



Inter-Search

Integrating federated searching
in an Inter-Library Loan
system



The “one ring” of searching

- One search to trawl them all
- One search to find them
- One search to bring them all
- And in the browser bind them



Why Federate the ILL search?

- Increasing component of full-text electronic consortia agreements as an element of the union list
- Increasing availability of open access resources and full text database resources
- Increasing complexity in subscribing to and accessing multiple different resource contexts

InterSearch Networks



GratisNet: <http://www.gratisnet.org.au> (Gratisnet is a Health-focussed network of 350 libraries)



GLASS - <http://www.glassdd.org> (a network supporting the GLINN and LOTS consortia of NSW government and semi-governmental libraries)



QShare: <http://www.qshare.org.au> (a network of 15 Queensland government libraries)



Australasian Libraries in the Emergency Sector: <http://www.alies.org.au> a network of 28 libraries in Emergency Service.



Legal Inter-Library Loans Interchange

The centrality of the search to ILL fulfilment

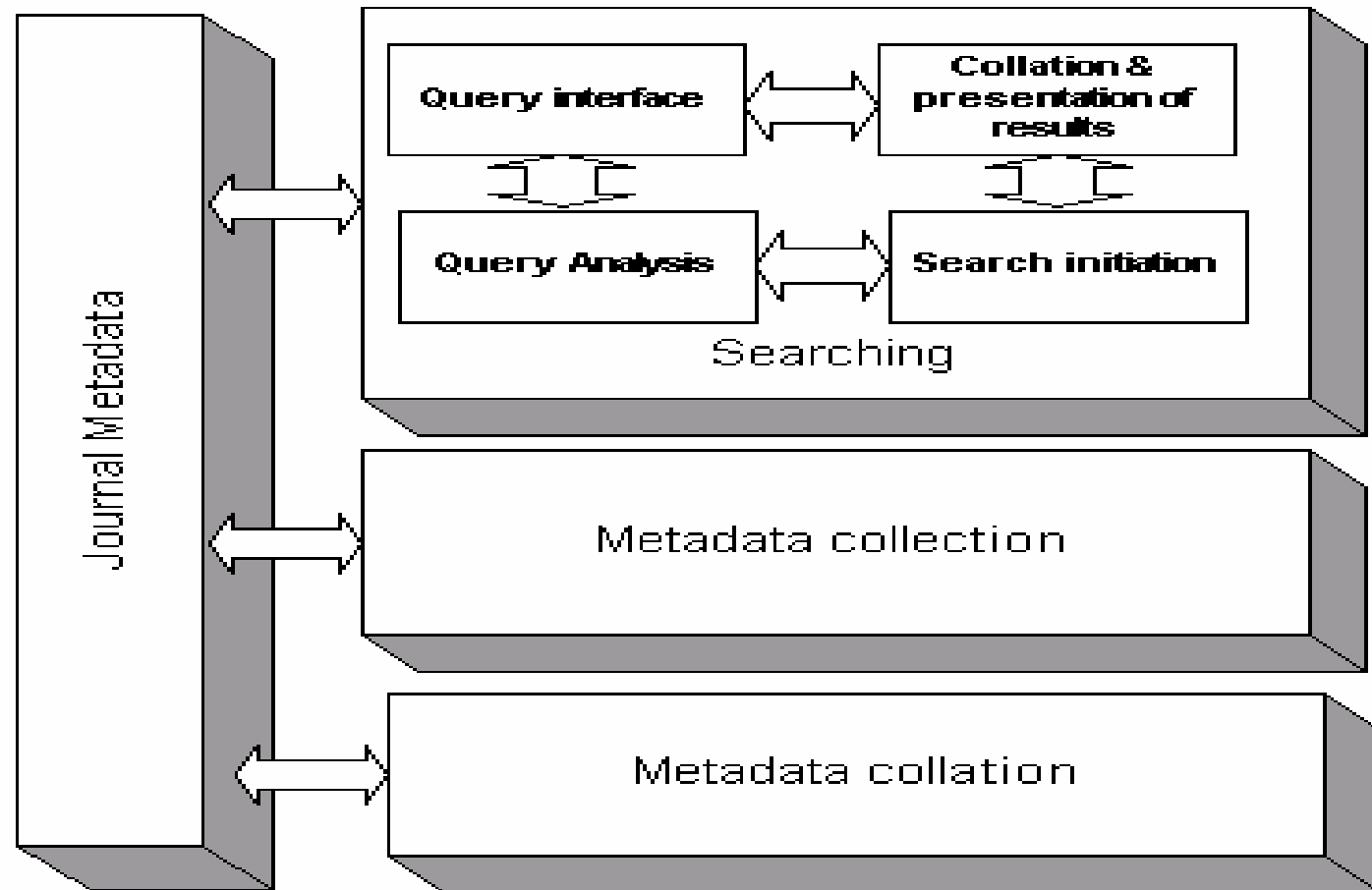
Function	Percent website activity
Search	42.42%
Raising ILL request	14.49%
Electronic request download/fulfillment	7.92%
Home page	7.83%

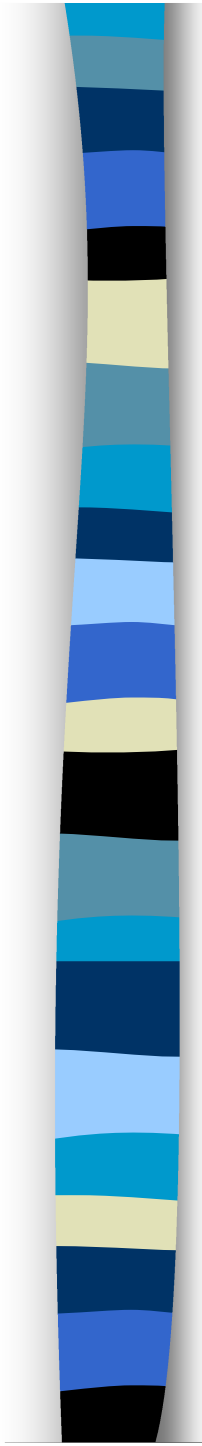


Federated Searching

- Searching heterogeneous document collections through a single search interface
- Extension: collation of the search results
- Extension: de-duplication
- Extension: clustering and classification

The anatomy of Federated searching





Approaches to search integration with the ILL system

- Presentation of search results fully in the context of each database provider
- Presentation of an integrated list of search results (possibly with duplicated entries removed)
- Presentation of clustered, integrated, search results
- Direct linking to full text resources from the search results.

Searching within Inter-Search

Search Journals

bmj

TitleHoldings Journal Holdings Search - only journals with holdings will be returned

Title Journal Title Search - all matching titles will be returned, irrespective of holdings

Keyword Journal Keyword search

Abbreviation

ISSN

JOURNALID = 268917

ILL REQUEST

Click on a NUCOS code to place an ILL Request
Click on a Title to Add or Review holdings or to

Refer to the GRATISNET FAQ on formatting your request information.

#	ISSN	
1	0959-8146	<p>Bmj : British Medical Journal Formerly: <u>British Medical Journal</u></p> <p><u>NHSE (nsw) V. 2</u> <u>NAH (nsw) V. 29</u> <u>NRRR (nsw) Current</u> <u>NOFR (nsw) V. 2</u> <u>NSTR (nsw) V. 2</u> <u>NU:RH (nsw) V.</u></p>

Susman Library
Royal Prince Alfred Hospital
library@email.cs.nsw.gov.au
Phone: 02 9515 8684 Fax: 02 9515 6325
Ariel Address:
Opening Hours: M - F : 8.30 - 5.00
Notes: PLEASE PHONE FOR URGENT REQUESTS. NO URGENT DEPT. REQUESTS. **NAH DUE TO RAIN. PLEASE USE AS LAST RESORT FOR FAST TRACKS TILL FURTHER NOTICE.
Urgent Orders: Accepted

Holdings: V. 297(1988) - 325(2002)

Req No. Delivery Post Priority

Additional Delivery Comments

Title: Bmj : British Medical Journal
ISSN: 0959-8146

Citation Yr Vol Issue Pages

Author

Title

Copyright Declaration Date
Copyright Dec Date:

This request complies with Section 50 of the Copyright Act 1968
 Please Copy and Supply as Agent for Requesting Library - Copy Requested for the Services of the Commonwealth

Alternate Locations (NUCOS Codes)

or select up to three from the following and these will be transferred to the ILL request form (note hold title to select multiples)

NHSE) -V. 297(1988) - (fax:02 4827 3036)
NAH) -V. 297(1988) - 325(2002) (fax:02 9515 6325)
NRRR) -Current 10 YRS (fax:02 9809 9063)
NOFR) -V. 297(1988) - (fax:02 6882 9096)

Send ILL request by Email

Generate ILL Fax Form

Searching on journal, abbreviations, ISSN or keywords, with ranked display of libraries allowing single click through to raise requests.



Inter-Search ILL System

- Individual & Bulk Request System
- Integration with electronic holdings
- Email/Fax requests
- Request tracking
- Load distribution of requests based on inverse ranking
- Title management & electronic subscriptions
- Holdings uploads & updates



Metadata, metadata everywhere

- Proprietary database services
 - Proquest 5000
 - Informit
 - Libraries Australia/Kinetica & other Open URL and OPAC services
 - Infotrieve
- Open access databases & journals
 - PubMed
 - Open access metadata collections



Stages of Federated search integration

- Open access resources discovery
- Federated metadata searching
- Cross-database searching

Impact of Open Access integration

Year	Number of ILL requests
2003	0
2004 (metadata introduced)	112
2005	3534
2006 (11 months)	3746

Federated metadata searching

- Journal searching is integrated with database links:

The screenshot displays a search interface with a navigation menu on the left containing 'Search', 'Request', and 'Administration'. The main content area shows search results for the ISSN 0965-2140. A table lists the following results:

#	ISSN	Title
1	0965-2140	Addiction (Abingdon, England) Libraries Australia Proquest 5000

Below the table, a 'Summary' section provides details for the search query: 'Your search for 0965-2140 limited to (Journals) found these results:'. It lists the number of results found in various collections: Australian Library Collections (7), Australian Library Collections (0), and Australian Library Collections (0).

The 'Summary Results' section shows two results:

- 1. Addiction (Abingdon, England) : Online** *Addiction [electronic resource]*. [Oxford, England] : Blackwell Science Ltd, ISSN: 1360-0443 <http://www.blackwell-synergy.com/servelet/useragent?func=showissues&code=add>. (at 3 libraries). [Get this item](#)
- 2. Addiction (Abingdon, England)** *Addiction*. Abingdon, Oxfordshire, UK : Cartax Pub. Co., c1993- Description: v. : ISSN: **0965-2140** ISSN: **0965-2140 (Print)** ISSN: 1360-0443 (Online) #4896 for accessing the journal using authentication number and password through OLS.

The interface also features a 'Libraries Australia' banner with a message: 'Covered by your monthly subscription. You cannot raise ILL requests through this search interface (at this time) - you will need to raise your ILL request separately reviewing holdings holdings shown here.' The banner includes the 'NATIONAL LIBRARY of AUSTRALIA' logo and navigation links for 'Search', 'Search History', and 'Help'.

Recycling searches as ILL's

Request Journals using Bibliographic lists

This function allows you to paste in a bibliographic citation list and process this list to generate ILL requests.

Your bibliographic format must be preconfigured. If your bibliographic format is not supported, contact your librarian.

Please nominate a citation format to be used: (Add new import definition)

Are these Journals or Books (you cannot process both Books and Journals together at this time)

Paste below your citation list to be processed, and click the PROCESS button.

Note: Most browsers and web servers can accept up to 10,000 characters.

```
JID - 8918173
SB - T
MH - Blast Injuries/classification/*mortality
MH - Emergency Medical Services
MH - *Explosions
MH - Human
MH - Iran/epidemiology
MH - War
EDAT- 2002/12/26 04:00
MHDA- 2003/01/10 04:00
PST - ppublish
SO - Prehospital Disaster Medicine
```

Process

Process ILL requests from bibliographic list of type PubMed (Journal)

Failed bibliographic imports will appear in the textbox below, and may be reprocessed after editing. Successful bibliographic details appear in the list below with options for email or fax submission.

Return to the Request Form

Please nominate a delivery Method:


Processing Journals

Copyright Type:

Show original citation										
volume	serial	year	title	page	author	journal	issn	Copyright Decl Date	Notes	Actions
17	2	2002	Mortality in Iran	107-9	Jahanlu HR	Prehospital Disaster Medicine	1049-023x			Send To: NHCW-V. 13 No. 2/4(1999) Alternates: NHCW-V. 13 No. 2/4(1999) OES-V. 7 No. 3(1992) - WRPH-V. 18 No. 3(2003)

Database searches can be used to raise multiple requests

Cross-Database Searching Thematically & by database

 Search in News Only full text?

Charges this month: \$50.00 Rebate available: \$50.00

[Help](#)

Inter-Searchtm e-connect provides a federated search of electronic database resources and search engines. Enter your search term(s) and select the search engine. You can search for GRISNET journals or using a thematic search across several databases.

News
 News
 Science
 Union List
 —Databases—
 GRATISNET Union List
 AEI
 ALG
 ASIC
 AustLII
 BiomedCentral
 CiteSeer

Full Text Resources Most Frequently Used

[Infotrieve](#) [Proquest5000](#) [NewsText](#) [CiteSeer](#) [PubMed](#) [IEEE](#)


Databases by Subject

[Business](#) [Education](#) [Engineering](#) [Health](#) [Information Technology](#) [Law](#) [Library Address](#) [Mathematics](#) [Multidisciplinary](#) [New](#)


Business

NewsText	Has full-text (Charges)	Newstext contains almost 30 million text articles from 150 News Corporation newspapers in Fiji and Papua New Guinea, and is updated daily. Some of the archives date back to 1984 newspapers in the archive are given below. <i>Full text articles are available on a per-download basis. The fee per download is AU\$0.50. All articles are visible to all members!</i>
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Tabbed database-in-context results

 Search in Only full text?

Charges this month: \$50.00 Rebate available for downloads: \$0.00

 [Historic Archive](#) | [The Digital Australian](#) | [Homework Helper](#) | [NewsXtra Online Shop](#)

Inter-Search **There are 806 credits left**
Expiring on: 23/08/2007 [Home](#) | [Archive Dates](#) | [News](#) | [FAQ](#) | [Support](#) | [Log Out](#)

SEARCH results

[< go back](#)

61 documents matched your query .

Result pages: [1](#) [2](#) [3](#) [4](#) [>](#) [Save this search](#) [New search](#)

Documents 1 to 20 are displayed on this page [Select all articles](#) [Unselect all](#)

- [Red wine over \\$20 - JAMES HALLIDAY'S TOP 100 WINES](#)
- [The Australian, 11-11-2006, Ed: 1, Pg: M18, 1616 words , MAGAZINE](#)
Whatever else guides my choice of the Top 100, it is not finding the cheapest possible wines; this is true of both the under and over \$20 sections. This is a guide to the best wines across a complete spectrum of prices, the \$20 marker being as much a...
- [WEBSITES FOR WINES - JAMES HALLIDAY'S TOP 100 WINES](#)
- [The Australian, 11-11-2006, Ed: 1, Pg: M38, 75 words , MAGAZINE](#)
www.mcwilliams.com.au www.gapstedwines.com.au www.peterlehmannwines.com.au www.yalumba.com

Contingency in search management & presentation

	Metadata collection methodology	Query presentation	Query Analysis	Query initiation	Result collection	Search metadata
Union-list journals	Community maintenance	Single search box with a variety of search options	Text parsing to construct a Structured query Language query against the metadata database	Against the journal metadata database	Results presented as an integrated federated search	Search history captured for ranking purposes
Open Access Journals	Community maintenance	Single search box with a variety of search options	Text parsing to construct a Structured query Language query against the metadata database	Against the journal metadata database	Results presented as an integrated federated search	Search history captured for ranking purposes
Consortia collections	Autonomous spidering of consortia collection lists	Single search box with a variety of search options	Text parsing to construct a Structured query Language query against the metadata database	Against the journal metadata database	Results presented as an integrated federated search	Search history captured for ranking purposes
Full-text	Structured capture of metadata relating to databases, access rights, full-text resource costs, connection metadata and thematic metadata	Single search box with a variety of search options	Text parsing of query and post-query preparation for presentation to each different database context	Against each database selected based on thematic content (eg health databases)	Results presented in the original context of each database service, including the results of an integrated federated search of Inter-Search	Search history captured for billing purposes and to indicate most popular databases

Implications for search architecture?

■ Contingency

- Strategic searching may conflict with federated searching – Marie Ann Staley “Swimming against the tide”
- In many cases the search context of the database itself is more aware of the specific search “ontology” of that database than an integrated search result from a federated search



The Name of the Rose?

- Increasing complexity of online document resources
- Decreasing clarity in long-term collection building
- Experiments in journal archiving (LOCKSS & local research)
- Copyright & Digital Rights Management

The End – happy searching!

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