

[EN] Configuring DOI

Basic information

DOI (digital object identifier) – a digital identifier of an electronic document, which – unlike URL identifiers – does not depend on the physical location of a document but is permanently ascribed to it.

DataCite – an international non-profit organization, the goal of which is to improve data citations to:

- facilitate access to scientific data on the Internet,
- increase the acceptance of scientific data as verified data and of the input in scientific publications,
- support data archiving in order to make it possible to verify results and to use them in the future.

Integrating the dLibra System with the DataCite System and the Metadata Store (MDS)

The [DataCite Metadata Store \(MDS\)](#) allows users to register DOIs with the associated metadata. Version 6.1 of the dLibra system integrates with the abovementioned API and makes it possible to easily register objects created in the system. After they have been correctly registered, the objects will be available to the public through the [DataCite REST API](#).

NOTE: In order to use the DOI functionality built into the dLibra system, the user must have an account in the DataCite system. The PCSS is a member of the DataCite consortium, and it is authorized to take care of the necessary formalities on the basis of which an account is created for the interested institution. For more information about it and for a contact form, see the website of the Data ID service.

Configuration

The dLibra System Server – Metadata Mapping

The metadata required by the MDS are mapped from the dLibra system to the [metadata schema](#) on the basis of the content of the **doi-export.properties** file located in the **conf/ms** subdirectory of the root directory of the server. The box below contains a sample content of that file.

doi-export.properties

```
#Mandatory
creator
= Creator
title
= Title
title.AlternativeTitle
Alternative
title.
Subtitle
=
title.TranslatedTitle
title.
Other
=
publisher
= Publisher
publicationYear
=
resourceType.Audiovisual
resourceType.Collection
resourceType.DataPaper
resourceType.Dataset
resourceType.
Event
resourceType.
Image
resourceType.InteractiveResource
resourceType.
Model
resourceType.PhysicalObject
resourceType.Service
resourceType.Software
resourceType.
```

Sound	=		
resourceType.			
Text	=		
resourceType.Workflow		=	
resourceType.			
Other	=	Type	
#Recommended			
subject			
= Subject			
contributor.ContactPerson		=	
contributor.DataCollector		=	
contributor.DataCurator			=
contributor.DataManager			=
contributor.Distributor			=
contributor.			
Editor		=	
contributor.HostingInstitution		=	
contributor.Producer			=
contributor.ProjectLeader		=	
contributor.ProjectManager		=	
contributor.ProjectMember		=	
contributor.RegistrationAgency		=	
contributor.RegistrationAuthority	=		
contributor.RelatedPerson		=	
contributor.Researcher			=
contributor.ResearchGroup		=	
contributor.RightsHolder		=	
contributor.			
Sponsor		=	
contributor.Supervisor			=
contributor.WorkPackageLeader	=		
contributor.			
Other	=		
Contributor			
date.			
Accepted			
= Accepted			
date.			
Available			
= Available			
date.Copyrighted			
= Copyrighted			
date.			
Collected			
=			
date.			
Created			
= Created			
date.			
Issued			
= Issued			
date.			
Submitted			
= Submitted			
date.			
Updated			
= Modified			
date.			
Valid			
= Valid			
date.			
Other			
= Date			
#Related identifier types - all combinations relatedIdentifier.{relatedIdentifierType}.{relationType}			
#relatedIdentifier.ARK.{relationType}		=	
#relatedIdentifier.arXiv.{relationType}			=
#relatedIdentifier.bibcode.{relationType}	=		
#relatedIdentifier.DOI.{relationType}		=	
#relatedIdentifier.EAN13.{relationType}			=
#relatedIdentifier.EISSN.{relationType}			=
#relatedIdentifier.Handle.{relationType}	=		

```

#relatedIdentifier.IGSN.{relationType} =
#relatedIdentifier.ISBN.{relationType} =
#relatedIdentifier.ISSN.{relationType} =
#relatedIdentifier.ISTC.{relationType} =
#relatedIdentifier.LISSN.{relationType} =
#relatedIdentifier.LSID.{relationType} =
#relatedIdentifier.PMID.{relationType} =
#relatedIdentifier.PURL.{relationType} =
#relatedIdentifier.UPC.{relationType} =
#relatedIdentifier.URL.{relationType} =
#relatedIdentifier.URN .{relationType} =
#relatedIdentifier.{relatedIdentifierType}.IsCitedBy =
#relatedIdentifier.{relatedIdentifierType}.Cites =
#relatedIdentifier.{relatedIdentifierType}.IsSupplementTo =
#relatedIdentifier.{relatedIdentifierType}.IsSupplementedBy =
#relatedIdentifier.{relatedIdentifierType}.IsContinuedBy =
#relatedIdentifier.{relatedIdentifierType}.Continues =
#relatedIdentifier.{relatedIdentifierType}.IsDescribedBy =
#relatedIdentifier.{relatedIdentifierType}.Describes =
#relatedIdentifier.{relatedIdentifierType}.HasMetadata =
#relatedIdentifier.{relatedIdentifierType}.IsMetadataFor =
#relatedIdentifier.{relatedIdentifierType}.HasVersion =
#relatedIdentifier.{relatedIdentifierType}.IsVersionOf =
#relatedIdentifier.{relatedIdentifierType}.IsNewVersionOf =
#relatedIdentifier.{relatedIdentifierType}.IsPreviousVersionOf =
#relatedIdentifier.{relatedIdentifierType}.IsPartOf =
#relatedIdentifier.{relatedIdentifierType}.HasPart =
#relatedIdentifier.{relatedIdentifierType}.IsReferencedBy =
#relatedIdentifier.{relatedIdentifierType}.References =
#relatedIdentifier.{relatedIdentifierType}.IsDocumentedBy =
#relatedIdentifier.{relatedIdentifierType}.Documents =
#relatedIdentifier.{relatedIdentifierType}.IsCompiledBy =
#relatedIdentifier.{relatedIdentifierType}.Compiles =
#relatedIdentifier.{relatedIdentifierType}.IsVariantFormOf =
#relatedIdentifier.{relatedIdentifierType}.IsOriginalFormOf =
#relatedIdentifier.{relatedIdentifierType}.IsIdenticalTo =
#relatedIdentifier.{relatedIdentifierType}.IsReviewedBy =
#relatedIdentifier.{relatedIdentifierType}.Reviews =
#relatedIdentifier.{relatedIdentifierType}.IsDerivedFrom =
#relatedIdentifier.{relatedIdentifierType}.IsSourceOf =
#relatedIdentifier.{relatedIdentifierType}.IsRequiredBy =
#relatedIdentifier.{relatedIdentifierType}.Requires =
description.Abstract =
Abstract
description.Methods
description.SeriesInformation
description.TableOfContents =
TableOfContents
description.TechnicalInfo
description.
Other =
Description
geolocation
= Geolocation
#Optional
language
= Language
#alternateIdentifier.{freeText} =
size
=
format
= Format
version
=
rights
= Rights
fundingReference
=

```

Notes on mapping:

- In order to assign metadata assigned to the schema required by the MDS system, the user must enter the RDF name of the attribute available in the dLibra system after the equal sign (for example, "**creator = Creator**") Several attributes can be assigned (for example, "**title = Title, Alternative**").
- The content of the configuration file is divided into three sections: **#Mandatory** (mandatory), **#Recommended** (recommended), and **#Optional** (optional). The fields in the mandatory section always appear in the results metadata schema. If RDF attribute names are not assigned to those fields or if those attributes do not have any value for the given object, then the default value, "**(:unav)**", will be assigned. In order to make sure that the mandatory fields are always filled in, the user may use the attribute view mechanism which makes it possible to configure the attributes required for creating an object description.
- Metadata beginning from prefix **relatedIdentifier** can be created freely, on the basis of combinations of the type **relatedIdentifier**. **{relatedIdentifierType}{relationType}** The values for **{relatedIdentifierType}** and **{relationType}** have been included in the file mentioned above.
- Any number of assignments can be made for the **alternateIdentifier** metadata type, in accordance with the **alternateIdentifier{freeText}** formula, where **{freeText}** is any value.
- The **publicationYear** metadata is required by the MDS, and its value must be a four-digit natural number (0000–9999). If the value is incorrect, the date of the creation of the object in the digital repository will be used.

Reader Application

For the DOI registration system to function correctly in the MDS system, the "**doi.properties**" file must also be configured. The file is located in the **"/conf"** catalog of the Reader Application. The box below contains a sample content of that file.

doi.properties

```
class.name = pl.psnc.dlibra.web.comp.resources.doi.DoiManager
doi.username=
doi.password=
doi.prefix=10.5072
doi.endpoint.mds=https://mds.test.datacite.org
doi.defaultLanguage=pl
```

Configuration parameters:

- doi.username – the name of a user in the DataCite system;
- doi.password – a password connected with an account in the DataCite system;
- doi.prefix – a DOI prefix assigned by the DataCite system;
- doi.endpoint.mds – the address for the MDS, where:
 - <https://mds.test.datacite.org> – the address for tests, and
 - <https://mds.datacite.org> – the address for production; and
- doi.defaultLanguage – the language of the metadata which is to be used for objects the metadata of which are defined in many languages.