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The Good, The Bad and The Ugly: Using APIs to develop reading list software at the University of Huddersfield

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## THE GOOD, THE BAD AND THE UCLY





Using APIs to develop reading list software at the University of Huddersfield







Dave Pattern Library Systems Manager University of Huddersfield, UK

## The back story...



Once upon a time in the West...



## The back story...



- Once upon a time in West Yorkshire, UK
- ...the University of Huddersfield had a lot of courses
- ...each course contained several modules
- ...most modules had a list of required, recommended and background reading (books, articles, web sites, etc)



some academics don't check if the students can access the items on their lists in the library



some academics don't update the books on their reading lists to the latest edition



many academics forget to send a copy of the reading list to the library



students get p\*ssed off
when the library fails
to provide access to the
reading list items



it gets <u>real</u> ugly when 300 students try to get hold of the <u>only</u> copy of the book in the library



time for the library to be the good guys :-)









## Enter MyReading...



- Reading list software developed in-house
- Launched in summer 2011
- Over 98% of all active modules now have a reading list in MyReading
- Most academics are using the software to maintain their reading lists

#### BFK0006: INTRODUCTION TO SPORTS PROMOTION AND MARKETING

Module Leader: Glynis Jones

This list was last updated on 22/Jan/2013 URL: http://library.hud.ac.uk/my/BFK0006

Contents (show)



#### 1 - Essential Reading

collapse | top



book » essential reading

Chadwick, Simon and Beech, John G. (2007) - The marketing of sport



#### 2 - Supplementary Reading

collapse | top

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book » recommended reading

Fullerton, Sam (2010) - Sports marketing (2nd ed)



book » recommended reading

Shank, Matthew D. (2009) - Sports marketing: a strategic perspective (4th ed)



book » recommended reading

Smith, Aaron (2008) - Introduction to sport marketing



book » recommended reading

Sutton, William Anthony, Hardy, Stephen and Mullin, Bernard James (2007) - Sport marketing (3rd ed)



book » recommended reading

Wakefield, Kirk L. (2007) - Team sports marketing



#### BFK0006: INTRODUCTION TO SPORTS PROMOTION AND MARKETING

Module Leader: Glynis Jones

This list was last updated on 22/Jan/2013 URL: http://library.hud.ac.uk/my/BFK0006

Contents (show)



#### 1 - Essential Reading

collapse | top



book » essential reading

Chadwick, Simon and Beech, John G. (2007) - The marketing of sport

more like this options details

#### Links:

· DawsonEra (electronic book)

#### Library holdings:

· Huddersfield: 3 copies (all available now)

#### Bibliographic details:

- · published in 2007 by Financial Times Prentice Hall (Harlow)
- shelfmark: 796.0698 MAR
- ISBNs: 9780273688266 / 9781405898812

#### Library Catalogue - all editions and related works:

- . The marketing of sport (2007) edited by Beech, John G. [electronic book]
- The marketing of sport (2007) edited by Beech, John G.

#### Purchase options:

- Amazon.co.uk £44.79 (paperback, 1st ed., 2006)
- Blackwells £48.99 (paperback, ISBN 9780273688266)



## The requirements...



- The software had to:
  - give students electronic access to as much material as possible
  - provide the library with purchasing data
  - automate as much as possible
  - be easy for academics to use
  - integrate with other systems













# #1 SUMMON

## Serials Solutions Summon API



## api.summon.serialssolutions.com

## The problem...

- We need to make MyReading easier to use than updating a Word document
- Getting accurate metadata is hard and we want to make the references as rich as possible
- We need reliable full-text links

## Serials Solutions Summon API



- api.summon.serialssolutions.com
- MyReading is integrated into the Summon interface (using jQuery)
- Academics can quickly add items to their reading lists from the 132 million items in our Summon collection ...or from the 791 million items in the full Summon index

Inspiring tomorrow's professionals

It gives practical information on things to see and do in all destinations served, including Brussels.

✓ Any

```
(0032 9233 7689, WWW.
 </field>
- <field name="SourceType">
     <value>Aggregation Database</value>
     <organization name="Guardian News & Media Limited"/>
- <field name="Publisher_xml">
  </field>
      <value>It doesn't take long to expect the unexpected in Ghent, a city sometimes left off
         the traditional tourist trail in favour of Bruges's beauty and Antwerp's...</value>
  </field>
 - <field name="Snippet">
 - <field name="NewspaperSection">
       <value>Guardian Special Supplement</value>
       <value>http://search.proquest.com/docview/245898893</value>
    </field>
  - <field name="URI">
    </field>
  - <field name="PQPubID">
        <value>35249</value>
     </field>
   - <field name="IsScholarly">
        <value>false</value>
         <value>FETCH-proquest_dll_2465506211
     </field>
    - <field name="ID">
    - <field name="PublicationTitle">
         <value>The Guardian</value>
    - <field name="PublicationYear">
          <value>2002</value>
       </field>
     - <field name="Genre">
          <value>News</value>
     - <field name="PublicationPlace_xml">
           <location name="London (UK)"/>
        </field>
      - <field name="PQID">
             245898893</value>
```

#### Please check the item reference for accuracy...

fields in red are mandatory

fields in green affect how the software displays the reference and should be altered with caution

item type:	JOURNAL ARTICLE	
article title:	Cities of Flanders: Ghent: Sweet secrets: You never know quite what to expect in Ghent, with	
article author(s):	Jane E Knight	?
journal title:	The Guardian	
volume:		?
issue:		?
page(s):	5	?
article DOI:		
article URL:	http://rc4ht3qs8p.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info:ofi/enc:	
publication date:	23/11/2002	?
publisher name:	Guardian News & Media Limited	?
publisher location:	London (UK)	?
ISSN (print):	0261-3077	?
ISSN (electronic):		?
	submit	
	Subiliit	

#### 4 - ELAG 2013

section options: edit | ↑move↓ | copy | adaptive release | delete

collapse | top



journal article » recommended reading

Jane E Knight - Cities of Flanders: Ghent: Sweet secrets: You never know quite what to expect in Ghent, with its quirky customs, secret recipes and long- hidden treasure in *The Guardian* (2002)

details more like this edit options

#### Links (show more):

article link (via Summon)

#### Article details:

page: 5

date: 23/11/2002

#### Article abstract from Summon:

 It doesn't take long to expect the unexpected in Ghent, a city sometimes left off the traditional tourist trail in favour of Bruges's beauty and Antwerp's attitude. For Ghent not only ... [read more]

#### Journal details:

- · The Guardian
- ISSN: 0261-3077 (print)
- publisher: Guardian News & Media Limited (London (UK))





#### journal article » background reading



Shannon, Brent - Refashioning Men: Fashion, Masculinity, and the Cultivation of the Male Consumer in Britain, 1860-1914 in Victorian Studies (2004)

details more like this edit options

#### Links (show more):

Arte O Humanitiae Full Tout (article)

#### Article details:

- volume: 46
- issue: 4
- pages: 597-630date: 01/07/2004
- DOI: 10.2979/VIC.2004.46.4.597
- subject terms: Clathing Consumer behavior Fashion Man, and Middle class

#### Article abstract from Summon:

In November 1893 the Cutter's Gazette of Fashion, a prominent trade periodical for tailors, published the comments of a T.
 Patterson delivered before the Sheffield Society. In his address, Patterson celebrated the robust state of London's men's
 tailoring and extolled the modern advances that had allowed its proliferation throughout the provinces and the Continent.
 Shannon examines how men, masculinity, and male consumption were imagined in the discourse of the burgeoning
 commodity culture and fashion industry, and how this discourse operated against, and alongside of, the Great Masculine
 Renunciation's more conservative promotion of sartorial reserve and repudiation of consumer desire in Britain between 1860
 and 1914.

#### manage of the second

- Victorian Studies
- ISSN: 0042-5222 (print) & 1527-2052 (electronic)
- publisher: Indiana University Press



# #2 XISBN

### OCLC xISBN



## www.oclc.org/developer/services/xisbn

## The problem...

- Some academics don't list the latest edition of a book on their reading list
- The library routinely buys new editions of popular books and gets rid of the older editions

### OCLC xISBN



## www.oclc.org/developer/services/xisbn

- Provides details of related editions, including basic metadata
- Free for up to 500 requests per day
- Ideal for linking together different editions of the same title

MONIST SEVEN AND TAINED ANY WAY TO SEE SECTION OF THE MOST SECURIOR SECTION OF THE SECTION OF TH



book - recommended reading

Tungate, Mark (2005) - Fashion brands : branding style from Armani to Zara



details

more like this

options

#### Links:

· Ebrary (electronic book)

#### Library holdings:

Huddersfield: 4 copies (all available now)

#### Bibliographic details:

- · published in 2005 by Kogan Page (Sterling, Va, London)
- shelfmark: 687.0688 TUN
- ISBN: 9780749442996

#### Library Catalogue - all editions and related works:

- · Fashion brands: branding style from Armani to Zara (2nd ed, 2008) Tungate, Mark
- Fashion brands branding style from Armani to Zara (2005) Tungate, Mark [electronic book]
- · Fashion brands: branding style from Armani to Zara (2005) Tungate, Mark

#### Purcnase options:

- · search Amazon.co.uk
- search AbeBooks UK





book » recommended reading

Welters, L. and Lillethun, A. (2011) - The fashion reader (2nd ed)



book » recommended reading

Welters, Linda and Lillethun, Abby (2011) - The fashion reader (2nd ed)







update to this edition

18 18 18 18 18 C

ungate, Mark (2005) - rashion brands , branding style from Armani to [private note from the library] A newer edition from 2008 is listed on the library catalogue.

details more like this edit options

#### Links:

Ebrary (electronic book)

#### Library holdings:

Huddersfield: 4 copies (all available now)

#### Bibliographic details:

- published in 2005 by Kogan Page (Sterling, Va, London)
- shelfmark: 687.0688 TUN
- ISBN: 9780749442996

#### Library Catalogue - all editions and related works:

- Fashion brands: branding style from Armani to Zara (2nd ed, 2008) Tungate, Mart
- Fashion brands branding style from Armani to Zara (2005) Tungate, Mark [electro
- Fashion brands: branding style from Armani to Zara (2005) Tungate, Mark

#### Purchase options:

- search Amazon.co.uk
- search AbeBooks UK



book » recommended reading

Welters, L. and Lillethun, A. (2011) - The fashion reader (2nd ed)



book » recommended reading

Welters, Linda and Lillethun, Abby (2011) - The fashion reader (2nd ed)















# #3 360 LINK

## Serials Solutions 360 Link serials solutions.com/en/services/360-link



## The problem...

- Linking to articles is a pain in the ass!
- Academics don't understand URLs with session IDs, authentication issues, etc
- Legal issues around hosting article PDFs
- Library subscriptions and journal platforms keep changing

## Serials Solutions 360 Link serials solutions.com/en/services/360-link



- You've paid for a link resolver, so why not use it?;-)
- 360 Link API provides current access options and basic metadata for a given OpenURL as XML

She in Critical Survey (2008)



journal article » background reading



Slifkin, Robert - James Whistler as the Invisible Man: Anti-Aestheticism and Artistic Vision in Oxford Art Journal (2006)

details more like this edit options

#### Links (show more):

Oxford Journals Humanities Collection (article)

#### Article details.

- volume: 29
- issue: 1
- pages: 55-75
- date: 01/01/2006
- DOI: 10.1093/oxartj/kci049

#### Article abstract from Summon:

 H. G. Wells' novel "The Invisible Man" (1897) and its title character in particular can be seen as a satire of the flamboyant and contentious public persona of James McNeil Whistler. ... [read more]

#### Journal details:

- · Oxford Art Journal
- ISSN: 0142-6540 (print) & 1741-7287 (electronic)
- publisher: Oxford Publishing Limited(England) (Oxford)



journal article » background reading

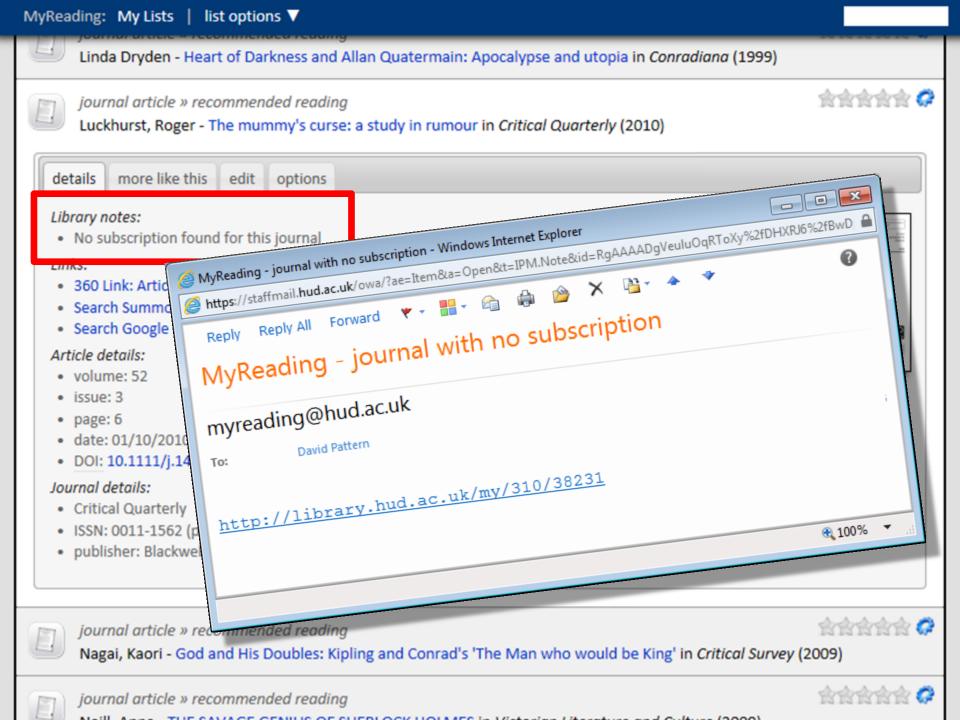


Sussman, Herbert - Arthur Conan Doyle and the Meaning of Masculinity / Conrad and Masculinity (Book Review) in Victorian Studies (2002)









# #4 COPAC

### COPAC



copac.ac.uk/developers/webapi/

## The problem...

- Getting good metadata for books the library doesn't have in stock
- Academics often want to add books that they have sitting on the shelf in their office

#### COPAC

## University of HUDDERSFIELD

### copac.ac.uk/developers/webapi/

- Academics can type in an ISBN
- MyReading checks library catalogue first
- If not held in stock, we check COPAC
- See also:
  - OCLC WorldCat Search API
  - Amazon APIs
  - <u>Perl WWW::Scraper::ISBN</u> modules

# #5<br/>DOI

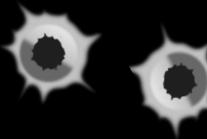
## CrossRef Metadata Search API search.labs.crossref.org/help/api



### The problem...

- An academic wants to add a reference manually but we want to avoid bad metadata, typos, etc
- If the academic has a DOI for the reference, we can check CrossRef to get accurate metadata









# products With NO APIS

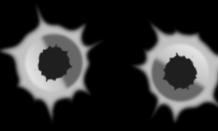
# products without a free AFI

## products with hard to use APIs



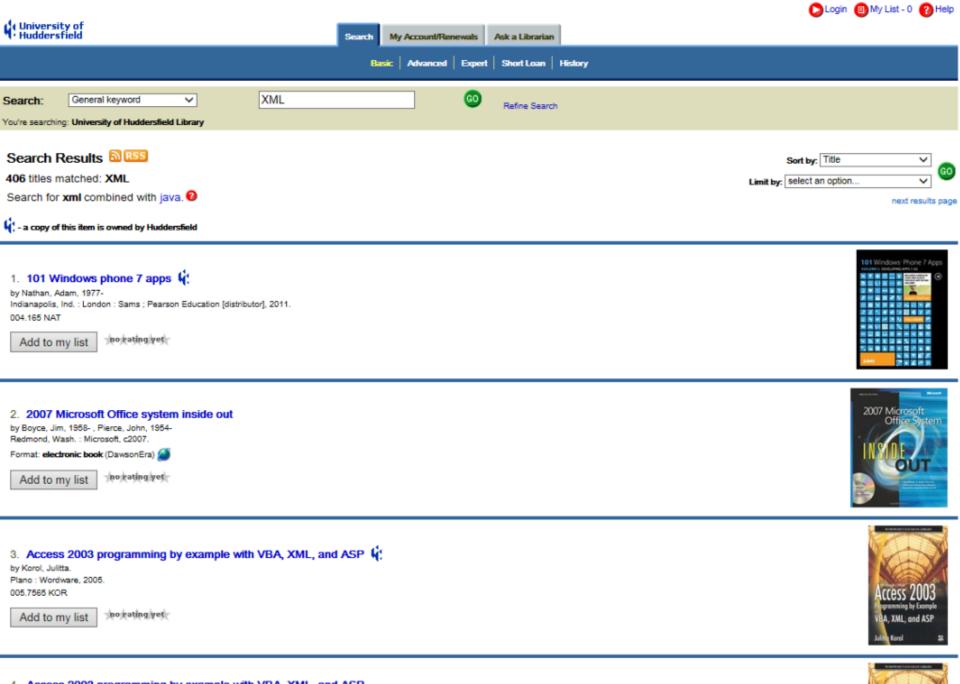






## #1

## THE OPAC



 Access 2003 programming by example with VBA, XML, and ASP by Korol, Julitta.
 Plano: Wordware, 2005.

# &GetXML=true

```
<?xml version="1.0" encoding="UTF-8" standalone="true"?>

    <searchresponse>

     <version>3.08</version>
     <session>13F89GX210160.4196</session>
     cls
     <lang>eng</lang>
      <expirepage>360</expirepage>
      <illurl/>

    <a href="httpserver">httpserver</a>>

         <servername>127.0.0.1</servername>
         <host>webcat.hud.ac.uk</host>
          <port>80</port>
      </httpserver>
     - <browser>
          <type>MSIE</type>
          <majorversion>10</majorversion>
          <minorversion>0</minorversion>
          <os>Windows NT</os>
          <addr>127.0.0.1</addr>
       </browser>
     - <bookbag>
           <size>0</size>
       </bookbag>
      - <security>
           <auth>false</auth>
           <name/>
        </security>
      - <toolbar>
           <active_tab>search</active_tab>
            <bgcolor>#336699</bgcolor>
            <bg>null</bg>
            <userlimits/>
          - <tab>
               <name>Search</name>
               <alt>search the library catalogue</alt>
                <value>search</value>
                <active>true</active>
            </tab>
                <name>My Account/Renewals</name>
           - <tab>
                <alt>view your account information and renew items</alt>
                <value>account</value>
                <active>false</active>
             </tab>
           - <tab>
                 <name>Ask a Librarian</name>
                 <alt>email a question to a Librarian</alt>
                 <href>http://www.hud.ac.uk/library/help/askalibrarian/</href>
                 <active>false</active>
              </tab>
            - <submenu>
                 <name>Basic</name>
                 <alt>basic search</alt>
                  <value>subtab33</value>
                  <active>true</active>
               </submenu>
             - <submenu>
                  <name>Advanced</name>
                  calt>advanced search</alt>
```

# #2 DATA

## Issues around data aka "The Can o' Worms"



- Data ownership
- Data use, reuse and remixing
- Can we still make use of the data we've already collected/harvested if we cancel the vendor product?

## **SerialsSolutions**

## XML API for OpenURL Requests

Version 1.0 12 June 2007

#### Table of Contents

3. Usage Restrictions

Some restrictions on usage will be imposed. The exact specification of these has yet to be determined.

cons XML API for OpenURL requests. We outline here the base URL, the particle of the base URL and the particle of the base URL and the particle of the base URL and the base URL

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#### Access and Authentication

#### Access and Query Types

The base URL for this operation is

http://<client identifier>.openurl.xml.serialssolutions.com/openurlxml

mea.

Both HTTP POST and GET requests are supported.

#### Usage Restrictions

Some restrictions on usage will be imposed. The

# #3 STANDARDS

## Summary



- APIs allow developers to enrich existing library services and to rapidly develop new ones
- APIs allow you to "glue" together different services and products, and this then allows data to flow

### Summary



- When purchasing new products, remember to ask the vendor...
  - does it have an fully-featured API?
  - is the product itself built on top of the API?
  - is the documentation publicly available?
  - what have other libraries developed using your API?

## That's all folks! Thank you for listening ©



email: d.c.pattern@hud.ac.uk

tweet: @daveyp

• images taken from various trailers for The Good, The Bad and The Ugly (1966), directed by Sergio Leone