

Redesigning our Combine Harvester

Experimenting with Metalib's X-server:
ideas, attempts and realisations

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Outline

- Introductory
- Our Metalib
- Statistics–modules

Metalib Statistics

(SFX–statistics)

- Experimenting with the X–server: LiveTrix Demo

Summarizing: Front features

Summarizing: Rear features

Under the hood

- Concluding

(if time allows)

- Extras

Introductory

University of Groningen –
Rijksuniversiteit Groningen (RUG)

- founded 1614
- 22,000 students, 6,000 staff
- 494.2 mln EUR expenditure (2005) (632 mUSD, 4.5 mdSEK)

University Library

- Central library, in addition to 10 faculty libraries
- 130 staff
- Collection: 2.2 mln printed vols., 24,000 e-journals, 450 licenced electronic databases
- 1.36 mln EUR expenditure on collection development (incl. co-financing of electronic resources by faculty libraries) (1.74 mUSD, 12.53 mSEK)

Our Metalib: RUG Combine

- Introduced v2 as pilot 2004, Faculty of Medicine and University Medical Centre (Hospital staff)
- Migrated to v3 in January 2005, completing introduction to the whole of the University september 2005
- NOT only gateway (OPAC, Guide, Lists); usage *modest* so far



Our SFX: RUGlinks

- Introduced 2002, v3 since 2005



Statistics (1)

2 Modules: RUGlinks and RUG Combine

- Built upon logfiles, stored in MySQL-database
- Home made search software
- Available through HTML-webapplication
- Extract data that meet our needs and wishes
- Database and software on separate server
- Not interfering with production environment for Metalib and SFX
- Online webinterface; moved away from admin-module
- Username/Password access for library staff and management

Statistics (2)

What we found

15% errors:

technical measures > reducing to 1.5% errors/flaws

50% zero or false results:

- Misspellings and typos in search terms
- Picking databases at random
- Unable to understand QuickSearch, MetaSearch, Find Database
- Using the wrong search keys
- Using search keys wrong
- Using Dutch search terms in English language databases
- Using non-specific terms, phrases that are too broad
- Lack of understanding of Boolean logic or database peculiarities

[Metalib statistics](#)

Statistics about specific searches

Generate statistics for specific searches. The report can be filtered by date range, the full name of the resource, the status of the search and/or the number of documents retrieved.

Date (YYYY-MM-DD):	From <input type="text" value="2005-10-01"/> To <input type="text" value="2005-10-15"/>
Resource name:	<div style="border: 1px solid black; padding: 2px;"><ul style="list-style-type: none">AATA online : art and archaeology technical abstractsAcademic Search PremierAccessMedicineACL AnthologyACM Digital Library</div> <p><small>To select multiple databases: keep Control key (Ctrl) pressed and click with the mouse on each database. To select all databases: select first database, keep "Shift" key pressed and si multaneously press "End" key.</small></p>
Status:	<input checked="" type="radio"/> All searches <input type="radio"/> Successful searches <input type="radio"/> Unsuccessful searches
No. documents:	<input type="checkbox"/> Zero

Send

1284	2005-10-15	RUG00218	PsycINFO (EBSCO)	WRD=(discharge delay)	0	DONE
1285	2005-10-15	RUG00218	PsycINFO (EBSCO)	WRD=(0	DONE
1286	2005-10-01	RUG00008	PubMed	WRD=(chronical burnout) AND WRD=(stress related pr	0	DONE
1287	2005-10-01	RUG00008	PubMed	WRD=(chronical burnout) AND WRD=(stress related)	0	DONE
1288	2005-10-01	RUG00008	PubMed	WRD=(burnout) AND WRD=(stress related) AND WAU=(se	0	DONE
1289	2005-10-02	RUG00008	PubMed	WRD=(vetzucht)	0	DONE
1290	2005-10-02	RUG00008	PubMed	WRD=(obesity AND leptine)	0	DONE
1291	2005-10-02	RUG00008	PubMed	WRD=(cochlea implant) AND WRD=(logopedist)	0	DONE
1292	2005-10-02	RUG00008	PubMed	WRD=(cochlea implant) AND WRD=(logopedia)	0	DONE
1293	2005-10-02	RUG00008	PubMed	WRD=(PLa copolymer invivo)	0	DONE
1294	2005-10-02	RUG00008	PubMed	WRD=("lactic acid metabolism" human biomaterial)	0	DONE
1295	2005-10-02	RUG00008	PubMed	WAU=(antonius schmidt)	0	DONE
1296	2005-10-02	RUG00008	PubMed	WAU=("schmidt ajm")	0	DONE
1297	2005-10-02	RUG00008	PubMed	WAU=("ajm schmidt")	0	DONE
1298	2005-10-02	RUG00008	PubMed	WAU=(schmidt ajm)	0	DONE
1299	2005-10-02	RUG00008	PubMed	WAU=(schmidt ajm)	0	DONE
1300	2005-10-02	RUG00008	PubMed	WAU=(schmidt ajm) AND WAU=()	0	DONE
1301	2005-10-02	RUG00008	PubMed	WAU=(schmidt ajm)	0	DONE
1302	2005-10-02	RUG00008	PubMed	WAU=(schmidt) AND WAU=(ajm)	0	DONE

Complex phrases

Dutch ! (obesity)

Quotes

Name handling

Name handling

What if...

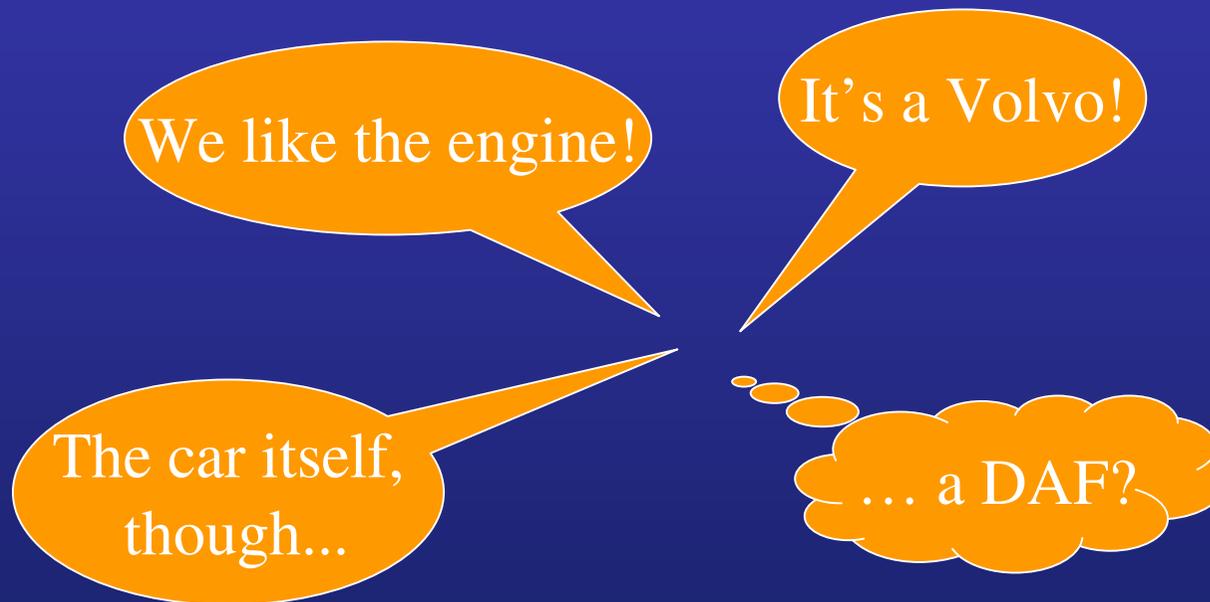
- we could users make to understand the work flow
- we could clear away misspellings
- we could suggest other or related search terms
- we could make users pick the right databases or better still...
- users wouldn't have to bother which databases to choose

We can!

By building new applications around Metalib's XML-server (X-server)

X-server

If Metalib is the car, then the X-server is the engine.



We could have power steering, ABS, a navigation system, cruise control, keyless entry, air bags all around us and a nice car stereo. We build our own car!

Livetrix - mostly back up - Mozilla Firefox

Bestand Bewerken Beeld Ga Bladwijzers Extra Help

http://livetrix.ub.rug.nl/ Ga

Beginnen Laatste nieuws

Livetrix - mostly back up Bibliotheek der Rijksuniversiteit Groningen

user: New search

LIVETRIX

All fields:

All fields:

Title

Author

(Search) - enter some search text

Random hint: **'All fields'** regularly means only the important fields like title, authors and abstract. Sometimes less, sometimes (much) more. When you know a term is in the title, search in the **title**.

The sources to search in are guessed based on statistics. To select a set yourself, [click here](#).

Klaar Adblock

LIVETRIX

All fields:

All fields:

Title

Author

(Search) - enter some search text

Random hint: **'All fields'** regularly means only the important fields like title, authors and abstract. Sometimes less, sometimes (much) more. When you know a term is in the title, search in the **title**.

By Subject

By Name

Suggest

Selected sources: [\(clear\)](#)

	Primary	Secondary	Tertiary
Business, Economics			
Exact Sciences			
General			
History, Art			
Humanities			
Law			
Linguistics			
Medical, Biological			
Other: Book sources			
Philosophy, Theology			

No sources selected, and you need not select any: the system will guess the best sources.

This may not work for rare or work well general words, and does not (currently) consider names, so you can search in specific sources if you wish.

All fields:

All fields:

Title

Author

Search

Random hint: When searching for **authors**, be careful not to be too specific. Use only the last name when specific enough. When initials are necessary, it seems most sources react well to the form Smith, J* (the wildcard to allow for both the initial and full name)

You have many sources selected. Only the first 10 will actually be used

By Subject By Name Suggest

	Primary	Secondary	Tertiary
Business, Economics			
Exact Sciences			
General			
History, Art			
Humanities			
Law			
Linguistics			
Medical, Biological			
Other: Book sources			
Philosophy, Theology			
Psychology			

- Selected sources: [\(clear\)](#)
- Art Index
 - Art Abstracts
 - BHA
 - RILA
 - RAA
 - Communication and Mass Media
 - Picarta
 - Web of Science
 - Academic Search Premier
 - RuG Catalogue
 - Historical Abstracts
 - MUSE

LIVETRIX

All fields:

All fields:

Title

Author

(Search) - enter some search text

You have many sources selected. Only the first 10 will actually be used

By Subject

Lib

Suggest

- [ATLA](#)
- [BIBSYS Union Catalog](#)
- [COPAC](#)
- [Danish Library of Science and Medicine](#)
- [LIBRIS: det nationella biblioteksdatasystemet](#)
- [Library of Congress](#)
- [PubMed](#)
- [UNSW Library Resources](#)

Selected sources: [\(clear\)](#)

- [Art Index](#)
- [Art Abstracts](#)
- [BHA](#)
- [RILA](#)
- [RAA](#)
- [Communication and Mass Media](#)
- [Picarta](#)
- [Web of Science](#)
- [Academic Search Premier](#)
- [RuG Catalogue](#)

Klaar

Adblock

LIVETRIX

New search

You searched for WRD=(smultronstället)

Finished. There are 55 results in 7 sources - this is quite low, consider reading the query analysis. ([query analysis](#))

- LIBRIS: det nationella biblioteksdatasystemet - 44 hits
- Library of Congress - 6 hits
- RuG Catalogue - 5 hits
- Historical Abstracts - 0 hits
- MUSE - 0 hits
- Academic Search Premier - 0 hits
- Web of Science - Search failed

◀ Previous page

LIBRIS: det nationella biblioteksdatasystemet — 1 2 3 4 5

Next page ▶

[The Swedish dreams of Ingmar Bergman](#)

1996 L Aatland

[Wild strawberries](#)

1995 P French K French

Bergmanis, Ingmars Birghman, Inghmar
ISBN: 0-85170-481-6

[Three post-Inferno Strindberg plays which Strindberg did not write](#)

1994 T Bredsdorff

Förf. jämför Smultronstället med Ett drömspel och Den starkare med Persona och Tribadernas natt
Strindberg S Post Inferno Plays / Editor

[Long day s journey into night](#)

1994 E Törnqvist

Birghman, Inghmar Bergmanis, Ingmars
Strindberg S Post Inferno Plays / Editor

[Drömmens klara bilder](#)

1993 E Törnqvist

Om förhållandet mellan filmmanuskriptet och den färdiga filmen
Filmdiktaren Ingmar Bergman

[Ingmar Bergmans opus 18 & 27](#)

1992 J Liljekvist

Birghman, Inghmar Bergmanis, Ingmars

Klaar

Adblock

LIVETRIX

New search

You searched for WRD=(smultronstället)

Finished. There are 55 results in 7 sources - this is quite low, consider reading the query analysis. ([query analysis](#))

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- Library of Congress - 6 hits
- RuG Catalogue - 5 hits
- Historical Abstracts - 0 hits
- MUSE - 0 hits
- Academic Search Premier - 0 hits
- Web of Science - Search failed

◀ Previous record to page view Next record ▶

Smultronstället och dödens ekipage

By:	Wirmark, Margareta
From:	ISBN in record: 91-7203-842-X  91-7203-842-X
In year:	1998
Full-text lookup	No citation information.
Other actions	Print record View raw XML record , or this view , in new window. Search for article title in: A9 , Google , Google Scholar .
Free-form notes	Birghman, Inghmar Bergmanis, Ingmars
Keywords	efterkrigstiden sverige filmhistoria filmregissörer bergman, ingmar filmanalys film filmer

Note: The meaning, use and usefulness of the fields below varies. Mouse-overing the field name may provide hints.

Cataloging

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LIVETRIX

All fields:

All fields:

Random hint: **'All fields'** regularly means only the important fields like title, authors and abstract. Sometimes less, sometimes (much) more. When you know a term is in the title, search in the **title**.

The sources to search in are guessed based on statistics. To select a set yourself, [click here](#).

LIVETRIX

New search

You searched for WRD=(anatomy lesson)

◀ Previous record

to page view

Next record ▶

Finished. There are 3876 results in 10 sources. (query analysis)

- SCIRUS (Elsevier) - 2288 hits
- Blackwell Synergy - 1252 hits
- CancerLit - 96 hits
- COPAC - 92 hits
- Web of Science - 63 hits
- Science Direct (Elsevier) - 44 hits
- Library of Congress - 25 hits
- Nationalbibliografin - Böcker - 7 hits
- LIBRIS: det nationella biblioteksdatasystemet - 7 hits
- ERIC - 2 hits

Rembrandt s anatomy lesson as a metaphor for education

By:	De Ville, K.A. Kopelman, L.M.		
From:	ISSN: 0149-7944 Current Surgery Mar 2003		
In year:	2003		
Full-text lookup	Journal title	<input type="text" value="Current Surgery"/>	
	ISSN	<input type="text" value="01497944"/>	Volume <input type="text"/>
	Year	<input type="text" value="2003"/>	Issue <input type="text"/>
			Page <input type="text"/> ...to... <input type="text"/>

Change and retry if information or result is incorrect

Wait for lookup...

- [Elsevier ScienceDirect Complete](#) (full text or best guess) (create tinyurl)
- [RUG Catalogue](#) (catalogue lookup, of journal) (create tinyurl)
- [Citation Information and URL](#) (formatted citation)

Done.

The following may (also) work:

IRRT's present (above lookup and/or links are usually preferable; there are no guarantees to even what this is)

https://proxy.ub.rug.nl/login?url=http://www.sciencedirect.com/science/journal/01497944

Adblock

LIVETRIX

New search

You searched for WRD=(anatomy lesson)

COPAC — 1 2 3 4 5 6 7 8 ...

Next page ▶

Finished. There are 3876 results in 10 sources. (query analysis)

- SCIRUS (Elsevier) - 2288 hits
- Blackwell Synergy - 1252 hits
- CancerLit - 96 hits
- COPAC - 92 hits
- Web of Science - 63 hits
- Science Direct (Elsevier) - 44 hits
- Library of Congress - 25 hits
- Nationalbibliografin - Böcker - 7 hits
- LIBRIS: det nationella biblioteksdatasystemet - 7 hits
- ERIC - 2 hits

[The anatomy lesson / Philip Roth](#)

1984 P Roth

ISBN: 0-224-02960-6

[Anatomy lessons from the great masters / by Robert Beverly Hale and Terence Coyle](#)

1977 RB Hale

ISBN: 0-8230-0222-5 or 0-273-01146-4

[Zuckerman bound](#)

1989 P Roth

ISBN: 0-14-011541-2

[The anatomy lesson / Philip Roth](#)

1995 P Roth

ISBN: 0-09-947661-4

[Rembrandt under the scalpel : the anatomy lesson of Dr. Nicolaes Tulp dissected / Norbert Middelkoop...\[et al.\]](#)

1998

ISBN: 90-71056-11-2 or 90-71056-12-0

[The anatomy lesson / John David Morley](#)

1995 JD Morley

ISBN: 0-349-10721-1 or 0-349-10628-2

[What every teacher should know about effective teaching strategies / Donna Walker Tileston](#)

2004 DW Tileston

ISBN: 0-7619-3121-X or 0-7619-3127-9

[Anatomy lessons / \[photographs and text, Karen Ingham ; preface, Bernard Moxham ; afterword,](#)

LIVETRIX

New search

You searched for WRD=(anatomy lesson)

to page view

Next record

Finished. There are 3876 results in 10 sources. (query analysis)

- SCIRUS (Elsevier) - 2288 hits
- Blackwell Synergy - 1252 hits
- CancerLit - 96 hits
- COPAC - 92 hits
- Web of Science - 63 hits
- Science Direct (Elsevier) - 44 hits
- Library of Congress - 25 hits
- Nationalbibliografin - Böcker - 7 hits
- LIBRIS: det nationella biblioteksdatasystemet - 7 hits
- ERIC - 2 hits

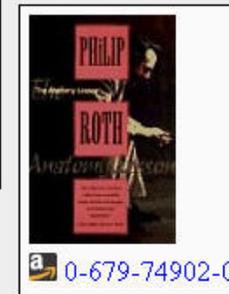
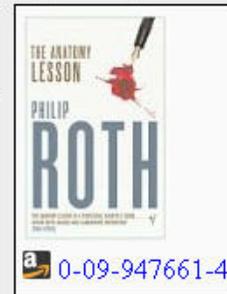
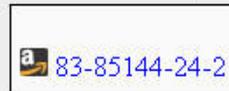
The anatomy lesson / Philip Roth

By: Roth, Philip, 1933-

From: ISBN in record: 0-224-02960-6



The following items are related somehow (according to ISBN). These links are to Amazon:



In year: 1984

Klaar

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LIVETRIX

New search

You searched for WRD=(anatomy lessons)

Finished. There are 2439 results in 10 sources. ([query analysis](#))

- Blackwell Synergy - 1252 hits
- PubMed - 1076 hits
- Web of Science - 85 hits
- Science Direct (Elsevier) - 20 hits
- IBZ - 3 hits
- Econlit - 1 hits
- ERIC - 1 hits
- IBSS - 1 hits
- Geobase - 0 hits
- SCOPUS - Search failed

Query analysis

Unknown strings

The following strings are **not (yet) known**. This may simply mean they had not been searched for yet, they are rare, misspelled, or ignored because it is a stopword or very long.

- ◆ anatomy lessons - could you have meant '[anatomy lesson](#)' or '[some lessons](#)' or '[antibody response](#)'? (click to search in same sources)

Likely sources

Statistics show that the following will also be **responsive to the words in your search** (though not necessarily the search itself)

- ◆ Top few: [COPAC](#), [Library of Congress](#), [SCIRUS \(Elsevier\)](#), [Nationalbibliografin - Böcker](#), [LIBRIS: det nationella biblioteksdatasystemet](#), [CancerLit](#), (click to search in this set)

Substrings

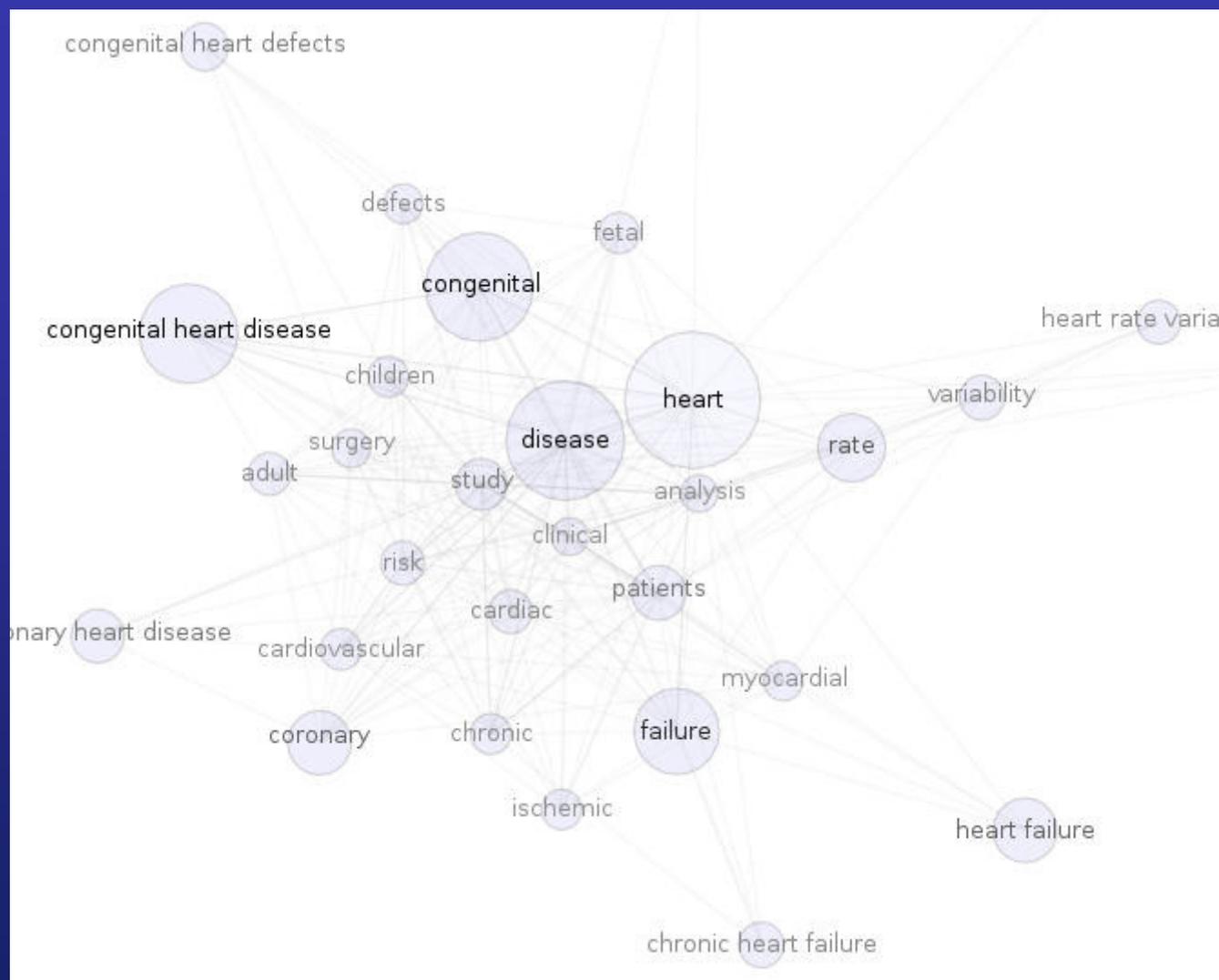
Shorter strings strings from your search are generally more likely to yield results. The following list is sorted; most likely to give results (usually because it is more general) come first. (Click to search each in sources that seem to represent them best)

- ◆ [lessons](#)
- ◆ [anatomy](#)

X-server: LiveTrix Front

- Ticking one or several Subject Areas (if you want)
- Primary, Secondary (and Tertiary) resources (if you want)
- Suggest-mode (if you want)
- Select resources (if you want)
- Help texts, search hints, explanation
- No Meta, no Quick
- Filling in search fields; no Simple, no Advanced
- Spelling check
- Graphical representation

LIVETRIX



X-server: LiveTrix Rear

- Search progress
- Presentation of hits
- Immediate access, even during retrieval process
- Help texts, search hints, explanation
- Short (table) view
- Long view, featuring: Book covers, Inline SFX services (link resolving to full text, inline catalogue lookup, searching Google, Google Scholar, A9, export to RefMan), Generate persistent tiny URL, Delivering extra metadata from external resources, e.g. local library systems

LIVETRIX

LiveTrix: under the hood

Search terms are sent to all databases in the background.

The first 30 titles from each database are retrieved. These titles are indexed both as a string and word for word, as well as counted. A relation network is built up. From then on, the system knows in which databases these terms occur.

In the next query, suggestions about databases (“likely sources”) are given on the basis of these ever expanding indexes.

Dito for suggestions about word relations.

The indexes are also used for correcting typos and word/phrase suggestions.

Suggestions about similar sounding phrases are given upon phonetic matches (“Soundex”).

LIVETRIX

Concluding

How do we continue?

Uncertain

- Our funding
- Our manpower
- Maybe seeking cooperation/partners (inter)nationally
- What does ExLibris come up with?

Aim to make it a working system for end users.

- Completing it with personalization, alerting tool, solutions for “link-only” resources
- Improving the interface
- Usability tests

Thank you for your attention!
Tack för uppmärksamheten!

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University of Groningen Libraries: <http://www.rug.nl/bibliotheek>

RUG Combine: <http://combine.ub.rug.nl>

LiveTrix: <http://livetrix.ub.rug.nl>