

PHAIDRA

Permanent Hosting, Archiving and Indexing of Digital Resources and Assets

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Agenda

- **Used technologies**
- **Architecture & Security**
- **Phaidra Core**
- **Metadata schema**
- **Content models**
- **Supported formats**
- **Book-Viewer**
- **Forecast**

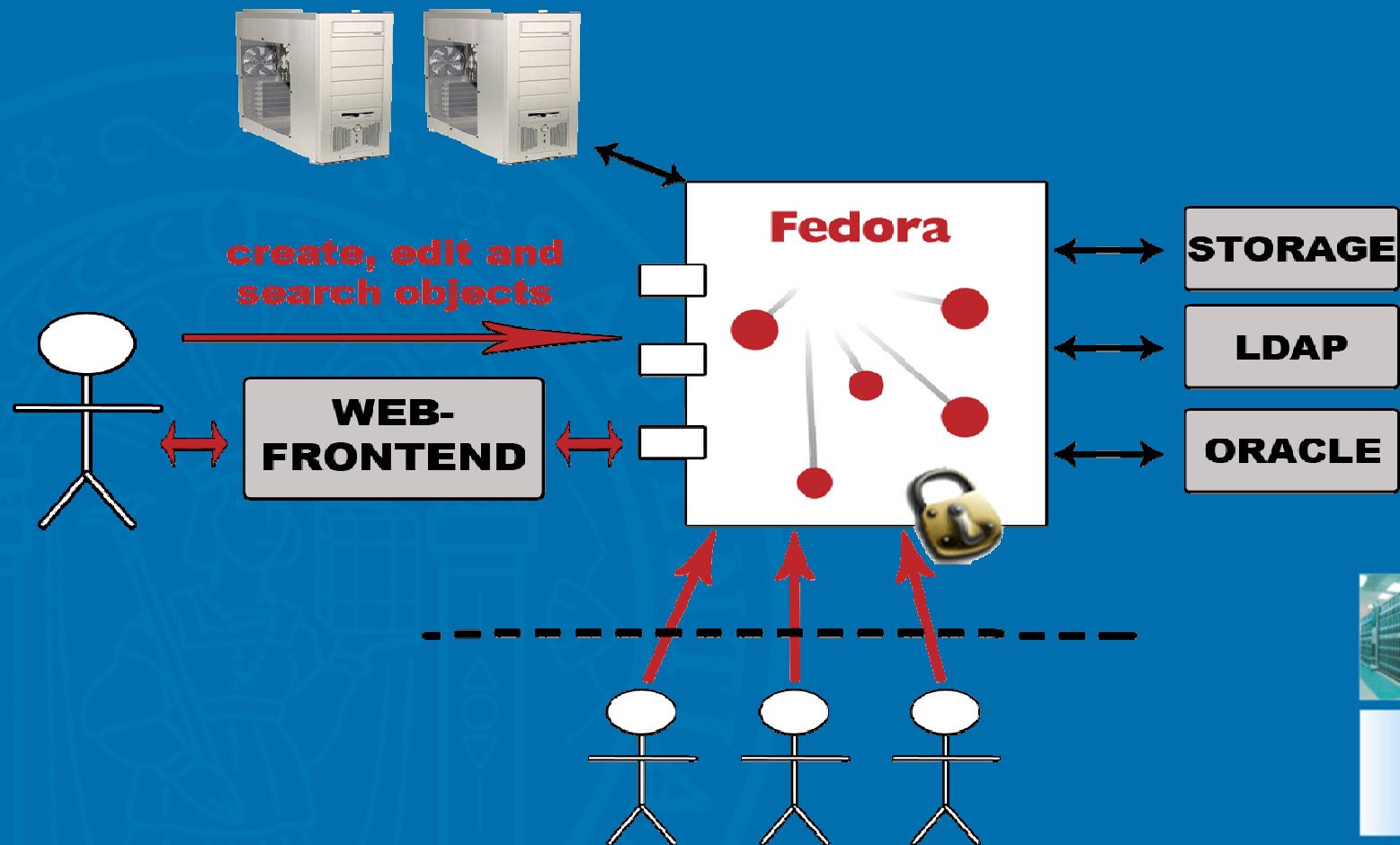


Used technologies

- **Web-Frontend: mod_perl applications**
- **Catalyst: MVC-Framework for Perl**
Model: DBIx::Class as ORM, own Model for Fedora (Facade)
- *View: Template::Toolkit*
- **Fedora 2.2.3 at Linux 2.6, Tomcat 5.5.20, Apache 2.2.3 as Frontend Server**
- **Databases: Oracle 10 & MySQL 5.0.32**



Architecture



Security

- **Authentication over LDAP: differ between staff, students, external (soon use of Shibboleth)**
- **Authorisation over XACML: who is allowed to use which API-(A|M)-functions under which terms**
- **Phaidra: all users are allowed to use (certain) API-(A|M)-functions, not only admins. XACML not sufficient!**



Phaidra Core

- **APIs for Perl and Java**
- **Abilities to search: Fulltext, Metadata, „Google Search“, Browse (Lucene)**
- **User-Interface: fully localized in german; usability very important**
- **Persistent Unicode (UTF-8)**



Phaidra Core

- **Right-management: allocation of rights for single user, user groups, departments, faculties.**
- **Rights can expire!**
- **Version-management: in RELS-EXT datastream; also available in „external view“**



Metadata schema

- **Modified LOM-Schema**
- **Faculties are able to save own metadata to their objects**
- **Different classification databases to classify the object (ÖFOS, GETTY, PACS, EuroVoc, ACM, ...)**
- **XML datastream is saved to every object**
- **DC is generated machinable**



Content models

- **Object groups:**

Single File

1 Content DS: picture, document, audio, ...

Collection

No content but members in RELS-EXT DS

Container

Multiple content datastreams



Content model

- **Object types: Picture, Document, Audio, Video, Ressource, Book, Page, Container, Collection**
- **Design of a typical Phaidra object:**

DC POLICY RELS-EXT	
OCTETS UWMETADATA RIGHTS STYLESHEET THUMBNAIL	bdef:Asset bdef:ImageManip



Supported formats

	recommend	possible	not applicable
picture	.tiff	.jpg	.psd, .gif, .png, .psd, ...
audio	.wav	.mp3	.wma, .aac, .ogg, ...
video	.avi, .mpeg2		.wmf, .flv, .mov, ...
documents	.pdf, .tei	.tex, .html	.doc, .ppt, .indd, .qxd, ...



Book-Viewer

- **Vienna University Library import their „E-Books on demand“ into Phaidra**
- **Every page in TIFF and whole book in PDF**
- **If available OCR data is also included**
- **With the help of Phaidra Book-Viewer the user is able to view the E-Book in a browser**



Book-Viewer

- **Main functions: stepless zoom, navigate through the book, full-screen view, download pages in JPG or PDF, ...**
- **Communication with Fedora over AJAX**
- **Search and highlighting of words or phrases is supported if OCR is available**



Forecast

- **Image Viewer: browser application for pictures > 100 MB – also used to scale pictures in Phaidra (Image Magick)**
- **Save and playback of molecules in digital form**



Forecast

- **OAI Interface (Europeana)**
- **Integration into existing systems (Fronter, TYPO3, ...)**
- **Link to streaming server**
- **Upgrade to Fedora 3**



Thank you!

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