
DH-crud Documentation

Release 2019

DARIAH-DE

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A PDF version of the DH-crud Documentation you can find [HERE](#).

The DARIAH-DE CRUD Service is the core storage service for the DARIAH-DE Repository. It talks to both the DARIAH-DE OwnStorage and PublicStorage. Two instances of the DH-crud are in use within the DARIAH-DE Repository: An only internally used instance that actually is creating and importing objects (via Publikator) and an externally used instance (the documented one) that is delivering publicly available data and metadata to the users.

API DOCUMENTATION

To retrieve data and metadata you would need the object's Handle PID or DataCite DOI, such as

```
21.11113/0000-000B-C8EF-7
```

or

```
10.20275/0000-000B-C8EF-7
```

All requests below using the Handle PID can be equally stated using the DataCite DOI of the object. Just exchange the Handle PID prefix with the DataCite DOI prefix, such as:

<https://repository.de.dariah.eu/1.0/dhcrud/10.20375/0000-000B-C8EF-7>

1.1 #VERSION

To check the current productive DH-crud version simply try:

<https://repository.de.dariah.eu/1.0/dhcrud/version>

and you get the currently deployed version of the productive public DH-crud.

1.2 Content Negotiation

<https://repository.de.dariah.eu/1.0/dhcrud/21.11113/0000-000B-C8EF-7>

Access on root object level provides content negotiated responses depending on Request Accept Header:

- Accept: **text/html** will provide the HTML landing page,
- Accept: **application/zip** will provide the ZIPped BagIt bag, and finally
- **leaving out** the Accept-header will return the data object itself in its original mimetype.

1.3 #GET Data

<https://repository.de.dariah.eu/1.0/dhcrud/21.11113/0000-000B-C8EF-7/data>

RESPONSE: A file object with appropriate Content-Type.

1.4 #GET BagIt Bag

<https://repository.de.dariah.eu/1.0/dhcrud/21.11113/0000-000B-C8EF-7/bag>

RESPONSE: A DARIAH-DE Repository BagIt ZIP file object with Content-Type application/zip.

1.5 #GET RDA BagPack (Research Data Repository Interoperability WG)

<https://trep.de.dariah.eu/1.0/dhcrud/21.11113/0000-000B-C8EF-7/bag/pack>

RESPONSE: A RDA WG Repository Interoperability BagIt ZIP file object with Content-Type application/zip (see 'working group web site' <<https://www.rd-alliance.org/groups/research-data-repository-interoperability-wg.html>>').

1.6 #GET Descriptive Metadata (DMD)

Descriptive metadata are in DC namespace and to be added by the user importing data into the repository. Only the dc:identifier tags holding the URL, DOI, and Handle PID are added by the DH-crud service.

<https://repository.de.dariah.eu/1.0/dhcrud/21.11113/0000-000B-C8EF-7/metadata>
(same as metadata/ttl)

RESPONSE: text/plain (TURTLE)

```
@prefix rdf:    <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
@prefix dariah: <http://de.dariah.eu/rdf/dataobjects/terms/> .
@prefix dc:     <http://purl.org/dc/elements/1.1/> .

<http://hdl.handle.net/21.11113/0000-000B-C8EF-7>
  a                dariah:Collection ;
  dc:creator       "DARIAH-DE" ;
  dc:description   "The collection containing the terms of use for the DARI
  dc:format        "text/vnd.dariah.dhrep.collection+turtle" ;
  dc:identifier    <http://dx.doi.org/10.20375/0000-000B-C8EF-7> , <http://
  dc:rights        "CC0" , "https://creativecommons.org/choose/zero/" ;
  dc:title         "DARIAH-DE Repository - Terms of Use" .
```


Different formats can be requested using

- TURTLE: [/metadata/ttl](#) (text/plain)
- RDF/XML: [/metadata/xml](#) (text/xml)
- JSON: [/metadata/json](#) (application/json)
- JSONLD: [/metadata/jsonld](#) (application/json)
- NTRIPLES: [/metadata/ntriples](#) (text/plain)

1.7 #GET Administrative Metadata (ADMMD)

Administrative metadata are in DCTERMS namespace and created by the DH-crud service itself at importing time.

<https://repository.de.dariah.eu/1.0/dhcrud/21.11113/0000-000B-C8EF-7/adm>
(same as [adm/ttl](#))

RESPONSE: text/plain (TURTLE)

```
@prefix premis: <http://www.loc.gov/premis/rdf/v1#> .
@prefix rdf:    <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
@prefix dcterms: <http://purl.org/dc/terms/> .
@prefix dariah: <http://de.dariah.eu/rdf/dataobjects/terms/> .

<http://hdl.handle.net/21.11113/0000-000B-C8EF-7>
  a                                dariah:Collection ;
  dcterms:created                  "2017-12-04T19:25:31.028" ;
  dcterms:creator                  "StefanFunk@dariah.eu" ;
  dcterms:extent                   "436" ;
  dcterms:format                   "text/vnd.dariah.dhrep.collection+turtle" ;
  dcterms:identifier               <http://dx.doi.org/10.20375/0000-000B-C8EF-7> ;
  dcterms:modified                 "2017-12-04T19:25:31.028" ;
  dcterms:source                   "https://cdstar.de.dariah.eu/dariah/EAEA0-4" ;
  premis:hasMessageDigest          "be66b89927c01eb13a0f924f1f7de5a0" ;
  premis:hasMessageDigestOriginator
    "dhcrud-base-7.36.0-DH.201712041055" ;
  premis:hasMessageDigestType      "md5" .
```

Different formats can be requested using

- TURTLE: [/adm/ttl](#) (text/plain)
- RDF/XML: [/adm/xml](#) (text/xml)
- JSON: [/adm/json](#) (application/json)
- JSONLD: [/adm/jsonld](#) (application/json)
- NTRIPLES: [/adm/ntriples](#) (text/plain)

1.8 #GET Technical Metadata (TECHMD)

Technical metadata is extracted from each single object (content file) at import. A File Information Tool Set (FITS) service is used by the DH-crud.

<https://repository.de.dariah.eu/1.0/dhcrud/21.11113/0000-000B-C8EF-7/tech>

RESPONSE: text/xml (FITS XML)

```
<?xml version="1.0" encoding="UTF-8"?>
<fits xmlns="http://hul.harvard.edu/ois/xml/ns/fits/fits_output" xmlns:xsi="http
  <identification>
    <identity format="Plain text" mimetype="text/plain" toolname="FITS" toolvers
      <tool toolname="Droid" toolversion="6.1.5" />
      <tool toolname="Jhove" toolversion="1.16" />
      <tool toolname="file utility" toolversion="5.14" />
      <externalIdentifier toolname="Droid" toolversion="6.1.5" type="puid">x-fmt
    </identity>
  </identification>
  <fileinfo>
    <size toolname="Jhove" toolversion="1.16">436</size>
    <filepath toolname="OIS File Information" toolversion="0.2" status="SINGLE_R
    <filename toolname="OIS File Information" toolversion="0.2" status="SINGLE_R
    <md5checksum toolname="OIS File Information" toolversion="0.2" status="SINGL
    <fslastmodified toolname="OIS File Information" toolversion="0.2" status="SI
  </fileinfo>
  <filestatus>
    <well-formed toolname="Jhove" toolversion="1.16" status="SINGLE_RESULT">true
    <valid toolname="Jhove" toolversion="1.16" status="SINGLE_RESULT">true</vali
  </filestatus>
  <metadata>
    <text>
      <linebreak toolname="Jhove" toolversion="1.16" status="SINGLE_RESULT">LF</
      <charset toolname="Jhove" toolversion="1.16">US-ASCII</charset>
      <standard>
        <textMD:textMD xmlns:textMD="info:lc/xmlns/textMD-v3">
          <textMD:character_info>
            <textMD:charset>US-ASCII</textMD:charset>
            <textMD:linebreak>LF</textMD:linebreak>
          </textMD:character_info>
        </textMD:textMD>
      </standard>
    </text>
  </metadata>
  <statistics fitsExecutionTime="66">
    <tool toolname="MediaInfo" toolversion="0.7.75" status="did not run" />
    <tool toolname="OIS Audio Information" toolversion="0.1" status="did not run
    <tool toolname="ADL Tool" toolversion="0.1" status="did not run" />
    <tool toolname="VTT Tool" toolversion="0.1" status="did not run" />
    <tool toolname="Droid" toolversion="6.1.5" executionTime="5" />
    <tool toolname="Jhove" toolversion="1.16" executionTime="44" />
```

```
<tool toolname="file utility" toolversion="5.14" executionTime="56" />
<tool toolname="Exiftool" toolversion="10.00" status="did not run" />
<tool toolname="NLNZ Metadata Extractor" toolversion="3.6GA" status="did not
<tool toolname="OIS File Information" toolversion="0.2" executionTime="21" /
<tool toolname="OIS XML Metadata" toolversion="0.2" status="did not run" />
<tool toolname="ffident" toolversion="0.2" executionTime="23" />
<tool toolname="Tika" toolversion="1.10" executionTime="32" />
</statistics>
</fits>
```

1.9 #GET Provenance Metadata (PROVMD)

The DARIAH-DE Repository is not yet using provenance matadata.

<https://repository.de.dariah.eu/1.0/dhcrud/21.11113/0000-000B-C8EF-7/prov>

RESPONSE: HTTP 500 – Internal Server Error (not yet implemented)

1.10 #GET Object Landing Page

<https://repository.de.dariah.eu/1.0/dhcrud/21.11113/0000-000B-C8EF-7/landing>

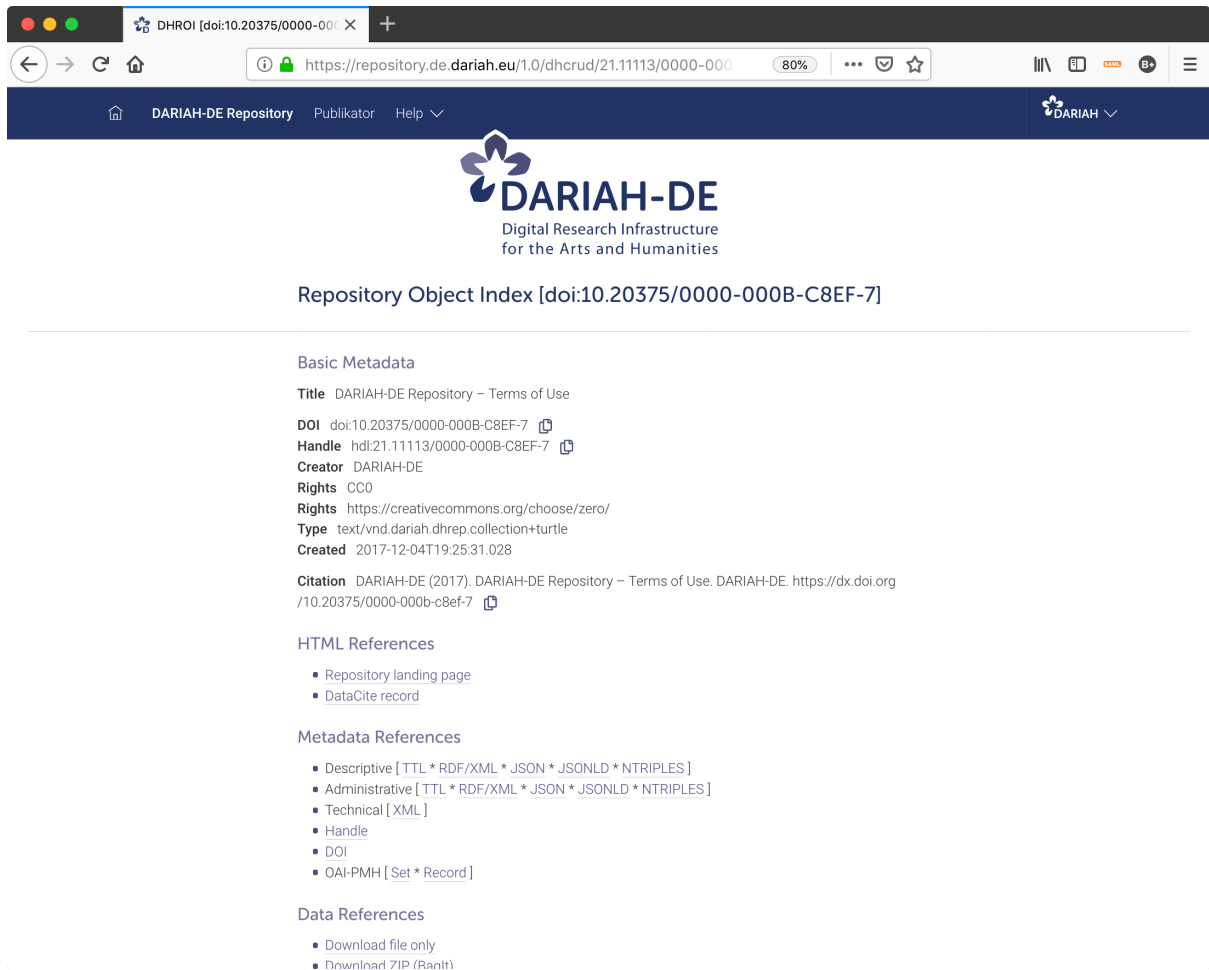
RESPONSE: text/html

The screenshot shows a web browser window with the address bar displaying `https://repository.de.dariah.eu/1.0/dhcrud/21.11113/0000-000`. The page title is "DARIAH-DE Repository – Terms". The browser's address bar shows a 80% zoom level. The page header is dark blue with the DARIAH-DE logo and navigation links: "DARIAH-DE Repository", "Publikator", "Extended Downloads", and "Help". The main content area is white and features the DARIAH-DE logo and the text "Digital Research Infrastructure for the Arts and Humanities". Below this, there are two buttons: "DOWNLOAD" and "DOI:10.20375/0000-000B-C8EF-7". Under the "DOWNLOAD" button, there are three links: "Descriptive Metadata", "Administrative Metadata", and "Technical Metadata". The main heading is "DARIAH-DE Repository – Terms of Use". Below this, there is a section for "Metadata" with the following information: "Creator DARIAH-DE", "Creation Date 2017-12-04T19:25:31.028", "Rights CC0", "Rights https://creativecommons.org/choose/zero/", and "Type text/vnd.dariah.dhrep.collection+turtle". There is a "Description" section with the text "The collection containing the terms of use for the DARIAH-DE Repository." and a "Citation" section with the text "DARIAH-DE (2017). DARIAH-DE Repository – Terms of Use. DARIAH-DE. https://dx.doi.org/10.20375/0000-000b-c8ef-7". There is also a "Content" section with two items: "1. hdl:21.11113/0000-000B-C8F0-4" and "2. hdl:21.11113/0000-000B-C8F1-3". The footer is light gray and contains links for "Imprint", "Privacy Policy", and "Contact". It also includes the text "dhcrud-base-9.3.2-DH+201811021543 © 2018 DARIAH-DE", "DARIAH-DE", "Digital Research Infrastructure for the Arts and Humanities", and the logo of the "Bundesministerium für Bildung und Forschung" (German Federal Ministry of Education and Research) with the text "GEFÖRDERT VOM" and "Förderkennzeichen 01UG1610A bis J".

1.11 #GET Object Index Page

`https://repository.de.dariah.eu/1.0/dhcrud/21.11113/0000-000B-C8EF-7/index`

RESPONSE: text/html



The screenshot shows a web browser window with the address bar displaying `https://repository.de.dariah.eu/1.0/dhcrud/21.11113/0000-000`. The page header features the DARIAH-DE logo and the text "Digital Research Infrastructure for the Arts and Humanities". Below the header, the page title is "Repository Object Index [doi:10.20375/0000-000B-C8EF-7]". The main content area is divided into several sections: "Basic Metadata", "HTML References", "Metadata References", and "Data References".

Basic Metadata

Title DARIAH-DE Repository – Terms of Use

DOI doi:10.20375/0000-000B-C8EF-7

Handle hdl:21.11113/0000-000B-C8EF-7

Creator DARIAH-DE

Rights CC0

Rights <https://creativecommons.org/choose/zero/>

Type text/vnd.dariah.dhrep.collection+turtle

Created 2017-12-04T19:25:31.028

Citation DARIAH-DE (2017). DARIAH-DE Repository – Terms of Use. DARIAH-DE. <https://dx.doi.org/10.20375/0000-000b-c8ef-7>

HTML References

- Repository landing page
- DataCite record

Metadata References

- Descriptive [TTL * RDF/XML * JSON * JSONLD * NTRIPLES]
- Administrative [TTL * RDF/XML * JSON * JSONLD * NTRIPLES]
- Technical [XML]
- Handle
- DOI
- OAI-PMH [Set * Record]

Data References

- Download file only
- Download 7IP (Ranit)

SOURCES

See [dhcrud_sources](#)

BUGTRACKING

See [dhcrud_bugtracking](#)

CHAPTER

FOUR

LICENCE

See [LICENCE](#)