

Preservation: Needs and Activities at the Bavarian State Library (BSB)



Klaus Kempf

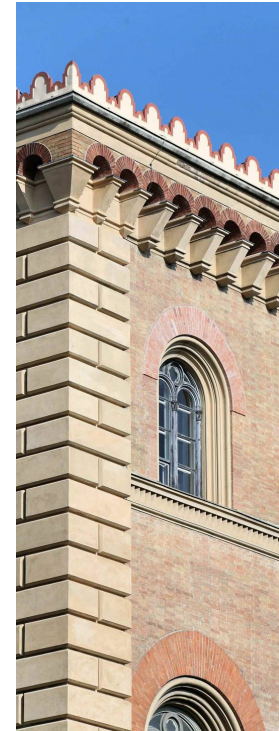
PLANETS-Workshop
Bern, 17.11.2009

Agenda

- BSB's Institutional Profile
- Munich Digitisation Centre (MDZ)
- Current Responsibilities, Milestones, Activities and Organisation of LTP
- Preservation Planning with PLATO
- Future Prospects

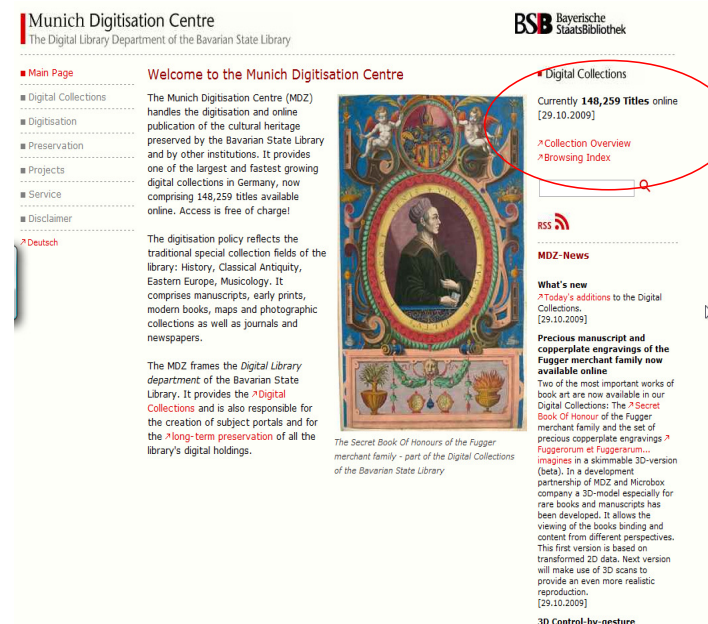
BSB's institutional and collection profile

- Research library of worldwide importance
- Archive library of Bavaria
- Flagship of the Bavarian Library Network (BVB + more)
- Integrated Part of the „German virtual national library“ together with the Staatsbibliothek zu Berlin (Berlin State Library) and the Deutsche Nationalbibliothek (German National Library)
- Inventory: almost 10 million volumes with an annual increase of about 150.000 volumes, 52.500 current periodicals (print and electronic) + big collections of old manuscripts (n. 4 in the world), incunabula (n.1 in the world) and other valuable materials (maps, photographs, music collections)



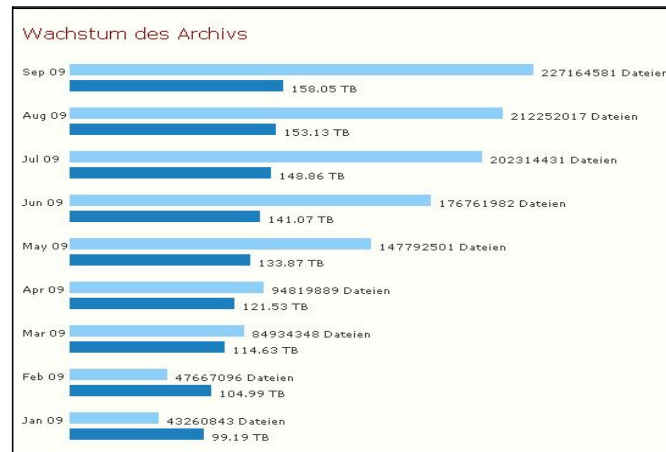
<http://www.munich-digitisation-centre.de>

- Founded as a national competence center for digitisation and digital long-term preservation
- More than 100 projects since 1997, mostly third-party-funded
- Mass digitisation since 2006
- Long-term preservation in cooperation with the Leibniz Supercomputing centre, Munich



Munich Digitisation Centre

- Main tasks:
 - (Retro-)Digitisation of printed material: (mass) digitisation projects, private public partnership with google, digitisation on demand, digitisation for preservation reasons
 - Data retrieval and e-publications: Bavarian Library Online, Virtual subject libraries
 - Long-term preservation of the digital collections of BSB
- Long term preserved data:
153 Terabytes/212 M. files
(with Google books cooperation)



Present Responsibilities in Long-Term Preservation (LTP)

- **Digital objects from (mass-)digitisation projects**
- **Born-digital objects from different sources:**
 - Purchase/ licensing (negotiated by BSB at local, regional and national level)
 - Legal deposit (federal state level)
 - BSB's special subject collections

LTP at BSB: Three intersecting Spheres of Activity

- **Further development and consolidation of the required structures concerning:**
 - Profile and concepts
 - Organisation
 - Technology
- **Continuous operation of long-term preservation system**
 - BABS
- **Research and development**

Long-term Preservation Milestones


- **1999:** *First project concerning removable media – testbed of a computer museum (Institute of Informatics, GFAF)*
- **2004:** Start of the cooperation with the Leibniz Supercomputing Centre (LRZ)
Migration of CD-ROM-stored digitisation data to the LRZ archiving system
- **2005:** Implementation of automatic archiving procedures during BABS I project
 - Connecting the storage/archiving system of the LRZ and MDZ production line (ZEND software)
 - Daily online transfer of new data
 - Distributed storage of multiple copies
- **2006:** First complete migration of the archive hosted by LRZ during the relocation of LRZ from Munich city centre to Munich Garching

der bundeswehr
universität  münchen




Major Project Activities in long-term preservation (LTP)

BABS I:

Development of a Library Archiving and Access
System (Pilot) (2005-2007) + 



BABS II:

Evaluation and improvement of the BABS-System
in terms of trustworthiness and scalability (2009-2010) + 



nestor:

Network of expertise for the long-term preservation in
Germany (since 2003)



Further studies:

Organisational and business models for the long-term
preservation of digitised materials et al.

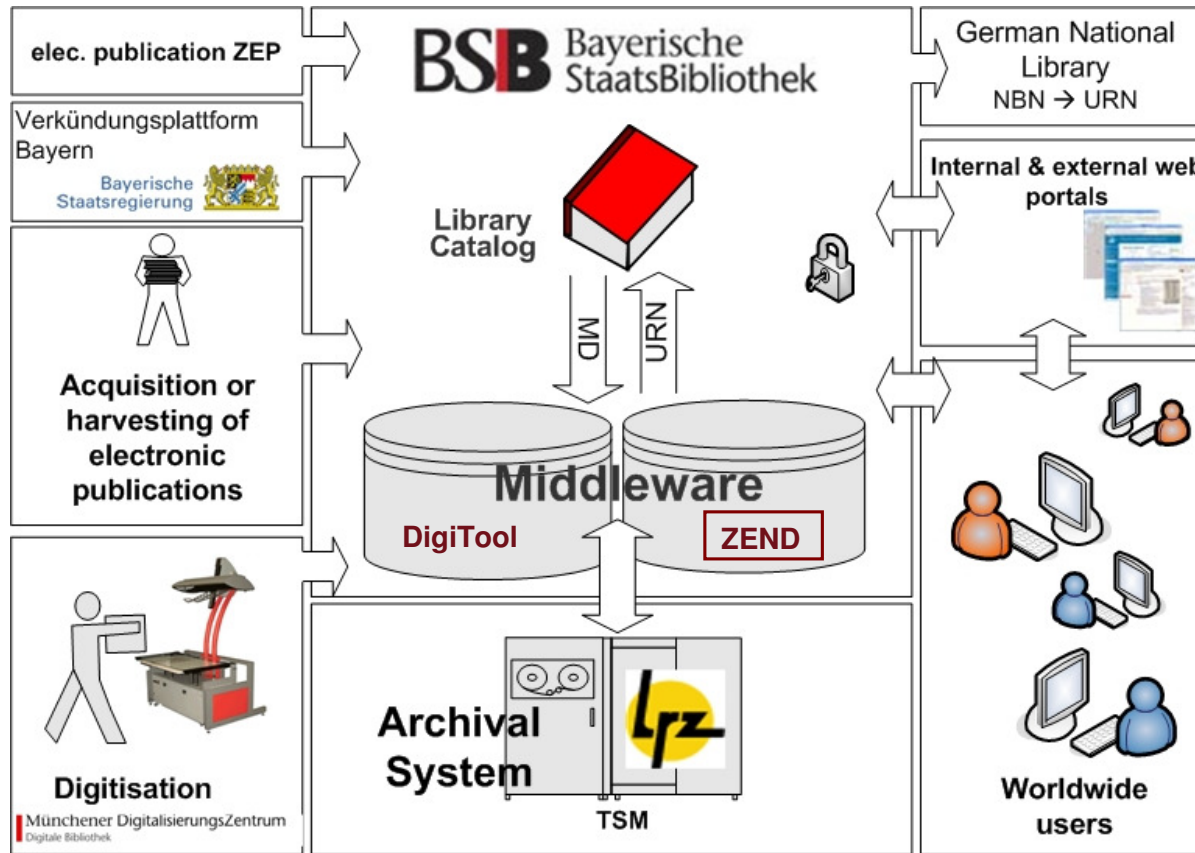
LOCKSS:

Participation in a world-wide pilot project



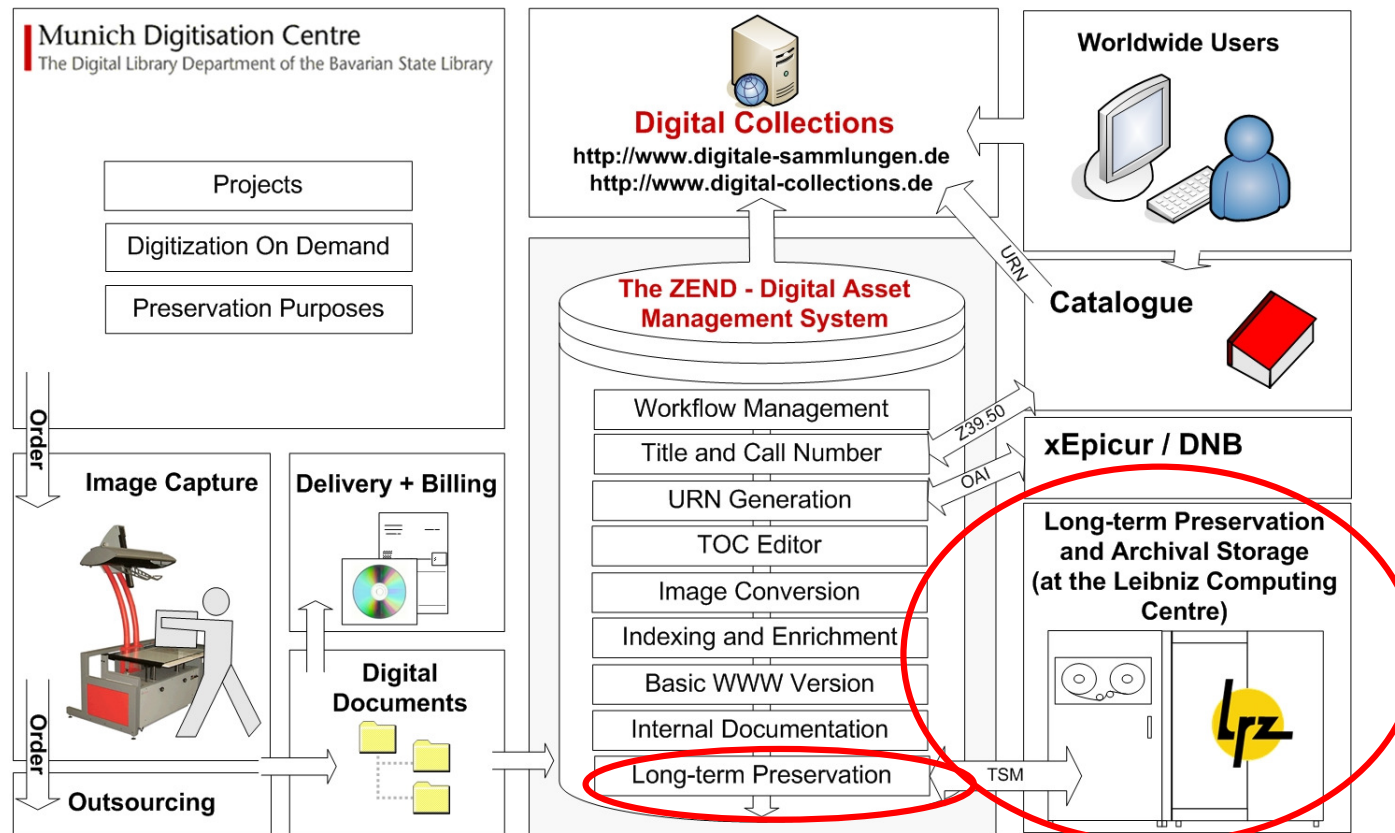
How it is done: Architecture of BABS

Münchener Digitalisierungszentrum
Digitale Bibliothek

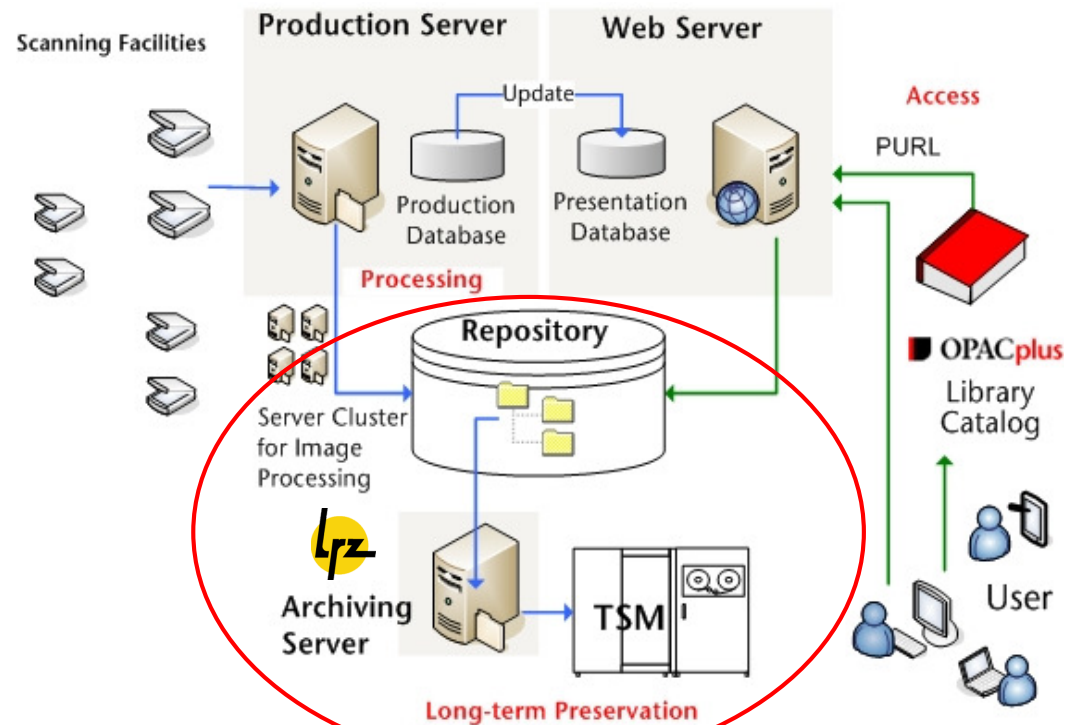


BSB Bayerische
Staatsbibliothek
Information in erster Linie

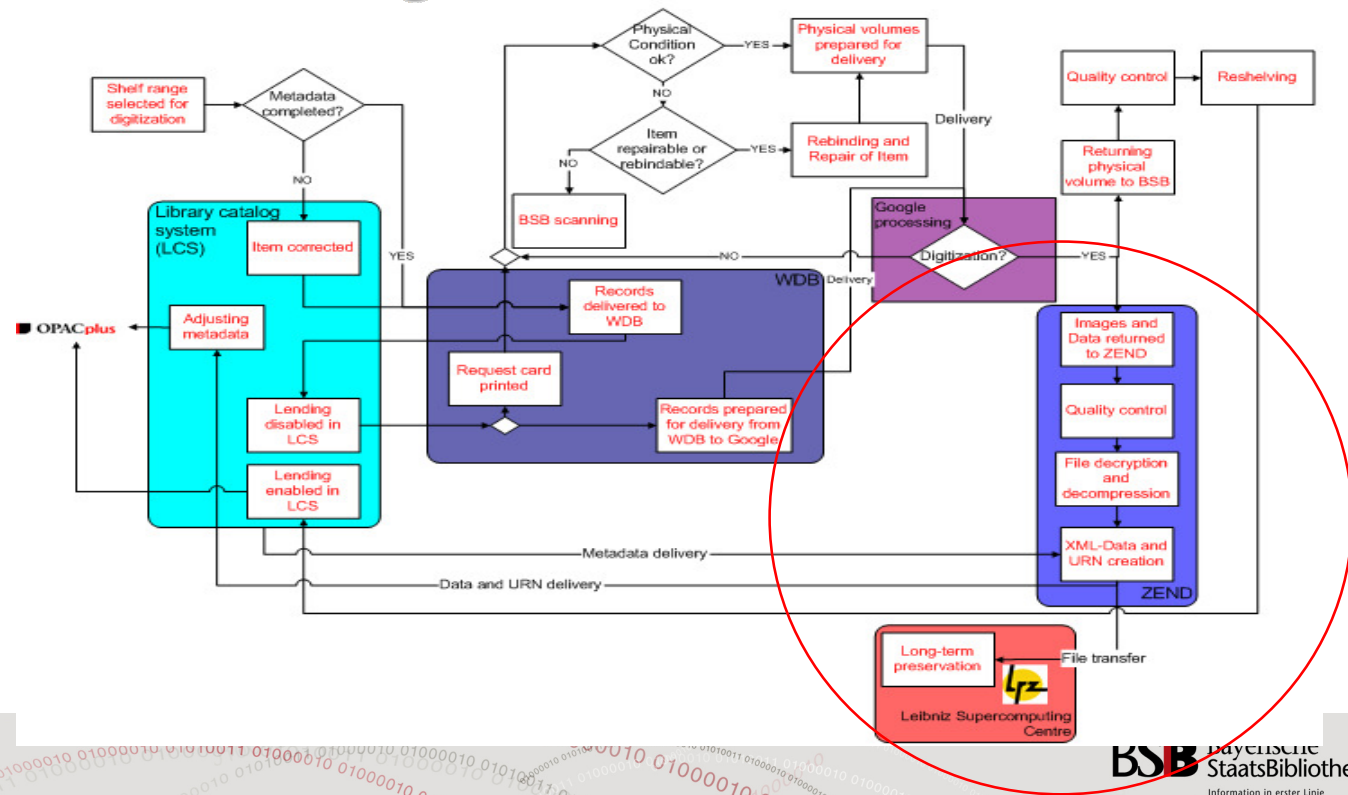
Retro-Digitization: the costumized workflow tool ZEND



BSB and Google™ books private public partnership– LTP



BSB and Google books - workflow

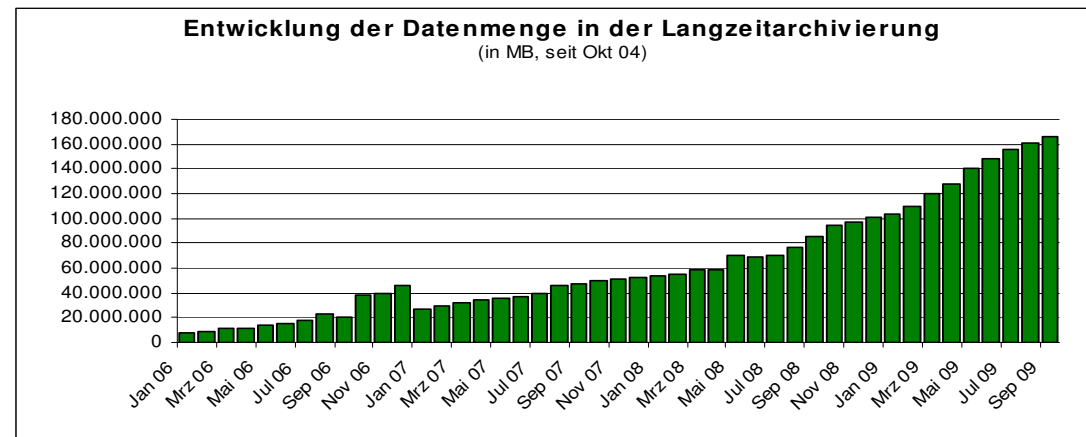


LRZ: The Backbone of BSB's LTP strategy

- **Supercomputing Centre of the Bavarian Academy of Sciences and Humanities**
- **Serviceprovider for**
 - general IT-services for the universities at Munich (more than 100,000 customers) and the Academy
 - powerful communications infrastructure called the Munich Scientific Network
 - backup and long-term preservation of large amounts of data
 - technical and scientific high performance Supercomputing Centre for all german universities



BABS: Some Figures



- January 2009: ca. 100 TeraBytes
- Expected annual increase: with scanrobot production and Google: more than 100 TeraByte.

BABS2: Project in cooperation with LRZ

Objectives:

To evaluate and improve our digital archive in regard to

- trustworthiness (Nestor criteria catalogue) and
- scalability

Activities:

- scalability tests
- defining BSB policies for long-term preservation
- developing process- and cost-models
- securing authenticity and integrity of the digital objects
- developing organisational and cooperation models

Preservation Planning with PLATO

**PLATO-workshop at BSB (July 2009): *From TIFF to JPEG 2000?*
using the example collection of digitized 16th century printings**

Background:

- High standards: TIFF uncompressed as master, embedded ICC-profiles etc.
- Continuous technology watch

Workshop activity:

- Defining requirements
- Defining alternatives
- Preservation action/ tests

Preservation Planning with PLATO

Results:

- PLATO is a suitable tool for Preservation Planning



- Migration to JPEG 2000 is **today** not an alternative for BSB -> revisions of the plan
- individual BSB-requirements (policies) -> individual preservation plan

Possible Future Strategic Objectives

General objectives:

- BSB fulfills its duties as the archive library for Bavaria by preserving digital media from different sources (extension of Legal Deposit Act)
- BSB is willing to become a trusted partner in a cooperative solution for the preservation of the digital heritage of Germany (National Hosting Strategy)
- Further contribution to national and international research and development

Next time objectives:

- Digitisation of the complete copyright-free holdings
- Implementation of Preservation Planning and Action for different BSB holdings
- Offering digitisation and long-term preservation services for third-party institutions (Bavarian regional libraries/ archives, university and research institutions etc.)

Future Prospects: Still a long way to go!

