Integrating ORCID in repositories and CRIS systems

OpenAire Coffee Lecture, 15th of January 2024

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Brief overview of ORCID
Integrating with ORCID
Integrating with ORCID in repositories
Integrating with ORCID in CRIS
Q & A
A brief overview of ORCID
A Few ORCID Facts

- Independent not-for-profit open to participation by all
- Registry launched in 2012
- Sustained by fees from our member organizations
- Guided by our values and founding principles
- Community-governed by a Board of Directors representative of our membership
ORCID’s mission is to enable transparent and trustworthy connections between researchers, their contributions, and their affiliations by providing a unique, persistent identifier for individuals to use as they engage in research, scholarship, and innovation activities.

We’ve been doing this since 2012
ORCID provides three main services

**The ORCID iD**
A unique, persistent identifier free of charge to researchers

**An ORCID record**
A digital profile connected to the ORCID iD, that can include employment, education, funding, peer review, research output and other metadata

**The ORCID APIs**
A set of *Application Programming Interfaces* (APIs), as well as the services and support of communities of practice enabling interoperability between an ORCID record and member organizations
We have broad adoption around the world

Users in 250 countries  
(That's every country on the planet apart from Niue, Norfolk Island, and Saint Pierre and Miquelon)

Member organizations in 57 countries  
(27 national consortia and 1 regional consortium)

Yearly Active Researchers  
8.01 M

Organizational Members  
1,355

Active Integrated Systems  
5,429

Data collected on the 8th of January 2024
More data available at https://info.orcid.org/orcid-statistics/
Researchers are at the centre of everything we do

In a nutshell:

Researchers securely share their IDs with the systems they interact with, proving them with their ID, and providing additional information.

These systems share information about researcher activities, creating a chain of validated and trusted assertions about researcher activity.

In these assertions, Persistent Identifiers (PIDs) are key.

The right person gets credit for the right research activities and is associated with the right institutions. And it’s automated.
We aim to balance researcher control and data quality

Researchers:
- Own their own records
- Control who accesses their information
- May change access preferences at any time

Terms of use prevent misrepresentation
- False data in records may be disputed by anyone in the community
- Machine-learning algorithm detects obvious spam
- Disputed and spam records are removed from use, pending correction or withdrawal

Organizations may only add information to ORCID records with the researcher’s permission, and may only update or delete information that was added by them

Trust in an ORCID record accumulates over time as reliable and trustworthy data sources add information (with the record holder’s permission)

https://info.orcid.org/balancing-researcher-control-and-data-integrity/
Integrating with ORCID
Integrations are key to deriving value from ORCID

- They connect an institutional system with the ORCID registry using the ORCID API.
- They require users’ authentication.
- They enable data synchronization with ORCID (when using the member API).
- They are *not* a data look-up in the ORCID registry.
Authentication is central in a user-controlled process

User logs in to their ORCID account to ensure the app connects to the correct ORCID iD.

Who is asking

Which permissions are given

You are currently signed in as:

Paloma Marín-Arraiza
https://orcid.org/0000-0001-7460-7794

People @ FH Burgenland

has asked for the following access to your ORCID record:

- Add/Update your research activities (works, affiliations, etc)
- Add/Update other information about you (country, keywords, etc.)
- Read your information with visibility set to Trusted Organizations
- Get your ORCID ID

Authorize access

Deny access

If authorized, this organization will have access to your ORCID record, as outlined above and described in further detail in ORCID's privacy policy.

You can manage access permissions for this and other Trusted Organizations in your account settings.
How to integrate? / Three ways of doing it

- Use an existing certified service provider (e.g. DSpace-CRIS, Symplectic Elements, OJS...)
- Develop a custom integration (for self-developed institutional systems)
- Adopt the Affiliation Manager (consortium members only)

Documentation: [https://info.orcid.org/documentation/integration-guide/](https://info.orcid.org/documentation/integration-guide/)
Certified service providers: [https://info.orcid.org/vendors-and-service-providers/orcid-certified-service-providers-list/](https://info.orcid.org/vendors-and-service-providers/orcid-certified-service-providers-list/)
Affiliation Manager: [https://info.orcid.org/affiliation-manager/](https://info.orcid.org/affiliation-manager/)
We re-launched our certification programme with best practice based requirements

Focus on 4 system types and the workflows they support

- Manuscript submission systems
- Research Information systems
- Repository systems
- Grant/facility application management systems

Pilot Partners

4Science (DSpace-CRIS); Altum (Proposal Central); Aries (Editorial Manager); Cambia (The Lens); Digital Science (Symplectic Elements); Elsevier (Pure); Ex Libris (Esploro); InfoEd (InfoEd); PKP (OJS und OPS); Royal Society Te Aparangi (The New Zealand ORCID Hub); SmartSimple (SmartSimple Cloud); Vidatum Technologies (Vidatum Academic); Watermark (Faculty Success)
ORCID Certified Service Providers

- Editorial Manager®
- Open Journal Systems (OJS)
- Open Preprint Systems (OPS)
- DSpace-CRIS
- Elements
- InfoEd Global
- ProposalCentral
- IRIS - Institutional Research Information System

With many more working on certification

Contact us if you want to learn more or get your system certified

https://info.orcid.org/vendors-and-service-providers/orcid-certified-service-providers-list/
Developing a custom integration can take more time and effort, but we’re here to help.

1. Check in with the ORCID team regarding integration plans
2. Develop & test your integration using our Sandbox Testing Server
3. Learn about our integration best practices & ensure your integration meets our minimum requirements for launch.
4. Schedule a demonstration with our team
5. Once approved, apply for Member API Credentials
6. Launch your integration & communicate with the community

On average our members refer to 45-60 hrs of technical work to launch a custom integration including testing
The Affiliation Manager: a tool without IT knowledge

Integrating ORCID in repositories
To bear in mind / Best practices for Repositories are always a guideline

Certified Repository Providers **MUST:**

- Allow sign-in with ORCID iD and authenticate author’s/contributor’s ORCID iD
- Allow administrators to collect authenticated iDs and permission where metadata includes non-authenticated iDs
- Collect authenticated ORCID iDs from contributors
- Make sure ORCID iDs are displayed on hosted research outputs
- Make sure hosted research outputs are added to authors’ ORCID records
- Include authenticated ORCID iDs in any metadata passed downstream
- Enable ORCID member organizations to use their own ORCID membership credentials when configuring the system
- Document how platform users can use the ORCID functionality offered in training and promotional materials

Source: https://info.orcid.org/vendors-and-service-providers/csp-criteria-repository-systems/
To bear in mind / Best practices for Repositories are always a guideline

Certified Repository Providers **SHOULD:**

- Use data from ORCID records to populate researcher profiles (if applicable)

Certified Repository Providers **MAY:**

- Allow administrators to associate ORCID iDs with authors/contributors

Source: https://info.orcid.org/vendors-and-service-providers/csp-criteria-repository-systems/
At an institutional level: DSpace - ORCID connections at the Federal University of Uberlândia (Brasil)

Source: https://orcid.org/0000-0002-4945-0841
Integrating ORCID in CRIS
Certified Research Information System Providers **MUST:**

- Collect authenticated researchers’ ORCID iD and permissions
- Display iDs of researchers
- Use data from ORCID records to populate researcher profiles and discover new researcher activity
- Add employment/education information to researchers’ ORCID records
- Add works to researchers’ ORCID records (if applicable)
- Add funding awards to researchers’ ORCID records (if applicable)
- Enable ORCID member organizations to use their own ORCID membership credentials when configuring the system
- Document how platform users can use the ORCID functionality offered in training and promotional materials

**Source:** [https://info.orcid.org/vendors-and-service-providers/csp-criteria-research-information-systems/](https://info.orcid.org/vendors-and-service-providers/csp-criteria-research-information-systems/)
To bear in mind / **Best practices for Research Information Systems are always a guideline**

Certified Research Information System Providers **SHOULD:**

- Add a link to the researchers’ profile in the Research Information System to their ORCID record

Certified Research Information System Providers **MAY:**

- Add an affiliation to visiting researchers’ ORCID records
- Allow administrators to associate ORCID iDs with [authors/contributors](https://info.orcid.org/vendors-and-service-providers/csp-criteria-research-information-systems/)

Source: [https://info.orcid.org/vendors-and-service-providers/csp-criteria-research-information-systems/](https://info.orcid.org/vendors-and-service-providers/csp-criteria-research-information-systems/)
At an institutional level: DSpace-CRIS - ORCID connections at the Universität Bamberg (Germany)

Data are asserted to the Employment, Education and the Works sections, adding a Trust marker.
At a national level: The Finnish CRIS, Research.fi, uses ORCID to facilitate metadata reusability

“ORCID iDs will play a central role here. In 2021, the service will introduce a dedicated ‘my data service’, which enables researchers to create their profiles in Research.fi by signing in with their ORCID accounts. To avoid ‘yet another profile to maintain’, no content will be entered or edited manually but will be transferred from existing sources”.

Source: https://info.orcid.org/the-new-finnish-research-information-hub-provides-a-comprehensive-view-of-finnish-research/
Our work doesn’t stop here
We keep working to support trustworthy connections between ORCID, (institutional and national) CRIS and repositories

- Continuous work with CRIS and repository service providers
- Promotion of the [Global Participation Fund](#) for open-source providers with global coverage
- Continuous work with national CRIS instances worldwide (Peruvian CRIS, Ukrainian CRIS, Norwegian CRIS...)
- Continuous support to custom CRIS and repository solutions
Thank you very much

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