Digitized Text Services, OpenURL link resolvers, and Umlaut

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http://docs.google.com/Presentation?id=dfd2t3bt_5hkbxrdoc
Straight to the demo!
the open source Umlaut link resolver

http://findit.library.jhu.edu/go/752150

• Search Inside from:
  o Google
  o Amazon
  o HathiTrust
• Open Access full text from:
  o Google
  o HathiTrust (only when no Google hit)
  o InternetArchive
• Covers from:
  o Amazon, Google, LibraryThing, OpenLibrary
More demo!

http://findit.library.jhu.edu/go/955948

• Limited excerpts from:
  o Google
  o Amazon

http://findit.library.jhu.edu/go/750567

• Author biographical information
  o Worldcat Identities
And, in the catalog:

http://catalog.library.jhu.edu/ipac20/ipac.jsp?index=BIB&term=29826

- Integrated once using convenient Umlaut APIs and javascript helpers.
  - New plug-ins in Umlaut, automatically show up in OPAC
A step back to consider
What is an OpenURL link resolver anyway?

Too Narrow
That thing which gets us full text for articles

Too broad
Anything!
• We will be thinking only of scholarly citation (SAP1/2) OpenURLs and link resolvers, as this is what actually existing products are.
• Do one thing and do it well.

Just Right
Software that takes a scholarly citation formatted as an OpenURL, and provides the user with services.
Umlaut

- Umlaut is a link resolver
- Umlaut does not have its own knowledge base of licensed materials
  - Uses SFX (via API) for knowledge base of licensed resources, and article-level linking to those resources SFX can handle.
  - Disentangle knowledge base from interface and value added services.
  - Umlaut could hypothetically work with other link-resolver type knowledge base products with APIs.
What is the role of a link resolver?

In the library infrastructure we can imagine

**Role 1: The electronic front-door to the library**

When the user finds a known item, possibly in a non-library third party application, and wants to know what her library can do for her with that item.

- Not just articles.
- Not just from licensed content providers
- With browser extensions like LibX if necessary, from anywhere our users are
Umlaut designed with electronic front door in mind

Any services for a known-item we can think of and manage to include

Including print call number and availability and direct links to OPAC crucial.

- [http://findit.library.jhu.edu/go/955948](http://findit.library.jhu.edu/go/955948)

- Abolish unnecessary extra clicks!
What is the role of a link resolver?

In the library infrastructure we can imagine

**Role 2: A known item service provider used by other software**

Many interfaces we need known-item services, often for the same type of interfaces.

Why implement these services multiple times?

"Single business" model, and good software engineering design says put this in one place.

Not necessarily formal "SOA", but the same goals.
Umlaut does that too

With plug-in architecture
Additional external services added in individual components

With full-featured suite of APIs
Including all Umlaut fetched services

• Full API
• Partial HTML API
• Javascript 'widget' style helpers
Interesting Problems

- Wait time for multiple services
  - Solved with background fetching, with AJAX updating
    - Non-AJAX option
    - Background fetching advertised by APIs
- Metadata matching
  - Identifier or keyword are used depending on capabilities of foreign service, and metadata in possession.
- Lack of sufficient APIs in third parties.
  - Google lack of detail
  - Amazon screen scrape necessary
  - Some services not possible.
No shortage of interesting problems.

- Bad metadata
  - Eg local; also Google.
  - Local staff/patrons don't care that it's a third party
- Multiple version issue
  - Include alternate versions or not, what's the right answer?
  - Can it be achieved anyway?
  - Multi-volume works tricky
- Terms of service
  - Not always clear
  - Amazon just (this week) changed interface/access negatively
Umlaut collaboration?

• Open source, Ruby on Rails.
• Collaborative open source is sustainable open source.
  o interested?
• Why is nobody interested in using it?

http://wiki.code4lib.org/index.php/Umlaut

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