dLibra
Digital Library Framework

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Plan

- dLibra – what it is?
- Electronic publication
- Library organization
- Document versioning
- Access management
- Functionality of dLibra
- Next deliverables

Digital Library Framework: dLibra

- System for multimedia content management and e-publishing

- Developed and funded internally by PSNC

- Facilitates main phases of digital publication process by supporting three basic roles: reader, editor and publisher

- Deployed in PSNC in May 2002 for internal publications

dLibra

- Support for digital publication process
  - Setting up, accessing and maintaining a library of digital documents of various types
  - Manipulating library contents through GUI aplications
  - Providing users with library content
    - Searching
    - Browsing
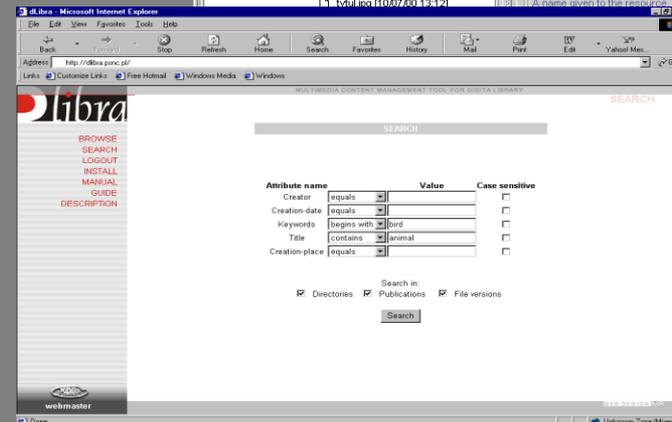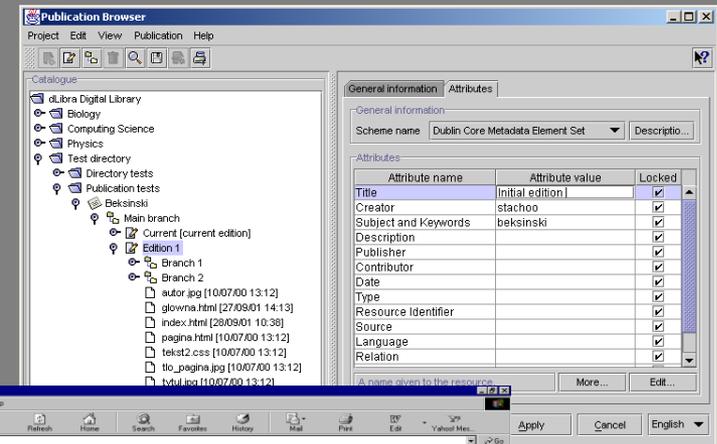
Electronic publication

- Electronic publication – separated and well organized unit of content/information
  - Scientific paper, report, book, web site, ...
- Structure of electronic publication
  - Single file (e.g. PDF, MS Word, ...)
  - Set of files (html, jpg, gif,...)

Electronic publication lifecycle

- Developing electronic document

- Uploading document to the library

- Enabling access to the document for library users

- Modifying electronic document

- Uploading modified files

- Enabling new version for library users

- .....

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Content organization

- Make the library easy to use for the readers

- Hierarchical library content organization
- Metadata

dLibra – Content organization

- Hierarchical library content organization
  - Content management
  - Access management

images

Publication 1 — TOC.html

chapter1.html

Computer networks

Other publication files

dLibra root directory

Grids

Publication 2

Other publications or directories…

…

Other publications or directories…
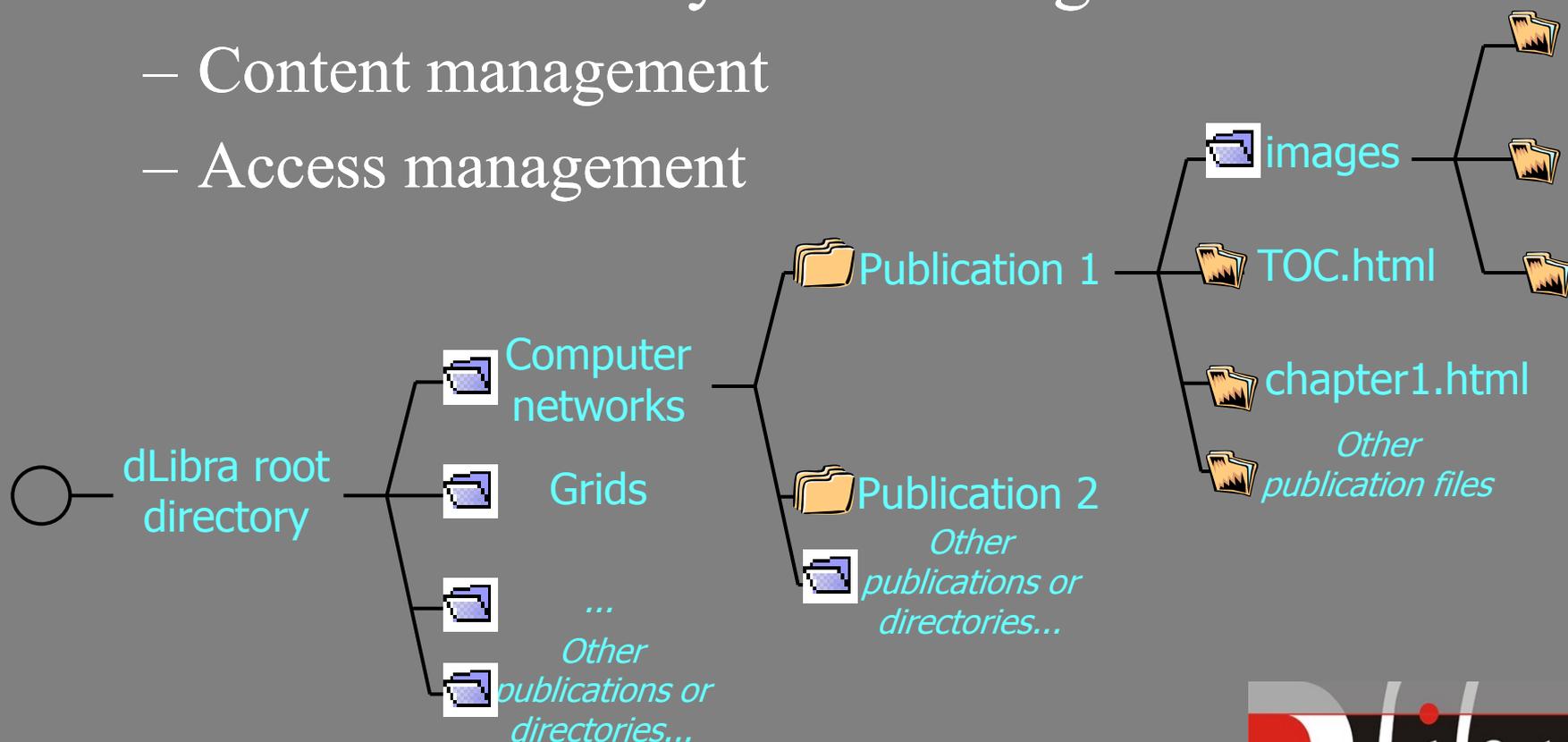
dLibra – Metadata

- Multiple, user-defined attribute schemes for every entity in the library

- Attribute values stored in multiple languages

- Dublin Core metadata scheme

Document versioning

- Let the documents develop freely

- Document-level versioning

- Object-level versioning

- Managing subsequent revisions of publications objects

- Branching

dLibra – Document versioning

Edition 1   Edition 2   Edition 3

Publication level

Objects level (components)

title.gif

Version 1.1

logo.gif

Version 1.1   Version 1.2

body.html

Version 1.1   Version 1.2   Version 1.3

Version 1.21
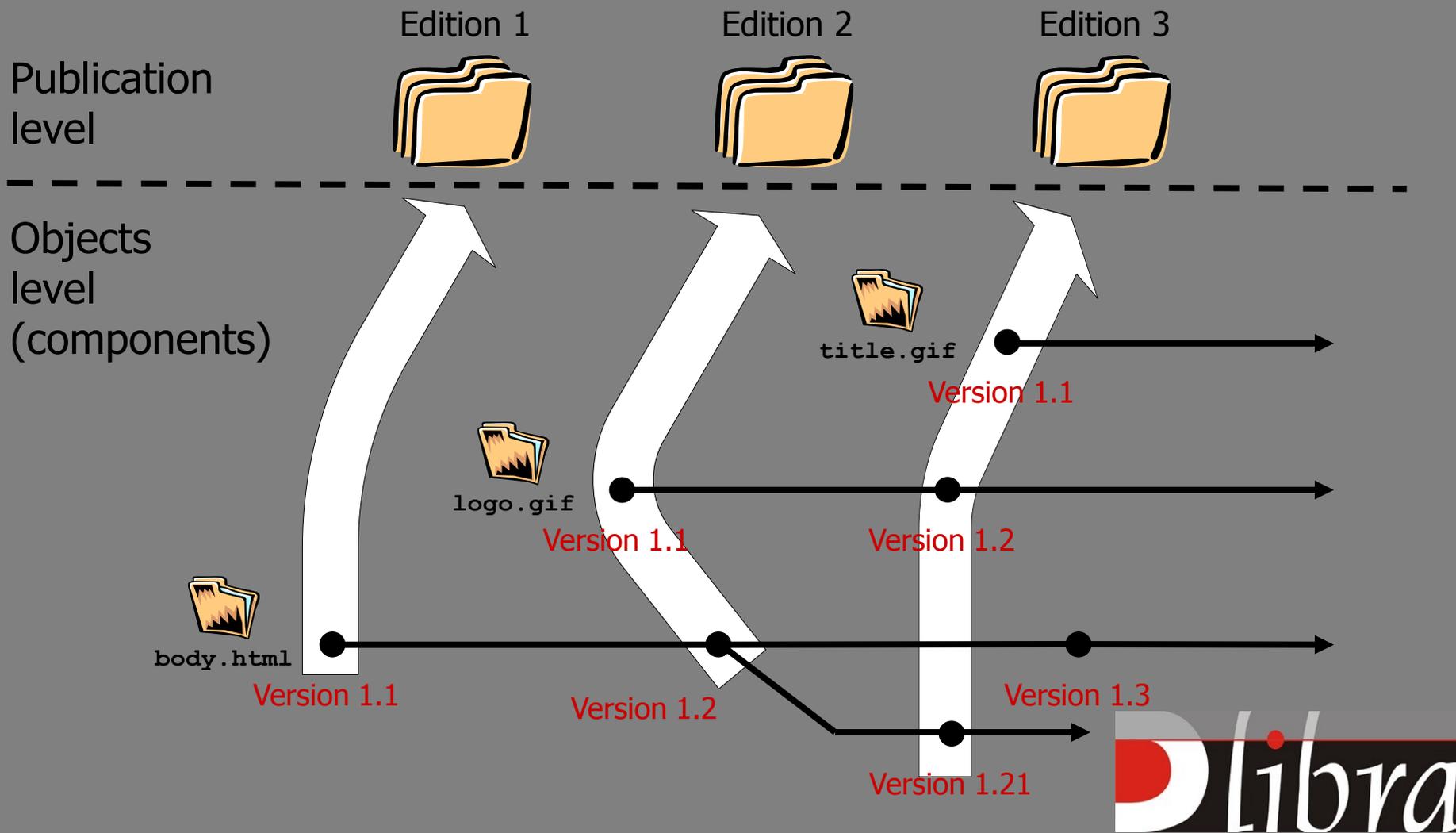
dLibra

Access management

- Make the library easy to manage

- Library-level access management (library administration)

- Directory-level access management

- Document-level access management

- Three user roles in dLibra

Acess management

- Rights Editor enables to alter access rights to library objects
- For a publication
  - „View" permits to read all published editions
  - „Read" permits to read all editions
  - „Manage" permits to manage publication
- For a branch
  - „Edit" permits to update and put new files

dLibra - Functionality

- Readers
  - Web-based viewing of selected publications
  - Searching and browsing library
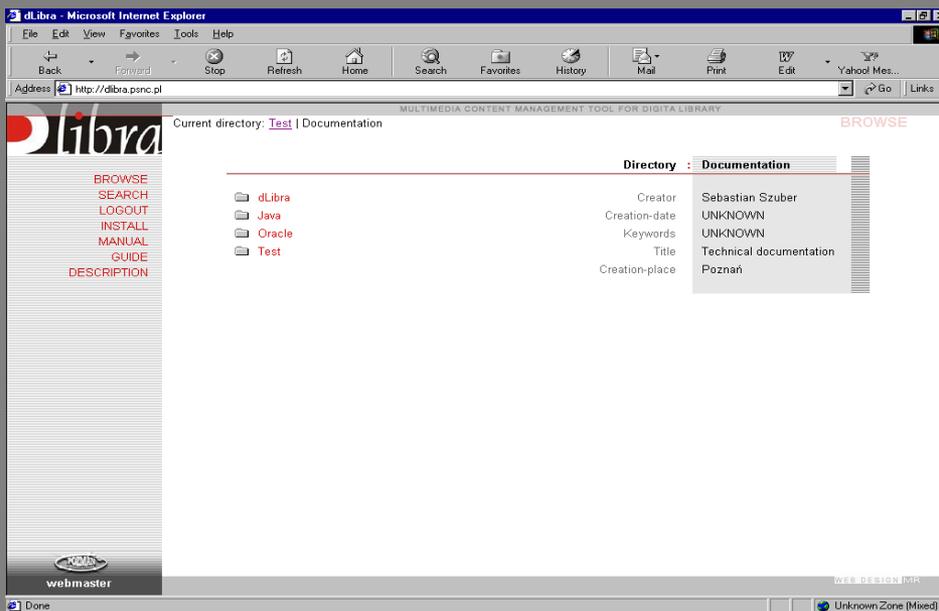
dLibra - Functionality

- Editors
  - uploading and retrieving publications or their components

  - advanced versioning supports managing of subsequent revisions of publication objects and branching
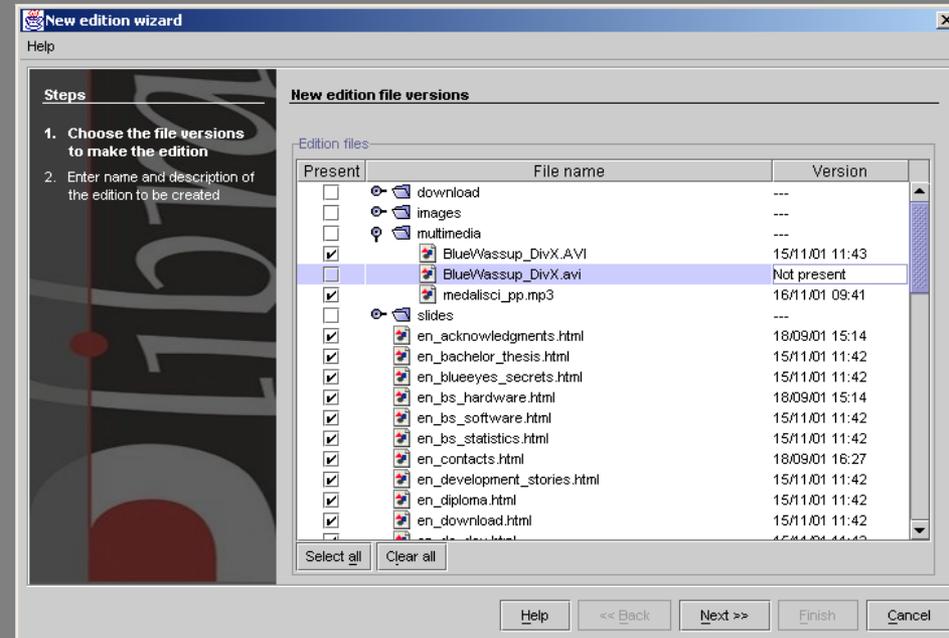
dLibra - Functionality

- Publishers
  - managing library structure
  - publishing and hiding publications, managing access rights and library resources
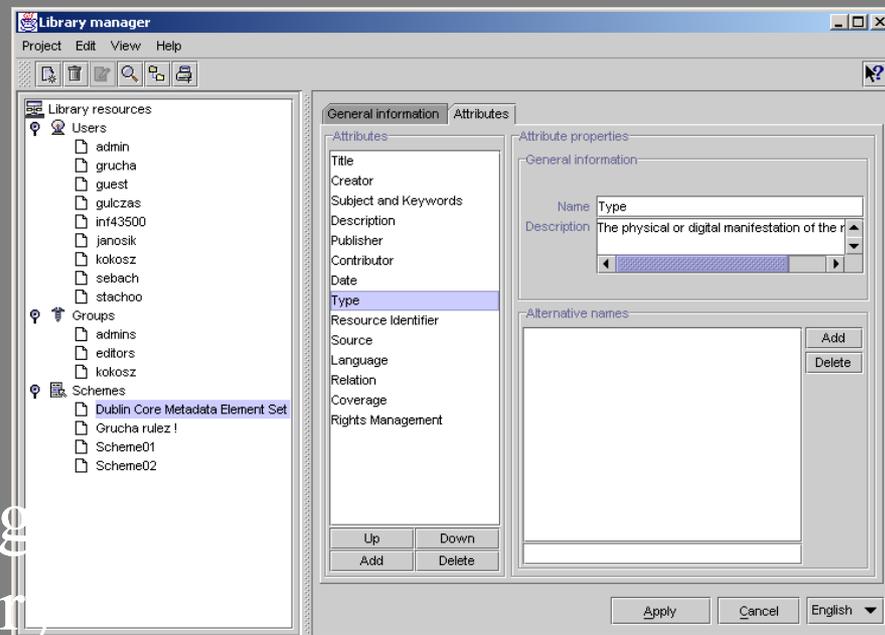
dLibra – Startup screen

Login

Publication browser

New publication wizard

Download wizard

Digital Library Framework: dLibra

- dLibra - next deliverables
  - Control mechanisms for document review and acceptance
  - Copy protection
  - User notifying about changes in particular publication
  - Content-based publication searching
  - Management of interdisciplinary publications
  - Extended metadata model
  - Supporting open source databases
  - Publication editor based on well-defined structure (XML/DTD)
  - DTD and stylesheet editor

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