Request for community comment

Registering content before online availability

Crossref is proposing a process to support the registration of content, including DOIs and other metadata, prior to that content being made available, or published, online. We provide background on the reasons Crossref wants to support this and highlight the use cases. One of the main use cases in journal publishing is to support the registration of Accepted Manuscripts immediately on, or shortly after, acceptance and dealing with press embargoes.

*We request community comment on the proposed approach as outlined below.*

Some examples of what we’d like to know:

- Are you aware of the issues outlined in this proposal?
- Are you aware of the funder and institutional requirements for authors to take action on acceptance of manuscripts for publication in journals?
- Do you think the proposed solution and workflows are reasonable?
- Are you likely to update your workflow to register content early?
- If you are likely to update your workflow, how long do you estimate it will take?
- Any other general comments, questions or feedback on anything raised in this document.

*Please send comments, feedback and questions to us at feedback@crossref.org. The deadline for comments is February 4th.*

The Problem

Crossref currently recommends that publishers register DOIs at the time, or shortly after, content is made available online. This has worked pretty well over the years but changes in scholarly communications means that the current process for registering content with Crossref is increasingly causing problems both before and after publication and doesn’t meet the needs of researchers, funders, institutions and publishers.

The Problem

Proposed Solution

Proposed Implementations

Conclusion

Appendix - Metadata Requirements
There are a number of reasons for content to be registered prior to online availability:

1. Publishers provide authors with proofs of articles during the editorial and production process and the manuscripts have “DOI-like strings” on them. The “DOI-like strings” will become DOIs when the content is registered with Crossref but this happens after online publication. Authors sometimes try to use the unregistered DOIs from the proofs but they don’t work so this undermines trust in using DOIs as persistent links.

2. The problem described above is exacerbated when the publisher is trying to control publicity for the publication and the press (or others) are given advanced copies of the content. To those who have advanced copies, the DOI will appear to be broken and therefore the recipients are understandably reluctant to use the DOI when referring to the content in articles, reviews, press releases, etc. that are designed to be released simultaneously with the content being made available. In addition, the DOI is included on proofs and review copies sent to authors and if they try to use the DOI as a link it won’t work and they will be reluctant to use the DOI as a persistent link to the content.

3. Accepted Manuscripts in journal publishing - in journal publishing there is a lag - sometimes lengthy - between manuscript acceptance and online availability of the article (whether it be the version of record or an early publication of the manuscript “ahead of print” or being assigned to an issue). Waiting until online availability of the article or manuscript to register the content with Crossref means that a central source for an advance record of accepted manuscripts - i.e. upcoming publications - isn’t possible. Currently, there is no formal mechanism to provide metadata for manuscripts accepted for publication before they are made available online. This is increasingly becoming a problem because:
   a. Researchers cannot provide formal evidence of all publications in employment and grant applications.
   b. Publishers cannot fully meet the conditions of new funder policies and mandates that focus on acceptance as a key event to report on. Some institutions and funders ask authors to take action on or shortly after acceptance (e.g. HEFCE¹, NIH², University of Oxford³) which require the notification of a manuscript’s acceptance.
   c. Funders cannot fully track all publications funded by their research grants.
   d. Institutions cannot fully track the scholarly output of their faculty members.
   e. Technology vendors that support scholarly research management cannot account for all outputs.

³ http://openaccess.ox.ac.uk/home-2/act-on-acceptance/
Proposed Solution

Crossref proposes to address the problems outlined above in a number of ways:

1. Crossref will clarify its guidelines and help documentation to make it clear that content should be registered prior to online availability with a suitable landing page for the DOI to resolve to (proposed guidelines for landing pages are in the Implementation section below).
2. Crossref will encourage publishers to update their workflows for Crossref deposits to happen prior to online availability of the content.
3. For Accepted Manuscripts in journal publishing, Crossref will encourage publishers to update their workflows for Crossref deposits to be made as soon as possible after acceptance.
4. Recognizing that full metadata may not be available or suitable for deposit prior to online availability for some content and that publishers may have difficulty in generating a suitable landing page for the DOI, Crossref will update its system to enable the early registration of content with minimal metadata and the option to have Crossref automatically generate and maintain a landing page for the content until it is available online and the metadata can be updated.

Proposed Implementations

Member Direct Early Registration
At the moment there’s nothing stopping publishers depositing metadata and registering DOIs for content prior to online availability. Publishers can choose to do this as long as they register a URL pointing to a Landing Page that includes as much metadata as possible but minimally including an “intent to publish” statement. This can be done in one of two ways. First, the publisher can register the final URL for the content pointing at a temporary “intent to publish” landing page that gets replaced when the content is finally published. Second, the publisher can register a temporary URL pointing to a standard “intent to publish” landing page, and then update the URL in Crossref to point to the real landing page once the article is published.

Crossref-facilitated Early Registration
Using the existing channels for a regular deposit, publishers deposit a subset of the full metadata record with a dedicated record type, "registered content." It is intended to notify interested parties while maintaining privacy of commercially or promotionally sensitive information about upcoming publications.
Once registered, the DOIs will resolve to a temporary Crossref-hosted landing page that minimally displays the DOI, the acceptance date, and an "intent to publish" statement. It will be hosted by Crossref in order to ensure consistency of metadata display across publishers at this stage and ensure that a landing page is always available before the publication is available online. For example:

The DOI http://doi.org/10.5555/12345678 has been registered for content that was accepted for publication by The Journal of Psychoceramics on 2008-08-01. When this content is available, the publisher will update this DOI, after which it will automatically resolve you to the copy on the publisher’s site.

Publishers can personalize the display and apply the following customizations:

- publisher/society/journal logo to display at the top of the landing page.
- custom "intent to publish" statement which will replace the default one provided by Crossref.
- display of all provided optional extra metadata such as article title, funder identifiers, ORCID iDs, license information, etc. (c.f. Appendix)
- CrossMark to handle the rare occasions when a publisher rescinds an acceptance.

All records will available through Crossref metadata search and the Crossref REST API.

The last step is that immediately prior to the public version of the content being made available online the publisher will make a regular deposit of the full metadata record for the item. The complete metadata record will replace the "registered content" record. At this point, the DOI will automatically resolve to the publication on the publisher’s site.
Conclusion

Registering content with Crossref prior to online availability will improve things and make the Crossref metadata and Crossref DOIs even more useful. In particular for journal articles, registering content, including the DOI, at acceptance enables formal evidence of impending publication for disclosure to all interested stakeholders. Authors, institutions, and publishers can immediately publicise the availability of the article (e.g. tweeting, emailing it to colleagues). Journalists can write their story during press embargo with a proper citation to the publication for release as soon as publication is available. And technology providers can better support the wide host of parties who desire to track scholarly publications. Also of equal importance, registering the Accepted Manuscript guarantees that the DOI link is active at the exact moment in which the publication is made available by the publisher.

By registering content before publication, publishers can:

- inform the user that the DOI followed is not yet available without serving an error.
- inform the user to use the provided DOI to link to the content as it will imminently resolve to the publisher stewarded copy.
- provide metadata for use by funders and institutions to detect and flag impending publications that are relevant to them and ensure that Institutional Repositories will use the DOI to link to the publisher stewarded copy.

We invite feedback on this service enhancement and the proposed approach to implementation. Please email comments, feedback, and questions to Ginny Hendricks at feedback@crossref.org by February 4th, 2016.

Appendix - Metadata Requirements

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<thead>
<tr>
<th>MUST INCLUDE</th>
<th>SHOULD INCLUDE</th>
<th>MAY INCLUDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOI</td>
<td>Funder information</td>
<td>A logo to display at the top of the landing page</td>
</tr>
<tr>
<td>Date of acceptance</td>
<td>Funder identifiers corresponding to their funder names where these exist in the Open Funder Registry</td>
<td>A custom “intent to publish” statement</td>
</tr>
<tr>
<td>Publisher name</td>
<td>ORCID iDs</td>
<td>The publication title</td>
</tr>
<tr>
<td>Journal/Book/Conference title</td>
<td>License information</td>
<td>The item title (e.g. article title)</td>
</tr>
<tr>
<td>ISSN/ISBN</td>
<td>Author affiliation information</td>
<td></td>
</tr>
<tr>
<td>Must be replaced with complete metadata using an appropriate schema for the content type when the publisher makes the content publicly available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Must include an “intent to publish” statement. If the publisher does not provide a statement, Crossref will provide a default one</td>
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