DOIs Demystified: Getting Started with CrossRef Membership and DOI Deposits

Jeffrey M. Mortimore  
*Georgia Southern University, jmortimore@georgiasouthern.edu*

Ashley D. Lowery  
*Georgia Southern University, sergiadis@etsu.edu*

Follow this and additional works at: [https://digitalcommons.georgiasouthern.edu/lib-facpresent](https://digitalcommons.georgiasouthern.edu/lib-facpresent)

Part of the [Library and Information Science Commons](https://digitalcommons.georgiasouthern.edu/lib-facpresent/42)

---

**Recommended Citation**  
Mortimore, Jeffrey M., Ashley D. Lowery. 2016. "DOIs Demystified: Getting Started with CrossRef Membership and DOI Deposits."  
*Library Faculty Presentations*. Presentation 42. source: [https://digitalcommons.kennesaw.edu/dcseug/2016/Schedule/8/](https://digitalcommons.kennesaw.edu/dcseug/2016/Schedule/8/)  
[https://digitalcommons.georgiasouthern.edu/lib-facpresent/42](https://digitalcommons.georgiasouthern.edu/lib-facpresent/42)

---

This presentation is brought to you for free and open access by the Faculty Research and Publications at Digital Commons@Georgia Southern. It has been accepted for inclusion in Library Faculty Presentations by an authorized administrator of Digital Commons@Georgia Southern. For more information, please contact digitalcommons@georgiasouthern.edu.
DOIs Demystified: Getting Started with Crossref Membership & DOI Deposits

Jeffrey M. Mortimore & Ashley D. Lowery
Georgia Southern University
Agenda

• A Brief History of OA Journals at Georgia Southern
• Crossref Membership Basics
• MOU Implications
• DOI Structure & Syntax
• DOI Deposit Workflows
• Reference List Workflows
• Lessons Learned & Demo
A Brief History of OA Journals at Georgia Southern

• 8 Journals in Digital Commons@Georgia Southern
  • Variety of ages and establishment

• Kill two birds with one stone.
  • Editors requested ISSNs, DOIs, and/or indexing
  • Library wanted Memorandum of Understanding (MOUs)
Crossref Membership Basics

About Crossref:

- Established in 2000 as an independent, non-profit membership association.
- Official DOI registration agency for scholarly and professional publications, including journals, books, conference proceedings, theses & dissertations, etc. *(there are other agencies for other content types)*
- In addition to DOI registration, Crossref provides DOI lookup, crosscheck, cited-by linking, and metadata services.
Crossref Membership Basics

Registering DOIs with Crossref requires membership, which entails an annual membership fee and DOI deposit fees:

- **2016 annual fee**: $275 for <$1 million in publishing revenue
- **2016 deposit fees**:

<table>
<thead>
<tr>
<th>Content Type</th>
<th>Deposit Fees Per DOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book Chapters with up to 250 chapters (each)</td>
<td>$ 0.25</td>
</tr>
<tr>
<td>Backfile (all content types)</td>
<td>$ 0.15</td>
</tr>
<tr>
<td>Standards and standards families (current and backfile)*</td>
<td>$ 0.15</td>
</tr>
<tr>
<td>Components, Data Sets and Data Elements (current and backfile)*</td>
<td>$ 0.06</td>
</tr>
<tr>
<td>Journal Title</td>
<td>free</td>
</tr>
</tbody>
</table>
Crossref Membership Basics

When you join Crossref, you get:

• A unique DOI prefix: [http://dx.doi.org/10.20429/](http://dx.doi.org/10.20429/)

• A username and password with which to register DOIs and deposit metadata about your digital objects.

• DOI resolution warnings and reports.
Crossref Membership Basics

Among other things, members are required to:

• Assign DOIs and deposit metadata for all online journal articles.
• Assign DOIs and deposit metadata as soon as possible after online publication.
• Maintain metadata and URLs associated with all registered DOIs.
• Link references in the journal articles they deposit with Crossref.
• Register DOIs for “Definitive Works” only, not duplicative works... Crossref does not permit multiple DOIs to be assigned to certain closely related versions of a work, and hence does not support assignment of DOIs to Pre-prints or Post-prints of Definitive Works or to the Personal Version or a Self-archived Copy of a Definitive Work. (http://www.crossref.org/02publishers/59pub_rules.html)
Crossref Membership Basics

Who is the Publisher? Who pays for membership?

Scenario 1: The IR (“Sponsoring Member”) pays for and maintains one Crossref membership to deposit DOIs for the journal (“Sponsored Publisher”). The IR administers all deposits and payments on the journal’s behalf.

Scenario 2: The journal pays for and maintains its own Crossref membership.

Under scenario 1, only one Crossref membership is needed for the entire contents of the IR. One prefix can accommodate any number of publications and objects.
MOU Implications

• Under Scenario 1, the IR (“Sponsoring Member”) will require proxy authority to maintain the Crossref membership on the journal’s behalf (“Sponsored Publisher”).

• Under Scenario 2, unless the journal is handling all aspects of DOI deposits, linking, and metadata maintenance, the IR will likely need proxy authority to access the journal’s membership account.

• In either case, if the journal ever leaves the IR, both parties will need to know how transfer of ownership and/or maintenance of existing DOIs will be handled.

• If you don’t have an MOU in place already, now’s the time!
MOU Implications

Items to address in the MOU:

1. Establish the membership relationship:
   - Scenario 1: IR as Sponsoring Member.
   - Scenario 2: Journal as Member.

2. Establish the IR’s proxy authority with third parties pursuant to:
   - Obtaining ISSNs.
   - Depositing and maintaining DOIs, and related metadata.

3. Establish responsibilities in case the MOU is terminated.

See Georgia Southern’s template at: [http://digitalcommons.georgiasouthern.edu/dc-promo/11/](http://digitalcommons.georgiasouthern.edu/dc-promo/11/)
DOI Structure & Syntax

• Standardized handout provided with MOUs
• Three nodes for DOI suffixes recommended:

10.1115/iJhm.2015.020201

<table>
<thead>
<tr>
<th>Encoding Options</th>
<th>Journal Identifier Node</th>
<th>Year of Publication Node (optional)</th>
<th>Item Identifier Node</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acronym [ijhm]</td>
<td>.2015</td>
<td>Volume #/Issue #/Article # [.010101]</td>
</tr>
<tr>
<td></td>
<td>ISSN [XXXXXXXX]</td>
<td></td>
<td>Platform Code and Manuscript # [.010001]</td>
</tr>
</tbody>
</table>
DOI Structure & Syntax

Example of Article Citation:

Example of Corresponding DOI:
/ijhm.2015.020201
DOI Deposit Workflows

- Generate article-level DOIs
- Publish DOIs in Digital Commons
- Deposit DOIs in Crossref

Deposit DOIs within 24 hours of publishing to DC!

Test DOIs for resolution.

Easy as clicking on the DOI on the response page!
DOI Deposit Workflows – Generate DOIs

Input the information for an issue into the Journal DOI Generator in Excel:
DOI Deposit Workflows – Publish DOIs in DC

Input the DOIs in a Batch Revise Spreadsheet in Digital Commons. Assign DOIs based on Digital Commons links.

<table>
<thead>
<tr>
<th>Title</th>
<th>DOI</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>What’s It Really A</td>
<td>10.20429/ijsotl.2007.010103</td>
<td><a href="http://digitalcommons.georgiasouthern.edu/ijsotl/vol1/iss1/3">http://digitalcommons.georgiasouthern.edu/ijsotl/vol1/iss1/3</a></td>
</tr>
<tr>
<td>Dialogic Communique</td>
<td>10.20429/ijsotl.2007.010104</td>
<td><a href="http://digitalcommons.georgiasouthern.edu/ijsotl/vol1/iss1/4">http://digitalcommons.georgiasouthern.edu/ijsotl/vol1/iss1/4</a></td>
</tr>
<tr>
<td>Allowing Not-Know</td>
<td>10.20429/ijsotl.2007.010105</td>
<td><a href="http://digitalcommons.georgiasouthern.edu/ijsotl/vol1/iss1/5">http://digitalcommons.georgiasouthern.edu/ijsotl/vol1/iss1/5</a></td>
</tr>
<tr>
<td>The Significance of</td>
<td>10.20429/ijsotl.2007.010106</td>
<td><a href="http://digitalcommons.georgiasouthern.edu/ijsotl/vol1/iss1/6">http://digitalcommons.georgiasouthern.edu/ijsotl/vol1/iss1/6</a></td>
</tr>
<tr>
<td>What Motivates St</td>
<td>10.20429/ijsotl.2007.010107</td>
<td><a href="http://digitalcommons.georgiasouthern.edu/ijsotl/vol1/iss1/7">http://digitalcommons.georgiasouthern.edu/ijsotl/vol1/iss1/7</a></td>
</tr>
</tbody>
</table>

After posting, double check that the correct DOIs were assigned (optional for Type A personalities).
DOI Deposit Workflows – Deposit DOIs in Crossref

Once article DOIs are published in Digital Commons, deposit the DOIs with Crossref within 24 hours!

Two methods for deposit:

• Manual deposit via the webDeposit form.
  • Labor-intensive but less technically demanding
  • Only specific content types are supported

• Automated deposit via XML upload.
  • More technically demanding but very fast
  • Requires XSLT transformation of DC OAI-PMH metadata
DOI Deposit Workflows – Deposit DOIs in Crossref


1. Enter journal info (journal DOI or ISSN required).
2. Enter article info (article DOI and URL required).
3. Login to deposit.
DOI Deposit Workflows – Deposit DOIs in Crossref

Automated Deposit:

1. Open, save, and edit article-level XML from Digital Commons.
2. Using XSLT, transform the article-level XML to Crossref scheme.
3. Log into Crossref and upload the transformed XML.
DOI Deposit Workflows – Deposit DOIs in Crossref

Base URL for article-level XML (example):
http://digitalcommons.georgiasouthern.edu/do/oai/?metadataPrefix=document-export&verb=ListRecords&set=publication:[collection label]/vol[#]/iss[#]/

Georgia Southern’s XSL Transformation Files and Instructions:
http://digitalcommons.georgiasouthern.edu/lib-data/1/

Notepad++ (can be run as a portable app):
https://notepad-plus-plus.org/

Notepad++ XML Tools Plugin:
Reference List Workflows

• Required to upload reference list with DOIs
  • Upload supplementary documents for published articles
  • Request new submissions to include DOIs
• Copy and paste reference list of one article into the Simple Text Query Form. (You must have a registered email.)
Reference List Workflows

• **Step 2**: Check DOIs generated by Crossref.


• **Step 3**: Copy and paste into document and upload into Digital Commons as supplementary document.
Lessons Learned

• Develop your DOI syntax to accommodate the full range or resources for which you are likely to deposit DOIs.

• Secure the MOU and DOI syntax before depositing.

• You don’t need a journal-level DOI to publish article-level DOIs. However, the journal does need to have an ISSN.

• Publish DOIs to DC before depositing with Crossref. However, Crossref is watching, so deposit ASAP!

• Every format will require unique XSL to transform; however, the online form is reliable and hand-coded XML uploads just fine, too.

• Crossref provides a sandbox server with which to test your XML prior to uploading.

• DOIs aid connections with third-party platforms.
Time for A Demo?

Once you have the process down, it takes about 10 minutes to upload an issue’s worth of DOIs to Crossref...
Questions?

http://digitalcommons.georgiasouthern.edu/

Jeffrey M. Mortimore
jmortimore@georgiasouthern.edu

Ashley D. Lowery
alowery@georgiasouthern.edu