications openly accessible through institutional repositories.
General Information: DRIVER II

- Duration: 24 months
- Budget: 2.7 m EUR
- Timeplan: 12/’07 -11/’09
- Main Deliverables:
  - Digital Repository Infrastructure
  - European Digital Repository Confederation
- Funded by the European Commission, “Research Infrastructure” Unit, FP 7
- Consortium Partners
  - Univ.of Athens (GR)
  - Univ. of Bielefeld (GE)
  - CNR-ISTI (IT)
  - STICHTING SURF (NL)
  - Univ. of Nottingham (UK)
  - Univ. of Bath (UK)
  - Univ. of Warszawski (PO)
  - Univ. of Gent (BE)
  - Univ. of Goettingen (GE)
  - Danish Technical University (DK)
  - Universidade do Minho (PT)
  - Narodna in univerzitetna knijznica (SLO)
**DRIVER History**

- DRIVER (I), started 1 June 2006, ended 30 November 2007
- DRIVER II, started 1 December 2007, ends 30 November 2009
- Recent event: DRIVER Summit 16/17 January 2008, Göttingen
DRIVER II activity areas and outcomes

Organization of Digital Repository Infrastructure Providers

Confederation

Open Source Software for repository networks

D-NET

Technical Digital Repository Network Infrastructure Services

DR Infrastructure

Community Building & Maintenance

DRIVER Portal & Wiki
The DRIVER Portal

www.driver-community.eu

Driver is a collaboration, co-funded by the European Commission, to build a network of freely accessible digital repositories with content across academic disciplines.
Welcome to the DRIVER Support website

Here you can access information and support relating to Open Access and digital repositories. Digital repositories can help make research information more widely available, more widely used, and improve the process of research itself. Information of interest to specific user groups is available as well as information about the DRIVER project.

DRIVER II, a project funded by the 7th Framework Programme of the European Commission, is the continuation of the DRIVER project. DRIVER II will extend the geographical coverage step-by-step and will move from a test-bed to a production-quality infrastructure. As part of DRIVER II this site will be revised to reflect new developments and the wider remit of the DRIVER II project: D-NET, a development of DRIVER II is nearing release and details will shortly be available from the Learn About DRIVER website.

This site holds details on the state of development of repositories in different European countries and how you can join the growing European network.

You may share information and news from your own country via the DRIVER Wiki and can benefit from the experience of others, and share your experiences, through the Mentor Service.

You can also want to suggest events or announce news on this site that other visitors may find useful.

For access to DRIVER Tools, DRIVER Search and to access and reuse the DRIVER Infrastructure please go to the DRIVER Portal http://www.driver-community.eu/.

Last updated: 27-Jun-2008
Open Access in the European Union

The DRIVER Guidelines were developed based on the DINI certification in Germany and DARE guidelines in the Netherlands with requirements specific to those networks removed. DRIVER partners involved in other repository networks, such as HAL in France and SHERPA in the UK, provided additional input to ensure that the DRIVER Guidelines are suitable for implementation by the entire European repository community. The DRIVER Guidelines are available from the Support website. A Wiki page has been set up for the DRIVER Guidelines where you may contribute.

The DRIVER "Inventory study into the present type and level of OA compliant digital repository activities in the EU" is now available. The study, which was managed by SURF, surveyed repository managers and associated institutional personnel on a range of issues relating to Open Access and repository development.

Of the 27 EU countries, seven appear to have no institutional repositories, five are in the early stages of developing repositories while the remaining 15 countries have, to varying degrees, established institutional repositories. A separate wiki has been set up for comments relating to this study.
Open Access in Portugal

Open Access Repositories

The Open Access Repositories activities in Portugal are currently undergoing a strong momentum as the reflex of the growing interest and involvement of the Portuguese academic and scientific community in the questions related with Open Access to scientific literature.

The first initiatives were from Minho University with the creation of RepositoriUM - its institutional repository (October 2003) and the subsequent definition of a pioneering self-archiving policy (January 2005).

But in 2006 the opening of another repository on production stage (ISCTE repository in October 2006), the Open Access Declaration issued by CPU (the Conference of Rectors of the Portuguese Universities) (November of 2006), the very successful second Open Access Conference (with more than 150 participants) held in Minho University, as well as other initiatives for creation of institutional repositories in diverse national institutions, fully illustrate the high degree of interest and development work that has been set up in Portugal.

There are 16 public universities in Portugal and combined with smaller private universities that are focused mainly on teaching, the number increases up to 22 universities. The Conference of Rectors of the Portuguese Universities, consisting of the rectors of the above-mentioned 16 public universities, has signed the Berlin Declaration on Open Access recommended that all universities build an institutional repository and design a policy for self-archiving.

At the time of writing, in Portugal, there are 4 institutional repositories (IRs) in a production stage, 3 in a testing stage, 1 in installation stage and several others starting the first steps towards their creation. The IRs already in production stage, combined, archive about 8700 documents (but 8700 are from just one repository).

The main driving force for engaging with the development of IRs is the increasing awareness of the open access movement and the need to showcase the research outputs are mentioned. On the contrary, the main inhibitors are the low level of awareness on Open Access in some scientific areas and institutions and the doubts and fears with regard to the copyright situation for published research output.
How can a single repository become a member of the DRIVER community?

• The concept of DRIVER sees national communities as the basis and as natural partners for the European repository network
• Contact the DRIVER Wiki and find out about your national contact point(s) (“correspondents”) to the DRIVER community
  – Become a member of your existing national community OR
  – Support the building of a national community within your country (see also DRIVER Mentoring Service)
• In case there is no correspondent: register your interest on the DRIVER website to
  – Become a member of the DRIVER community
How does DRIVER relate to national repository communities?

• National communities are usually represented by country “correspondents”
  – One institution or a group of institutions takes responsibility to build a national repository community (like DARENet-NL, SHERPA-UK, OA-Netzwerk-GE, RECOLECTA-ES, HAL-FR)

Country “correspondents” …

  – Maintain the national repository information on the DRIVER Wiki
  – Organise repository events in their countries
  – Translate repository guidelines and other relevant information into national languages
  – Build up national data aggregators, clean data, can offer additional services
How does DRIVER relate to international repository communities?

- DRIVER sees its mission as:
  - Catalyst for a global repository infrastructure
  - Develop and maintain the European repository infrastructure node
- DRIVER liaises already with institutions and initiatives from the U.S., Latin America, China, India and Africa
- DRIVER collaborates with eIFL, the library support organisation for developing countries
- DRIVER liaises with the *Object Reuse and Exchange (ORE)* project and SPARC, U.S.
Where can I get more information about DRIVER?

• Go to the DRIVER Portal: www.driver-community.eu

• Contact the DRIVER Helpdesk, helpdesk@driver-support.eu

Upcoming event:
Baltimore, 17/18 November 2008; SPARC US, Japan and Europe
Publishing and the Ecology of European Research (PEER)

EC eContentplus
Vorgesehener Start: 1. September 2008
Laufzeit: 3 Jahre

Partner: International STM Headoffice, ESF, Universität/SUB Göttingen, MPG/MPDL, INRIA, SURF, Universität/UB Bielefeld
Purpose of PEER

- Publishers and research community collaborate
- Develop an “observatory” to monitor the impact of systematically depositing stage-two outputs on a large scale
- Gather hard evidence to inform future policies
Objectives

- Determine how large-scale deposit of stage-two outputs will affect journal viability
- Determine whether it increases access
- Determine whether it affects the broader ecology of European research
- Determine the factors affecting readiness to deposit and associated costs
- Develop model(s) to show how traditional publishing can coexist with self-archiving
 Depositing activities

- 15 major STM publishers
- Ca. 300 Journal
- Approx. 20,000 articles per year (~60,000 articles for the project)
- 50% of the articles: Publisher > Repositories
- 50% of the articles: Author > Repositories
European University Presses take the initiative to develop an Open Access model for peer reviewed books in Humanities and Social Sciences

eContentplus EC co-funded project
Duration: 30 months
Start: September 1, 2008
Partners: Amsterdam University Press, Georg-August-Universität Göttingen, Museum Tusculanum Press, Manchester University Press, Presses Universitaire de Lyon, Firenze University Press, University of Amsterdam, University of Leiden
Open Access Publishing in European Networks

OAPEN is a project in Open Access publishing for humanities monographs. The Open Access movement has developed rapidly in the sciences and in journal publishing. The consortium of University-based academic publishers who make up OAPEN believe that the time is ripe to fully explore the possibilities of Open Access in the humanities and social sciences.

The OAPEN partners all currently have some involvement in the Open Access movement, and you are encouraged to view their pages on this site and on their own sites.

It is expected that this project will find useful, exciting and beneficial ways of publishing scholarly work in Open Access, allowing access to important peer reviewed research from across Europe.

The partners
Amsterdam University Press
Georg-August Universität Gottingen
Museum Tusculanum Press
Manchester University Press
Presses Universitaires de Lyon
Firenze University Press
University of Amsterdam
Leiden University
Key Objectives

- Creating the largest freely available collection of current peer reviewed books in European languages in various fields of HSS
- To develop and promote an Open Access (OA) publication model for primary publications
- To engage all stakeholders in the publication process
- To build a network around OA book publishing
- To develop common funding models
- To adopt common standards and metadata to improve retrievability and visibility of HSS publications
Expected Results

- **Publication Model**
  - OA funding model for e-books based on scientific studies (user needs, publication cultures, OA models)
  - Services and business plan for OA books and services
  - Contract for licensing content
  - Agreement for OAPEN partnerships

- **Publishing Platform**
  - dedicated to monograph content in HSS in all its dimensions (text, multimedia, data, reader interaction)
  - supplemented by tools and services for e-publication, digital printing (PoD), marketing and digitization

- **Networked Online-Library**
  - Aggregated collection of OA books
  - Multi-lingual search
Virtual Research Environments & e-Humanities

Textgrid: Pioneering work through building of Virtual Research Environments for Humanities
A collaborative effort of scholars, libraries, computer scientists and language experts

Two main product groups:
• TextGridRep (ressources such as texts or dictionaries)
• TextGridLab (tools and workbench)

• TextGrid I = 10/2005 – 03/2009
• TextGrid II = extension proposal submitted

Funded by the BMBF, coordinated by the SUB Göttingen
TextGrid in View: Goals

- Establishment of a virtual research infrastructure
- TextGrid: a generic platform for scientific text data processing
- Service Grid (toolbox for collaborative work)
- Data Grid (virtual archive for long-term data preservation)
Philological View: TextGrid Tools and Services

Tools
- lemmatize
- collate
- sort
- streaming
- quality

Ressources
- Catalogues
  - Goethe: Werther
  - Schiller: Wallenstein

- Facsimile

- Full text
  - lemmatized
  - morpho-syntactic
  - text genesis
  - named entities
  - narration
  - annotation

- Supplements
  - dictionaries
  - authority files
  - thesaurus
  - encyclopedia

Potential User Groups • TextGrid Tools and Services
TextGrid in View: TextGridLab

- Eclipse-based interactive client integrating all tools and services in a unified interface.
- TextGridLab: workbench for creating and processing text resources.
- Intuitively usable by way of dynamic views and context menus.
- Open standards and interoperability allow integration of additional tools and services.

Partners • Goals • TextGridLab • Tasks • Outlook
TextGrid in View: TextGridLab

Administration
- Projekte
- Rollen
- Benutzer
- Ressourcen

Workflow Editor
- Tool for defining complex workflows
- At this stage realised as external tool Taverna
- Later on: integration in TextGridLab

Project Management
- Management of users, roles and access rights for projects
- Based on Role-Based Access Control (RBAC, an ANSI standard)
- Shibboleth-enabled

Partners • Goals • TextGridLab • Tasks • Outlook
TextGrid in View: Tasks

- Integration of all tools in one user interface (workflow editor, project management …)
- Definition and configuration of workflows and processes
- Road map for community building
- Models for sustainability
- International Cooperation (e.g. service descriptions interoperable with Interedition)
Anwendungsszenarien

• Typische Arbeitsschritte bei der Erschließung von Primärquellen
  - Katalogisierung, Verzeichnung
  - Erfassung, Faksimilierung, Transkription
  - Edition (Leseausgaben, Studienausgaben, (historisch-)-kritische Editionen)
  - Publikation (Print, Digital, Online, Offline)
  - Analyse, Auswertung (quantitativ/statistisch, qualitativ/erläuternd)
  - Erschließung, Kontextualisierung (Register, Verzeichnisse, Kommentare, Grammatiken, Wörterbücher etc.)

Einführung • Textwissenschaften • Technik/Demo • Ausblick
Beispiele: Erschließung / Kontextualisierung

Heine Briefausgabe

Header

Edition

Verzeichnis

Faksimile

Kommentar
Beispiele: Erschließung / Kontextualisierung

Mittelhochdeutsches Textarchiv, hier Berthold von Regensburg, und Trierer Findebuch, Lemma 'abbe'

Textarchiv

Wörterbuch

Referenz Berthold v. Regensburg

abte

abbet

Einführung
KOPAL, a German Long-term Preservation System

Partners:

- German National Library (DNB)
- Göttingen State and University Library (SUB Göttingen)
- IBM
- GWDG (Computing Centre for Göttingen University and the Max-Planck-Society)

http://kopal.langzeitarchivierung.de/
Bibliotheken, Museen, Archive, Datenzentren und andere Gedächtnisorganisationen stehen vor dem Problem, ihre rapide anwachsenden digitalen Bestände auch in Zukunft nutzbar zu halten.
Ein Nutzer greift auf elektronische Dokumente oft über Online-Informationsysteme zu. Liegt ein solches Objekt in langzeitarchivierter Form vor, so kann es direkt abgerufen und in der aktuellen migrierten Form geliefert werden. Auf Wunsch erhält der Nutzer auch ältere Archivversionen.
Workflow der Archivierung
News

kopal goes live: Nutzungsmodelle und Perspektiven eines Langzeitarchivs digitaler Informationen


Über kopal

kopal – Kooperativer Aufbau eines Langzeitarchivs digitaler Informationen

Digitale Dokumente langfristig zur Verfügung zu stellen, ist ein bislang ungelöstes Problem unserer informationsgesellschaft. Mit der ansteigenden Zahl elektronischer Veröffentlichungen wächst die Notwendigkeit einer zuverlässigen Archivierung. Im Zuge der technischen Entwicklung werden immer neue digitale Datenformate verwendet, die an spezielle Programme und damit an bestimmte Rechnertypen und Betriebssysteme gebunden sind. Ältere Daten sind so mit aktueller Soft- und Hardware oft nicht mehr nutzbar. Das Projekt kopal widmet sich der Lösung dieser Problematik in Form eines kooperativ entwickelten und betriebenen Langzeitarchivs für digitale Daten.

Der ▶ kopal-Demonstrator veranschaulicht konzept und Arbeitsablauf des kopal-Archivsystems.

Deutsche Nationalbibliothek

gefördert vom
Bundesministerium
für Bildung und Forschung

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Servercluster, GWDG (Computing Centre for Göttingen University and the Max-Planck-Society)

Lossau
Future roles for research libraries

Digitisation and Networked Collections
- Digitise collections and bring them into international networks (incl. Organisational and policy issues)

Build national and international networks of digital repositories
- Setting up institutional repositories according to international standards (see certification like DINI, DRIVER Guidelines)
- Organise the deposit of all research publications of your organisation
- Integrate the local repository in the national and international repository network
- Organise and implement the linking from documents to primary data sets and any other digital object (film, language recording etc.; using e.g. the TIB Hannover primary data identifier registry system)
Future roles for research libraries

Enable and support open access publishing for journals and books

- Build up University Publishing Houses (perhaps in a network) and publish books in Open Access
- Advocate Open Access at your institution among scientists and governing boards
- Negotiate contracts with publishers, which allow open access publishing (original PDF file) also on the institutional repository
- Carry out projects with publishers, to shift cashflow from subscriptions to the payment of the publishing process, resulting in Open Access

Information technology and service watch

- Watch technology developments of new research tools (such as the „Textgrid suite“) and offer those services to your scholars (directly or as mediator)
Future roles for research libraries

Library structure and staff development

- Restructure your libraries in order to free-up personnel for new services
- Carry out projects to get new staff with technology skills into the library
- Train your permanent staff to meet future demands (e.g. TICER Summer School, Tilburg University, NL)
Characteristics of digital future library services

- Libraries will continue to digitise their collections
- Libraries will link documents to primary data sets, further digital objects, learning modules, providing standard metadata, persistent identifiers
- All search & navigation (like OPAC) and other information handling tools (like textgrid) can be exported into the desktop environment of researchers & students ⇒ Researchers can compose their own „Information Service“ desktop (eSciDoc, Germany; Research Information Centre, UK)
- Document delivery will be subsequently complemented (replaced?) by online repository networks (see DRIVER in Europe)
- Libraries provide digital preservation services
Publications as Live Documents

Acknowledgments go to Tony Hey, VP Microsoft, 2007
e-Science: Services can be composed

Acknowledgments go to Tony Hey, VP Microsoft, 2007
The BL Research Information Center

Acknowledgments go to Tony Hey, VP Microsoft, 2007
Tools and Services in Context

- Share Ideas, Disseminate Findings
- Search and Discover
- Experiment and Create
- Obtain Funding

Acknowledgments go to Tony Hey, VP Microsoft, 2007
1. John Logs in Using his infocard. The portal is personalized for the logged in user.

2. The research lifecycle phases are represented as tabs.

3. Researcher can move between his Projects by clicking on the project name.

4. Faculty menu displays Contacts and Wiki. LCS adds presence to contacts for IM communication.

5. Researcher can search across multiple online sources.

6. User can save searches and re-run them as required.

7. References displays URL’s saved by User.

8. RSS feeds alerts the user about latest funding topics/opportunities.

Acknowledgments go to Tony Hey, VP Microsoft, 2007.
Digital knowledge management of libraries for Virtual Research Environments („e-Research“)

Traditional Libraries
- Books, Journals
- Book Shelves
- Online catalogues
- Classifications
- Closed and open stacks, conservation & preservation
- Acting local

Libraries & e-Research
- ~ + Primary data, films, fotos, language records, radio broadcasts, simulations
- Online repositories (publications and primary data)
- Qualified search engines
- Dynamic, semantic networks/ontologies/semantic maps
- Digital preservation
- Acting cross-institutionally & internationally

Lossau
Thank you for your attention!

Contact:
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