The DataCite Metadata Schema

Frauke Ziedorn

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DataCite and DOI

- Growing demand to make data citable.
- DataCite is an international consortium whose aims are
  - establish easier access to research data on the Internet
  - increase acceptance of research data as legitimate, citable contributions to the scholarly record
  - support data archiving that will permit results to be verified and re-purposed for future study.

- The DOI system offers long-term persistence and accessibility of data.
- The IDF requires metadata for each object registered with a DOI.
DataCite and Metadata I

• Metadata make data discoverable.
• Long-term maintenance of metadata is an important part of the persistence of an identifier.

• DataCite’s infrastructure includes
  • **Metadata Schema**, well-formed, right-sized, and suitable for all disciplines and resource types, and
  • **Metadata Store** (MDS), which combines the DOI registration with the storage of metadata.
DataCite and Metadata II

• Schema is inspired by Dublin Core.
• Current preferred version: v2.2; v2.3 is to be released shortly
• Core value of the DataCite Metadata Schema: Linking between data and related objects.
• Future vision:
  Links between all related publications and objects.

*Graphic by http://media.mmg.mpg.de/
DataCite Metadata Schema
Mandatory Properties

- Identifier *(with type attribute)*
- Creator *(with type and nameIdentifier attributes)*
- Title *(with optional type attribute)*
- Publisher
- PublicationYear

- Citation:
  Creator (PublicationYear): Title. Publisher. Identifier
Dataset:
Kuhlmann, H et al. (2009):
Age models, iron intensity, magnetic susceptibility records and dry bulk density of sediment cores from around the Canary Islands. PANGAEA - Data Publisher for Earth & Environmental Science.
doi:10.1594/PANGAEA.727522,

Is supplement to this article:
DataCite Metadata Schema

Optional Properties

- Subject \((\text{with scheme attribute})\)
- Contributor \((\text{with type and nameIdentifier attributes})\)
- Date \((\text{with type attribute})\)
- Language
- ResourceType \((\text{with description attribute})\)
- AlternateIdentifier \((\text{with type attribute})\)
- RelatedIdentifier \((\text{with type und relationType attributes})\)
- Size
- Format
- Version
- Rights
- Description \((\text{with type attribute})\)
DataCite Services
Metadata Store (MDS)

- Registration and updating of DOI names.
- Storage of metadata.
- Accessible via UI or API.

Metadata Store

Register new Dataset
DOI latency: Be aware that it can take up to 24 hours until a DOI update is globally known. New DOIs should be resolvable after about 5 minutes.

For testing purposes please only use our dedicated test prefix 10.5072

DOI:

Url:

Is Active:

Is Ref Quality:

SAVE

Home | Language: | Logout
DataCite Services

• Search engine for all metadata stored in the MDS.
• Filter options to refine the search.

Metadata Search
DataCite Services

OAI-PMH Data Provider

• Exposes metadata stored in the MDS using the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH).
• Service is open to everyone.
• Available metadata formats:
  • OAI Dublin Core (oai_dc)
  • OAI DataCite (oai_datacite)
    This format contains several other elements describing the version of the metadata, whether it is of reference quality, and the registering datacentre.
  • DataCite Direct (datacite)
DataCite Services
Content Service

• Exposes metadata stored in the MDS using multiple formats: DataCite XML, DataCite text citation, RDF/XML, RDF Turtle, BibTex, RIS, HTML
• Accessible with HTTP content negotiation or HTML links.

DataCite Content Service Alpha

doi:10.3207/0906884659

This page represents DataCite's metadata for doi:10.3207/0906884659. For a landing page of this dataset please

Citation
Prof. Dr. Michael C. Khorz (2010): Laser Refractive Lens Surgery using an Intraocci

Abstract
This video shows an intraocular femtosecond laser (Alcon LenSx Lasers, Inc., Pt. V
the cornea, lens capsule and lens. Nucleus liquefaction, capsulorhexis and corneal
incisions. Irrigation aspiration only is used to remove the liquefied lens nucleus, an
than the manual technique and enables the surgeon to combine the lens surgery wi

Other metadata formats
x-datacite+xml http://data.datacite.org/application/x-datacite+xml/10.3207/0906884659
x-datacite+text http://data.datacite.org/application/x-datacite+text/10.3207/0906884659
rdf+xml http://data.datacite.org/application/rdf+xml/10.3207/0906884659
turtle http://data.datacite.org/application/turtle/10.3207/0906884659
x-bibtex http://data.datacite.org/application/x-bibtex/10.3207/0906884659
x-research-info-systems http://data.datacite.org/application/x-research-info-systems/10.3207/0906884659
Links

- **http://schema.datacite.org**
  Access to all versions of the DataCite metadata schema, with documentation, schema definition, and examples.

- **http://search.datacite.org**
  Search engine for all metadata stored by DataCite.

- **http://oai.datacite.org**
  Datacite’s OAI-PMH service which allows access to the metadata.

- **http://data.datacite.org**
  DataCite Content Service exposes metadata using multiple formats.
Thank you for your attention!