

# Integration of Metalib and Learning Management Systems

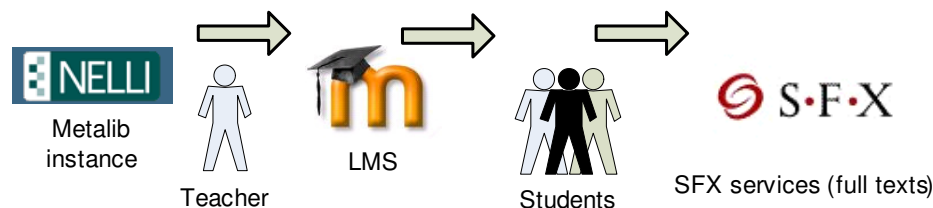
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# Why to integrate Metalib and LMS?

- This kind of integration projects is done by others (for example one presented in IGeLU 2006)
- Our customers told that our end users could need library resources in LMS systems such as Moodle and BlackBoard.
- There are plenty of course materials that can be reached through Metalib = digitally delivered content that E-Learning process use by definition.
- Metalib with its “My Space” is a very good tool to save and organize found course material.

# How to integrate?

- Found out while chasing up the workflow:
  - Just library search blocks in LMS would not have been enough.
- Draft idea:
  - Course manager (teacher) makes the course content and uses Metalib to search and manage published reading material.
  - When the list of records is ready it should be possible to move to LMS as easily as possible.
  - Links to the full texts should be handled like in Metalib: Direct links through proxy server or with SFX.



# Feedback from end-users

- First demo version ready -> Discourse and iteration with end-users
- The base line of the integration was supported, but there were things to re think:
  - In e-courses it is usual to have students also from other organisations. -> Problem for licensed material and linking
  - We had to do the transferable reading list package more simple
  - There was need for a preview stage where the teacher could attach her/his own comments to the selected records.

# Some technical problems

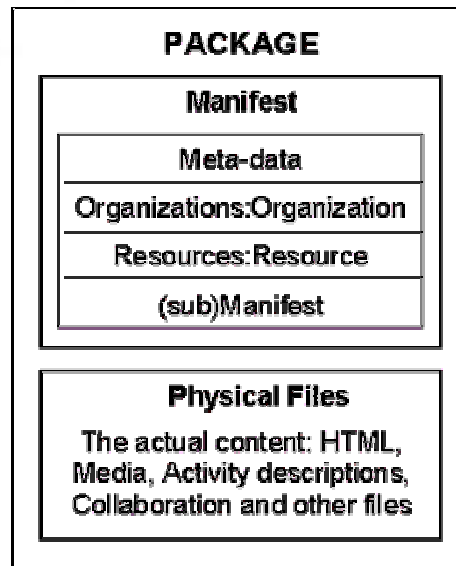
- We had to build our own html record list system which might seem quite useless in present versions of Metalib.
- Selected wrong approaches and starting points for not thinking everything inside out
- The most comprehensive record format for saving (MARC21) does not have document number (-> no SFX link with records)
- IMS-packaging standard is implemented differently in different LMS

# LMS standards

- Managed mostly by [IMS Global Learning Consortium](#).
- Problems in standards:
  - Too many and too complex
  - Commercial systems like Blackboard might support open standards badly.

# IMS-package?

- Very usable standard for wrapping and exporting content to LMS
  - In practice a zip package with content objects and descriptive metadata
  - No need for exact description of the functions of the content.
  - In our case the content was finally only one web-page



**IMS Content Package consists of  
Files (content) and Manifest**

## Demo in Nelli-portal

- Useful only when logged in. [>>>>](#)



# Licensed material and students from many organizations?

- We have a global SFX menu which combines all instances of higher education customers. Used with systems that are not used by one institution
- It tries to show only users own organization. If it does not recognize the IP-range user can select relevant organization and is saved as a cookie.



Questions?