

# **FOLIO** Community and Software

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Who we are ...





## VZG: Headquarter of the GBV



- Common Library Network GBV
- One of six regional library service networks in Germany
- Headquarter "VZG" situated in Göttingen, Lower Saxony



Quelle: Wikipedia



## VZG|GBV: Common Library Network



- Host for regional union catalogue (collaborative cataloguing)
- Located in a heterogenous software environment for its libraries
- Provides ILS (SaaS), ILL, portals and other services
- FOLIO project cooperation with North Rhine-Westphalian Library Service Centre (hbz), Cologne



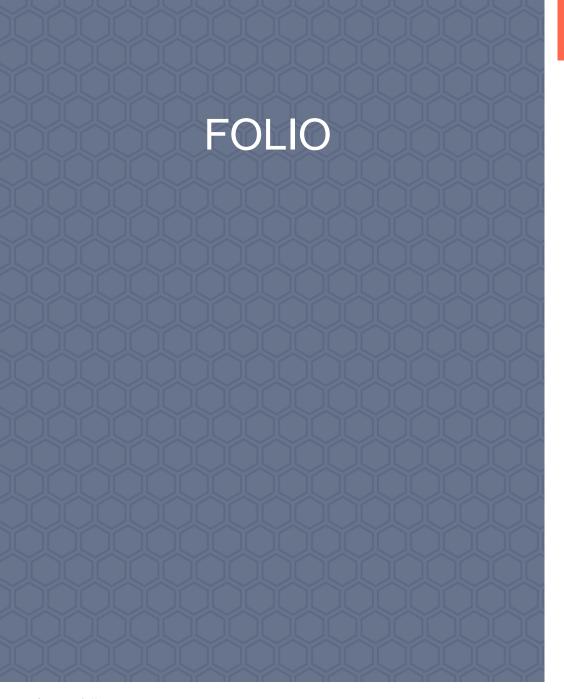


## VZG|GBV: Common Library Network



- Using OCLC CBS since 1993 for the Union Catalogue
  - For 72 academic libraries, 400 research libraries
  - With more than 37 m bibliographic and 89 m holding records
  - 122,000 e-journals, 2,100,000 online resources (ebooks, articles)
  - Integrated ILL
- Using OCLC LBS since 1993 as ILS in 188 libraries in 30 sites
  - OPAC, acquisition, circulation, work catalogue, user management, systems administration









### **FOLIO** overview



- Development since 2016
  - Founded as open source project by EBSCO, Index Data and the OLE community (Open Library Environment)
- Goal
  - Development of a Library Service Platform (LSP)
    - Open, sustainable, innovative, flexible, enhanceable
- Target Group
  - Academic and research libraries



### **FOLIO** overview



- Conception and Development of a technical platform "Okapi"
- Development of "FOLIO" as LMS on this platform
- Organization of end user applications = "apps"
- LMS development follows the design concept of
  - user experience design (UX)
  - user interface design (UI)
  - interaction design (IxD)



### **FOLIO** overview



- Open for
  - Libraries
  - Commercial vendors
  - Service providers
- In 2018 apps for
  - Circulation, media type independent acquisition and management, meta data management
  - Budget control, vendor data and user data management, systems administration



## FOLIO community



- New administrative home since 2016
  - Open Library Foundation
- Stakeholders
  - EBSCO, Index Data, OLE Community
- Development organizations
  - Stacks, K-Int, Qulto, @cult, FrontSide, UNAM
- Others



## FOLIO funding and staff resources



- EBSCO
- Index Data
  - Hired by EBSCO
- OLE Community
  - Andrew W. Mellon Foundation and community funded
- Engagement of other development companies and libraries



## **OLE** community



#### Partner Institutions































## **FOLIO** organization



- Special Interest Groups (SIG's)
- Product Council
- Developers
- UX/UI designers
- Product owner
- Stakeholders Board



## FOLIO special interest groups



SIG's	About
Metadata Management	SIG's per topic/module/app
Resource Access	Subject matter experts
Resource Management	Facilitated by convener and/or product
User Management	owner
Internationalization	Resourced by FOLIO Product Council
Consortia	Weekly web conferences
Reporting	Definition of requirements and use cases
• Privacy	Library expertise
Accessibility	
System Operations and Management	



### **FOLIO Product Council**



- Supports and coordinates SIG work
- Information hub
- Responsible for roadmap, prioritization, and resourcing
- Comprises of OLE partner libraries, EBSCO and Index Data
- Weekly web conferences





## FOLIO developers



Developer teams	Task
Index Data	Development lead and organisation, core team
OLE developer	Core team and app development
OLE developer / Mellon Foundation funded	App development for OLE community
• EBSCO	App development
<ul> <li>Development companies: <u>Stacks</u>, <u>UNAM</u>, <u>FrontSide</u>, <u>Qulto</u>, <u>@Cult</u>, <u>K-Int</u></li> </ul>	Contracted development
Others	Independent development

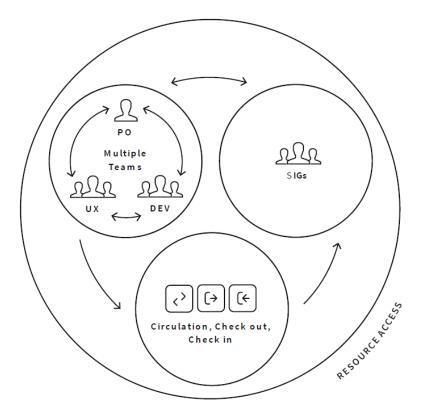
"Getting started for developers" - see "guidelines": <a href="http://dev.folio.org/community/">http://dev.folio.org/community/</a>







- UX/UI Designer
  - Base for app development
- Product Owner
  - Responsible for transfer of functional requirements into technical specifications
  - Connection to developer teams
  - Responsible for fulfilment of timeline and road map goals of his "product" (= app)



SIGs = Special Interst Groups

UX = User Experience Designer

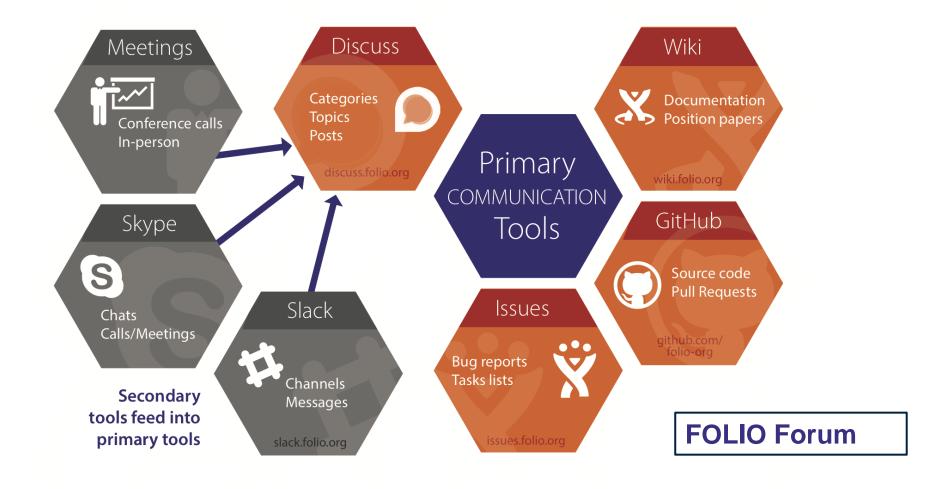
DEV = Developer = Softwareentwickler

PO = Product Owner



### FOLIO communication

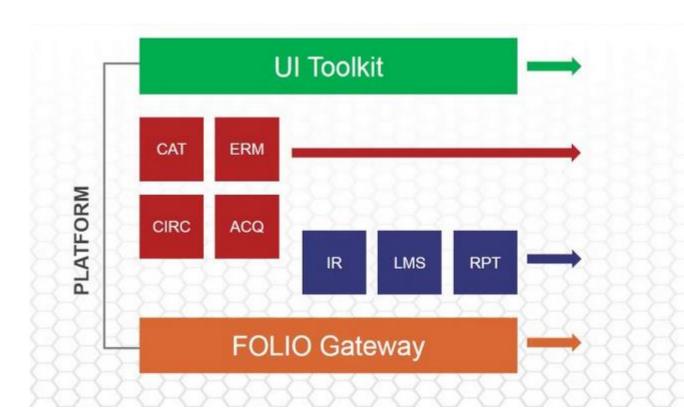






### FOLIO technical architecture





#### **UI Toolkit - Stripes**

React, Redux, Use default or create new

#### Core FOLIO ILS Apps

OS apps, e.g. e-resource management, circ, cat, acq...

#### Other Apps

Extend existing or develop new apps, OS or commercial

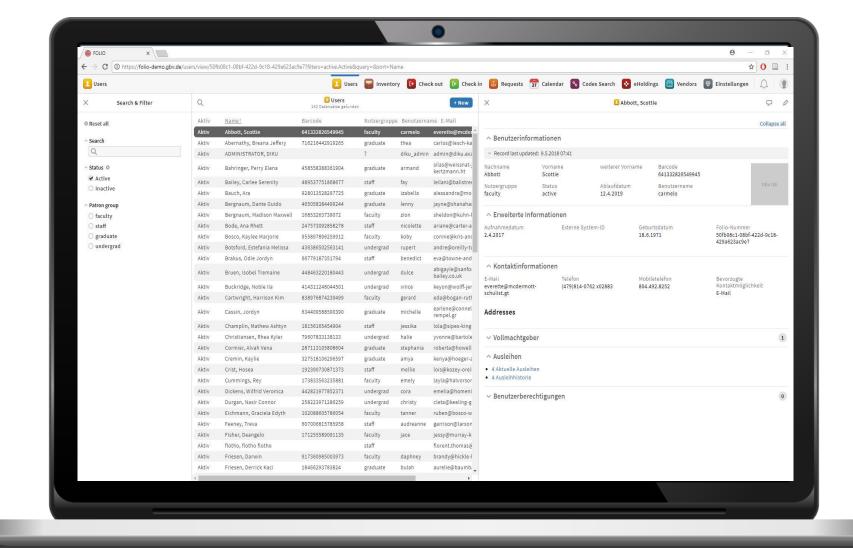
#### FOLIO Gateway - OKAPI

APIs, "Switchboard", Tenant separation





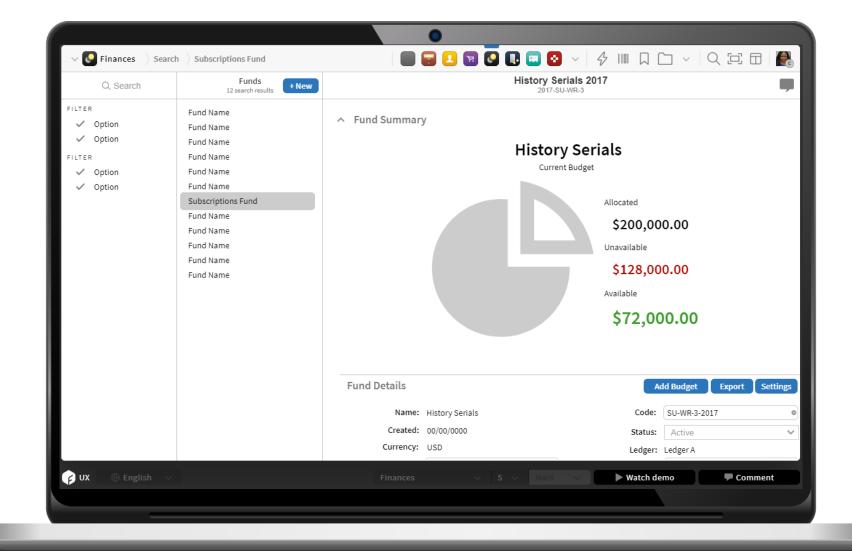
### FOLIO software - users





### FOLIO software - finances







### FOLIO team in VZG and hbz



- Active cooperation in FOLIO project
  - Functional experts and developers
    - FOLIO Product Council, Stakeholders Board, SIGs, subgroups (incl. convener)
- Active cooperation in OLE community
  - Board, Steering Committee
- Joint representation of network interests
  - Workshops, presentations, documentations
  - Developement project → electronic resource management
    - Organization of German FOLIO community
    - German web side <a href="https://www.folio-bib.org/">https://www.folio-bib.org/</a>"
  - Continuous evaluation of software and requirements during development process





- Systems concept: modular, flexible, and customizable
- Integration in higher education structures
- Possibility of "step by step" implementation of single modules
  - = less fractions, less risk
- Systems architecture strictly open api's
  - Platform internal between the apps
  - External to 3rd party systems
- Enhanceable by localization and extra services, e. g. 3rd party services, local developed apps (self check app, open access app, ...)





- Connection of various data sources
  - Standard metadata sources, e. g. union catalogues
  - Knowledge bases: commercial, cooperative
  - Linked open data
- Integration of future requirements
- Modern software stack
  - Recent technologies
  - Freedom of choice
  - Positive evaluation through OLE community technical review team





- Open Source
  - Open api's: quick, non proprietary addons possible
  - No vendor lock-in
  - Cooperative, transparent participation and developement community owned
  - "Save haven" of code (Apache 2.0 license) under the Open Library Foundation
- Data security, data safety, data ownership
- Self determination in information supply
  - Public service hosting possible
  - Library networks proven, strong, collaborative partners in international cooperation





- Cooperative development
  - "from libraries for libraries"
    - Comprehensive functional knowledge
    - Knowledge about recent and future requirements
    - Responsibility for development
  - In cooperation with commercial partners
    - Financial and management support
    - "Outcome oriented" target settings ensure the necessary pressure for success and reliability





- Achievement of an implementable version
  - Definition and priorization of requirements and realization
  - Reliable and timely delivery of
    - Funding
    - Staff: developer and functional experts
    - Product owner, project manager / leadership
    - Planned software in scope and quality
  - Consideration and realization of increased efforts in coordination and communication
  - Security for sustainable development continuation





- The platform in focus!
  - Isolated module migration possible
  - Open api architecture (internal and external)
  - Recent software stack
  - Microservice idea embedded in technology concept
  - Compatibility of public service and commercial interests
  - sustainable development possiblities of functionality and services for libraries in an innovative, self contained, consolidated concept!



## FOLIO implementation



- FOLIO partner libraries as "early adopters" in 2019
  - Texas A+M, Chicago, Lehigh, Chalmers, ...
  - Data migration concepts
  - OLE partner libraries will support each other
- Choice of business model
  - Local
  - Hosted / SaaS by public service provides, e.g. network headquarters or regional centers of excellence
  - Commerical SaaS, e.g. by EBSCO, Index Data, ...



### FOLIO learn more



- Code on GitHub https://github.com/folio-org
- UI prototype http://ux.folio.org/
- Demo installation https://folio-demo.gbv.de/ + http://folio-dev.hbz-nrw.de (diku\_admin / admin)



### FOLIO learn more



- FOLIO Wiki https://wiki.folio.org/
- OLE community https://www.openlibraryenvironment.org/
- Open Library Foundation http://www.openlibraryfoundation.org/
- FOLIO https://www.folio.org/







### Questions?

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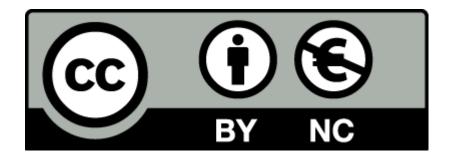
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Decisive for this presentation is the spoken word.

