

# EUNIS 2016 - Extended Abstract

## Identify to simplify: improving interoperability at a national level with the ORCID HUB

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### Keywords

Open Source, ORCID, Interoperability, Standards, DSpace, DSpace-CRIS, IRIS, CRIS.

### 1. Summary

The ORCID HUB is an open source infrastructure implemented by Cineca that simplifies the integration of multiple ORCID applications. The Hub is designed originally for national initiatives, but it can also be adopted for institutions with numerous and complicate applications to be integrated with ORCID. The Hub provides a dashboard for single researcher to authorize and monitor the applications to communicate with her ORCID profile. Massive data updating and Reporting are provided for administrators and managers to easily have an up-to-date and panoramic view of ORCID data.

### 2. The ORCID HUB

Italy is home to a remarkable project linking 80% of researchers, including doctoral students, and their publications, institutionally and in national infrastructures, using ORCID iDs. The project allows better identification of all Italian researchers and simplifies crucial processes within the research ecosystem.

In April 2015 Cineca released the first CRIS/ORCID integration for its open source solution DSpace-CRIS. This was the first (technological) step towards national ORCID adoption. In May 2015 the Italian Agency for the Evaluation of Universities and Research (ANVUR) announced that they would use ORCID as the researcher identifier for the National Research Evaluation exercise (VQR), starting in the Summer of 2015.

ANVUR, with the institutional support of CRUI (the Conference of Rectors of Italian Universities) and the technological support of Cineca, then founded the I.R.ID.E Project (Italian Researcher Identifier for Evaluation) to deliver this. In June 2015 Cineca signed a consortium agreement with ORCID, to allow all Italian member Institutions to access ORCID services.

For this project, Cineca created an ORCID Hub, released as an open-source software in July 2015. By October 2015 there were over 50,000 ORCID iDs linked to the ORCID HUB and more than 50 applications connected (including the national publication database, IRIS installations, and third-party legacy CRIS systems).

This open-source project has demonstrated the power of the implementation of a unique identifier for researchers at a national level, generating network effects and showcasing the value of

collaboration between community-led organisations at scale. As a unique identifiers, ORCID provides a way to distinguish each researcher from every other one and, through integration in key research workflows, supports automated linkages between researchers and their activities and outputs. The Hub is a registry that stores all Italian researchers' ORCID and the authorisations for applications to interact with the researcher profile, allowing to register once and get ORCID stored both in the national database and institutional repositories.

At the moment the Hub is serving the Italian research community but it can be adopted by any other nation or grouping seeking to embed identifiers in national or large infrastructures. Also single institutions can benefit from this technology where they can integrate multiple applications with ORCID in one go.

Before the end of 2015, Cineca made functionality available in DSpace-CRIS to update ORCID profiles using local data and implemented the full integration of the Cineca's extended CRIS platform (IRIS) with ORCID. At the beginning of 2016 Cineca added to DSpace-CRIS the feature to import locally the biographic data from the ORCID Profile. In the coming months Cineca will upgrade to the ORCID API v2, define the compliancy with the PTCRIS synchronization framework and add the possibility to collect information on publications and projects, besides biographic data.

Among the features offered with the ORCID HUB there are:

- Auto-Update functionality for Italian researchers (or any researchers associated with ORCID through the HUB): data provided by 1 researcher are automatically added to its collaborators (e.g.: co-author, co-investigator, etc);
- Easy import/export of ORCID information (Biography, Works, Funding) from CSV format;
- The researcher can authorize at once different applications to interact with ORCID (local CRIS, a national database, etc.)
- A central database matching "local/national ID" and ORCID which can be accessed with REST (Data As a Service)

The ORCID hub takes advantage of the functionality of the ORCID member API, but even a subset of these functions would be a significant benefit to any repository or research management network.

### 3. CONCLUSION

ORCID is becoming an essential infrastructure in the research ecosystem. It is open and free to researchers and its wide adoption will enhance the interoperability of information and the fluidity of workflows interconnecting different systems. The potential for new, exciting services is getting higher. Sustainability provided by institutions and other players will guarantee that ORCID will remain in the control of the community of scholars. Cineca's ORCID Hub is released as open-source software and it can be freely adopted by countries and large communities, thanks to impressive team work between Cineca and ORCID technical staff, representing a contribution to the success of a free, open, interoperable infrastructure to help illuminate the world of research.

### 4. REFERENCES

ORCID-HUB: <https://github.com/Cineca/OrcidHub>

DSpace-CRIS: <http://cineca.github.io/dspace-cris/>

IRIS: <http://www.cineca.it/en/content/iris-institutional-research-information-system>

PTCRIS: Mendes Moreira J, Cunha A and Macedo N. An ORCID based synchronization framework for a national CRIS ecosystem [version 1; referees: 2 approved, 1 approved with reservations]. F1000Research 2015, 4:181 (doi: [10.12688/f1000research.6499.1](https://doi.org/10.12688/f1000research.6499.1))

## 5. AUTHORS' BIOGRAPHIES

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Education: Master Degree in Applied Mathematics at the University of Rome La Sapienza (Italy) and Postgraduate Master, II level, in Information & Communication Technology Management at the University of Milan II (Italy), Sun Certified Java Programmer, Sun Certified Web Component Developer and Sun Certified Business Component Developer.

**Josh Brown** directs the operations of ORCID EU and project manages ORCID's work on the THOR project. Before ORCID, Josh was consortium and operations manager for SCOAP3, programme manager for digital infrastructure at Jisc, and project officer for SHERPA-LEAP at University College London. His background is in academic libraries.

**Susanna Mornati** is Head of International Business Development and she is also leading the Solution for Institutional Research Department in Cineca. She has been responsible for IT projects and services for research since 2010. She holds a strong experience in project and program management in complex environments. She participates as an expert in the activities of several committees and serves on a number of international scientific boards. She writes and lectures on various aspects of IT management for research. Main previous positions: Responsible for e-publishing and digital repositories services at CILEA (2003-2009), Vice Director of Libraries at the University of Insubria (2002-2003), Director of the Physics Library at the University of Milan (1996-2001), Associate at CERN Scientific Information Service, Geneva, Switzerland, (1994-1996). Education: Master Degree in Linguistics at the University of Milan, Postgraduate Master, II level, in Information & Communication Technology Management at the University of Milan Bicocca, Diplôme de Langue de l'Alliance Française, English Certificate of Proficiency.