

**DELOS NoE  
on Digital Libraries**

**Evaluation Plans for TEL**

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# Comparative Evaluation of TEL and Daffodil

- Systems: TEL, Daffodil
- Evaluation framework
- Evaluation method
- Conclusion

# Systems: TEL, Daffodil

ἡ βιβλιοθήκη La Biblioteca Europea Det europæiske bibliotek La bibliothèque européenne De Europese Bibliothek  
 The European Library Det europeiska biblioteket Avrupa Kütüphanesi Europska knjižnica Eiropas bi  
 na Evropska knjižnica Az Európai Könyvtár Die Europäische Bibliothek Euroopan kirjasto Euroopa raamatuko

[SEARCH](#) [COLLECTIONS](#) [LIBRARIES](#) [TREASURES](#) [ABOUT US](#)

[Simple search](#) [Advanced search](#) [Results](#)

## SEARCH

Enter a title, an author, ...

title all "digital library"

SEARCH



On start up you search in the [default list of collections](#).

For more specific results [choose your own collections](#).

▶ [Advanced search](#) (more options)

## Browser support

This website currently supports Internet Explorer 6.0+(pc), Firefox 1.0.2+(pc/mac) and Mozilla 1.7.8/Netscape 7.2+(pc/mac). Opera and Safari are currently not supported. Extended browser support is under development.

## THE EUROPEAN DIGITAL LIBRARY TREASURES



*Tables of All the Globe*  
 National Library of Russia (St.Peterburg)

- ▶ [View treasure](#)
- ▶ [More treasures](#)

[Announcements](#) | [Terms of service](#) | [Technical info](#) | [Feedback](#) | [Sitemap](#) | [Contact](#) | Language: English (eng)

List: sorting done...

Search in Thesaurus

Search in Thesaurus

Exit

# TEL: Query formulation

[The European Library](#)
La Biblioteca Europea
Det europæiske bibliotek
La bibliothèque européenne
De Europese Bibliotheek
Det europeiska biblioteket
Avrupa Kütüphanesi
Europska knjižnica
Eiropas bibliotēka
Evropska knjižnica
Az Európai Könyvtár
Die Europäische Bibliothek
Euroopan kirjasto
Euroopa raamatukogu

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[Simple search](#)
[Advanced search](#)
[Results](#)

## ADVANCED SEARCH

On start up you search in the [default list of collections](#). For more specific results [choose your own collections](#).

### 1 SELECT COLLECTIONS ?

[choose your own collections](#)  
[reset: default list of collections](#)

- EU Online books, images, maps, music...
- UK British Library integrated catalogue
- PT Biblioteca Nacional (Portugal)
- FR BN-OPALE PLUS
- DE Online catalogue of the Deutsche Bibliothek
- FI HELKA
- IT SBN OPAC
- NL General Catalogue Koninklijke Bibliotheek
- CH HELVETICAT
- SI National Library Catalogue (KatNUK)
- HR Croatian National Bibliographies of Books :

### 2 SPECIFY YOUR QUERY ?

Specify a query for one or more fields.

Any field

anc  Title  digital library

anc  Author

anc  Subject

[Add more fields](#)

# Daffodil: Query formulation

Search

	Data Sources	Data Types	
Filter	<input checked="" type="checkbox"/> Google	<input checked="" type="checkbox"/> BibDB	<input checked="" type="checkbox"/> LeaBIB
	<input checked="" type="checkbox"/> BibDBIS	<input checked="" type="checkbox"/> Achilles	<input checked="" type="checkbox"/> ACM
	<input checked="" type="checkbox"/> PLib	<input checked="" type="checkbox"/> CiteSeerIS	<input checked="" type="checkbox"/> DBLP
	<input checked="" type="checkbox"/> HCIBIB	<input checked="" type="checkbox"/> ArXiv	<input checked="" type="checkbox"/> DBLPIS
	<input checked="" type="checkbox"/> Springer	<input checked="" type="checkbox"/> CompuScience	<input checked="" type="checkbox"/> GetInfo
			<input checked="" type="checkbox"/> Metadata
		<input checked="" type="checkbox"/> PDF	
		<input checked="" type="checkbox"/> PS	
		<input checked="" type="checkbox"/> DOC	
		<input checked="" type="checkbox"/> PPT	

Query

▶ ...

**Author:**

**Title:**

**Year:**

**Free-Text:**

**Form  
Query**

Reset

use cache

Search

# TEL result list

## SEARCH RESULTS



Matches for '(title all "digital library")' .

EU	<a href="#">Online books, images, maps, music...</a>	2
UK	<b>British Library integrated catalogue</b>	197
PT	<a href="#">Biblioteca Nacional (Portugal)</a>	2
FR	<a href="#">BN-OPALE PLUS</a>	0
DE	<a href="#">Online catalogue of the Deutsche Bibliothek</a>	-
FI	<a href="#">HELKA</a>	17
IT	<a href="#">SBN OPAC</a>	16
NL	<a href="#">General Catalogue Koninklijke Bibliotheek</a>	72
CH	<a href="#">HELVETICAT</a>	3
SI	<a href="#">National Library Catalogue (KatNUK)</a>	22
HR	<a href="#">Croatian National Bibliographies of Books :</a>	0

SEARCH

search within results (title all "digital library")

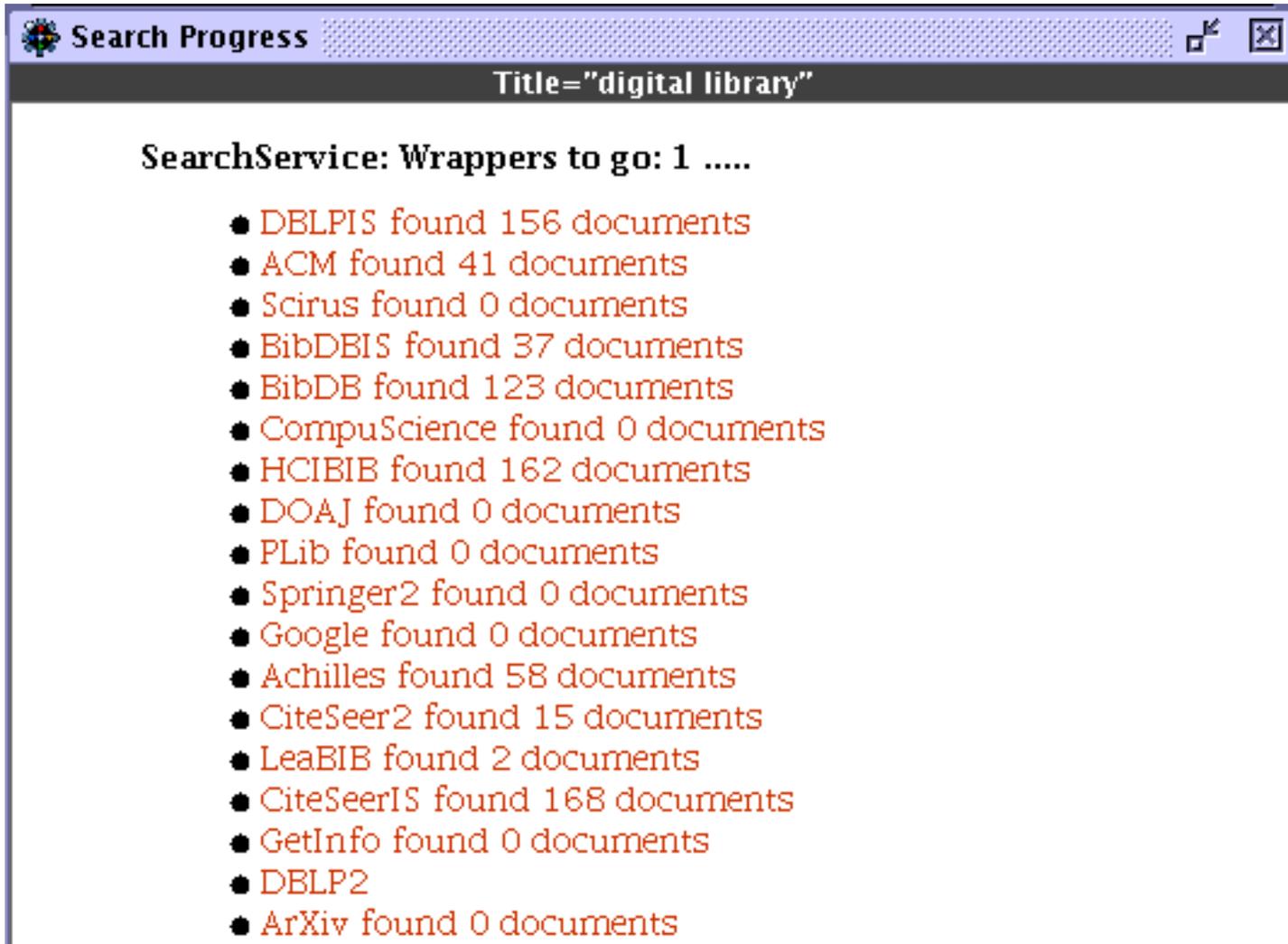
## British Library integrated catalogue - UK -

197 objects with (title all "digital library") have been found in 'British Library integrated catalogue'.

jump to

- 1 [▶ Designing and building integrated digital library systems - guidelines / by Bente Dahl Rathje ... \[et al.\].](#)  
 Rathje, Bente Dahl.  
 Document type: text , language materials , monograph | Language: eng
- 2 [▶ LIDA 2005.](#)  
 Document type: text , language materials , part | Language: eng
- 3 [▶ Peer-to-peer, grid, and service-orientation in digital library architectures : 6th thematic workshop of the EU Network of Excellence DELOS , Cagliari, Italy, June 24-25, 2004 : revised selected papers / Can Tu ¨rker, Maristella Agosti, Hans-Jo ¨rg Schek, eds.](#)  
 Thematic workshop of the EU Network of Excellence DELOS (6th : 2004 Jun : Cagliari, Italy) / T¸rker, Can. / Agosti, Maristella. / Schek, H.-J.  
 Document type: text , language materials , monograph | Language: eng
- 4 [▶ Exploring the digital library : a guide for online teaching and learning / Kay Johnson and Elaine Magusin.](#)  
 Johnson, Kay, 1963- / Magusin, Elaine.  
 Document type: text , language materials , monograph | Language: eng
- 5 [▶ Knowledge organization in digital environment in libraries \(KODEL\) : introspect and prospects / chief editor, M. Madhusudhan.](#)  
 Madhusudhan, M.  
 Document type: text , language materials , monograph | Language: eng
- 6 [▶ Digital terrain modeling : acquisition, manipulation, and applications / Naser El-Sheimy, Caterina Valeo, Ayman Habib.](#)

# Daffodil: Search progress



The screenshot shows a browser window with the title bar 'Search Progress' and a search query 'Title="digital library"'. The main content area displays a list of search services and the number of documents found for each.

**SearchService: Wrappers to go: 1 .....**

- DBLPIS found 156 documents
- ACM found 41 documents
- Scirus found 0 documents
- BibDBIS found 37 documents
- BibDB found 123 documents
- CompuScience found 0 documents
- HCIBIB found 162 documents
- DOAJ found 0 documents
- PLib found 0 documents
- Springer2 found 0 documents
- Google found 0 documents
- Achilles found 58 documents
- CiteSeer2 found 15 documents
- LeaBIB found 2 documents
- CiteSeerIS found 168 documents
- GetInfo found 0 documents
- DBLP2
- ArXiv found 0 documents

# Daffodil: Result list

Hits: 608

Sort by: query

Filter results:  Apply Reset

**Results**

- 1 **Steven Pemberton**  
The **digital library**.  
(2000) from DBLPIS; HCIBIB.
- 2 **Fox, E.A.& Urs, S.R.. S.R..**  
**Digital libraries**  
(2002) from BibDB.
- 3 **Gail Mcmillan**  
The **Digital Library**: Without a Soul Can It Be a **Library**?  
(2000) from CiteSeerIS.
- 4 **Wallace Koehler**  
**Digital Libraries, Digital Containers, Library Patrons, and Visions for the Future.**  
(2004) from Achilles.
- 5 **Calvin Mackey; Bruce R. Barkstrom; Michelle Ferebee; Melinda Finch**  
**Digital library communities and change: Adapting digital libraries to continual evolution**  
(2002) from ACM.
- 6 **Greg Janée; James Frew**  
**Digital libraries for spatial data: The ADEPT digital library architecture**  
(2002) from ACM.
- 7 **John Ober**  
The California **Digital Library**.  
(1999) from Achilles.

# TEL: Detail view

## British Library integrated catalogue - UK -

197 objects with (title all "digital library") have been found in 'British Library integrated catalogue'.

LIBRARY  
HSLIBR

# 1

[return to list](#) | [next](#)

**Designing and building integrated digital library systems - guidelines / by Bente Dahl Rathje ... [et al.].**

**AVAILABLE AT LIBRARY**

**Title** Designing and building integrated digital library systems - guidelines / by Bente Dahl Rathje ... [et al.]. »»  
IFLA professional reports, 0168-1931 ; no. 90 »»

**Author** Rathje, Bente Dahl. »»

**Type** text  
language materials  
monograph

**Language** eng

**Publisher** The Hague : International Federation of Library Associations and Institutions, c2005. »»

**ISBN** 9077897054 (pbk.) »»

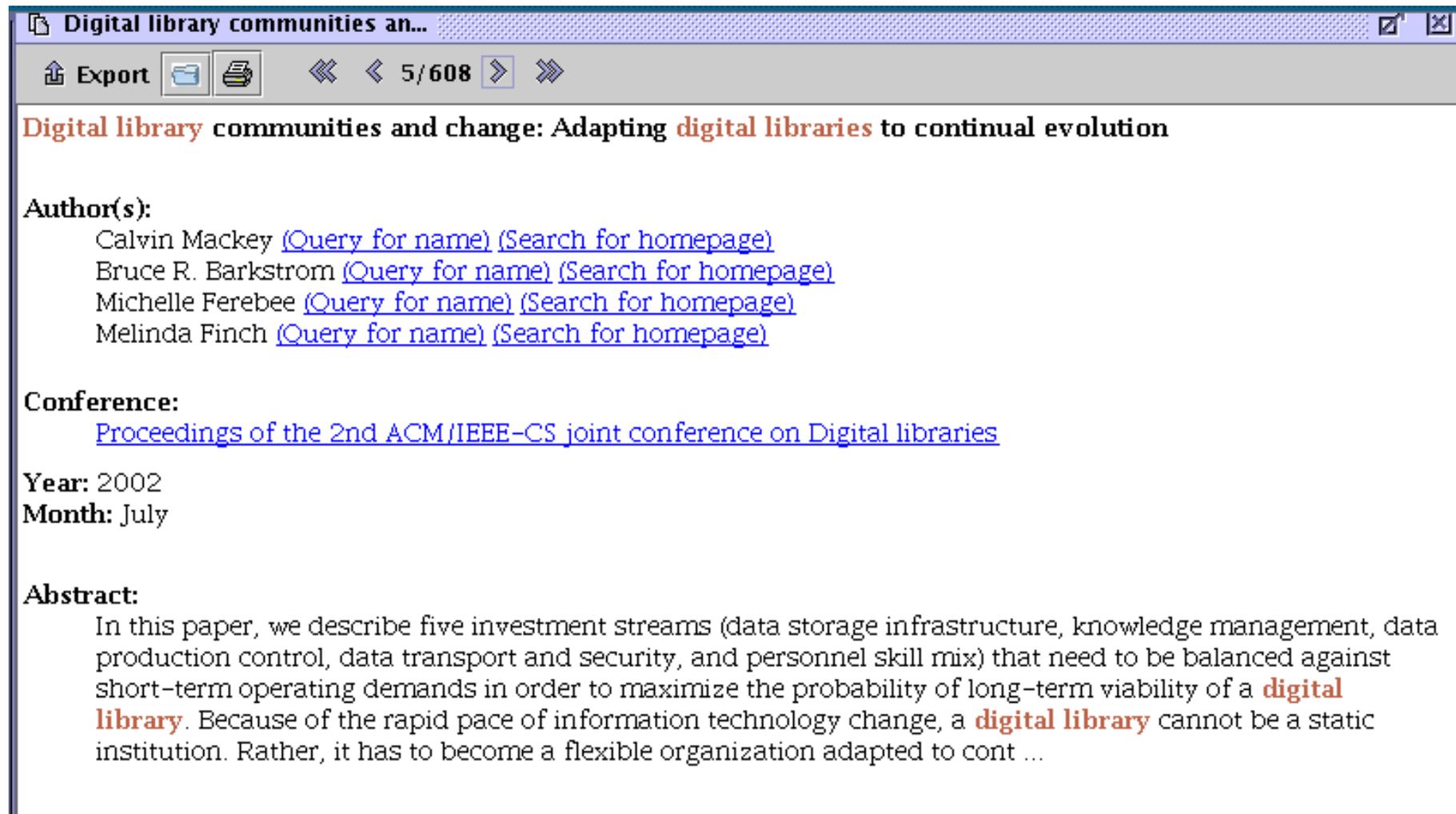
**Location** British Library : DSC : 4363.305500 : no. 90

**Issued** 2005

**Extent** 65 p. ; 30 cm.

**tel:recordId** 013333529

# Daffodil: Detail view



The screenshot shows a web browser window with the title "Digital library communities an...". The address bar contains "Export" and navigation icons. The main content area displays the following information:

**Digital library communities and change: Adapting digital libraries to continual evolution**

**Author(s):**  
Calvin Mackey ([Query for name](#)) ([Search for homepage](#))  
Bruce R. Barkstrom ([Query for name](#)) ([Search for homepage](#))  
Michelle Ferebee ([Query for name](#)) ([Search for homepage](#))  
Melinda Finch ([Query for name](#)) ([Search for homepage](#))

**Conference:**  
[Proceedings of the 2nd ACM/IEEE-CS joint conference on Digital libraries](#)

**Year:** 2002  
**Month:** July

**Abstract:**  
In this paper, we describe five investment streams (data storage infrastructure, knowledge management, data production control, data transport and security, and personnel skill mix) that need to be balanced against short-term operating demands in order to maximize the probability of long-term viability of a **digital library**. Because of the rapid pace of information technology change, a **digital library** cannot be a static institution. Rather, it has to become a flexible organization adapted to cont ...

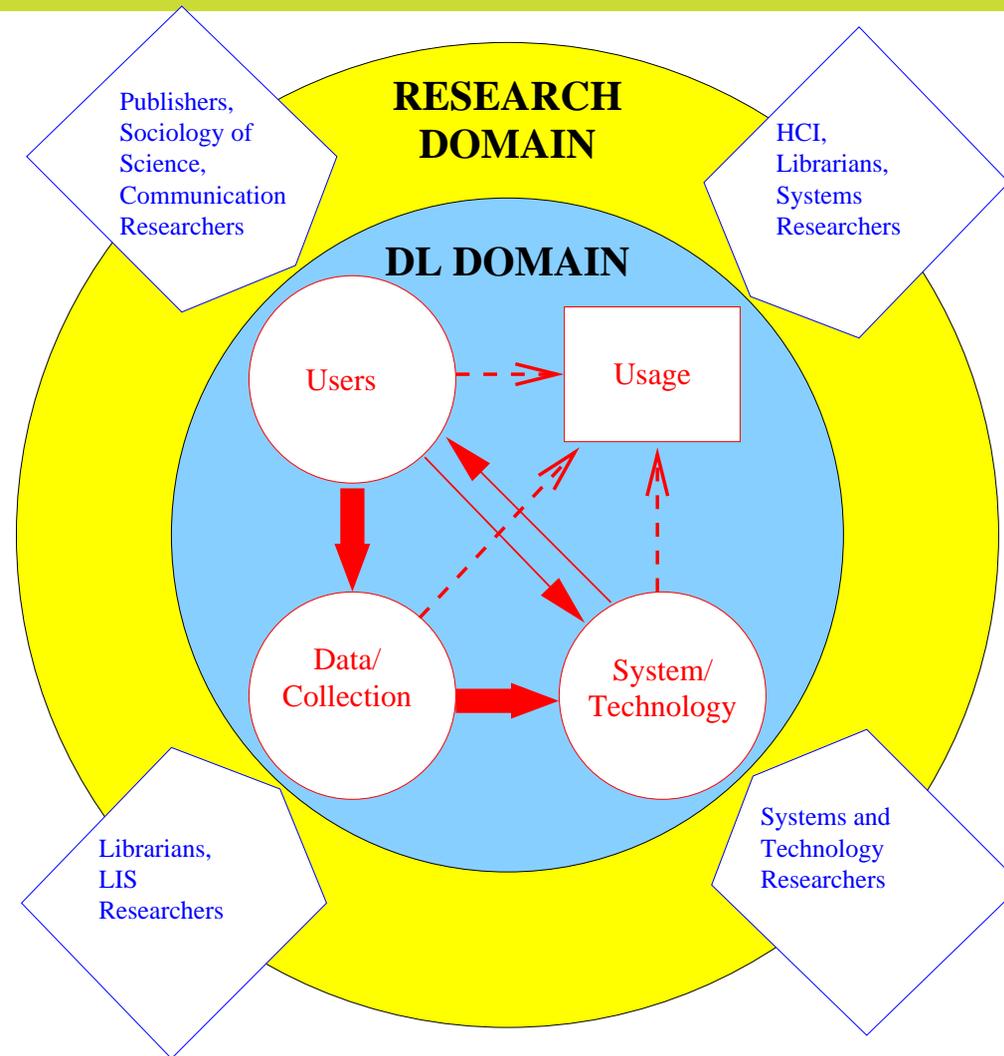
# Systems: TEL vs. Daffodil

- Commonalities:
  - Front-end to a federation of heterogeneous digital libraries
  - User-friendly interface, supporting mouse-based interactions
  - Similar search dialogue
- Differences
  - TEL is browser-based (Javascript)
    - No setup for user
    - Limited mouse interaction
  - Daffodil uses a client written in Java
    - Setup (download & install) required
    - Richer mouse interaction
  - Daffodil desktop contains various tools
    - (some of them are applicable to the TEL domain)

# Daffodil: Necessary changes and extensions

- Wrappers for the TEL libraries
  - Z39.50, SRU/SRW, OAI
- Query processing:
  - Incremental generation of result list (instead of waiting till all DLs have responded)
  - Initial result display: grouped by DL merging upon request
- Inclusion/adaption of tools:
  - Extraction of authors, keywords
  - Clipboard
  - Personal library

# Evaluation framework



# Collection

## The European Library's default collections:

- British Library integrated catalogue
- Biblioteca Nacional (Portugal)
- BN-OPALE PLUS
- Online-Katalog Der Deutschen Bibliothek
- HELKA
- SBN OPAC
- General Catalogue Koninklijke Bibliotheek
- HELVETICAT
- National Library Catalogue (KatNUK)
- Croatian National Bibliographies of Books: 1990-2003
- Serbian Union Catalogue COBIB.SR

# Users & Usage

- **Users:**  
DL stakeholders
  - End users
  - Librarians
- **Usage:**  
task scenarios to be developed

# Evaluation methods

- Analytical evaluation:  
*Is the design right?*
  
- Empirical evaluation:  
*Is it the right design?*

# Analytical evaluation

- Analytical evaluation:

*Is the design right?*

Start of evaluation:

- Explores how the TEL and Daffodil interface facilities are useable, learnable and comparable

At the end of evaluation:

- Examines how the TEL and Daffodil interface facilities are in alignment with the user requirements gathered from the empirical evaluation

# Empirical evaluation

- Empirical evaluation:

*Is it the right design?*

Perspectives:

- User characteristics, preferences and strategies
- Types of activities that the users do (to plan the task scenarios)
- The environments in which TEL and Daffodil are used, in natural or controlled laboratory settings

# Evaluation steps for empirical evaluation

- Acquisition of resources: equipment, instruction materials, recording technology, selection of representative users
- Briefing meetings with groups of users
- Search sessions and interviews with users
- Debriefing with groups of users
- Transcription of recorded data
- Data analysis
- Reporting

# Conclusion

- Comparative evaluation of two similar systems
- Will yield valuable output wrt. strengths/weaknesses of the TEL system
- Basis for possible further development