

# National Metadata Directory and OAI-PMH

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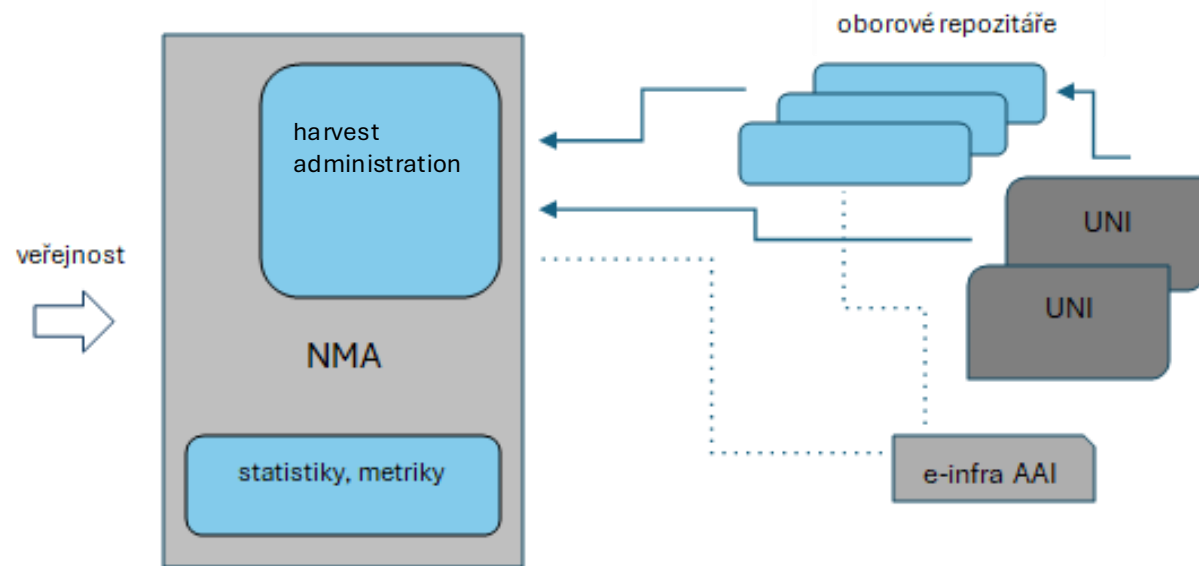


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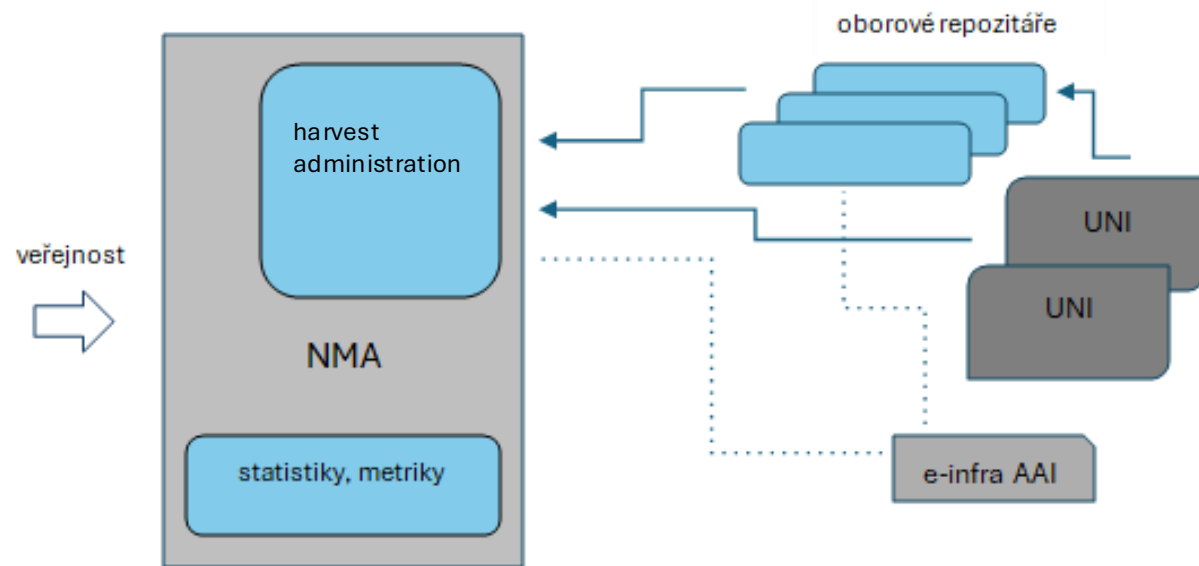
MINISTERSTVO ŠKOLSTVÍ,  
MLÁDEŽE A TĚLOVÝCHOVY

# Co je Národní metadatový adresář?



- Centrální bod a vyhledávací brána pro vědecké datové sady z českého výzkumu. Obsahuje informace o výzkumných datech jak z přírodních a technických věd, tak ze společenských a humanitních. Na jednom místě zde můžete prohledat mnoho vědeckých repozitářů všech oborů najednou pomocí základních metadat a přejít do původního oborového repozitáře pro přístup k datové sadě. Zdrojový repozitář může také nabízet vyhledávání podle podrobnějších kritérií nebo jiné specializované funkce.
- V digitální vědě je uspořádání dat do repozitářů důležitým krokem k vyšší kvalitě výzkumu a k mezinárodní spolupráci. Převážně jsou datové sady poskytovány na principu otevřeného přístupu, určitá část však z důvodu ochrany práv, obchodního zájmu nebo citlivých údajů může mít přístup omezen.

# What is the National Metadata Directory?



<http://nma.eosc.cz>

- A central point and search gateway for scientific datasets from Czech research. It contains information on research data from natural sciences and engineering as well as social sciences and humanities. In one place, you can search many scientific repositories of all disciplines here at once using basic metadata and navigate to the original disciplinary repository to access the dataset. The source repository may also offer searches by more detailed criteria or other specialised functionalities.
- In digital science, organising data into repositories is an important step towards higher quality research and international collaboration. For the most part, datasets are provided on an open access basis, but some may be restricted for reasons of rights protection, commercial interest or sensitive data.



# Open Archives Initiative Protocol for Metadata Harvesting

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Open Archives Initiative -> PMH

## ***Interoperability through Metadata Exchange***

The Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH) is a low-barrier mechanism for repository interoperability. *Data Providers* are repositories that expose structured metadata via OAI-PMH. *Service Providers* then make OAI-PMH service requests to harvest that metadata. OAI-PMH is a set of six verbs or services that are invoked within HTTP.

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## ***OAI-PMH Community Resources***

- [Ask questions, announce services, or make suggestions on the OAI-PMH Google group](#)
- [Date provider validation](#)
- [Service providers](#)
  - [Register as a service provider](#)
- [OAI-PMH Tools](#) - Software and tools for data providers and service providers.

## ***OAI-PMH Core Resources***

- [OAI-PMH Version 2.0 Specification](#)  
Describes the six OAI-PMH verbs, the XML schema for responses to verbs, and the underlying data model
- [Implementation Guidelines](#)  
A supplement to the OAI-PMH Version 2.0 Specification that includes guidelines for implementers and guidelines for specific application domains.
- [Static Repository Specification](#)  
Provides a simple approach for exposing relatively stable and small collections of metadata records through the OAI-PMH.

# Basic OAI-PMH requests

**OAI Identify to get OAI details:**

[https://\[OAI-PMH base URI\]?verb=Identify](https://[OAI-PMH base URI]?verb=Identify)

**OAI List Sets:**

[https://\[OAI-PMH base URI\]?verb=ListSets](https://[OAI-PMH base URI]?verb=ListSets)

**OAI List Metadata formats:**

[https://\[OAI-PMH base URI\]?verb=ListMetadataFormats](https://[OAI-PMH base URI]?verb=ListMetadataFormats)



# Aktivität I

(5 min)

Find OAI-PMH URI of any repository and query it in a browser for ListMetadataFormats





## Repository details

**LINDAT/CLARIAH-CZ repository**

## General

## Institutions

## Terms

## Standards

Persistent identifier  
system(s)

hdl

Name of the repository  
software

DSpace

Versioning

yes

Data citation guideline

<https://lindat.mff.cuni.cz/repository/xmlui/page/cite>

Quality management

yes

**Application programming interfaces (1)**

Type

OAI-PMH

Url

[https://centres.clarin.eu/oai\\_pmh](https://centres.clarin.eu/oai_pmh)**Alerting services (3)**Type of alerting  
service

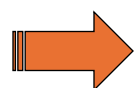
RSS

Type of alerting  
service

RSS

Type of alerting  
service

ATOM

<https://lindat.mff.cuni.cz/repository/server/oai/request>



Search records...

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# Featured communities



## Biodiversity Literature Repository

A community to share publications related to bio-systematics.

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REST API

OAI-PMH

Contribute

 GitHub

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Funded by

Powered by CERN Data Centre & InvenioRDM

Status

Privacy policy

Cookie policy

Terms of Use

Support

<https://zenodo.org/oai2d?verb=ListMetadataFormats>

 Metrics

38,454 Downloads

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The root dataverse.



Search this dataverse...



Advanced Search

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- ☐  Files (8,516)

**Dataverse Category**

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Organization or Institution (5)

Department (3)

Research Group (1)

**Publication Year**

2025 (475)

2024 (443)

2023 (291)

**License**

Custom Terms (1,179)

CC BY 4.0 (4)

CC0 1.0 (2)

**Author Name**

Červenka, Jan (209)

1 to 10 of 1,209 Results

 Sort

SYRI Over-indebtedness and disillusion in contemporary Czech democracy 2025



Oct 31, 2025 - SYRI

Šmatera, Václav, 2025, "SYRI Over-indebtedness and disillusion in contemporary Czech democracy 2025", <https://doi.org/10.14473/CSDA/VQ8IY0>, CSDA, V1

This study examined how the attitudes of people facing debt enforcement differ from those of the general Czech population regarding democracy, institutions, and politics.

Public demand for the rule of law in Hungary and the Czech Republic



Oct 19, 2025

Bakó, Beáta, 2025, "Public demand for the rule of law in Hungary and the Czech Republic", <https://doi.org/10.14473/CSDA/HL0XSA>, CSDA, V1, UNF:6:ctK4DI+I4o0T1ptRNgPH9A== [fileUNF]

This is a a representative empirical study where, instead of rating the importance of specific elements of the rule of law, respondents were asked to set up an order of priority between elements of democracy (majority rule) and the rule of law (counter-majoritarian institutions)....

Partisanship and lifestyle - conjoint experiment



Oct 8, 2025 - SYRI

Hrbková. Lenka; Voda, Petr, 2025, "Partisanship and lifestyle - conjoint experiment", <https://doi.org/10.14473/CSDA/A67SZL>, CSDA, V1

The data preparation was supported by NPO "Systemic Risk Institute" number LX22NPO5101, funded by European Union – Next Generation EU (Ministry of Education, Youth and Sports, NPO: EXCELES). The data gathering was conducted by Talk Online Panel. Data includes

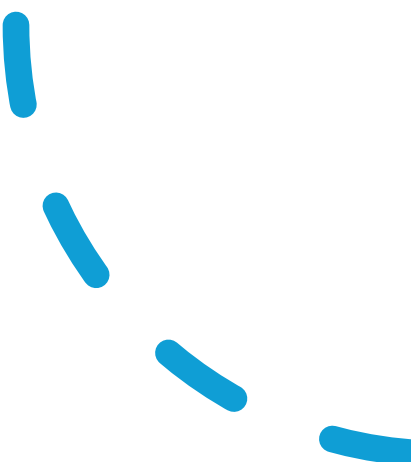
<https://archivdv.soc.cas.cz/oai?verb=ListMetadataFormats>



## Aktivitiy II

(5 min)

Query OAI-PMH URI of any repository in a browser for a record list in selected metadata format.



# OAI-PMH requests for records

**OAI List Identifiers where set spec is called “OAI\_example\_set”:**

[https://\[OAI-PMH base URI\]?verb=ListIdentifiers&metadataPrefix=oai\\_dc&set=OAI\\_example\\_set](https://[OAI-PMH base URI]?verb=ListIdentifiers&metadataPrefix=oai_dc&set=OAI_example_set)

**OAI List Identifiers by date where set spec is called “OAI\_example\_set”:**

[https://\[OAI-PMH base URI\]?verb=ListIdentifiers&metadataPrefix=oai\\_dc&set=OAI\\_example\\_set  
&from=2023-05-19T19:50:13Z&until=2023-05-31T19:50:13Z](https://[OAI-PMH base URI]?verb=ListIdentifiers&metadataPrefix=oai_dc&set=OAI_example_set&from=2023-05-19T19:50:13Z&until=2023-05-31T19:50:13Z)

## OAI List Records

[https://\[OAI-PMH base URI\]?verb=ListRecords](https://[OAI-PMH base URI]?verb=ListRecords) &... (other parameters similar to ListIdentifiers)

## OAI Get Specific Record

[https://\[OAI-PMH base URI\]?  
verb=GetRecord&identifier=oai:urm\\_oai:99182611100121&metadataPrefix=oai\\_dc](https://[OAI-PMH base URI]?verb=GetRecord&identifier=oai:urm_oai:99182611100121&metadataPrefix=oai_dc)

# CCMM OAI-PMH endpoint builders

OAI-PMH works with XML serialization of CCMM

**CCMM MetadataPrefix:** **ccmm-xml**

**CCMM Schema:**

<https://techlib.github.io/CCMM/dataset/schema.xsd>

(this link is for development version, see [ccmm.cz](https://ccmm.cz))

**CCMM Namespace:**

<https://schema.ccmm.cz/research-data/1.1>

(this is expected link to be published, see [ccmm.cz](https://ccmm.cz))

Repository software implementation needed

NRP documentation:

[https://docs.nrp.eosc.cz/en/docs/repo\\_admins/exports-to-nma](https://docs.nrp.eosc.cz/en/docs/repo_admins/exports-to-nma)

```
ns="http://www.openarchives.org/OAI/2.0/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
date="2025-07-29T10:58:19Z" />
<request verb="ListMetadataFormats">https://archivdv.soc.cas.cz/oai/</request>
<listMetadataFormats>
  <metadataFormat>
    <metadataPrefix>Datacite</metadataPrefix>
    <url>http://datacite.org/schema/kernel-4 http://schema.datacite.org/meta/kernel-4.5/metadata.x
    <namespace>http://datacite.org/schema/kernel-4</metadataNamespace>
  </metadataFormat>
  <metadataFormat>
    <metadataPrefix>oai_dc</metadataPrefix>
    <url>http://www.openarchives.org/OAI/2.0/oai_dc.xsd</schema>
    <namespace>http://www.openarchives.org/OAI/2.0/oai_dc/</metadataNamespace>
  </metadataFormat>
  <metadataFormat>
    <metadataPrefix>ccmm-xml</metadataPrefix>
    <url>https://techlib.github.io/CCMM/dataset/schema.xsd</schema>
    <namespace>https://schema.ccmm.cz/research-data/1.1</metadataNamespace>
  </metadataFormat>
</listMetadataFormats>
</OAI-PMH>
```

# CAUTION



# Advanced and Follow-up

## XSL Transformations

- Internal repository database metadata – OAI request metadata
- OAI Metadata – CCMM (optionally on NMA harvest)
- *Other...*

## Request granularity considerations

- Requests for all repository records can be very large and take too much time (especially when XSLT involved)
- Limit to accessions, batches
- Rate limiting: HTTP error 429 (too many requests), Resumption Tokens

## How to get CCMM metadata from NMA

- NMA OAI-PMH (TBA: 2026 CCMM 1.1 stable)
- NMA REST API

# Thank you for your attention.

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[nma.eosc.cz](http://nma.eosc.cz)



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