

ORCID Integration

Since DSpace 7.3 a bidirectional ORCID integration is available for DSpace. This feature allows for authentication via ORCID, as well as synchronizing data between ORCID and DSpace, via the usage of [Researcher Profiles](#).

Acknowledgments

The ORCID integration was originally developed by [4Science](#) in [DSpace-CRIS](#). It is the result of years of collaboration with several institutions and the ORCID team that has helped to correct, improve and broaden the scope of the integration. We want to thank the [University of Hong Kong](#) that was the first institution to fund development activities in this regard back in 2015 and the [TUHH Hamburg University of Technology](#) that have funded the initial porting of the ORCID integration to the new Angular/REST architecture introduced in DSpace 7. Last but not least, funds have been received by the DSpace community to port this feature from DSpace-CRIS to DSpace.

- [Overview](#)
- [User features](#)
 - [Login via ORCID](#)
 - [Connect/Disconnect the local profile to ORCID](#)
 - [Import publications from ORCID](#)
- [Configuration](#)
 - [Enable the integration](#)
 - [Configure the push of information from DSpace to ORCID](#)
 - [Mapping of the DSpace Person Items to ORCID Works](#)
 - [Mapping of DSpace Publication items to ORCID Works](#)
 - [Mapping of DSpace Project items to ORCID Funding](#)
 - [Configure the import features](#)
 - [Configure the author lookup in submission](#)
- [Troubleshooting & common issues](#)
 - [I'm having trouble testing the ORCID integration. What should I check?](#)
 - [I cannot find the ORCID features described by this page in my installation](#)
 - [I'm unable to authenticate via ORCID](#)
 - [After logging in via ORCID, a new DSpace account was created instead of using my existing DSpace account](#)
 - [I'm having trouble creating test accounts on ORCID to experiment with the features](#)
 - [I have configured my Public ORCID API credentials in DSpace but I get an error attempting to login via ORCID](#)
 - [I don't find my publications looking up for my ORCID iD](#)
 - [I cannot push all my publications, only few or none of them are listed in the queue](#)
 - [Push of publications to ORCID fails](#)
 - [Push of projects to ORCID fails](#)

Overview

DSpace provides a bidirectional integration with [ORCID](#) based on the ORCID API v3.0. Both the Public ORCID API and the Membership API are supported.

The table below summarizes the supported features according to the type of ORCID API configured.

Feature	No credentials*	Public API	Member API
Authentication		✓	✓
Connect local profile to ORCID (authenticated ID)		✓	✓
ORCID Registry Lookup - import Person records	✓	✓	✓
ORCID Registry Lookup - as authority	✓	✓	✓
Import publication from ORCID	✓	✓	✓
Push biographic data to ORCID			✓
Push publications to ORCID (works)			✓
Push projects to ORCID (fundings)			✓

* **No credentials:** please note that ORCID strongly recommends to apply at least for a free public API Key as this will help to trouble-shoot integration problems and get support from ORCID. There is also a chance to get better performance/priority over "unknown" client.

User features

Login via ORCID

Once enabled, an option to login via ORCID is provided to the user among the other authentication methods configured in the system. The ORCID authentication doesn't allow the user to reset his password from DSpace.

  [Log In](#) ▾

 Log in

or

 Log in with Shibboleth


 Log in with ORCID




[New user? Click here to register.](#)

[Have you forgotten your password?](#)

Connect/Disconnect the local profile to ORCID

The researcher can connect (or disconnect) their DSpace local [Researcher Profile](#) with ORCID from the Person item detail page.


 [Communities & Collections](#) [Statistics](#) [All of DSpace](#) ▾

   ▾

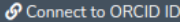
[Home](#) • [Test community](#) • [People](#) • [Sample Researcher](#)

[← Back](#)

ORCID Authorizations



No ORCID iD associated yet. By clicking on the button below it is possible to link this profile with an ORCID account.

 Connect to ORCID ID

[← Back](#)

ORCID Authorizations

Granted authorizations

- Get your ORCID iD
- Read your information with visibility set to Trusted Parties
- Add/update your research activities
- Add/update other information about you

Missing authorizations

Great! This box is empty, so you have granted all access rights to use all functions offers by your institution.

[✕ Disconnect from ORCID](#)

ORCID Synchronization settings

Synchronization mode

Please select how you would like synchronization to ORCID to occur. The options include "Manual" (you must send your data to ORCID manually), or "Batch" (the system will send your data to ORCID via a scheduled script).

Synchronization mode

Manual

Publication preferences

Select whether to send your linked Publication entities to your ORCID record's list of works.

Funding preferences

Select whether to send your linked Project entities to your ORCID record's list of funding information.

Profile preferences

Select whether to send your biographical data or personal identifiers to your ORCID record.

Once a profile has been connected they can manage their synchronization preferences deciding what should be pushed to ORCID, including:

- biographic data
- Publication (entities) linked with their Researcher Profile. (Publication entities are synced to Works in ORCID.)
- Project (entities) linked with their Researcher Profile. (Project entities are synced to Fundings in ORCID.)

NOTE: The ORCID synchronization feature is disabled by default, even when ORCID Authentication is enabled. See Configuration section below for how to enable it.

ORCID Synchronization settings

Synchronization mode

Please select how you would like synchronization to ORCID to occur. The options include "Manual" (you must send your data to ORCID manually), or "Batch" (the system will send your data to ORCID via a scheduled script).

Synchronization mode

Manual

Publication preferences

Select whether to send your linked Publication entities to your ORCID record's list of works.

☐ Disabled

☒ All publications

Funding preferences

Select whether to send your linked Project entities to your ORCID record's list of funding information.

☒ Disabled

☐ All fundings

Profile preferences

Select whether to send your biographical data or personal identifiers to your ORCID record.

☒ Biographical data

☒ Identifiers

Update settings

ORCID Registry Queue

Now showing 1 - 1 of 1

Type	Description	
	Publication for ORCID webinar - updated	<div>Update this entry on the ORCID registry</div> <div> </div>

DSpace software copyright © 2002-2022 LYRASIS
[Cookie settings](#) | [Privacy policy](#) | [End User Agreement](#) | [Send Feedback](#)

The synchronization can happen automatically over the night or manually. The list of information that should be pushed or updated from DSpace to ORCID is presented in a queue and can be manually discarded or immediately pushed by the researcher.

Import publications from ORCID

It is possible to import a publication from ORCID using the "Import from external sources" button in the home page. Once you select the Publication entity type you will be able to find ORCID as a Source and you can get the list of publications (ORCID works) that appear in an ORCID profile by searching for its ORCID ID.

Communities & Collections All of DSpace

Import a publication from an external source

ORCID

Search

Search Results

Now showing 1 - 3 of 3

Naturally enhanced neutralizing breadth against SARS-CoV-2 one year after infection.

Publication Metadata in CERIF: Inspiration by FRBR

The Impact of COVID-19 on the Optimal Management of Osteoporosis.

Back to MyDSpace

Configuration

Enable the integration

All the ORCID features requires a minimal common set of properties to configure in the `local.cfg`

```
# These URLs are for testing against ORCID's Sandbox API
# These are only useful for testing, and you must first request a Sandbox API Key from ORCID
orcid.domain-url= https://sandbox.orcid.org
orcid.api-url = https://api.sandbox.orcid.org/v3.0
orcid.public-url = https://pub.sandbox.orcid.org/v3.0
# Keep in mind, these API keys MUST be for the Sandbox API if you use "sandbox.orcid.org" URLs above!
orcid.application-client-id = <YOUR-SANDBOX-ORCID-CLIENT-ID>
orcid.application-client-secret = <YOUR-SANDBOX-ORCID-CLIENT-SECRET>

# Once you are ready to switch to Production, you need to update these settings to use ORCID's production API
# See https://github.com/ORCID/ORCID-Source/tree/master/orcid-api-web#endpoints
# orcid.domain-url= https://orcid.org
# orcid.api-url = https://api.orcid.org/v3.0
# orcid.public-url = https://pub.orcid.org/v3.0
# DON'T FORGET TO UPDATE YOUR API KEY! It must be a valid Public or Member API Key
# orcid.application-client-id = <YOUR-PRODUCTION-ORCID-CLIENT-ID>
# orcid.application-client-secret = <YOUR-PRODUCTION-ORCID-CLIENT-SECRET>
```

- **Enable in Production:** To enable the main integration (i.e. connect a local profile with ORCID and push data to the ORCID registry) you MUST to be an [ORCID Member](#), get a [Member API Key](#) and properly enable and configure the feature in DSpace. See also "[How do I register for Member API credentials?](#)" from ORCID.
- **Enable in Testing:** To test ORCID integration, it's possible to use the [ORCID Sandbox](#) (without being an ORCID member). However, to do so, you must request a [Sandbox Member API Key](#). See also "[How do I register a public api client?](#)".
- **Setting the "redirect URL" in ORCID:** In the ORCID API Credentials request form you will be asked to enter one or more redirect URLs for your application (DSpace). You will need to enter here the root URLs of your REST and user interfaces, which could be different. If the root URLs of both are the same, then just enter the URL of your user interface.
 - For example, for the DSpace 7 official demo, we use these redirect URLs:
 - User Interface: <https://demo7.dspace.org> (please note the absence of a /home or any subpaths)
 - REST API: <https://api7.dspace.org> (please note the absence of a /server or any subpaths)
 - For more information on valid ORCID redirect URLs, see "[How do redirect URLs work?](#)" from ORCID.
- **Configure the Client ID and Client Secret in DSpace:** Once ORCID has reviewed and approved your request, you will get from them the Client ID and Client Secret that need to be set in the `local.cfg` among other properties See the configuration examples above.

Please note that by default DSpace will request permissions to READ and WRITE all the information from the ORCID profile, as this will enable support for all of the features. You can fine-tune that by overriding the following properties. Please note that if you are going to configure Public API Credentials you MUST update this configuration keeping only the `/authenticate` scope as all the other scopes require Member API.

```
# The scopes to be granted by the user during the login on ORCID (see https://info.orcid.org/faq/what-is-an-oauth-scope-and-which-scopes-does-orcid-support/)
orcid.scope = /authenticate
# The below scopes are ONLY valid if you have a Member API Key. They should be commented out if you only have a Public API Key
orcid.scope = /read-limited
orcid.scope = /activities/update
orcid.scope = /person/update
```

To enable **ORCID Authentication** you need to uncomment the following line in the `modules/authentication.cfg` file or add it to your `local.cfg`

```
plugin.sequence.org.dspace.authenticate.AuthenticationMethod = org.dspace.authenticate.OrcidAuthentication
```

Please note that you are NOT required to enable the ORCID Authentication to use the other ORCID features, including the synchronisation ones. It is also possible to use just the ORCID Authentication without enabling all the other features.

When a user logs in via ORCID the system will attempt to reuse an existing account looking up by email. If none is found then a new account is created in DSpace. It is possible to disable the creation of new accounts by setting the following property:

```
authentication-orcid.can-self-register = false
```

To enable **ORCID Synchronization**, you need to uncomment the following or add it to your `local.cfg`

```
# the properties below are required only for the sync / linking part (not for authentication or import)
orcid.synchronization-enabled = true
# you need to enable the orcidqueue consumer to keep track of what need to be sync between DSpace and ORCID
event.dispatcher.default.consumers = versioning, discovery, eperson, orcidqueue
```

The push of DSpace data (Person, Publication, Project) to ORCID is based on mappings defined in the `config/modules/orcid.cfg` file. You will find details below in the dedicated paragraphs.

The ORCID Synchronization features depend on other features that must be enabled: [DSpace User Profile](#), [Configurable Entities](#) at least Person, Publication, Project & OrgUnit.

The synchronization features are classified as *experimental* at the time of 7.3 and it **MUST** be enabled manually. Due to the strict validation rules applied on the ORCID side and the absence of friendly edit UI for the archived items in DSpace (see [issues#2876](#)), it is hard at this time to achieve an optimal UX.

Configure the push of information from DSpace to ORCID

Please note that many fields on the ORCID side are subject to validation, i.e. only values from controlled-list can be used and some fields are mandatory. The table below summarizes the validations that are defined at the time of DSpace 7.3. ORCID updates such rules periodically, usually modifying (enlarging) the controlled-list, and changes to the mandatory fields can also happen.

ORCID Entity	Corresponding DSpace Entity	Mandatory fields	Controlled fields
Person	Person		Country (iso-3166 2 code letter)
Work	Publication	Title Type Publication Date (>= 1900) External Identifier (at least one)	Type (https://info.orcid.org/documentation/integration-and-api-faq/#easy-faq-2682) Identifier.Type (https://pub.orcid.org/v3.0/identifiers)
Funding	Project	Title External Identifier (at least one) Funding Agency (Organisation) Currency if an Amount is provided	Amount.Currency (https://www.iso.org/iso-4217-currency-codes.html)
Organisation	OrgUnit	External Identifier (at least one) Address City Country	See https://support.orcid.org/hc/en-us/articles/360006894674-Metadata-in-the-Funding-section Country (iso-3166 2 code letter) Identifier.Type (ROR, LEI, CrossRef Funder ID, RINGOLD, GRID)

To provide more meaningful messages to the user DSpace implements a local validation before trying to push the record to ORCID. This validation verifies the data using the rules above so that a specific message is displayed to the user. If for any reason another error is returned by ORCID a generic message is shown to the user and the exact technical message received by ORCID is logged in the `dspace.log` file and stored in the `orcidhistory` table.

The local validation can be turned off. This validation is mainly intended as a development/debug option and should be not enabled in production.

```
orcid.validation.work.enabled = true
orcid.validation.funding.enabled = true
```

Mapping of the DSpace Person Items to ORCID Works

Metadata in a DSpace "Person" item, once that the item has been linked to ORCID by the researcher owning the ORCID profile, can be pushed to ORCID to fill the Profile Section of the ORCID Person using the `org.dspace.orcid.service.OrcidProfileSectionFactoryService` configured via this mapping bean:

```

<!-- Configuration of ORCID profile sections factory.
Each entry of sectionFactories must be an implementation of OrcidProfileSectionFactory.-->
<bean class="org.dspace.orcid.service.impl.OrcidProfileSectionFactoryServiceImpl">
    <constructor-arg name="sectionFactories">
        <list>

            <bean class="org.dspace.orcid.model.factory.impl.OrcidSimpleValueObjectFactory">
                <constructor-arg name="sectionType" value="OTHER_NAMES" />
                <constructor-arg name="preference" value="BIOGRAPHICAL" />
                <property name="metadataFields" value="\${orcid.mapping.other-names}" />
            </bean>

            <bean class="org.dspace.orcid.model.factory.impl.OrcidSimpleValueObjectFactory">
                <constructor-arg name="sectionType" value="KEYWORDS" />
                <constructor-arg name="preference" value="BIOGRAPHICAL" />
                <property name="metadataFields" value="\${orcid.mapping.keywords}" />
            </bean>

            <bean class="org.dspace.orcid.model.factory.impl.OrcidSimpleValueObjectFactory">
                <constructor-arg name="sectionType" value="COUNTRY" />
                <constructor-arg name="preference" value="BIOGRAPHICAL" />
                <property name="metadataFields" value="\${orcid.mapping.country}" />
            </bean>

            <bean class="org.dspace.orcid.model.factory.impl.
OrcidPersonExternalIdentifierFactory">
                <constructor-arg name="sectionType" value="EXTERNAL_IDS" />
                <constructor-arg name="preference" value="IDENTIFIERS" />
                <property name="externalIds" value="\${orcid.mapping.person-external-
ids}" />
            </bean>

            <bean class="org.dspace.orcid.model.factory.impl.OrcidSimpleValueObjectFactory">
                <constructor-arg name="sectionType" value="RESEARCHER_URLS" />
                <constructor-arg name="preference" value="IDENTIFIERS" />
                <property name="metadataFields" value="\${orcid.mapping.researcher-
urls}" />
            </bean>

        </list>
    </constructor-arg>
</bean>

```

The above configuration links each piece of information that can be synchronized from DSpace to ORCID with a preference that the user can manage on the DSpace side (i.e. sync of the keywords is linked to the BIOGRAPHICAL preference) and defines which DSpace metadata will be used to fill the ORCID field. The bean reads the metadata mapping from the `config/modules/orcid.cfg`

```

### Other names mapping ###
orcid.mapping.other-names = person.name.variant
orcid.mapping.other-names = person.name.translated

### Keywords mapping ###
orcid.mapping.keywords = dc.subject

### Country mapping ###
orcid.mapping.country = person.country
orcid.mapping.country.converter =

### Person External ids mapping ###
##orcid.mapping.person-external-ids syntax is <metadataField>::<type>
orcid.mapping.person-external-ids = person.identifier.scopus-author-id::SCOPUS
orcid.mapping.person-external-ids = person.identifier.rid::RID

### Researcher urls mapping ###
orcid.mapping.researcher-urls = dc.identifier.uri

```

Mapping of DSpace Publication items to ORCID Works

A DSpace "Publication" item is pushed to ORCID as a "Work" using the `org.dspace.orcid.model.factory.impl.OrcidWorkFactory` configured via this mapping bean:

```
<bean id="orcidWorkFactoryFieldMapping" class="org.dspace.app.orcid.model.OrcidWorkFieldMapping" >
    <property name="contributorFields" value="{orcid.mapping.work.contributors}" />
    <property name="externalIdentifierFields" value="{orcid.mapping.work.external-ids}" />
    <property name="publicationDateField" value="{orcid.mapping.work.publication-date}" />
    <property name="titleField" value="{orcid.mapping.work.title}" />
    <property name="journalTitleField" value="{orcid.mapping.work.journal-title}" />
    <property name="shortDescriptionField" value="{orcid.mapping.work.short-description}" />
    <property name="subTitleField" value="{orcid.mapping.work.sub-title}" />
    <property name="languageField" value="{orcid.mapping.work.language}" />
    <property name="languageConverter" ref="{orcid.mapping.work.language.converter}" />
    <property name="typeField" value="{orcid.mapping.work.type}" />
    <property name="typeConverter" ref="{orcid.mapping.work.type.converter}" />
    <property name="citationType" value="{orcid.mapping.work.citation.type}" />
</bean>
```

that reads the mapping from the `config/modules/orcid.cfg` file:

```
### Work (Publication) mapping ###
orcid.mapping.work.title = dc.title
orcid.mapping.work.sub-title =
orcid.mapping.work.short-description = dc.description.abstract
orcid.mapping.work.publication-date = dc.date.issued
orcid.mapping.work.language = dc.language.iso
orcid.mapping.work.language.converter = mapConverterDSpaceToOrcidLanguageCode
orcid.mapping.work.journal-title = dc.relation.ispartof
orcid.mapping.work.type = dc.type
orcid.mapping.work.type.converter = mapConverterDSpaceToOrcidPublicationType

##orcid.mapping.work.contributors syntax is <metadataField>::<role>
orcid.mapping.work.contributors = dc.contributor.author::author
orcid.mapping.work.contributors = dc.contributor.editor::editor

##orcid.mapping.work.external-ids syntax is <metadataField>::<type> or $simple-handle::<type>
##The full list of available external identifiers is available here https://pub.orcid.org/v3.0/identifiers
orcid.mapping.work.external-ids = dc.identifier.doi::doi
orcid.mapping.work.external-ids = dc.identifier.scopus::eid
orcid.mapping.work.external-ids = dc.identifier.pmid::pmid
orcid.mapping.work.external-ids = $simple-handle::handle
orcid.mapping.work.external-ids = dc.identifier.isi::wosuid
orcid.mapping.work.external-ids = dc.identifier.issn::issn
```

In the above configuration the "simple" properties are mapped matching the ORCID field name on the left (i.e. short-description) with the DSpace metadata that holds such information (i.e. dc.description.abstract). For the ORCID Type field a special "converter" is configured so that the value of the DSpace metadata (i.e. dc.type) is mapped to the controlled-list of types accepted by ORCID (<https://info.orcid.org/faq/what-work-types-does-orcid-support/>). The value of the `orcid.mapping.work.type.converter` matches the name of a bean defined in the `config/spring/api/orcid-services.xml`

```
<bean name="mapConverterDSpaceToOrcidPublicationType" class="org.dspace.util.SimpleMapConverter" init-
method="init">
    <property name="converterNameFile" value="orcid/mapConverter-dspace-to-orcid-publication-type.
properties" />
    <property name="configurationService" ref="org.dspace.services.ConfigurationService" />
    <property name="defaultValue" value="other" />
</bean>
```

Finally a special treatment is needed for the external ids as this is a complex field on the ORCID side composed of two values: the identifier type (from a controlled-list) and the identifier value. In this case the configuration maps a DSpace metadata field (i.e. dc.identifier.doi) to a specific identifier type (i.e. the part after ::, doi).

Mapping of DSpace Project items to ORCID Funding

A DSpace "Project" item is pushed to ORCID as a "Funding" using the `org.dspace.orcid.model.factory.impl.OrcidFundingFactory` configured via this mapping bean:


```

<bean id="orcidFundingFactoryFieldMapping" class="org.dspace.orcid.model.OrcidFundingFieldMapping" >
    <property name="contributorFields" value="{orcid.mapping.funding.contributors}" />
    <property name="externalIdentifierFields" value="{orcid.mapping.funding.external-ids}" />
    <property name="titleField" value="{orcid.mapping.funding.title}" />
    <property name="typeField" value="{orcid.mapping.funding.type}" />
    <property name="typeConverter" ref="{orcid.mapping.funding.type.converter}" />
    <property name="amountField" value="{orcid.mapping.funding.amount}" />
    <property name="amountCurrencyField" value="{orcid.mapping.funding.amount.currency}" />
    <property name="amountCurrencyConverter" ref="{orcid.mapping.funding.amount.currency.
converter}" />
    <property name="descriptionField" value="{orcid.mapping.funding.description}" />
    <property name="startDateField" value="{orcid.mapping.funding.start-date}" />
    <property name="endDateField" value="{orcid.mapping.funding.end-date}" />
    <property name="organizationRelationshipType" value="{orcid.mapping.funding.organization-
relationship-type}" />
</bean>

```

that reads the mapping from the config/modules/orcid.cfg file

```

### Funding mapping ###
orcid.mapping.funding.title = dc.title
orcid.mapping.funding.type =
orcid.mapping.funding.type.converter = mapConverterDSpaceToOrcidFundingType
##orcid.mapping.funding.external-ids syntax is <metadataField>::<type>
##The full list of available external identifiers is available here https://pub.orcid.org/v3.0/identifiers
orcid.mapping.funding.external-ids = dc.identifier::grant_number
orcid.mapping.funding.external-ids = dc.identifier.other::other-id
orcid.mapping.funding.description = dc.description
orcid.mapping.funding.start-date = project.startDate
orcid.mapping.funding.end-date = project.endDate
##orcid.mapping.funding.contributors syntax is <metadataField>::<type>
orcid.mapping.funding.contributors = project.investigator::lead
orcid.mapping.funding.organization-relationship-type = isOrgUnitOfProject
orcid.mapping.funding.amount = project.amount
orcid.mapping.funding.amount.currency = project.amount.currency
orcid.mapping.funding.amount.currency.converter = mapConverterDSpaceToOrcidAmountCurrency

```

in the above configuration the "simple" properties are mapped matching the ORCID field name on the left (i.e. description) with the DSpace metadatafield that holds such information (i.e dc.description). For the ORCID Type field a special "converter" is configured so that the value of the DSpace metadata (i.e. dc.type) is mapped to the controlled-list of types accepted by ORCID (<https://support.orcid.org/hc/en-us/articles/360006894674-Metadata-in-the-Funding-section>). The value of the orcid.mapping.funding.type.converter matches the name of a bean defined in the config/spring/api/orcid-services.xml The same apply for the currency orcid.mapping.funding.amount.currency.converter = mapConverterDSpaceToOrcidAmountCurrency

```

<bean name="mapConverterDSpaceToOrcidFundingType" class="org.dspace.util.SimpleMapConverter" init-method="init">
    <property name="converterNameFile" value="orcid/mapConverter-dspace-to-orcid-funding-type.properties" />
    <property name="configurationService" ref="org.dspace.services.ConfigurationService" />
    <property name="defaultValue" value="" />
</bean>

<bean name="mapConverterDSpaceToOrcidAmountCurrency" class="org.dspace.util.SimpleMapConverter" init-method="
init">
    <property name="converterNameFile" value="orcid/mapConverter-dspace-to-orcid-amount-currency.
properties" />
    <property name="configurationService" ref="org.dspace.services.ConfigurationService" />
    <property name="defaultValue" value="" />
</bean>

```

Finally a special treatment is needed for Funder that is a mandatory field on the ORCID side. In this case the mapping defines which relation is used to link the Project with the Funder (OrgUnit)

```

orcid.mapping.funding.organization-relationship-type = isOrgUnitOfProject

```

Configure the import features

The Import features from ORCID have been implemented using the [Live Import Framework](#)

The following bean is used to configure the **import of person records from ORCID**. It is activated as an external source in `config/spring/api/external-services.xml`

```
<bean class="org.dspace.external.provider.impl.OrcidV3AuthorDataProvider" init-method="init">
  <property name="sourceIdentifier" value="orcid"/>
  <property name="orcidUrl" value="${orcid.domain-url}" />
  <property name="clientId" value="${orcid.application-client-id}" />
  <property name="clientSecret" value="${orcid.application-client-secret}" />
  <property name="OAUTHUrl" value="${orcid.token-url}" />
  <property name="orcidRestConnector" ref="orcidRestConnector"/>
  <property name="supportedEntityTypes">
    <list>
      <value>Person</value>
    </list>
  </property>
</bean>
```

the mapping between ORCID Person and the DSpace Person Item is the following, currently hard-coded:

ORCID	DSpace
Name/FamilyName	person.firstName
Name/GivenName	person.givenName
Name/Path	person.identifier.orcid
ORCID Profile URL	dc.identifier.uri

The following bean is instead used to configure the **import of publication records** from ORCID (Work)

```
<bean id="orcidPublicationDataProvider" class="org.dspace.external.provider.impl.
OrcidPublicationDataProvider">
  <property name="sourceIdentifier" value="orcidWorks"/>
  <property name="fieldMapping" ref="orcidPublicationDataProviderFieldMapping"/>
  <property name="supportedEntityTypes">
    <list>
      <value>Publication</value>
    </list>
  </property>
</bean>
```

The mapping of the ORCID Work metadata to the DSpace metadata is performed by the following bean in `config/spring/api/orcid-services.xml`

```

        <bean id="orcidPublicationDataProviderFieldMapping" class="org.dspace.orcid.model.
OrcidWorkFieldMapping" >
            <property name="contributorFields" value="{orcid.external-data.mapping.publication.
contributors}" />
            <property name="externalIdentifierFields" value="{orcid.external-data.mapping.publication.
external-ids}" />
            <property name="publicationDateField" value="{orcid.external-data.mapping.publication.issued-
date}" />
            <property name="titleField" value="{orcid.external-data.mapping.publication.title}" />
            <property name="journalTitleField" value="{orcid.external-data.mapping.publication.is-part-
of}" />
            <property name="shortDescriptionField" value="{orcid.external-data.mapping.publication.
description}" />
            <property name="languageField" value="{orcid.external-data.mapping.publication.language}" />
            <property name="languageConverter" ref="{orcid.external-data.mapping.publication.language.
converter}" />
            <property name="typeField" value="{orcid.external-data.mapping.publication.type}" />
            <property name="typeConverter" ref="{orcid.external-data.mapping.publication.type.converter}" />
        />
    </bean>

```

that reads the mapping from the `config/modules/orcid.cfg` file.

Please note that such mapping is separated from the mapping used to push information from DSpace to ORCID but usually, as provided in the default configuration, the mapping should be the same.

```

### Work (Publication) external-data.mapping ###
orcid.external-data.mapping.publication.title = dc.title

orcid.external-data.mapping.publication.description = dc.description.abstract
orcid.external-data.mapping.publication.issued-date = dc.date.issued
orcid.external-data.mapping.publication.language = dc.language.iso
orcid.external-data.mapping.publication.language.converter = mapConverterOrcidToDSpaceLanguageCode
orcid.external-data.mapping.publication.is-part-of = dc.relation.ispartof
orcid.external-data.mapping.publication.type = dc.type
orcid.external-data.mapping.publication.type.converter = mapConverterOrcidToDSpacePublicationType

##orcid.external-data.mapping.publication.contributors syntax is <metadataField>::<role>
orcid.external-data.mapping.publication.contributors = dc.contributor.author::author
orcid.external-data.mapping.publication.contributors = dc.contributor.editor::editor

##orcid.external-data.mapping.publication.external-ids syntax is <metadataField>::<type> or $simple-handle::
<type>
##The full list of available external identifiers is available here https://pub.orcid.org/v3.0/identifiers
orcid.external-data.mapping.publication.external-ids = dc.identifier.doi::doi
orcid.external-data.mapping.publication.external-ids = dc.identifier.scopus::eid
orcid.external-data.mapping.publication.external-ids = dc.identifier.pmid::pmid
orcid.external-data.mapping.publication.external-ids = dc.identifier.isi::wosuid
orcid.external-data.mapping.publication.external-ids = dc.identifier.issn::issn

```

Configure the author lookup in submission

Please note that there are two different possibilities:

- via an [ORCID lookup authority](#) available for a DSpace repository that is not using Configurable Entities
- via a relation among the research output item (Publication, etc.) and a Person Item bound to the ORCID Person External Source defined in the previous paragraph

Troubleshooting & common issues

The troubleshooting guide from ORCID can help as well <https://info.orcid.org/documentation/integration-guide/troubleshooting/>

I'm having trouble testing the ORCID integration. What should I check?

Please double check the documentation and the other FAQs to be sure that you have followed all of the instructions to enable the integration correctly. If you still have trouble, contact the [DSpace tech community via email or slack](#) providing as much detail as possible. If the issue is related to the synchronization of DSpace local data with ORCID it would be useful to share information about the content of your `orcidhistory` table and any relevant message that you could have in the `dspace.log` file.

I cannot find the ORCID features described by this page in my installation

The ORCID features must be enabled by changing some configuration files. Please refer to the ***Enable the integration section*** above.

I'm unable to authenticate via ORCID

If you have correctly enabled the ORCID authentication feature and you are able to start the OAuth flow with ORCID but get a failure when you are redirected back to DSpace, it could be due to privacy settings on your ORCID record. The DSpace ORCID authentication **requires that you release an email address to match your ORCID account with a DSpace account** or to create a new one at your first login. Make your ORCID account email address public or visible to trusted parties. This is often not the case for a freshly created account on ORCID.

If you are encountering this issue, you'll see a message like this in your "dspace.log" file on the backend:

```
2022-08-04 11:43:42,124 ERROR unknown unknown org.dspace.authenticate.OrcidAuthenticationBean @ An error occurs
registering a new EPerson from ORCID
java.lang.IllegalStateException: The email is configured private on orcid
```

After logging in via ORCID, a new DSpace account was created instead of using my existing DSpace account

Currently, the ORCID integration with DSpace relies on a matching email address to find your existing account. If your ORCID account and DSpace account have **different** email addresses associated with them, then it is possible that a new (duplicative) user account will be created.

I'm having trouble creating test accounts on ORCID to experiment with the features

Please refer to the ORCID trouble-shooting guide <https://info.orcid.org/documentation/integration-guide/troubleshooting/>. A frequent mistake working with the ORCID sandbox environment is to forget that only email addresses @mailinator.com are allowed for account created on the sandbox. Remember to validate your email address once the account has been created visiting the online inbox at mailinator.com

I have configured my Public ORCID API credentials in DSpace but I get an error attempting to login via ORCID

When you use public ORCID API credentials you can only use a subset of the integration features (check). Moreover you need to limit the scopes (permissions) requested to the user via the ORCID authentication to the `/authenticate` scope. Please check the ***Enable the integration section*** above.

I don't find my publications looking up for my ORCID iD

Please check "`config/modules/orcid.cfg`" (or your `local.cfg`) to see if the system has been properly configured to use the production ORCID API. There is a chance that your installation is still configured to use the ORCID Sandbox that is appropriate for the testing and development phase of the integration. The ORCID sandbox doesn't contain the same data as the Public environment.

I cannot push all my publications, only few or none of them are listed in the queue

Please double check that the `orcidqueue` consumer has been enabled (in `dspace.cfg` or `local.cfg`) and that the orcid settings of your profile have the "All publications" checkbox flagged. ORCID features require the use of the new [Configurable Entities](#). Only Publication item are synchronized with ORCID; simple "untyped" Items will not be synchronized. Please consider to convert your legacy collection to "Publication" collection and set a `dspace.entity.type = Publication` metadata on your legacy items.

Push of publications to ORCID fails

This is usually due to validation errors. ORCID could complain about missing mandatory fields or invalid values for fields that are linked to a controlled-list. Please check the table in the ***Configure the push of information from DSpace to ORCID*** and the ***Mapping of DSpace Publication items to ORCID Works paragraph*** to solve this. Your `dspace.log` file may also provide useful error messages.

Push of projects to ORCID fails

This is usually due to validation errors. Make sure that all required metadata fields exist on the Project Entity and any linked OrgUnit Entities. ORCID could complain about missing mandatory fields or invalid values for fields that are linked to a controlled-list. Please check the table in the ***Configure the push of information from DSpace to ORCID*** and the ***Mapping of DSpace Project items to ORCID Funding paragraph*** to solve this. Your `dspace.log` file may also provide useful error messages.

