

Proposal for euroCRIS Strategic membership meeting November 2024 – Paris

COAR Notify Project one year later: from the wireframe to the first official Releases

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Abstract:

An update of the progress of the COAR Notify protocol project will be presented. After one year, when 4Science presented the first concepts and wireframes of the Notify Protocol at euroCRIS Strategic Membership Meeting 2023, we are proud to showcase the real implementation of the Notify Protocol within the DSpace and DSpace-CRIS 8 version. The COAR Notify protocol has become a reality that starts to be used by some DSpace & DSpace-CRIS adopters.

Introduction:

One year ago, at euroCRIS Strategic Membership Meeting 2023 in Pamplona, 4Science presented the COAR Notify Project as a groundbreaking initiative at the intersection of open science and technological innovation.

At 4Science, we strive to be more than just supporters of the DSpace community and developers of the DSpace-CRIS solution. We are committed to pioneering advancements in the open access and open science realms. Our dedication to driving innovation in this space sets us apart. A testament to this commitment is our active involvement in developing new enhancements, such as the COAR Notify project.

COAR (the Confederation of Open Access Repositories) initiated this project to improve the global discoverability and visibility of open access content. The COAR Notify Initiative aims to develop and promote the community adoption of a standardized, interoperable, and decentralized method for reusing and linking research outputs hosted in the distributed network of repositories and CRIS systems with other external systems. The Notify Protocol leverages the established Linked Data Notifications and ActivityStreams2 W3C standards, enabling seamless communication between Notify-enabled repositories/CRIS and services. Initially, the focus has been on connecting repository resources with external peer review platforms and overlay journals. However, other use cases of interest to the community include linking articles with research data and ensuring efficient, near-real-time reuse of resources by other systems for purposes such as preservation, analysis, and evaluation.

The community adoption of such a standard that is interoperable and has a decentralized approach for linking research outputs across the distributed network of Repositories/CRIS could significantly bolster the principles of openness over centralization.

COAR Notify Protocol become a reality with DSpace-CRIS & DSpace 8 version

At the euroCRIS Strategic Membership Meeting 2023, we showcased key functionalities of the COAR Notify protocol, detailed in a UAT Book, and illustrated wireframes for all planned UI features. In 2024, development has progressed further with a dedicated test instance, where the designed wireframe concepts have been transformed into real user interfaces.

In June 2024, we released the COAR Notify patch for DSpace 7.6.1 to the community and integrated the protocol as a core functionality in the DSpace 8 release. Following these official releases, we at 4Science launched an awareness and demonstration campaign to showcase the protocol's real-world applications. The first event was a presentation at the June Open Repositories conference, where we introduced the main features available out of the box in DSpace 8 to the World Repositories Community. In September, at Open Access Tage 2024, we organized a dedicated workshop featuring a demo session of real installations. Additionally, the DSpace-CRIS 8 2024 release will soon be available to the large community of CRIS adopters. By integrating the COAR Notify protocol into the base code of the widely used open-source CRIS/Repository platform, we believe this will enable a large number of installations to immediately utilize the protocol, significantly enhancing the value of this distributed network.

In this way the use cases of the Notify Protocol will become everyday reality: notification service that allows CRIS/repository systems to notify external systems such as global aggregators, national evaluation platforms, repositories, peer-review platforms and other services about the availability of new content or relationship among scholarly resources. We will start to notice requests that allows the CRIS/repository system to send requests to external system to perform a service such as review, endorse or ingest content allowing the orchestration of complex, distributed workflows simplifying the researchers, administrators and librarians user experience allowing the CRIS/repository system to initiate such processes respecting the core principle “enter once, reuse multiple times” that should inspire each RIS system (Science Europe. (2016). Position Statement on Research Information Systems. <https://doi.org/10.5281/zenodo.5059955>).

With the latest release of DSpace-CRIS 8 and DSpace 8, where the COAR Notify protocol is integrated like other interfaces such OAI-PMH and REST, we believe that making this protocol accessible to institutions worldwide will promote the broad dissemination of open access content and connect services within the ‘publish, review, curate’ ecosystem. This is highly valuable in the Open Access and Open Science context.

Looking deeper into the research cycle, the COAR Notify implementation in DSpace-CRIS will help researchers enrich the data available in CRIS/repository systems and identify new data of interest, reducing the friction of deposit. Suggested data will be placed directly in the CRIS system where needed. For example, when a researcher deposits a dataset into a data repository, they can use COAR Notify to send the link directly to the CRIS/repository system (in this case, DSpace-CRIS) along with the related publication, which can then be linked to the dataset and vice versa.

This integration will also assist CRIS/Repository Managers in quickly deciding and enriching data within their familiar environment. They will have the ability to configure rules for automatic decisions based on the trustworthiness of the source and transparency policies, such as linking a review or ingesting content. This capability will be automatically available to other providers like ORCID and OpenAIRE Graph.

For researchers, this will be a significant time-saver, allowing them to review new requests, such as linking a review or ingesting new suggested/linked content, directly within the CRIS/repository system.

Conclusions:

Support for the COAR Notify protocol will elevate DSpace-CRIS to the next level, making each DSpace-CRIS system an active player in the new Scholarly Communication Information Space. National and regional CRIS/Repository aggregators could also play a new role in disseminating collected data that could be notified to individual Repository/CRIS systems.

Modern integration scenarios become now a reality supported out-of-the-box, allowing for:

- Establishment of overlay journals and open peer review platforms
- Integration among publications and data repositories
- Near-real-time and scalable integration with preservation platforms and aggregators
- Greater flexibility to meet different institutions' needs and integration requirements

Finally we're happy to share significant progress in the implementation of COAR Notify within the DSpace ecosystem. The recent launch of COAR Notify in the CSIC (Spanish National Research Council) that uses DSpace-CRIS repository platform marks a major milestone for open science and interoperability.

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