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Experiences from the kopal Project

Olaf Brandt

Göttingen State and University Library



- Overview
- Partners
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- Background Information
- Developments
- Experiences

- kopal: German acronym for: Cooperative development of a long-term digital information archive
- Funded by the Federal Ministry for Education and Research (BMBF)
- Financial volume: 4,2 Mio €+ self-financed activities by all partners
- Duration: July 2004 – June 2007

Partners:

- Die Deutsche Bibliothek (DDB, project leader)
- Göttingen State and University Library (SUB Göttingen)
- IBM Deutschland GmbH
- Gesellschaft für wissenschaftliche Datenverarbeitung mbH Göttingen (GWDG)

- Die Deutsche Bibliothek serves as a national library and as a national bibliographic center for Germany.
- It is a legal deposit for publications on physical media like paper, microforms and also for digital publications on physical media.
- In the near future it will likely become a legal deposit for all networked digital publications produced in Germany and for the german Web.

- is responsible for more than 20 special subject collections (Sondersammelgebiete).
- runs a wide range of digital services and portals.
- has a variety of digital holdings
- is also producing a variety of digital content

- is the Consulting and Development partner of the kopal project
- ensures a professional adaption of the Dutch DIAS system for specific needs
- provides a stable support for DIAS
- has experience in longterm preservation technologies like the Universal Virtual Computer (UVC)

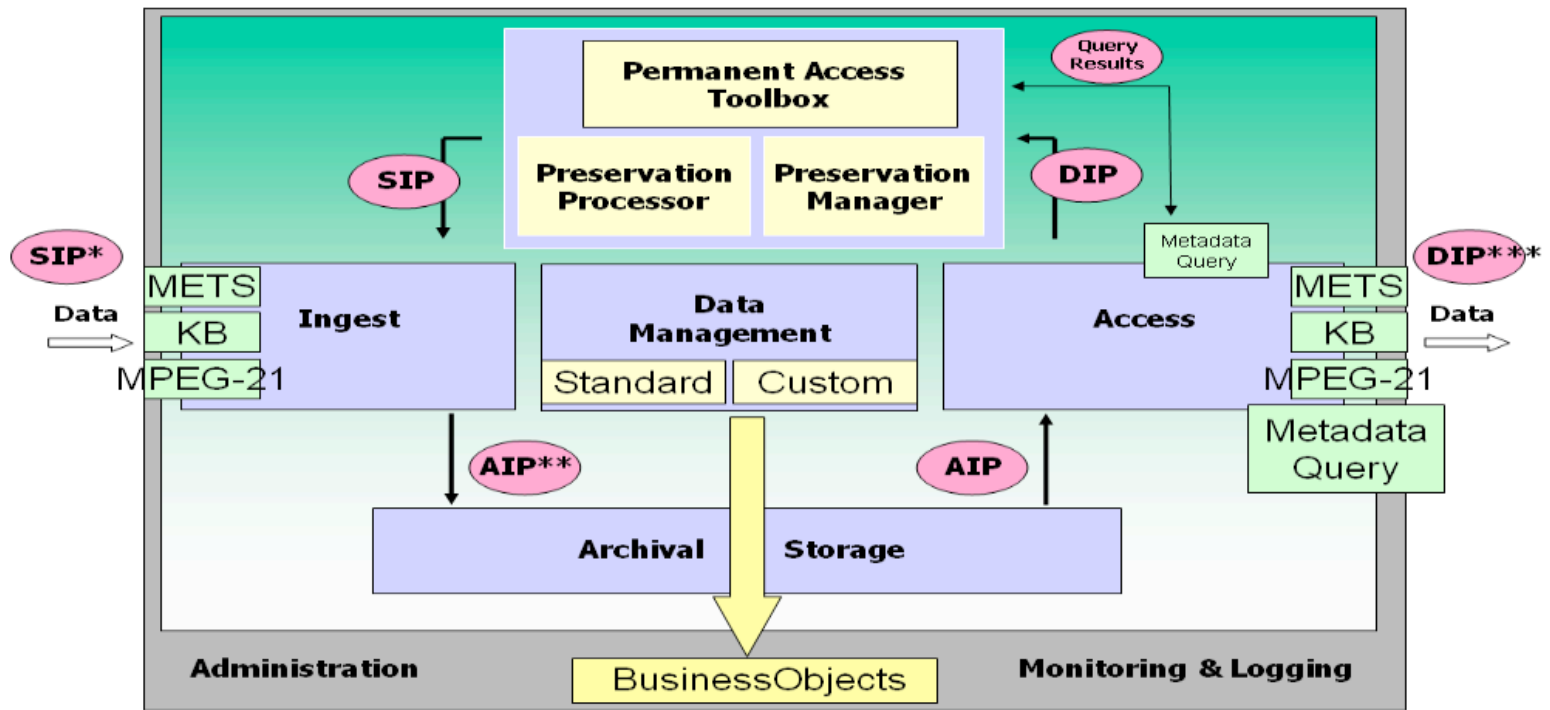
- is the computing centre for the University of Göttingen and the Max Planck Society
- provides standardized and individual solutions for data processing
- it will host and operate the kopal DIAS system

- Cooperative development and running of a long-term preservation system
 - with multi organisation support
 - with remote access
 - based on standards (like OAIS or METS)
 - reusable for other cultural heritage institutions or companies
- the kopal DIAS solution will be the technical Basis for DDB's Webarchiving activities

- DIAS (Digital Information and Archiving System) of the National Library of the Netherlands
- Developed by IBM (Netherlands) and KB
- Implementation of the OAIS standard
- Further development of suitable long-term preservation components (emulation, migration)

- Enhancement for cooperative usage
- Development of an object format
- Hosting outside the library (remote access)
- Extension of DIAS-Core with Open Source Software tools

kopal: DIAS overview



* = SIP: Submission Information Package
** = AIP: Archival Information Package

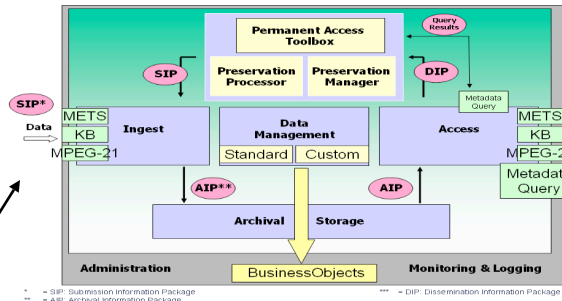
*** = DIP: Dissemination Information Package

Source: IBM

e.g. SUB
Workflowtools
(Metadatagenmerator,
Packager, Quality
assurance

SIP - Loader

Other Open Source
tools?



Other tools:

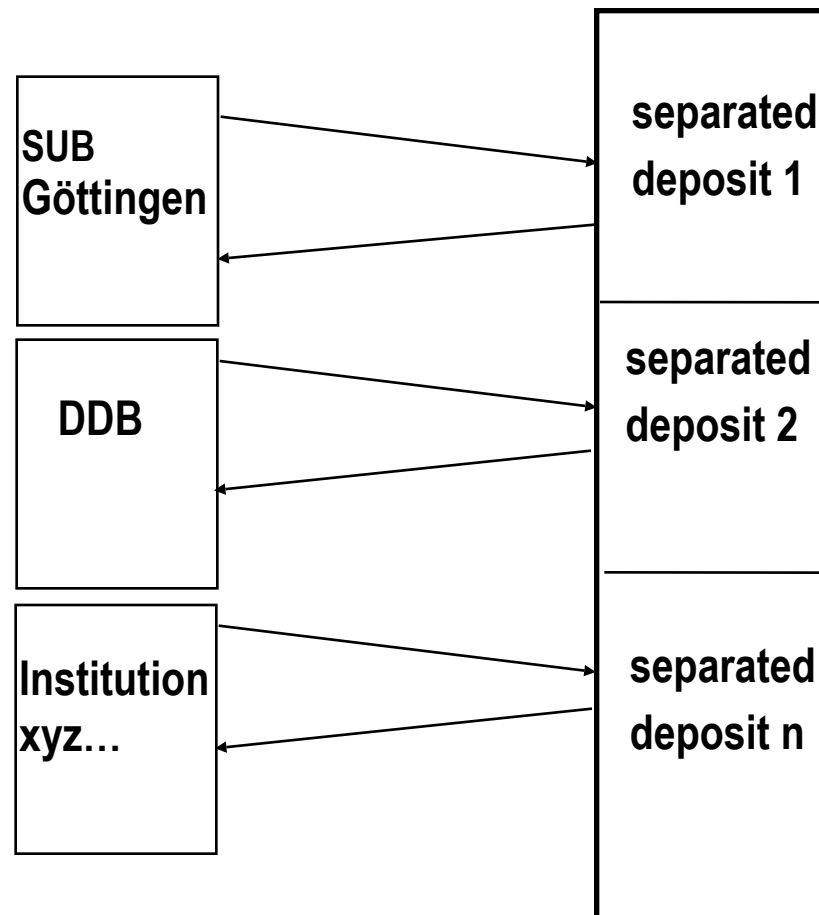
IBM UVC-
Decoder for
graphics

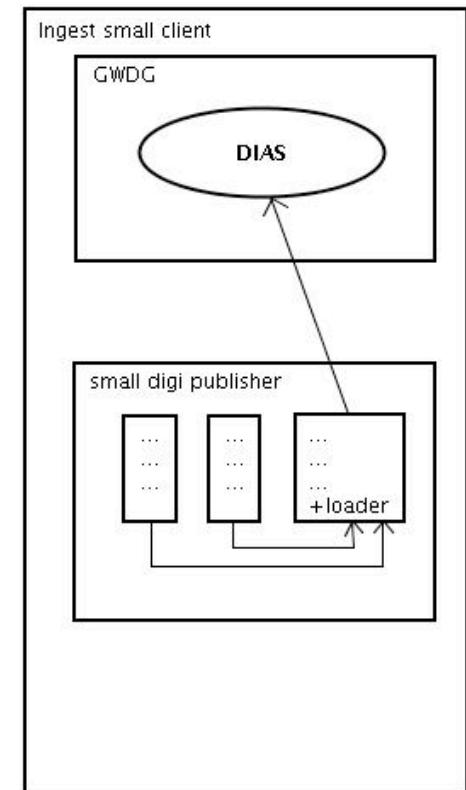
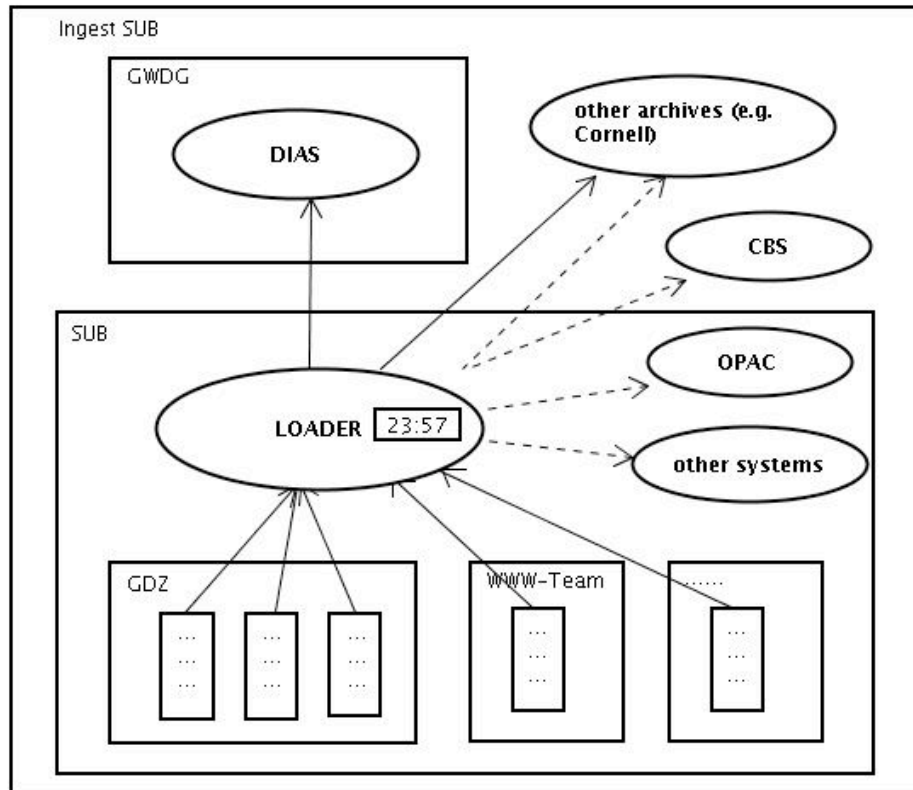
kopal access
tools

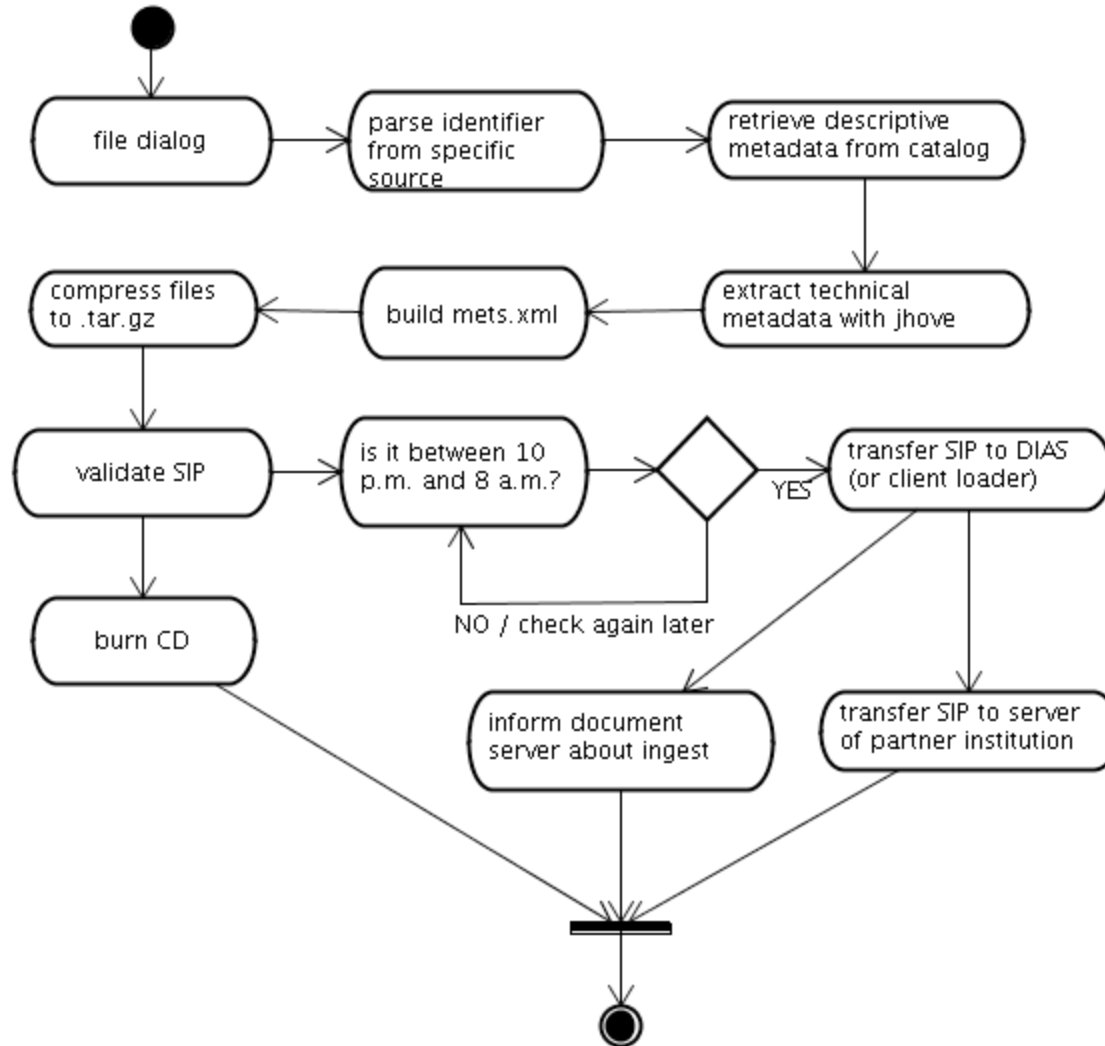
kopal migration
tools

OSS exchange
tools?

kopal DIAS system







Example for a simple build policy:

```
...  
<policy name="testWoto" type="build">  
  <step class="de.langzeitarchivierung.kopal.sub.SimpleMod">  
    <step class="de.langzeitarchivierung.kopal.ingest.SubmitSIPToClientLoader">  
      <step class="de.langzeitarchivierung.kopal.sub.SimpleMod"></  
step>  
    </step>  
  </step>  
</policy>  
...
```

Recent Developments

- programming of ingest tools (finishing October)
- programming of the access tools
- integration in workflows

- Ingest of different digital material (early 2006)
- Preservation Planning functionalities (early 2006)
- Graphical User Interface for Workflow tools
- Monitoring functionalities for the system
- Interarchival exchange facilities
- PREMIS Import and Export?
- Integration of File Format Registries?

- The processes are really time consuming!
 - to find out the institutions needs
 - to coordinate the development amongst different institutions and departments
 - to develop the organisational policies
 - to integrate longterm preservation in institutional workflows and systems

- You need a lot of internal and external expertise
- It is good to discuss the issues with people from a trusted Network of Expertise (e.g. nestor in Germany <http://www.digitalpreservation.de>)
- Make papers available via collaboration tools!

- It is a necessity to include the IT department (somebody with an overview of running systems and services)
- Bring in the management for the development of policies right in the beginning!
- Rely on standards
- Use existing software if possible
- There is no perfect solution in the early stages ;-)

Thank you!

Questions?

brandt@sub.uni-goettingen.de

<http://kopal.langzeitarchivierung.de/> (will be translated into English soon)