# Consortial Primo Installation at KOBV, Germany

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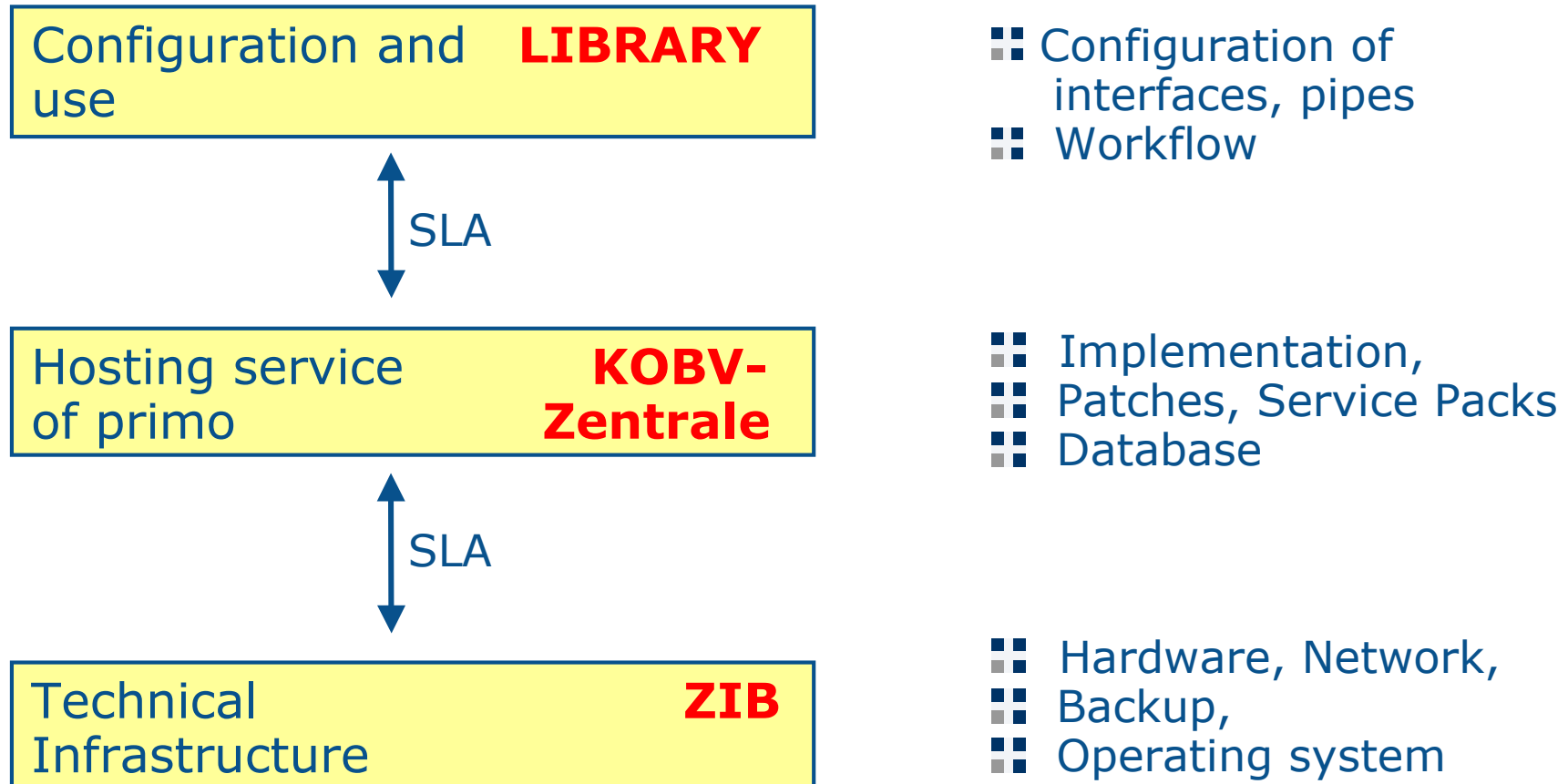
IGELU Helsinki 2009

# Consortial Primo Installation at KOBV, Germany

- **Partner**

- **KOBV hosting service**

- **Infrastructure**

- **Projekt**

- **Interface**

- **Primo consortial enviroment - Issues**

- **Primo consortial enviroment - Benefits**

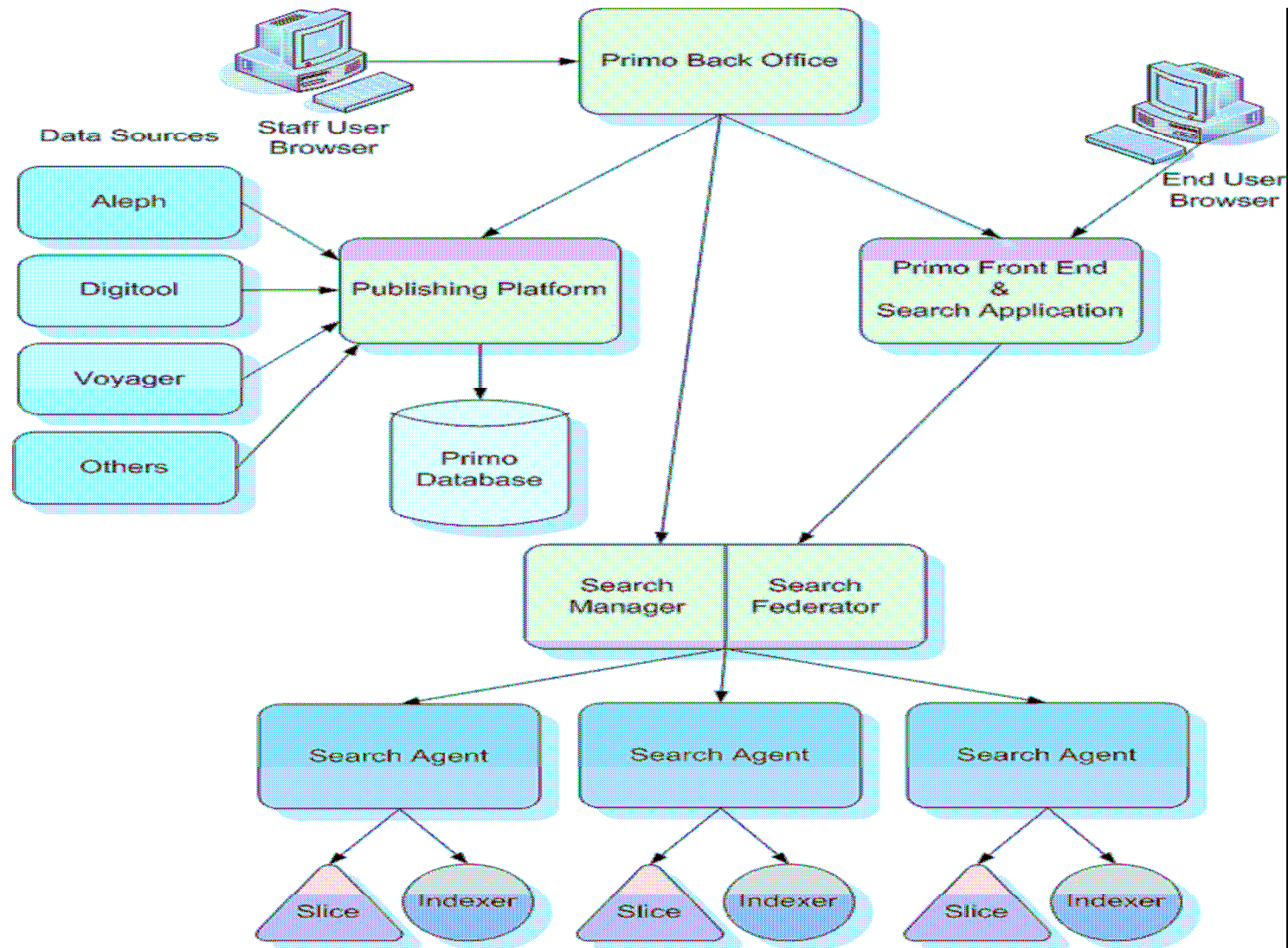# Primo – consortial partner at KOBV

**University Libraries of**

- **FU Berlin (32 000 FTE)**

- **HU Berlin, (32 000 FTE)**

- **TU Berlin, (25 000 FTE)**

- **Universität Mannheim (18 000 FTE)**

- **Universität Paderborn (25 000 FTE)**

- **Universität Düsseldorf (15 000 FTE)**

- **Requests from other Instituts**

- **Hosting by KOBV, Berlin**

# KOBV Hosting services

| Configuration and **LIBRARY** use | ▦ Configuration of interfaces, pipes ▦ Workflow |

↕ SLA

| Hosting service of primo **KOBV-Zentrale** | ▦ Implementation, ▦ Patches, Service Packs ▦ Database |

↕ SLA

| Technical Infrastructure **ZIB** | ▦ Hardware, Network, ▦ Backup, ▦ Operating system |

# Primo System Architecture

# Sizing of the consortial Primo System

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- **Requirements**

  - **6 institutions**

  - **800 simultaneous user**

  - **60 Mio Data sets, including 20 Mio sets from national licenses**

- **Hardware**

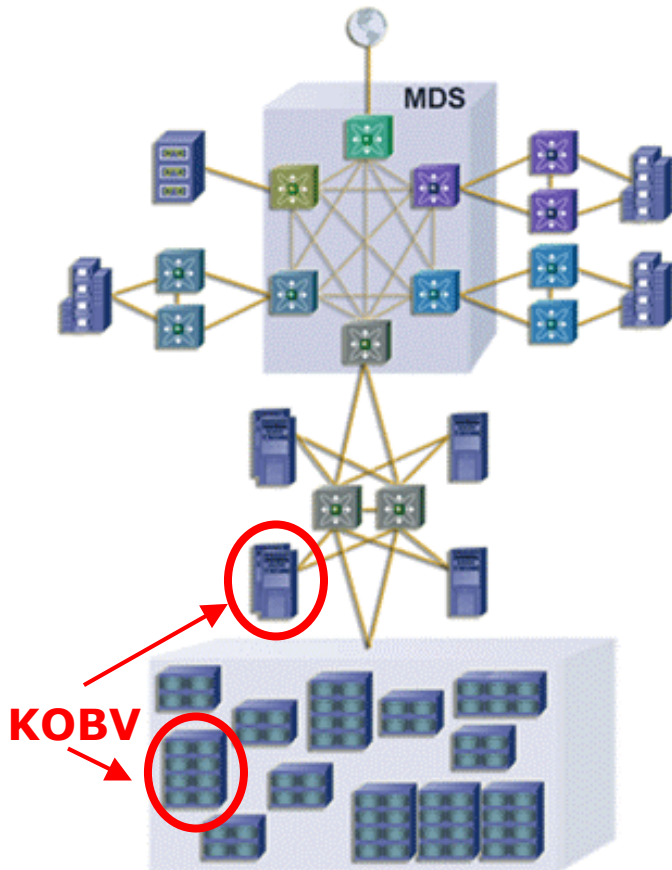  - **Test system**
    - **1 x Sun X4150, (4x4 CPU, 16 GB RAM),**
    - **2 TB SAN (Sun Array 6140)**
    - **Virtual servers**

  - **Production system**
    - **7 x Sun X4150 (4x4 CPU, 16 GB RAM), 2 TB SAN**
    - **separate Database sever (tbd.)**
    - **2 Front End Server (load balancing u. automatic failover, tbd.)**
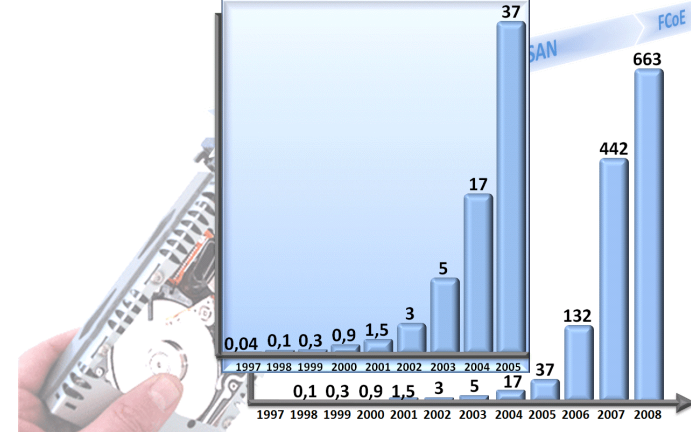
# Infrastructure in ZIB

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Außenanbindung

MDS

Bandgeräte,
Cluster,
Hochleistungssysteme

Zentrale Server des ZIB,
Projektserver

Plattenspeichersystem

**KOBV**

**Zentrale Datenhaltung im ZIB**
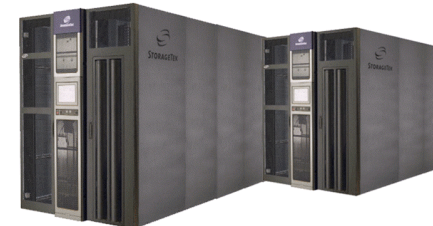Entwicklung der Plattenkapazität in TByte über die Zeit

SAN    FCoE

37    663    442    132    17    5    3    1,5    0,9    0,3    0,1    0,04
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008

0,1  0,3  0,9  1,5  3  5  17  37
1997 1998 1999 2000 2001 2002 2003 2004 2005

**Magnetbandspeicher**

**Roboter Sun STK SL8500**

Ein Roboter als Modular erweiterbares System

Insgesamt

13.500    Stellplätze für Bänder
16    Handbots
28    Laufwerke

Speicherkapazität

10 PB  bei  T9940B    Bändern
40 PB  bei  T10000C  Bändern

Grundmodul + 5 Erweiterungen    Grundmodul + 1 Erweiterung    beide mit 4 Durchreichen verbunden

| Laufwerke<br>bis zu 64 pro Robot | Typ | Kapazität<br>eines Bandes<br>(unkomprimiert) | Bandbreite | |
|---|---|---|---|---|
| | 17 x T9940B | 200 GByte | 30 MByte/s | |
| | 11 x T10000A | 500 GByte | 120 MByte/s | |
| | T10000B | 1000 GByte | 120 MByte/s | |
| | T10000C | 2000 GByte | >200 MByte/s | geplant für 2009 |
| | LTO und SDLT | möglich, aber zur Zeit nicht geplant | | |

# Monitoring

# Primo – Project plan

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- **Dez '08:**       **Contract with ExLibris**

- **Feb/Mar '09:**  **Training in Primo**

- **Mar '09:**       **Start of implementation**

- **Mar '09**        **Set up a Wiki for communication purpose**

- **Jun '09:**        **Adding Uni Mannheim**

- **Jul '09:**        **2 day workshop with all members (and members in spe) for experience exchange**

- **Okt '09:**       **STP HU Berlin, Uni Mannheim**

- **Q1/2010:**     **STP FU Berlin, TU Berlin with Version 3**

# Interface (Univ. Mannheim Instance)



**Catalogue.PLUS**
**Including:**

- **OPAC**

- **Journals**

- **All Online**
  **Resources**

# Our Experience

- Uni Mannheim had experience on an local installation since begin of 2008

- FU, TU and HU started testing after implementation in April '09

- Düsseldorf and Paderborn have no experience yet

- We shared our knowledge in two workshops

- We shared the normalization rules as templates to use the local 'flavour' to change these rules

- We organize a process to share upgrades in the templates after testing and updating the local normalization rules manually

- We share collective data, for example data from our national license, in each instance, i.e. the data from one pipe is included in all views

# Actual work

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**All:**

- Training stuff
- Create and test pipes
- HU, UM, FU: Create Views, Layout
- Create and improve normalisation rules and mappings
- Check system maintenance, limits and possibilities
- Performance tests

**Sources/pipes to involved:**

- Aleph with MAB (German Format)
- ILS OCLC Sisis (planned)
- MetaLib as an separate tab
- SFX (in discussion)
- Institutional Repositories via OAI; different systems: Home grown, Image Catalogues, Museum catalogues, MyCoRe, OPUS…
- National Licenses Data (XX)
- Source from Publishers ()
- Sum: Pipes in consortia: Views in consortia

# Pipes for sources in the consortia

- During tests created one pipe for delete and one for reload; a regular pipe for productive purpose

- One Aleph MAB normalization rule template, 4 Pipes (diff. flavours of the institutions)

- 8 OAI-Pipes; Institutional Repositories, Special and Image Catalogues

- 16 Pipes (diff. Marc Data) for National Licenses, usable for all Instances

- Additional pipes for sources in planning

    - MetaLib Data

    - SFX Data

    - Special Catalogues (i.e. Museums, Central scientific libraries, Sisis)

    - Data from Vendors (.i.e Oxford, de Gruyter, EBSCO)

    - Checking the pipes/normalisation rules in El Commons

# Back office issues in consortial environments: workarounds



- No instance separation in BO, no access control

    - Everybody can see and use other BO-stuff – workaround: don't touch others rules, tables..., only copy is allowed, use this own copy

    - List in Pipes, Tables, view etc. Very long, own material hard to find - workaround: indicate each name with the institute names, i.e. FUB_...

- Files for the scope with terms and notation are effective for all instances in one languages. workaround: use different 'languages' for each instance ;-) ; you can create your own language file

- No prioritization of pipes and indexing (FIFO) , this blocks the other processes until it is ready – workaround: clarify via mail which pipe should start first

- Hanging threads block the system – workaround: **restart the system**. This is not a good option for productive systems. Threads should delete separately (like a kill in unix)

- Deploy from staging to productive system – there is no tool yet - workaround: doing by hand?

- Search scope can only accept 255 character from all scope names – not enough for all our national licence data scopes – workaround: add different licences to one scope by normalisation from pnx and reindexing for a new scope

# Other issues in consortial environment without workarounds (but open SIs)

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- There is only one base-URL definition for a catalog in an instance – we can not mix three different catalogue information to one 'multiple' view (Fixed now)

- PDS: one PDS-server for all instances and an authenticity provider per institution is a bottle neck. If this server stops, there is no login in Primo and Aleph and MetaLib **in all institutions** as well

- Some of the lists in the BO are not alphabetically ordered. It is hard to find the right thing in our long lists.

- There is only one synonym list for the instance. This list should be one per Scope/view to help for specialized views. By the way: The German synonym list is bad and was corrected by UB Mannheim. Will be available via El Commons.

- Not only consortial issues:

    - The normalisation rules don't read 'normal' xml-files, i.e. with a **regular** tree structure. Will be solved in V3

    - The publishing process in Aleph is not consistent and loses data. Fixed now by a hot fix??

# Benefits of the consortia

- Sharing the experience - one of the colleagues knows mostly the answer for your question or share templates for the start

- We will share our experience via El Commons as well

- Sharing normalization rules, language data etc. - in our consortia we are in a similar (German) environment with similar sources, formats etc.

- Scopes are separated by institutions, but common data (national licenses) can be shared in the search scopes

- Consortia reduce the costs for hardware and maintenance (50%)

- New instances can be added and start later on – the consortia can start with an initial group and grow up over the time with new members

# Work in progress ...



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