



TRINITY
COLLEGE
CAMBRIDGE

FOLIO & VuFind® at Trinity College Cambridge

08 Sept 2022

Trinity College



- Founded in 1546
 - by King Henry VIII
- 34 Nobel Prizes
- ~700 undergraduate students
- ~300 graduate students
- ~180 Fellows (academics)

About the Library Collection

- ~300,000 volumes
 - ~1250 western medieval manuscripts
 - ~750 books printed before 1501
- Capell collection of Shakespeariana
- Books from library of Sir Isaac Newton
- Rothschild collection of 18th-century literature
- Kessler collection of livres d'artistes
- >70,000 books printed before 1820
- Also, an ever-expanding modern collection



Why FOLIO

- Driven by need to replace old LMS (Innovative's Millennium); very dated OPAC
- Experience of being independent from central university library (Alma);
- Single vendor model vs new model
- FOLIO: future-proofed(?); community-based; transparent; scalable

FOLIO is an open-source library services platform that integrates print and electronic resource management. It includes core library management functionality, is built on a modern architecture to ensure continuous innovation, and supports the integration of applications from third-party providers. EBSCO provides implementation, hosting and support for FOLIO.

Implementation Experience

- 9 month period, very intense. Hardest thing: to explain our library, its intricacies, our workflows. Decisions, decisions, decisions.
- Staff awareness/perception: intuitive, but different from Millennium, some good some bad; modern
- Challenges of using such a 'young' LMS e.g. connecting via SIP to self-issue machines; exporting and importing. But great community support.

From the Implementation Consultant's (IC) view:

- Trinity's catalog had the best data quality our IC had ever come across
- Everyone involved seemed to know the in- and outs of the catalog very well
- Client knew ***what*** they wanted but at the same time were flexible about the ***how***

Why VuFind

- Open source, like FOLIO
- Blacklight first(!). Similar functionality, but more polished appearance (Stanford, Cornell) vs VuFind examples. But, VuFind highly customisable.
- Modern vs special collections. Challenges: call numbers, geared for LC. Boundwiths.
- Browse-type searches vs Google-like single search box
- Cater to different users: students, academics, external researchers
- Possible interaction with University Library's discovery layer, iDiscover (Primo)

Feature Spotlight

Feature Spotlight

- I'll show you features that do work and made an impact
- All of these items should see improvements
- I welcome suggestions and questions
- Thanks in advance!

Mapping Rules

Mapping Rules

- marc_local.properties for the win
- My head is spinning whenever I even think about it
 - Without Ben, I would be lost here
- Very powerful logic is possible
 - See <https://github.com/solrmarc/solrmarc/wiki>
- Sometimes you'll need to do a Java function
 - Not nearly as bad as it sounds

New Items

New Items

The screenshot shows the Trinity College Cambridge VuFind website. The header includes the college logo, the text 'VuFind Search. Discover. Share.', and navigation links like 'Home', 'Login', 'Language', 'RECOMMEND A BOOK', 'CHAT', 'OPENING HOURS', and 'LIBRARY HOME'. The main search bar is at the top, and below it is a 'New Items' section. In this section, there are filters for 'Range' (Yesterday, Past 5 Days, Past 30 Days) and 'Subject'. The subject list includes: Anglo-Saxon, Norse and Celtic; Archaeology; Architecture; Asian and Middle Eastern Studies; Chemical Engineering; Classics; Computer Science; Economics; Engineering; and English. A callout box points to this list with the text 'Subjects are configured in Folio.ini'. The callout contains the following code:

```
137 funds["f9ef5dec-c34e-44cb-987a-4b82ca53a8a9"] = "Anglo-Saxon, Norse and Celtic"
138 funds["3b72c547-a2e5-4332-98ab-db2067c6fbd8"] = "Archaeology"
139 funds["d4039b29-0456-4bb2-96b6-73562caea3c4"] = "Architecture"
140 funds["a9faafbd-e2f0-4243-82f1-605404e08519"] = "Asian and Middle Eastern Studies"
141 funds["442f6c26-6958-47e0-a934-78c6daaf0750"] = "Chemical Engineering"
142 funds["b307b6db-6286-4ba6-9053-6f08cb25dd7e"] = "Classics"
143 funds["ba979bea-ed89-49e0-98d6-7011927dd04a"] = "Computer Science"
144 funds["e2dc6049-07c9-40e5-8d57-5504a03084ac"] = "Economics"
145 funds["3f858a6e-3fbf-4107-a4d5-85736bcb5e37"] = "Engineering"
146 funds["7ca63f43-ea60-4ef5-b1b4-9ad6c70d2705"] = "English"
147 funds["5377f352-35c4-4067-89af-cd5c6f5b3249"] = "Film (books)"
148 funds["2fc24235-3cd0-46d2-98e4-a135a825cfe1"] = "Film (dvds)"
149 funds["a9567df3-024c-47e3-9398-6650d7a44ce5"] = "General interest (books)"
150 funds["25e58ba9-d19a-477f-9bce-4d0107c89880"] = "General interest (games, etc.)"
```

At the bottom of the page, there are sections for 'Search Options' (Search History, Advanced Search, New Items), 'Find More' (Browse the Catalogue, Browse Alphabetically, Explore Channels), and 'Need Help?' (Search Tips, Email the Library). The VuFind and folio+ logos are in the bottom right corner.


New Items

The screenshot displays the Trinity College Cambridge VuFind library website. The header includes the college's crest and logo, the text 'VuFind Search. Discover. Share.', and navigation links for Home, Login, Language, Recommend a Book, Chat, Opening Hours, and Library Home. A search bar is prominently featured with a 'Find' button and an 'Advanced' link. Below the search bar, a 'New Items' filter is selected. The main content area shows search results for 'New Items', displaying 1 to 10 results. A 'Refine Search' sidebar on the left offers filters for Format, Author, Language, Genre, Era, Region, Year of Publication, Collection Type, and Modern Collection. The search results list three items, each with a thumbnail, title, author, edition, publication information, shelfmark, location, and availability status.

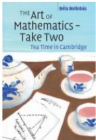
Showing 1 - 10 results of 10 New Items, query time: 0.05s

Search Tools: [Get RSS Feed](#) — [Email this Search](#) —


Results per page: 20 Sort: Shelfmark

1  **The Cambridge companion to Shakespeare on film** [★ Save to List](#)

Edition: Second edition.
Published: Cambridge : Cambridge University Press, 2007.
Shelfmark: [LL 028 SHA 385](#)
Located: Lower Library
[Book](#) [Available](#)

2  **The art of mathematics - take two : tea time in Cambridge** [★ Save to List](#)

by Bollobás, Béla
Published: Cambridge : Cambridge University Press, 2022.
Shelfmark: [LL 307 B 108](#)
Located: Lower Library
[Book](#) [Available](#)

3  **A concise history of Mexico** [★ Save to List](#)

by Hamnett, Brian R.
Edition: Third edition.
Published: Cambridge : Cambridge University Press, 2019.
Shelfmark: [LL 653 H 129](#)
Located: Lower Library
[Book](#) [Available](#)

New Items

- Solr Index vs ILS
- Folio doesn't have an endpoint to show newly added items
- Query against `/orders/order-lines`
 - `receiptDate + receiptStatus=="Fully Received"`
- Downside:
 - Shows "in process" items

Boundwith

Sammelbände

Boundwith



Boundwith is a term used by catalogers when referring to pamphlets & tracts published separately but subsequently bound together...

Boundwith: The Problem to be solved

- A Boundwith in Folio is currently represented as:
 - Separate Instance for each element
 - Each Instance has a holding & call number
 - Only the first Instance has an item (= status)
- The problem:
 - When the first Instance was checked out, the other Instances would still show as available

Boundwith

- holdingsTypeId = 7b94034e-ac0d-49c9-9417-0631a35d506b
- Current State

```
"callNumber": "Crewe 1.10[1]",
"administrativeNotes": [],
"notes": [
  {
    "note": "This Record is a Bound-with. It is bound with 3 instances. Below is a json structure allowing you to
      move this into the future Bound-with functionality in FOLIO\n{\"instances\": [\n
      \n\"aec505d2-55c1-4b77-b127-eaf3bc8b3e1d\", \n      \n\"4b17cec9-b7a8-46b9-85dc-3f2720a9aad\", \n
      \n\"4739324a-f6e1-4b96-b004-ed1a6c604f1d\" \n]}",
    "staffOnly": true,
    "holdingsNoteTypeId": "e19eabab-a85c-4aef-a7b2-33bd9acef24e"
  },
  {
    "note": "This Record is a Bound-with. It is bound with 3 other records. In order to locate the other records,
      make a search for the Class mark, but without brackets.",
    "staffOnly": false,
    "holdingsNoteTypeId": "e19eabab-a85c-4aef-a7b2-33bd9acef24e"
  }
],
```

Boundwith

- Availability for “boundwith” can be challenging
 - Imagine Crewe 1.10[2] – it has a holding, but no item
 - This would lead to Crewe 1.10[2] showing as available, despite the fact that the bound with (1.10) was checked out
- What to do?
 - Currently we look at the note, identify the first instancelid and try again
 - Those notes were added during data migration and not necessarily for newly added items

Boundwith

- Future State:

```
"boundWithParts": [  
  {  
    "id": "3a7642f7-bf54-4fe6-b407-a2ee2ad94be1",  
    "holdingsRecordId": "b9d0c18d-b94a-4109-9fad-4c9a66f408b0",  
    "itemId": "1a10d783-cf87-4ae4-a2f5-4fa2e92542cd",  
    "metadata": {  
      "createdDate": "2022-07-13T14:07:51.898+00:00",  
      "createdByUserId": "28e02507-c772-446a-9f79-93065e7232a5",  
      "updatedAt": "2022-07-13T14:07:51.898+00:00",  
      "updatedByUserId": "28e02507-c772-446a-9f79-93065e7232a5"  
    }  
  }  
],
```

- By using Folio's Boundwith feature, we will find it easier to handle, it does require a change though

Boundwith

1



Excellent opvscvle de Plvtarqve, de la tardive vengeance de Dieu

★ Save to List

by [Plutarch](#).

Published: A Paris : Pour lean Dallier libraire, demourant sur le pont Saint Michel, à l'enseigne de la Rose blanche, 1563.

Shelfmark: [Crewe 1.10\[2\]](#)

Located: Reserve (Wren) - Ask at Enquiry Desk

[Book](#) [Available](#)

Holdings

[Description](#)

[Comments](#)

[Staff View](#)

Reserve (Wren) - Ask at Enquiry Desk

Shelfmark:

Crewe 1.10[3]

Not for loan : **Available**

Notes:

- This Record is a Bound-with. It is bound with 3 other records. In order to locate the other records, make a search for the Class mark, but without brackets.

To Top

Granular Status in Result List

Result List: Granular Status

- By default: Checked-out or Available
 - What about “in Process”, “Missing”, etc?
- Config.ini
 - `show_full_status = true`
 - The generated table was deemed undesirable
- A bit of a hack
 - Adapt `ajax/status-full.phtml`

Result List: Granular Status

The screenshot displays the Trinity College Cambridge VuFind search results page. The search query is "John Selden politic*". The results are as follows:

Result Number	Title	Author	Published	Subjects	Located	Status
1	John Selden and the western political tradition	by Haivry, Ofir	Published: Cambridge : Cambridge University Press, 2017.	Subjects: "...Selden, John, 1584-1654...."	Located: Reading Room	Book In process
2	Discourse on history, law, and governance in the public career of John Selden, 1610-1635	by Christianson, Paul, 1937-	Published: Toronto ; London : University of Toronto Press, c1996.	Subjects: "...Selden, John, 1584-1654...."	Shelfmark: LL 674 C 118 Located: Lower Library	Book Available
3	An historical and political discourse of the laws & government of England, from the first times to the end of the reign of Queen Elizabeth.					

On the left side of the results, there are filters for:

- Era
- Region
- Year of Publication
- Collection Type
- Modern Collection
- Special Collection

Special & Modern Collections

Special & Modern Collections

- Trinity College has:
 - Special Collections
 - Identify those truly rare books
 - Modern Collection
 - Books for everyday student use
- Goal:
 - Help filter results
 - Browse the collection

Collections: The Challenge

- Two very different approaches
- Special Collection
 - Created Java Function to extract the “Collection Part” from 952\$e
 - If 952\$h == “Special Collection” extract first section of call number
 - **NQ**.17.37 => match against specialCollection_subject_map.properties

Special Collection: Browse from Homepage

The screenshot shows the Trinity College Cambridge VuFind library homepage. The browser address bar displays `lib-cat.trin.cam.ac.uk`. The page features a large background image of a college courtyard. A 'Special Collection' modal is open in the center, displaying a list of collections sorted by result count. The modal includes a 'close' button at the bottom. On the left side of the modal, there are tabs for 'Sort', 'Result Count', and 'Alphabetical', with 'Result Count' currently selected. The background page also shows a 'Browse by Format' overlay on the left and a 'Browse by Collection' overlay on the right. The top navigation bar includes links for Home, Login, Language, Recommend a Book, Chat, Opening Hours, and Library Home. The bottom of the page has links for Search Options, Search History, Advanced Search, and Need Help? (Search Tips, Email the Library).

Collection	Result Count
Wren classes	53,227
Sraffa	6,624
Grylls	6,609
Hare	5,042
Crewe	4,346
Rothschild	2,486
Adversaria	2,443
Newton	907
Stray	780
Munby	609
Capell	384
Page	313
Gow	240
Kessler	218
Ling	204
Jeans	148
Macaulay	147
Butler	64
Frazer	11
King	1

Special Collection: Facet in result set

The screenshot displays a library search interface. On the left, a 'Refine Search' sidebar contains various filters. The 'Special Collection' filter is expanded, showing a list of collections with their respective item counts:

Special Collection	Count
Newton	886
Wren classes	567
Grylls	32
Adversaria	31
Rothschild	15
Crewe	11

A 'more ...' link is visible at the bottom of the list. The main search results area shows 1,738 results for the query 'newton'. The first four results are displayed, each with a thumbnail, title, author, publication information, subjects, shelfmark, and location. Each result also includes a 'Save to List' link and a 'Book Available' status.

Showing 1 - 20 results of 1,738 for search 'newton', query time: 0.05s

Search Tools: [Get RSS Feed](#) — [Email this Search](#) — [Save Search](#)

Results per page: 20 Sort: Relevance

Extend this search to iDiscover

- Newton : the making of genius** by Fara, Patricia.
Published: New York : Columbia University Press, c2002.
Subjects: "...Newton, Isaac, 1642-1727...."
Shelfmark: LL 301 F 122
Located: Lower Library
[Book](#) [Available](#)
- Newton : the man** by De Villamil, Richard, 1850-
Published: London : Knox, [1931]
Subjects: "...Newton, Isaac, 1642-1727...."
Shelfmark: LL 301 D 110
Located: Lower Library
[Book](#) [Available](#)
- Newton : texts, backgrounds, commentaries** by Newton, Isaac, 1642-1727.
Published: New York, NY : W.W. Norton, c1995.
Shelfmark: LL 302 NEW 124
Located: Basement
[Book](#) [Available](#)
- Newton : the proceedings of the Trinity College Science Society. 2007.** [Save to List](#)
Published: [Cambridge] : Trinity College Science Committee, [2007]
Shelfmark: Pam.c.00.123
Located: Reserve (Cage) - Ask at Enquiry Desk
[Newton](#)
[Book](#) [Available](#)

Collections: The Challenge

- Modern Collection

- Created Java Function to extract the “Collection Part” from 952\$h
- If 952\$h == “Modern” extract subject part of call Number
- LL 082 K 100 => match against three properties files

- Modern0:

- 082 = 0/[006-108] ENGLISH LITERATURE: 1200-/

- Modern1:

- 082 = 1/[006-108] ENGLISH LITERATURE: 1200-/ [080-085] More than one period/

- Modern2:

- 082 = 2/[006-108] ENGLISH LITERATURE: 1200-/ [080-085] More than one period/ [082] History and criticism of prose; fiction; the novel; narrative/

Modern Collection (Browse by Subject Number)

The screenshot shows the Trinity College Cambridge VuFind library website. The header includes the Trinity College logo, the text "VuFind Search. Discover. Share.", and navigation links for Home, Login, Language, Recommend a Book, Chat, Opening Hours, and Library Home. A search bar is prominently displayed with a "Find" button and an "Advanced" link. Below the search bar, a breadcrumb trail indicates the current location: "breadcrumb_search_result / Modern Collection Browse". The main content area is titled "Modern Collections browse by subject number/shelf" and includes a link to "click on ► to see more". A list of subject categories with their respective item counts is shown, each preceded by a right-pointing triangle icon.

Subject Category	Count
[000-005] ANGLO-SAXON, NORSE AND CELTIC	875
[006-108] ENGLISH LITERATURE: 1200-	12,189
[110-122] BIBLIOGRAPHY	1,923
[130-135] LINGUISTICS	1,090
[140-229] MODERN LANGUAGES AND LITERATURE	13,937
[230-248] THEOLOGY	2,972
[251-278] CLASSICS	6,551
[280-295] PHILOSOPHY	2,899
[298-302] HISTORY AND PHILOSOPHY OF SCIENCE	2,398
[304] GENERAL SCIENCE	68
[305-339] MATHEMATICS	3,020
[340-368] ENGINEERING	1,722
[369] MANAGEMENT	337
[370-487] NATURAL SCIENCES AND MEDICINE	6,784
[490-697] LAND ECONOMY AND VETERINARY MEDICINE	468
[500] UNIVERSAL HISTORY AND GEOGRAPHY	30

Modern Collection (Browse by Subject Number)

The screenshot displays the Trinity College Cambridge VuFind library catalog interface. The header includes the Trinity College logo, the text "VuFind Search. Discover. Share.", and navigation links for Home, Login, Language, Recommend a Book, Chat, Opening Hours, and Library Home. A search bar with a "Find" button and an "Advanced" link is present. Below the search bar, a breadcrumb trail shows "breadcrumb_search_result / Modern Collection Browse". The main content area is titled "Modern Collections browse by subject number/shelf" and includes a link to "click on ► to see more". The subject list is organized into expandable/collapsible sections. The "[006-108] ENGLISH LITERATURE: 1200-" section is expanded, showing a list of subject categories with their respective item counts.

Subject Category	Count
[000-005] ANGLO-SAXON, NORSE AND CELTIC	875
[006-108] ENGLISH LITERATURE: 1200-	12,189
[006] 1200-1400 - texts and criticism of individual authors and anonymous works	100
[008] Chaucer - texts and criticism	148
[010] 1400-1500 - texts and criticism of individual authors and anonymous works	114
[011-015] 1200-1500	311
[018] 1501-1550 - texts and criticisms of individual authors	91
[019] 1551-1600 - texts and criticisms of individual authors	208
[020-024] 1500-1600	247
[027] Shakespeare - texts	515
[028] Shakespeare - criticism	606
[029] Shakespeare: Bacon-Shakespeare controversy	16
[030] 1601-1630 - texts and criticism of individual authors	314
[031] 1631-1660 - texts and criticism of individual authors	179
[033] Milton - texts and criticism	128
[035] 1661-1700 - texts and criticism of individual authors	179

Modern Collection (Browse by Subject Number)

The screenshot shows the Trinity College Cambridge VuFind website. The header includes the Trinity College logo, the text "VuFind Search. Discover. Share.", and navigation links for Home, Login, Language, Recommend a Book, Chat, Opening Hours, and Library Home. A search bar is prominently displayed with a "Find" button and an "Advanced" link. Below the search bar, the "Modern Collection Browse" section is active, displaying a list of subject categories with their respective item counts. The categories are organized into expandable sections, with the "English Literature: 1200-1500" section currently expanded to show sub-topics like "Collections of prose and poetry", "History and criticism of poetry and prose", "Collections of drama", "History and criticism of drama", "General surveys", and "1501-1550 - texts and criticisms of individual authors".

Modern Collection Browse

Modern Collections browse by subject number/shelf

click on ► to see more

- [000-005] ANGLO-SAXON, NORSE AND CELTIC 875
- ▼ [006-108] ENGLISH LITERATURE: 1200- 12,189
 - [006] 1200-1400 - texts and criticism of individual authors and anonymous works 100
 - [008] Chaucer - texts and criticism 148
 - [010] 1400-1500 - texts and criticism of individual authors and anonymous works 114
 - ▼ [011-015] 1200-1500 311
 - [011] Collections of prose and poetry 58
 - [012] History and criticism of poetry and prose 94
 - [013] Collections of drama 19
 - [014] History and criticism of drama 42
 - [015] General surveys 98
 - [018] 1501-1550 - texts and criticisms of individual authors 91
 - [019] 1551-1600 - texts and criticisms of individual authors 208
 - [020-024] 1500-1600 247
 - [027] Shakespeare - texts 515
 - [028] Shakespeare - criticism 606

Modern Collection (Hierarchical Facet)

The screenshot displays a library catalog interface. On the left, a 'Refine Search' sidebar contains various filters. The 'Modern Collection' filter is expanded, showing a hierarchical structure: '006-108] ENGLISH LITERATURE' (19 results), '011-015] 1200-1500' (19 results), and '[013] Collections of drama' (checked). The main search results area shows 19 results for the search query. The first five results are listed, each with a thumbnail image, title, publication information, shelfmark, location, and a 'Book Available' status. The results are sorted by relevance.

Refine Search






- Format
- Author
- Language
- Era
- Region
- Year of Publication
- Former Owner
- Collection Type
- Modern Collection
 - 006-108] ENGLISH LITERATURE 19
 - 011-015] 1200-1500 19
 - [013] Collections of drama ✓

Showing 1 - 19 results of 19 for search "", query time: 0.02s

Search Tools: [Get RSS Feed](#) — [Email this Search](#) — [Save Search](#)

Results per page: 20 Sort: Relevance

Extend this search to iDiscover

-  **The play of Antichrist from the Chester cycle** ★ Save to List
Published: Oxford : Clarendon Press, 1935.
Shelfmark: [LL 013 C 100](#)
Located: Lower Library
[Book](#) [Available](#)
-  **The Wakefield mystery plays** ★ Save to List
Published: London : Evans, c1961.
Shelfmark: [LL 013 W 100](#)
Located: Lower Library
[Book](#) [Available](#)
-  **York plays : the plays performed by the crafts or mysteries of York on the day of Corpus Christi in the 14th, 15th and 16th centuries** ★ Save to List
Published: Oxford : Clarendon, 1885.
Shelfmark: [LL 013 Y 103](#)
Located: Lower Library
[Book](#) [Available](#)
-  **The Assumption of the Virgin : a miracle play from the N-town cycle** ★ Save to List
Published: Oxford : Clarendon Press, 1915.
Shelfmark: [Adv.c.26.17](#)
Located: Reserve (Cage) - Ask at Enquiry Desk
[Book](#) [Available](#)
-  **Quellen-Studien zu den Dramen George Chapman's, Philip Massinger's und John Ford's** ★ Save to List
by Koeppel, Emil.
Published: Strassburg : Trübner, 1897.
Shelfmark: [LL 013 H 100\[2\]](#)
Located: Lower Library

Call Number Browse

Browse Indexes (Call Numbers)

- Trinity uses many different Call Number schemas
 - Crewe 1.10[1], LL 082 K 100 & NQ.17.37
- Call Number Browse did not do a good job at sorting
 - Crewe 1.1, Crewe 1.10, Crewe 1.2, Crewe 1.21
- Small Java Function normalizes these for sorting
 - Crewe 001 001, Crewe 001 010, Crewe 001 002, Crewe 001 021
 - => Crewe 1.1, Crewe 1.2, Crewe 1.10, Crwe 1.21

Browse Indexes (Call Numbers)

- Downside
 - Current implementation is a bit of a hack
 - Needs to be refactored
- Other Browse Indexes can suffer from a similar problem
 - Series Title Browse would benefit from a Natural Sort order



“It has been a great pleasure to work with EBSCO on implementing VuFind for the Trinity library catalogue. Once the full range of capability of the system became evident, we were able to install several additional features beyond our original expectations. It is very rewarding to see our researchers submitting complex searches and making full use of the faceted search options. We are particularly grateful to the FOLIO and VuFind communities for making all of this possible.”

Dr Nicolas Bell
Librarian, Trinity College Library

EBSCO

Questions?

