Digital-Asset-Management, Collection Management and more with fylr

fylr
CURATE KNOWLEDGE.

Tuesday, 08/22/2023, Time: 3.00pm - 3.45pm
Sebastian Klarmann, COO, Programmfabrik GmbH

Digital-Asset-, Collection Management and more with fylr

Learn how university libraries use **fylr**, the successor of easydb 5, to create software services for their university departments. With **fylr** any type of media- and metadata repository can be set up without writing one line of code. **fylr** installations serve as Digital-Asset-, Collection-, Research-Data-Management, Vocabulary Services or customized software solutions with individual data models.

Libraries are changing

"The building of a public library should be centrally located, easily accessible also to the disabled and open at reasonable hours. The building and its furnishings must be attractive, comfortable and friendly; and it is especially important that readers have direct access to the shelves.

Will we ever succeed in realising this utopia?"

(Umberto Eco about the ideal library, 1981)

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Agenda

- Introduction

- **fylr**

- Customers

- Case Study 1: heiRIS - University of Heidelberg Research Infrastructure

- Case Study 2: University Vienna

- Case Study 3: University Münster

- Reach out & Questions

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Introduction Programmfabrik

- Founded in 2000

- Berlin based

- Team of 15 employees

- 200 Customers in 8 countries

- 1 product **fylr** (formerly easydb)

- Partner network

- Community

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What can I do with fylr?

- Create media- and metadata repositories

- No coding framework

- Digital-Asset-Management, Collection Management, Research-Data-Management, Vocabulary Services or customized software solutions

- Individual data models

- Focus on the GLAM&UR (Galleries, Libraries, Archives, Museums, Universities and Research Institutes) sector and businesses
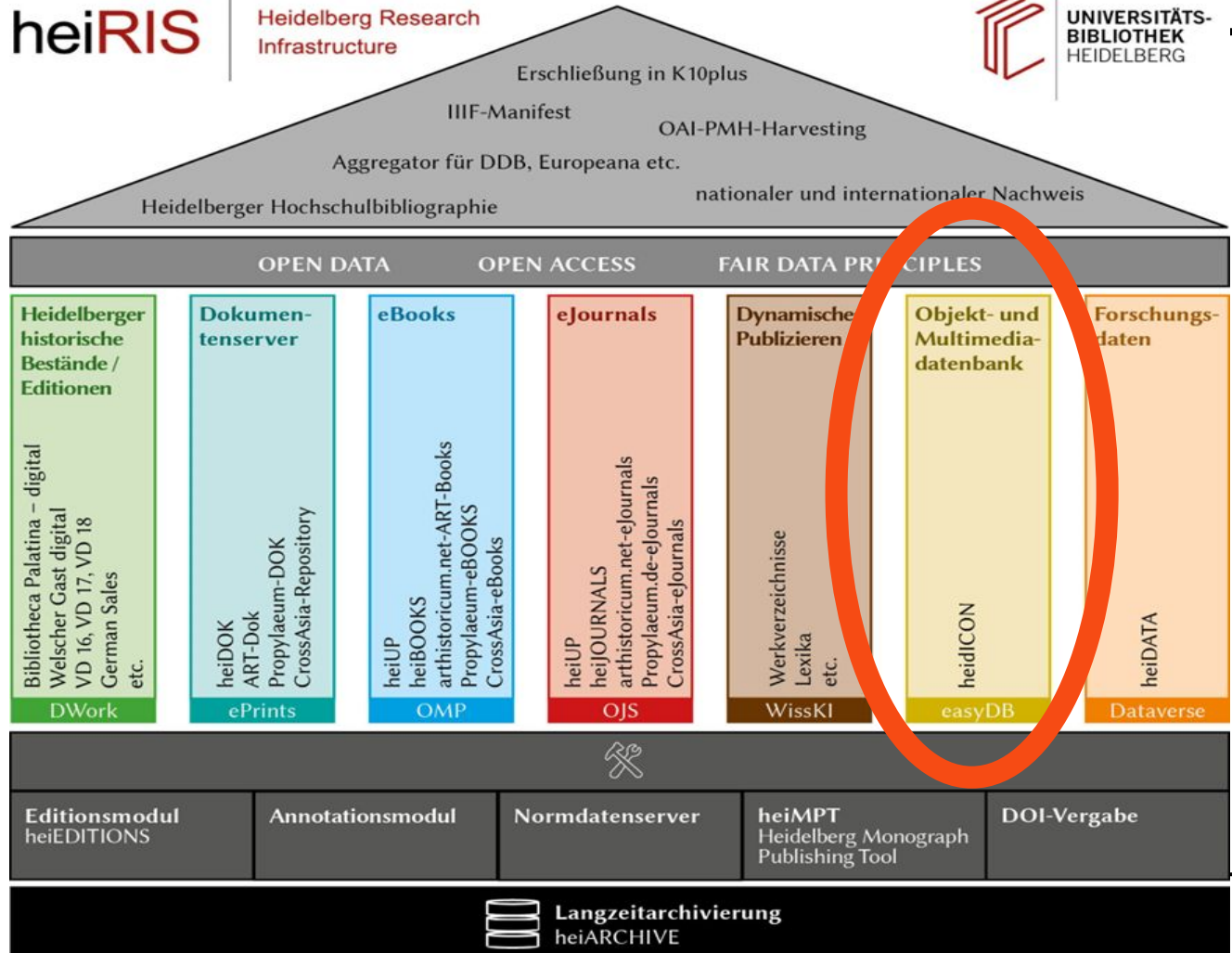
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fylr Features

- Flexible data model

- Graphic web frontend

- Permission Management

- Authentication via OAUTH2

- Multi-lingual

- RESTful API over HTTP

- Any files

- Im- & Export: XML, JSON, OAI/PMH, CSV

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Customers

- Libraries
- Universities
- Museums
- Archives
- Research Institutes
- Educational Institutions
- City Councils
- Businesses

- Germany
- Austria
- Switzerland
- Denmark
- Finland
- Italy
- Canada
- Uzbekistan

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Case Study 1: heiRIS - Heidelberg Research Infrastructure

- Modular research infrastructure of Heidelberg University Library

- Being build up for almost 20 years: Strategically selected projects, with a special focus on the needs of the humanities, the "Digital Humanities"

- Content: Digitized material, digital media and texts

- Goals: Making research data available, and long-term archiving to ensure the sustainability

- Ecosystem of interlinked services

- Strong community member & Development: Plugins & API Connectors

- Publicly available: heidicon.ub.uni-heidelberg.de

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heiRIS | Heidelberg Research Infrastructure

UNIVERSITÄTS-BIBLIOTHEK HEIDELBERG

Erschließung in K10plus

IIIF-Manifest

OAI-PMH-Harvesting

Aggregator für DDB, Europeana etc.

Heidelberger Hochschulbibliographie

nationaler und internationaler Nachweis

OPEN DATA	OPEN ACCESS	FAIR DATA PRINCIPLES

Heidelberger historische Bestände / Editionen
- Bibliotheca Palatina – digital
- Welscher Gast digital
- VD 16, VD 17, VD 18
- German Sales
- etc.

DWork

Dokumentenserver
- heiDOK
- ART-Dok
- Propylaeum-DOK
- CrossAsia-Repository

ePrints

eBooks
- heiUP
- heiBOOKS
- arthistoricum.net-ART-Books
- Propylaeum-eBOOKS
- CrossAsia-eBooks

OMP

eJournals
- heiUP
- heiJOURNALS
- arthistoricum.net-eJournals
- Propylaeum.de-eJournals
- CrossAsia-eJournals

OJS

Dynamische Publizieren
- Werkverzeichnisse
- Lexika
- etc.

WissKI

Objekt- und Multimediadatenbank
- heidICON

easyDB

Forschungsdaten
- heiDATA

Dataverse

Editionsmodul heiEDITIONS	Annotationsmodul	Normdatenserver	heiMPT Heidelberg Monograph Publishing Tool	DOI-Vergabe

Langzeitarchivierung heiARCHIVE

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https://www.ub.uni-heidelberg.de/service/openaccess/heiris.html?op=Log+in

Object and multimedia database 1/2

- **fylr** has been in use since 2005

- **fylr** is used as object and multimedia database as part of the Heidelberg Research Infrastructure

- Object-based database

- Research environment for objects and their audio-visual reproductions

  - Enables in-depth indexing (complex data model, controlled vocabulary)

  - Serves as a repository and publication platform

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Object and multimedia database 2/2

- Links/Linked Data:

    - Assignment of DOIs and persistent URIs at the dataset level.

    - IIIF output

    - Integration of standards data and thesauri (controlled vocabulary)

    - Enables data exchange - via XML (DDB, Prometheus)

- … Enables long-term archiving

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heiRIS data model

- Based on the XML-Format LIDO

- … is developed by a working group of the ICOM

- … is based on CIDOC CRM

- … is an XML harvesting schema for data exchange

- … enables Linked Data

- … has an event-oriented structure

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Multimedia filter and views

Dateityp

☐ Bilder	588891
☐ Office & PDF	3692
☐ Audio	2446
☐ Vektor (3D)	1980
☐ Video	1199
☐ Sonstige	14
☐ Archive	2

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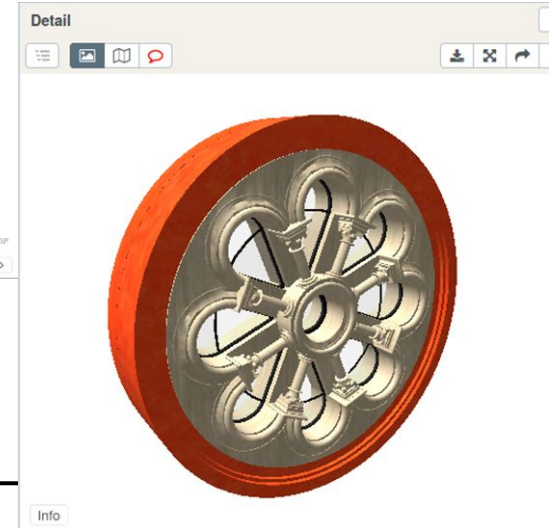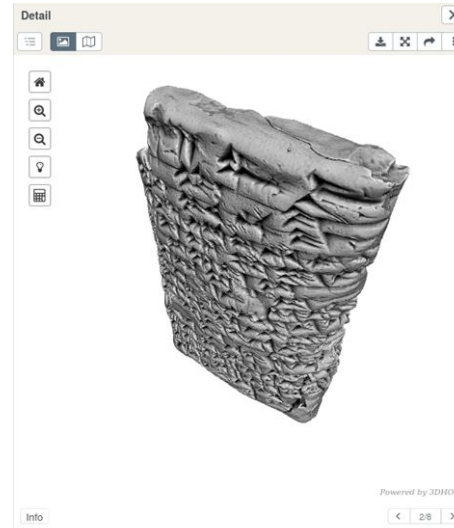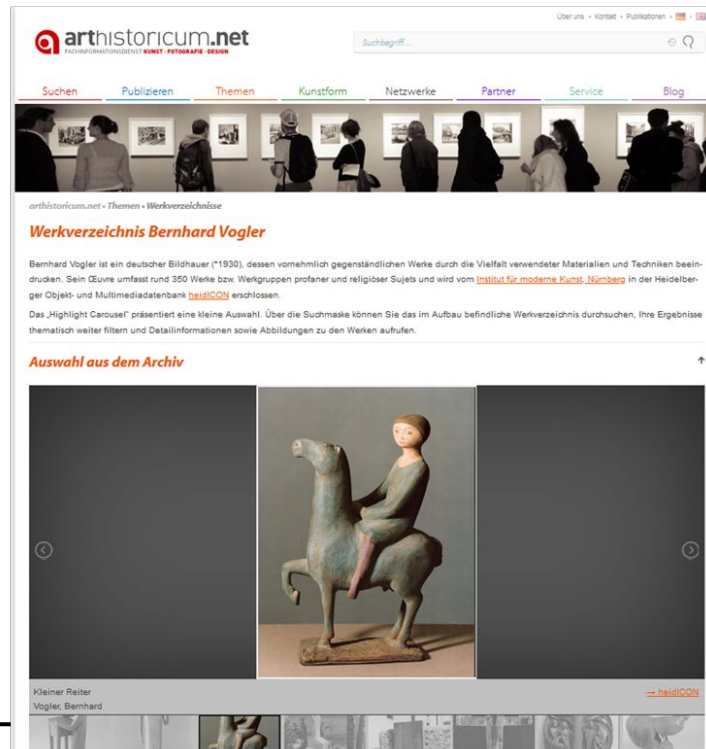
Data exchange

"Shop window function„

- Integration into the individual layout of the image provider
- „Highlight Carousel"
- Search / hit indication inside the window
- JavaScript application using the easydb5 API
- Usable for as many content management systems or frameworks as possible (e.g. Bootstrap))

https://gitlab.ub.uni-heidelberg.de/fdm/easydbportalng

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Interoperability and reusability

Case Study 2: University Vienna

- Start in the art history department in 2006

- Now: Central service in the university library

- Operation of several instances / installations depending on the scientific area

- Backend and frontend plugin Development

- Metadata are imported and/or bulk updated as CSV files

- Strong community member

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Key facts

- 6 projects / installations

- Only internal use

- Average of 1.000 objects per project, average of 5 users

- Project UniDAM: 500.000 assets

- Archive of academic graduation ceremonies at the University of Vienna: 500.000 assets

- Handwritten Protocols from the Austrian Monarchy

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Further projects planned

- Share and publish content outside the university as well

- Transcribus Workflow: Transcribing handwritten manuscripts automatically with full text search

- Long-term archiving interface fedora

- Integration of AI: Image description, classifications

Focus:
Digitalisation of zoological specimens, historical photographs and other archival materials of the zoological collection

- 54 object types (mainly imported helper objects, 7 main objects types)

- Data model: Specimen object type has about 90 fields

- 16,000 media files / images as objects / specimen

- 56,000 objects in total

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Standards

- Biodiversity standard: Audiovisual Core (Audubon Core)

- Controlled Vocabularies: Art & Architecture Thesaurus® (AAT)

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Outlook: Future steps

- Darwin Core Archive (DwC-A) export (xml/csv)

- Audiovisual Core (Audubon Core) export (xml/csv)

- Link with Global Biodiversity Information Facility Taxonomic Backbone

- Automated export of DWCA dataset to GBIF

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Case Study 3: University Münster

- Started in 2012 in the archeology department

- Now: Operation is centralised by the library

- Central Actor in the community

- Approx. 30 solutions in the areas of administration and science

- Multiple **fylr** instances and services available: 7 production installations / instances and 2 for testing

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Distribution of tasks
library & departments/institutions

- Permissions and role management based on IDM user groups, but user group management is the responsibility of the users or the using work groups (library only takes on an advisory role)

- Basic services (e.g. import of standardised data in collection management) are provided by the library

- Further work (e.g. complex mapping, data cleansing, etc.) is not part of the basic service and is agreed separately

- Service offered by the library for the departments / institutions in different service categories

Service categories
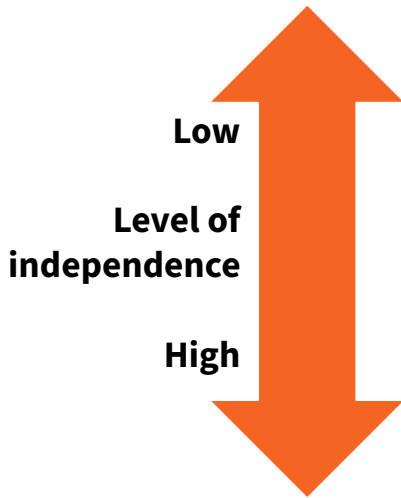
Service type	Data model	Data import
Collection Management	Defined / Provided by library	Standard import done by the library
Archive Management	Defined / Provided by library	Standard import done by the library
Research Management	Individual but implemented by the library	Standard import done by the department with support of the library
Digital Asset Management	Individual but implemented by the department	Independently done by the department

Low

Level of independence

High

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Collections Management

- Five university collections and growing

  - Mineralogical Collection

  - Archaeological Collections

  - Collection of the Bible Museum

- Number of users per collection: 5-10

- Internal use only but external publication with a 3rd party viewer planned

- Existing standard data model for different collections adopted from GBV Göttingen

- LIDO Format

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Example 1: Collection Management Bible Museum

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Archive Management

- Archive materials of the University of Münster

  - University archive holdings

  - Examination files,

  - Staff files

- This service is offered on an instance / installation with highly restricted accessibility and increased security requirements

- Metadata model based on other archival metadata

- Currently no long-term archiving, only backup, but together with the state initiative Digital University of North Rhine-Westphalia, prototype planned for 2024

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Research Management

- General scientific data

    - 3D data of art historical objects

    - Photos of archaeological excavations

    - Information on historical urban developments (pure metadata)

    - Scans of historical drug recipes

- Number of users per collection: 5-10

- Only internal use

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Example 2: Research Management Archaeology: seal impressions from the archives of Doliche (Turkey)

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Example 3: Research Management Archaeology, cuneiform writing on a Babylonian clay tablet (Iraq)

Digital Asset & Media Management

- University-internal management of photos and videos
  - University Press Office
  - University International Office
  - Startup Center
  - Library photo collection
- Multilingual, including Coptic and Hebrew
- 3D Objects
- iiif

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Reach out & Questions

- Booth G4 - We offer free **ice cream**

- Email: curate@fylr.io

- Website: programmfabrik.de & fylr.io

- Documentation: docs.fylr.io

- Meet me at the IFLA Early Morning Bootcamp (Euromast, Parkhaven 20, at 7.30am)

Sebastian Klarmann, COO, Programmfabrik GmbH

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fylr technical background

- Backend: programmed in go

- Frontend: HTML5, CSS, Javascript (Coffeescript)

- Server OS / Deployment: Linux, Windows or Kybernetes, Docker

- Database: PostgreSQL

- Search: Indexing via Elasticsearch

- Storage: S3, ceph and filesystem

- Extensions via plugins

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