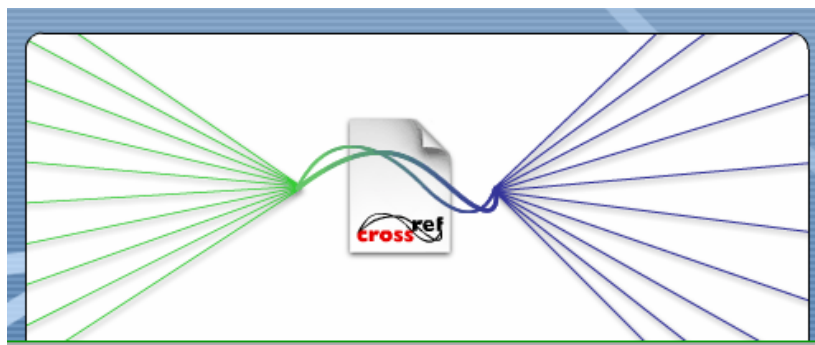


“The vast majority of scholarly journals are now online, and there have been a number of studies of what features scholars find most valuable in e-journals. Seamless linking to and from citations, the original articles cited, and bibliographic databases always ranks extremely highly. DOI and CrossRef provide an increasingly flexible way of enriching scholarly literature online with actionable and persistent links.”

-- Sally Morris, Chief Executive of the Association of Learned and Professional Society Publishers

CrossRef Forward Linking: Adding Value to Content



Ed Pentz, Executive Director
Chuck Koscher, Director of Technology

Overview

- CrossRef Forward linking:
- What is it.
- Why do it.
- How to do it.

CrossRef Forward Linking: What is It?

- Add value to your publications by including “Cited by” links
 - Persistent DOI links for the reader to articles that cite the article being read
- Cross-publisher cited by links:
 - many publishers have links but only on a single hosting platform
- Takes advantage of successful CrossRef model of reference linking with a level playing field for all members
- Deposit references with CrossRef and add cited by links to your site using data returned by CrossRef

CrossRef Forward Linking: Why Do It?

- Enhance the online reading experience for users – makes research easier
- Add value to your content and your site
- Extension of CrossRef reference linking
 - Takes advantage of the power of network effects – link out and get links back
 - More participation=more value for all
 - Smaller journal sites can see huge benefits
- As of 2007 there is no CrossRef fee!!

CrossRef Forward Linking: How to Do It

- Notify CrossRef that you would like to participate
 - It's an optional service
 - Annual CrossRef fee: \$0!!
- Deposit references
- Retrieve/Query “cited by” links and add to your site then keep up-to-date
- Policies:
 - For use with primary content
 - No secondary publishing use
 - Must deposit references before retrieving DOIs of citing articles

Why not just use Google Scholar?

- CrossRef FL and Google Scholar “cited by” links complementary
- Google Scholar links:
 - Take user off your site
 - Links are broad but not focused
 - Links are not verified
- CrossRef FL links:
 - More focused and validated
 - Add value and keep the user on your site

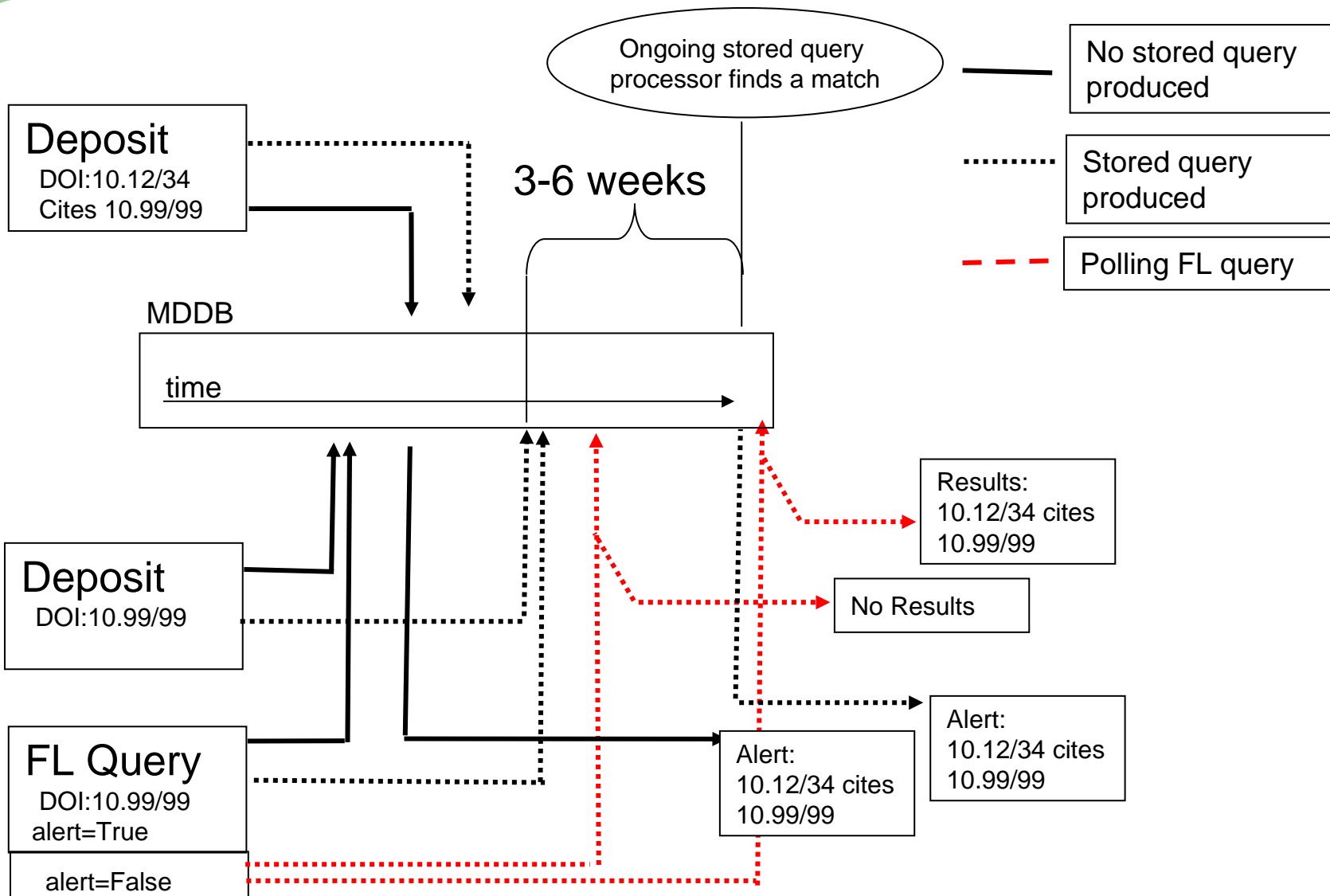
Demonstration

- PLOS Biology
<http://dx.doi.org/10.1371/journal.pbio.0000005>
- Japanese Journal of Pharmacology
<http://dx.doi.org/10.1254/jjp.78.113>
- European Journal of Biochemistry
<http://dx.doi.org/10.1111/j.1432-1033.2004.04062.x>

Forward Linking Operation

58	member publishers participating
50,875,954	resolved reference citations
53,814,996	citations that have not yet resolved to a DOI.
6,643	number of journals that are cited

The overall process



Permissions – FL Query

- A user account must be given permission to do forward linking queries

User ID: 1199
 Login:
 Password:
 Desc.:
 Options Tokenize batch query result emails

Privilege:

- Basic Query (metadata -> DOI)
- Forward Link Query
- DOI Query (DOI -> metadata)
- Metadata Upload
- Metadata Download
- Reports
- Real time queries

This user can only retrieve forward links to articles whose DOI have these prefixes or are owned by this prefix

In Publisher Group:

- [Springer-Verlag](#)
- [Springer-Verlag](#)
- [Springer - Society of Surgical Oncology](#)

10.1007

10.1140

10.1245

Webinar

XML – FL Query

```
<?xml version = "1.0" encoding="UTF-8"?>
<query_batch version="2.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.crossref.org/qschema/crossref_query_input2.0.xsd"
  http://www.crossref.org/qschema/crossref_query_input2.0.xsd">
  <head>
    <email_address>ckoscher@crossref.org</email_address>
    <doi_batch_id>fl_001</doi_batch_id>
  </head>
  <body>
    <fl_query alert="true" start_date= 1900-01-01 end_date=2007-01-01>
      <doi>10.1097/00001622-200101000-00005</doi>
    </fl_query>
  </body>
</query_batch>
```

If set to FALSE these queries run really fast !!!
(e.g. do NOT set to true if you are polling)

These are OPTIONAL and, they define the dates that the forward link was established **NOT** the dates of the citing article

XML – FL Deposit

```
<?xml version="1.0" encoding="UTF-8" ?>
<doi_citations_batch version="1.0.1"
  xmlns="http://www.crossref.org/doi_citations_schema/1.0.3"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.crossref.org/doi_citations_schema/1.0.3
  http://www.crossref.org/schema/3.0.3
  http://www.crossref.org/schema/deposit/doi_citations1.0.3.xsd">
  <head>
    <doi_batch_id>123456</doi_batch_id>
    <depositor> ... </depositor>
  </head>
  <body>
    <doi_citations>
      <doi>10.5555/small_md_0001</doi>
      <citation_list>
        <citation key="ref1">
          <journal_title>Current Opinion in Oncology</journal_title>
          <author>Chauncey</author>
          <volume>13</volume>
          <first_page>21</first_page>
          <cYear>2001</cYear>
        </citation>
        <citation key="ref2">
          <doi>10.5555/small_md_0001</doi>
        </citation>
      </citation_list>
    </doi_citations>
  </body>
</doi_citations_batch>
```

The DOI of the 'citing' article

A 'cited' reference

The DOI of a 'cited' reference

No special permission is required
to make FL deposits

XML – FL Deposit Results

```
<?xml version="1.0" encoding="UTF-8"?>
<doi_batch_diagnostic status="completed" sp="CR4">
  <submission_id>334701547</submission_id>
  <batch_id>04260730</batch_id>
  <record diagnostic status="Success">
    <doi>10.5555/small_md_0001</doi>
    <msg>Successfully updated</msg>
    <citations diagnostic>
      <citation key="ref1" status="resolved_reference">
        10.1016/0197-4580(90)90059-9
      </citation>
      <citation key="ref2" status="resolved_reference">10.5555/small_md_0001</citation>
      <citation key="ref3" status="stored_query"></citation>
    </citations_diagnostic>
  </record_diagnostic>
</batch_data>
  <record_count>1</record_count>
  <success_count>1</success_count>
  <warning_count>0</warning_count>
  <failure_count>0</failure_count>
</batch_data>
</doi_batch_diagnostic>
```

The DOI of the 'citing' article

FL Deposits Using STQ



This form allows you to retrieve Digital Object Identifiers (DOIs) for journal articles, books, and chapters by simply cutting and pasting the reference list into the box below. You may use the form with any reference style, although the tool works most reliably if references are formatted in a standard style such as shown in this example:

Clow GD, McKay CP, Simmons Jr. GM, and Wharton RA, Jr. 1988. Climatological observations and predicted sublimation rates at Lake Hoare, Antarctica. *Journal of Climate* 1:715-728.

To test the interface, simply cut & paste this reference!

Please separate individual references by a blank line. For best results, there should be no line breaks within an individual reference. When submitting multiple references they must be in alphabetical order or presented as a numbered list. For editorial purposes, to check the accuracy of a reference click on the DOI link that is returned with the reference.



Enter text in the box below:

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Clow GD, McKay CP, Simmons Jr. GM, and Wharton RA, Jr. 1988. Climatological observations and predicted sublimation rate at McMurdo Station, Antarctica. *Journal of Climate* 1:715-728.

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Clow GD, McKay CP, Simmons Jr. GM, and Wharton RA, Jr. 1988. Climatological observations and predicted sublimation rate at McMurdo Station, Antarctica. *Journal of Climate* 1:715-728.

doi:10.1175/1520-0442(1988)001<0715:COAPSR>2.0.CO;2

[http://dx.doi.org/10.1175/1520-0442\(1988\)001<0715:COAPSR>2.0.CO;2](http://dx.doi.org/10.1175/1520-0442(1988)001<0715:COAPSR>2.0.CO;2)

The DOI of the article containing this reference

Email Address:

Parent DOI:

Username:

Password:

Reset

FL Deposits Using STQ

- Deposit of references will be submitted for you to the system
- You will receive an email with the deposit results
- The deposit will contain all the references eXtyles can extract
 - Parsed references that do not find a DOI submitted as a query
 - References do find a DOI submitted as just a DOI
- Each deposit will over-write a previous deposit
 - Make each request a complete list of all references.
 - Delete a reference by submitting again and omitting

Questions

- Questions?
- More information available online:

http://www.crossref.org/02publishers/forward_linking_howto.html