Enabling collaborative review with the DSpace configurable workflow

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Session Type
• Poster

Abstract
The DSpace configurable workflow feature enables the creation of custom review workflows beyond the traditional edit metadata, accept, reject actions. This poster reports on our experiences in using the customisable workflow to enable collaborative review by repository management staff for the AgResearch institutional research repository, AgScite.

Conference Themes
• Supporting Open Scholarship, Open Data, and Open Science
• Managing Rights

Keywords
DSpace; Review workflows; Repository management

Audience
Repository managers; Repository developers/maintainers

Background
Repository software has traditionally included review workflow functionality that lets repository management staff ensure submissions meet quality standards and inclusion criteria. However, the functionality of the standard DSpace workflow is very much based on early repository use cases that assume repository items are original content (theses; grey literature such as reports) and self-submitted by authors, making the repository the original place of publication. A repository item, once accepted into the repository, was generally assumed to never change. For many repositories today, these assumptions no longer hold. Instead, many repository items are now open-access versions of content published elsewhere. Furthermore, an institutional repository today is often a downstream system fed, for example, by a research management system. In this situation, repository items may be submitted to the repository before formal publication occurs, and metadata of the repository item may need to be subsequently updated. At AgResearch, repository staff face an additional challenge in that repository submissions may even occur prior to acceptance of a publication, which means some workflow tasks need to be deferred for up to several months. In a feeder system scenario, there may also be limited opportunities to adjust metadata coming through to the repository, thus requiring a greater degree of adjustment during the review workflow.

The standard DSpace workflow functionality does not give repository staff many tools to manage the list of workflow tasks, presumably since it is assumed that each workflow task can be acted upon immediately and that only a very small number of workflow tasks will exist at any given time. The first assumption does not hold at AgResearch for the reasons outlined above. With institutional reporting
deadlines at the end of the AgResearch financial year, the AgResearch institutional repository receives the bulk of a year’s submissions in a one-month window, leading to an influx of workflow tasks over a very short period. To process as many of these tasks as possible, additional staff are pulled in to review submissions, which can mean that staff relatively unfamiliar with repository quality standards and inclusion criteria need to pass on certain workflow tasks to their more experienced colleagues.

**Poster content**

The DSpace configurable workflow functionality [1] lets repository developers create custom workflow steps and workflow actions. In our poster, we describe how we used this functionality to create a review workflow better suited for the needs of AgResearch repository staff.

The requirements for the review workflow in the AgResearch institutional repository, AgScite, included:

• allowing repository administrators to “park” a task that is not ready for immediate processing and/or approval;
• passing review tasks on to another repository administrator for a second opinion or for further processing;
• enabling repository administrators to annotate review tasks for the duration of the review process;
• allowing repository administrators to manually run curation tasks on the submission under review;
• adjusting the display of review tasks to ensure repository administrators can select and process tasks efficiently and effectively.

Our poster shows how we configured the workflow to achieve this functionality and outlines the extent of custom Java code required.

The configurable workflow functionality alone did not allow us to address all AgResearch requirements. In addition to enabling the configurable workflow with our custom steps and actions, we also enhanced the list of workflow tasks by adjusting the information shown for each task and adding basic functionality to filter and sort workflow tasks. The poster will briefly touch on these additional customisations.

Presenting our work as a poster will enable us to present visually the process and the user experience of the collaborative review workflow, especially if the electronic poster format at OR2017 can accommodate animated and/or interactive content.

**Conclusion**

The DSpace configurable workflow feature has allowed us to create a review workflow much more suitable for the needs of a modern repository, improving the tools available to repository staff at all stages of the review/approval process. Some further customisations were still necessary. Both aspects of our work may be helpful for other institutions that use DSpace and face challenges similar to those that exist at AgResearch.

**References**

1. DSpace configurable workflow: https://wiki.duraspace.org/display/DSDOC/Configurable+Workflow