

Understanding KVK, the technical base of artlibraries.net

Uwe Dierolf
Library of the Karlsruhe Institute of Technology (KIT)

KIT-BIBLIOTHEK



KIT Library - pictures



Opened in april 2006
24h library
never closed since 2006
+30.000 visitors per week



KIT Library – more pictures



KIT Library – first 24/7 library in europe

- Self service stations for all tasks using RFID technology
 - Book lending and book return



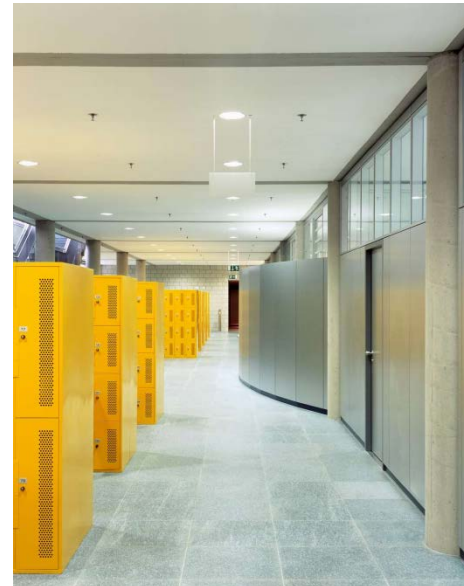
KIT Library – first 24/7 library in europe

- Self service stations for all tasks using RFID technology
 - Book lending and book return
 - Lending of ILL books



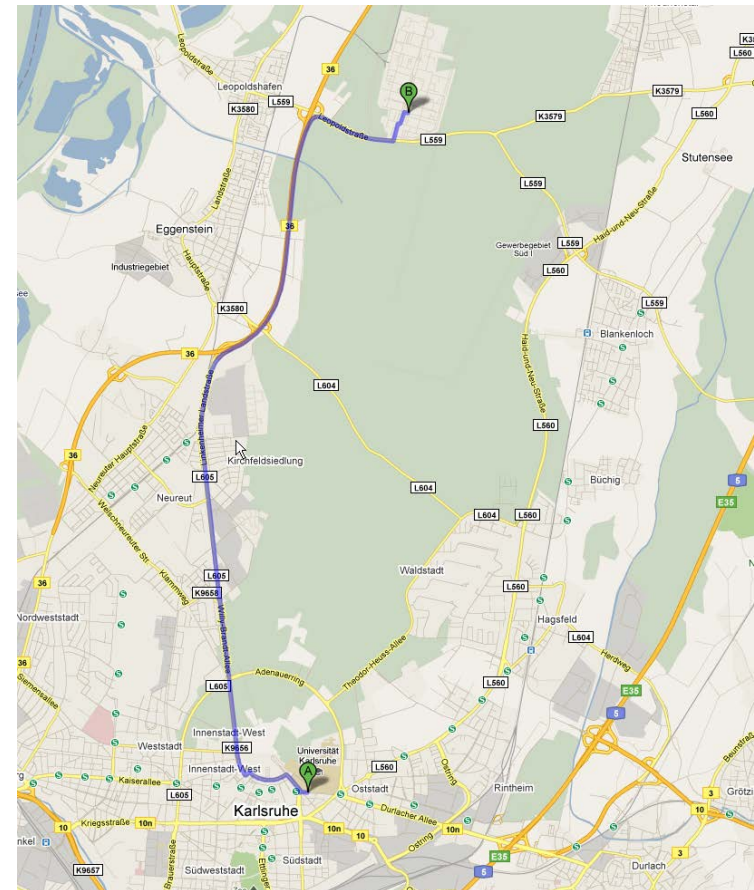
KIT Library – first 24/7 library in europe

- Self service stations for all tasks using RFID technology
 - Book lending and book return
 - Lending of ILL books
 - Lending of keys (keylender)



KIT vs. University of Karlsruhe

- University of Karlsruhe
 - 18.000 students
 - 4.000 researchers and administrative staff
- Forschungszentrum Karlsruhe
 - 4.000 researchers
- KIT = University + Forschungszentrum
- Distance 10 km



KVK – the technical base of artlibraries.net

- Started in august 1996
- Even as old as the internet
- 1.500.000 search requests per month
- Idea
 - In 1996 only few library catalogs had a Z39.50 interface
 - Problem: How to develop a simple user friendly search service?
 - Solution: Pattern matching
 - Send search requests to a catalog using HTTP requests
 - KVK emulates the user with his browser
 - Take a look on (read / parse) the HTML of the result page
 - Get short title, URL to full title, number of hits, "more hits"-link
 - Create a unique formatted hit list
 - with links leading to the destination catalog

Pros and cons of cross search vs. general index

- Cross search could be slow
 - Users have to wait for slow catalogs if they want to see all results
 - But the felt speed is fast cause results of fast catalogs are presented immediately
- Duplicate titles can't be eliminated
 - It's not a problem for the users
 - They are primarily interested in the result
- General index needs the metadata
 - Cross update problem
- KVK can integrate even any web based catalog
 - Cookie problem
- Cross search limits the number of catalogs in a virtual cat.

Cookie problem

- KVK acts like a "man in the middle"
 - KVK starts the search session
 - Some catalogs manage all their session information using cookies
 - To get the full title you need session ID stored in the cookie
 - KVK is not allowed to store cookies for other domains cause of security reasons
 - Workaround
 - Relay-mode of the KVK
 - Even requests to get a full title are handled by the KVK server
 - KVK acts like a proxy server for full title requests
 - All links on the full title page which need the session are not working
- Conclusion: in most cases cookies are a "no go"

Workflow of a KVK request

User



KVK-Search



KVK



native search



Catalog
using
cookies



result only



result + cookie



get full title



invalid session or session timed out



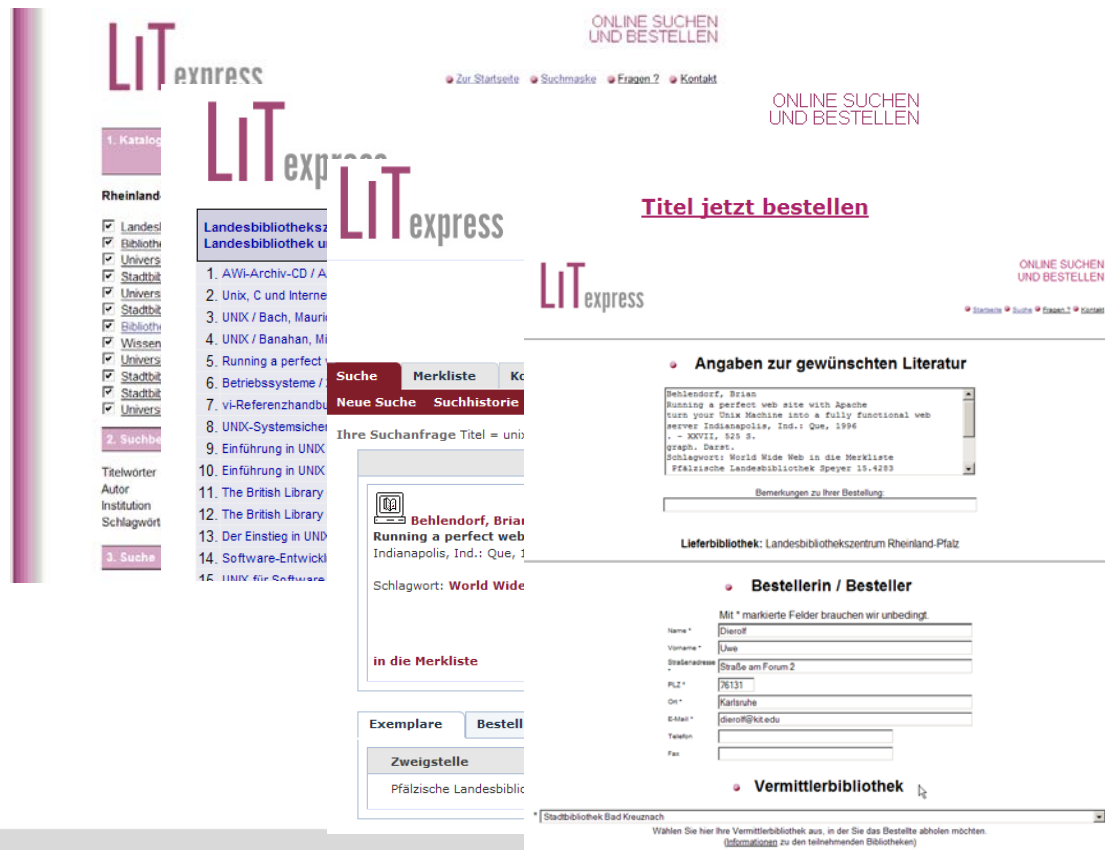
Solutions to circumvent the cookie problem

- KVK uses internal search interface for search engines
 - In most cases the result is machine readable, e.g. XML
- Examples
 - Infoguide from OCLC
 - KVK sends search requests to the Infoguide Web service
 - DNB catalog
 - KVK sends SRU requests to the DNB server
 - Union catalogs KOBV and BVB
 - KVK uses the internal search interface to Lucene / Fast
- Why does this help?
 - KVK doesn't need the session ID and the cookie any more
 - KVK creates "deep links" as links to the full title
 - Use the ID of the title in the URL

Delivery service based on KVK

■ Lit-Express

- Simple form of ILL
- KVK extracts the title data and fills an order form



The screenshot displays the LITexpress website interface. On the left, there is a navigation menu with categories like '1. Katalog', '2. Suche', and '3. Suche'. The main content area shows a search result for the book 'Running a perfect web' by Brian Behlendorf. The book details include the title, author, and a brief description. Below the book details, there is a section for 'Angaben zur gewünschten Literatur' (Details of the desired literature) and a form for 'Bestellerin / Besteller' (Orderer) with fields for name, address, and contact information. The form is partially filled with the user's details. At the bottom, there is a section for 'Vermittlerbibliothek' (Intermediary library) with a dropdown menu set to 'Stadtbibliothek Bad Kreuznach'. The website header includes the LITexpress logo and navigation links like 'ONLINE SUCHEN UND BESTELLEN', 'Zur Startseite', 'Suchmaske', 'Fragen?', and 'Kontakt'.

New features in KVK search

- My catalogs
 - Saving and restoring selections of catalogs
 - Based on Javascript Library jQuery
- "Did you mean ..."
 - Using Google to prevent typing mistakes
 - ... under construction

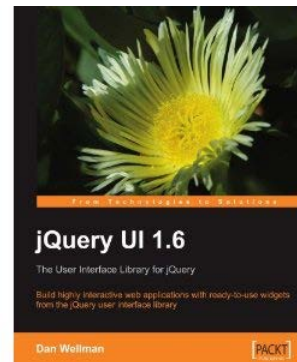
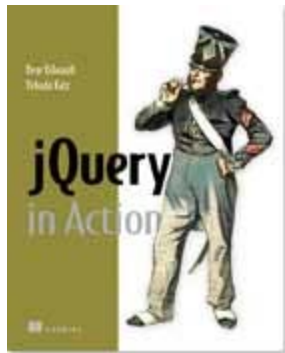
Thanks for your attention



Are there any questions ?

Literatur

- *jQuery in Action*, Bear Bibeault und Yehuda Katz, engl.
- *jQuery*, Ralph Steyer), dt.,
- *Learning jQuery 1.3*, PACKT Publishing, engl.
- *jQuery Reference Guide*, PACKT Publishing, engl.
- *jQuery UI 1.6*, PACKT Publishing, engl. (neu 1.7)



Links

- http://docs.jquery.com/Main_Page
- <http://www.ubka.uni-karlsruhe.de/jquery/jquery-in-action-DEMO/>
- http://en.wikipedia.org/wiki/Unobtrusive_JavaScript
- <http://westhoffswelt.de/blog.html>
- http://westhoffswelt.de/data/portfolio/webtechcon_2009_bubbles_and_trees_with_jquery.pdf

Bilder

