



Réseau des bibliothèques de Suisse occidentale
Westschweizer Bibliotheksverbund
Rete delle biblioteche della Svizzera occidentale
Library Network of Western Switzerland

Journée RERO 2016

Les réseaux de bibliothèques à la croisée
des chemins

Aula Magna, Université de Fribourg

Jeudi 2 juin, 13h30

Journée RERO 2016

13h30: Message de bienvenue

par M. Christian Pilloud, Président du Comité de pilotage RERO

13h40: **Opportunités et atouts des nouveaux systèmes de gestion de bibliothèque en cloud**

par M. Andreas Degkwitz, directeur de la bibliothèque de l'université Humboldt à Berlin

15h00: Travaux et avancées du projet SLSP

- **Introduction**

par Mme Margareta Baddeley, Présidente du Comité de pilotage SLSP

- **LT1: Prestations de services et modèles d'affaires**

par M. Christian Oesterheld, Chef du sous-projet LT1

- **LT2: Organisation et gouvernance**

par M. Martin Kasser, Chef du sous-projet LT2

- **LT3: Processus et exigences informatiques**

par M. Pierre Buntschu, Participant au sous-projet LT3

16h00: Questions-réponses

16h30: Apéritif



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Présentation

Opportunités et atouts des nouveaux systèmes de gestion de bibliothèque en cloud

Andreas Degkwitz, directeur de la bibliothèque de l'université Humboldt à Berlin

“Next Generation Library Systems”

ReRo-Journee 2016

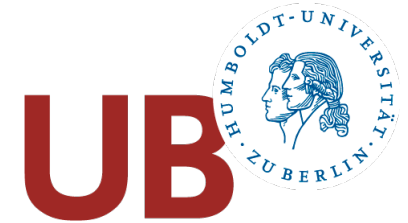
2nd of June 2016 – Fribourg

Prof. Dr. Andreas Degkwitz – Humboldt-University Berlin

Next Generation Library Systems

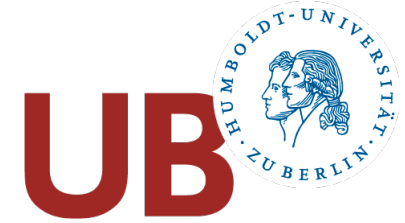
- The library systems of the next generation of the world's largest supplier Ex Libris and OCLC are cloud-based systems. Furthermore, there are Open Source Systems under construction, e.g. Kuali OLE, KoHa.
- ALMA (Ex Libris) and WMS (OCLC) are hosted by computing centres outside the universities and in a virtual system environment (cloud), they are run as Software as a Service (SaaS) by these companies themselves.
- Access to ALMA and WMS is possible for librarians and users over a Web-interface via Browser on their desktop.
- Which challenges are connected to these outsourcing scenarios? What is so exciting about the cloud?

Challenges



- Libraries will continue to be required to occupy themselves with library systems and staff in the IT departments will continue to fulfill important tasks: configuration of the system, standardization of workflows, metadata management
- The configuration of new systems requires IT knowledge. Third party systems will be needed for finances, user authentication, self-issue and returns, etc. - and these will have to connect to and be integrated into the cloud systems.
- Topics such as data privacy, data security and data sovereignty are not fundamentally new to librarians, but they require a new level of attention and sensitivity in the cloud.

What is new in cloud systems?

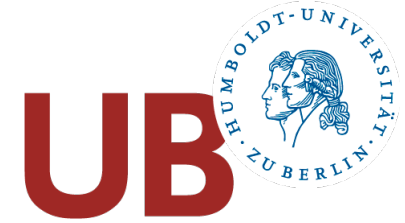


- Obvious advantages are scalability of systems whilst demand and requirements increase,
- Ease the burden in libraries through outsourcing of IT systems and their administration, including frequent software updates,
- Uniform treatment of analogue and digital media, knowledge bases for licensed resources,
- Good statistics functionalities AND
- Standardised workflows, which are a key motivation on the side of companies for such SaaS-solutions.

Opportunities ...

- Electronic Resource Management (ERM) functionalities are a new key issue in the range of functionalities in cloud systems.
- Reporting and statistics functional have been significantly further developed.
- Opportunities for staff to increase know-how with regard to data and data structures, etc.
- Easy access to international data services and separation from regional (German) “Verbund”-databases.
- Increased efficiency through outsourcing of systems basis (server) und through standardisation of workflows.

... and the risks.

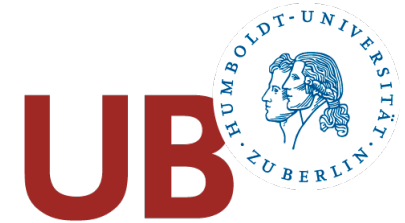


- Potential loss in quality through standardised SaaS portfolio.
- Reduced consideration for local particularities or features.
- Significantly higher dependency on a company.
- Questions regarding development of costs – also relating to integration with third party or other systems.
- Data sovereignty, data protection and data security.

Cloud solutions = liberation from IT?

- → No! This is a dangerous error – because:
- How libraries provide the data and the system provide services (configuration, data management, third party system integration), remains the challenge of libraries and cannot be ‘delegated’ to third parties.
- Questions relating to data protection and contact compliance are closely related to aspects of library services (evaluation of scenarios).
- Specific library expertise and metadata skills are still needed and have to ‘grow’ in line with the new requirements.
- → Libraries have to develop into partners of companies and take on an active role.

Standardization (1)

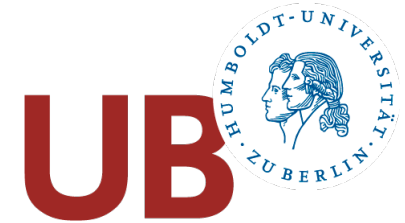


- The introduction of company-driven standards requires an effective 'change management', which should certainly not mean that the use of these new software systems stands under the 'dictate' of these companies.
- Some scope to move is definitely left to libraries, although this space is considerably smaller than what we are accustomed to.
- Possible restrictions are compensated by interfaces and 'app galleries' with which libraries can increase their range of functionalities → new 'own/local' workflows.
- However, service and maintenances of these locally implemented components are the responsibility of the libraries.

Standardization (2)

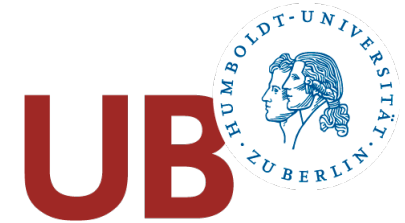
- The approach of efficiency: Standardization is the driver of more efficiency → intellectual work and/or manual work like cataloging is more efficient, if it's standardized.
- Bigger and/or only a few networks or units of cooperating libraries are more efficient than many, smaller networks or units → World-Cat, SLSP, merger of networks - e. g. CBDZ (= merger of BSZ, GBV and HBZ) – is more efficient than many „individual“ networks and/or units.
- This is concerning data and services and primarily the backoffice tasks like acquisition, cataloging, circulation etc. → target group is the staff of libraries
- But what about special or user driven data or service requirements of collections and materials, which are unique and not or less operable by standard procedures?

Library data infrastructure



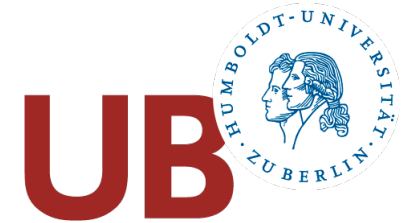
- The current data available for acquisitions, cataloguing, lending and user services
 - Copy cataloguing data for shared cataloguing
 - Authority data (GND)
 - User and service data (issues and usage data etc.)
 - Bookseller and publisher data
 - Licensing data
- ... should also be available in the context of ALMA, WMS et al.

Library networks databases



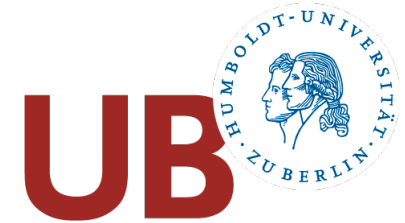
- This is a further consequence of the use of cloud systems, which is based principally on the fact that current developments are leading to the termination of – e. g. the six German - library networks databases. Why don't ALMA and WMS no longer use any library networks?
- WMS uses World-Cat for cataloguing and copy-cataloging.
- ALMA offers as a solution a 'Community Zone' which currently includes international master and authority data, in addition to the already mentioned knowledge-base for electronic resources. Furthermore, ALMA offers an 'ALMA Network Zone' which provides a co-operative cataloguing platform, which is quite similar to the continental European practice of library networks.
- Systems such as Quali OLE, KoHa etc. use – according to current reports – existing cataloguing environments. Whether this is World-Cat, an ALMA Network Zone or a library network, remains the decision of the libraries using these systems

CIB Project (1)



- The German data space of the DFG project 'Cloudbasierte Infrastruktur für Bibliotheksdaten' (CIB) should be formed virtually through regular synchronisation of metadata of German libraries in World-Cat and the German Network Zone (GNZ) of Alma.
- Thus, synchronisation should give ALMA and WMS users the opportunity to access each other's data in the respective metadata environment. The synchronisation should be open and available to further providers of library systems, too.
- In order to reach this goal and in addition to technical requirements, an RDA-compatible data model was needed that referred to the German RDA- 'Anwendungsregeln' and required some extensions to the RDA-interpretation in World-Cat. MARC field for GND-data → identifiers (no text strings).
- No more material-specific cataloging (monographs, journals).

CIB Project (2)



- The CIB Project offered in effect well-developed, partly already precisely specified concepts for the GND, for future cataloging of journals and serials, for the very complex topic of synchronisation, and there is a data model which is available to the library community.
- But in the end of the day: All the synchronisation procedures, which have been considered, failed or are too sophisticated. The project recommended cataloging in the World Cat, what includes a number of conditions and prerequisites like interfaces, data formats, working procedures etc.
- But what is not asked often enough: Which expectations are linked to the project? How the results should be interpreted, which regard to reliability and usability? What do we want, continuation of the status quo or setting out for new shores?

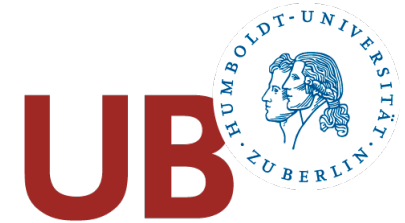
Metadata management (1)

- The biggest impact of these ‘library clouds’ for libraries is to be found in metadata management.
- The keyword is ‘internationalisation’ → Introduction of the new cataloguing standard Resource Description and Access (RDA). Does this satisfy the requirement to internationalise our cataloguing practices?
- The answer is “no”. The introduction of RDA according to the German MARC practices may be more international than MAB, but in reality it creates just another MARC-dialect within the range of such dialects.
- Orientation according to MARC of the globally most used data source → World-Cat → Cataloging with the World-Cat is the final recommendation of the CIB project.

Metadata management (2)

- Approach of more efficiency → Metadata management in just one or two networks – e. g. SLSP and ReRo - is enabling a much more efficient data sharing (= shared cataloging) → economy of scale
- This is concerning the back office procedures. But what about innovative effectivity, which is improving the information retrieval capabilities?
- Big data technologies (= cloud technology) are able to aggregate, to enrich, to link and to operate any kinds of metadata data automatically for enhanced user searches.
- Innovative tasks of the front office (discovery systems) – target groups are the users → More data hubs or data services for enhancements or enrichments of data → better access to content.

View to the shorter term future



- The question is whether the current co-operative practice of shared cataloguing should be continued, and if yes, how?
- For WMS users World-Cat is the basis for shared cataloguing. ALMA users can use World-Cat, but not as a shared cataloguing basis; but can ‘only’ use World-Cat data via copy cataloging. If ALMA users want to benefit from shared cataloguing, they need to do this in an ALMA Network Zone which offers this option → network zone of CBDZ (= merger of BSZ, GBV and HBZ) provided by the BSZ network
- How far the databases of the existing German ‘Verbünde’ will be integrated into the ALMA Network Zone and what exactly this co-operation will look like, is a separate project. Not least, because the ALMA Network Zone is more than just co-operative cataloging.
- Systems such as Quali OLE, KoHa etc. access – according to current information – existing cataloguing environments (‘Verbünde’, ALMA Network Zone, World-Cat).

A view to the longer term future

- In future, cataloguing will happen with Linked (Open) Data in the WWW, and be strongly automated → Big Data Procedures! Therefore, in future, less time should be spent discussing interpretation of cataloguing rules and optimisation of formats.
- Instead we should learn more about the many (not necessarily library-specific) metadata formats, persistent identifiers, international authority data and ontologies, taxonomies and thesaurus, and semantic linking technologies. We need to acquire significantly more expertise and knowledge in these fields.
- With this in mind, the old cataloguing practices of AACR, MARC, RDA etc. will represent important milestones on the way to the formation of the global Web-Space → traditional cataloguing will lose importance.

To sum it up

- Cloud based library systems are able to increase the efficiency of back office tasks by a stronger standardization of workflows.
- Big data technologies (= clouds) are able to enhance the search quality of metadata or any kind of data by innovative approaches.
- Result: Big (but only few) data networks for shared cataloging and/or new data hubs or services for enhancing the impact of the user searches.

**Thank you very much for your attention –
Questions?**

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