

Using Dataspecer to create Application Profiles

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Seminar CCMM: Model, Principles, Tools

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Prerequisites - Vocabularies

Vocabulary/Ontology

- List of term (class / property) IRIs, labels, definitions and relations
- Typically context-agnostic

Examples

- [Dublin Core](#)
- [SKOS](#)
- [DCAT](#)

Vocabulary:	DCMI Metadata Terms
URI	http://purl.org/dc/terms/Frequency
Label	Frequency
Definition	A rate at which something recurs.
Type of Term	Class

Vocabulary:	DCMI Metadata Terms
URI	http://purl.org/dc/terms/title
Label	Title
Definition	A name given to the resource.
Type of Term	Property
Has Range	http://www.w3.org/2000/01/rdf-schema#Literal
Subproperty of	Title (http://purl.org/dc/elements/1.1/title)

Prerequisites - APs

Application Profile (AP)

- Selection of terms from vocabularies and other APs to be used in a specific **context**
- Context-specific terminological adjustments
- Context-specific domains, ranges, cardinalities

In my context

- e.g. my repository for ABC

I use Dataset as defined in DCAT.

I use Title from Dublin Core on my Datasets, titles are mandatory

I use Subject from Dublin Core to connect my Datasets to Concepts as defined in SKOS. I call the relation “Is about”, and it is mandatory.

Dataset
profile of Dataset

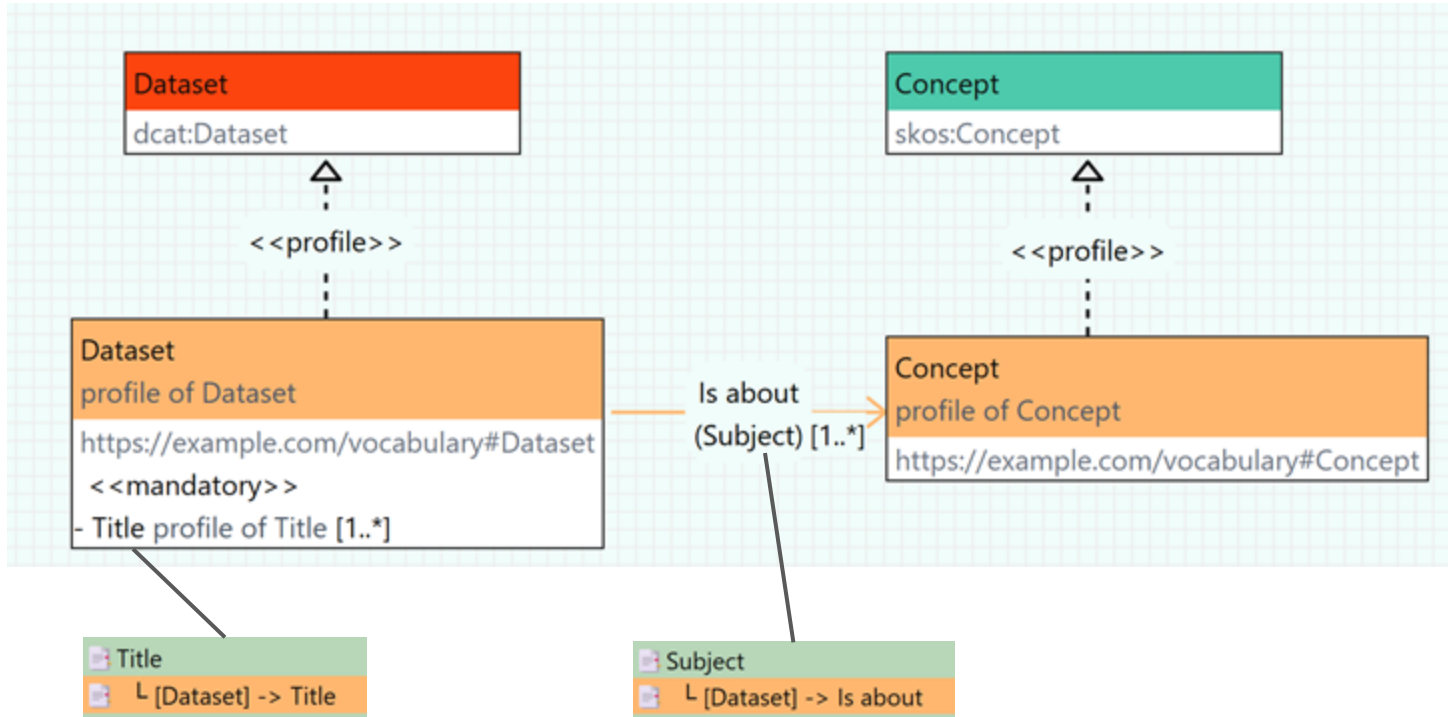
<https://example.com/vocabulary#Dataset>
<<mandatory>>
- Title profile of Title [1..*]

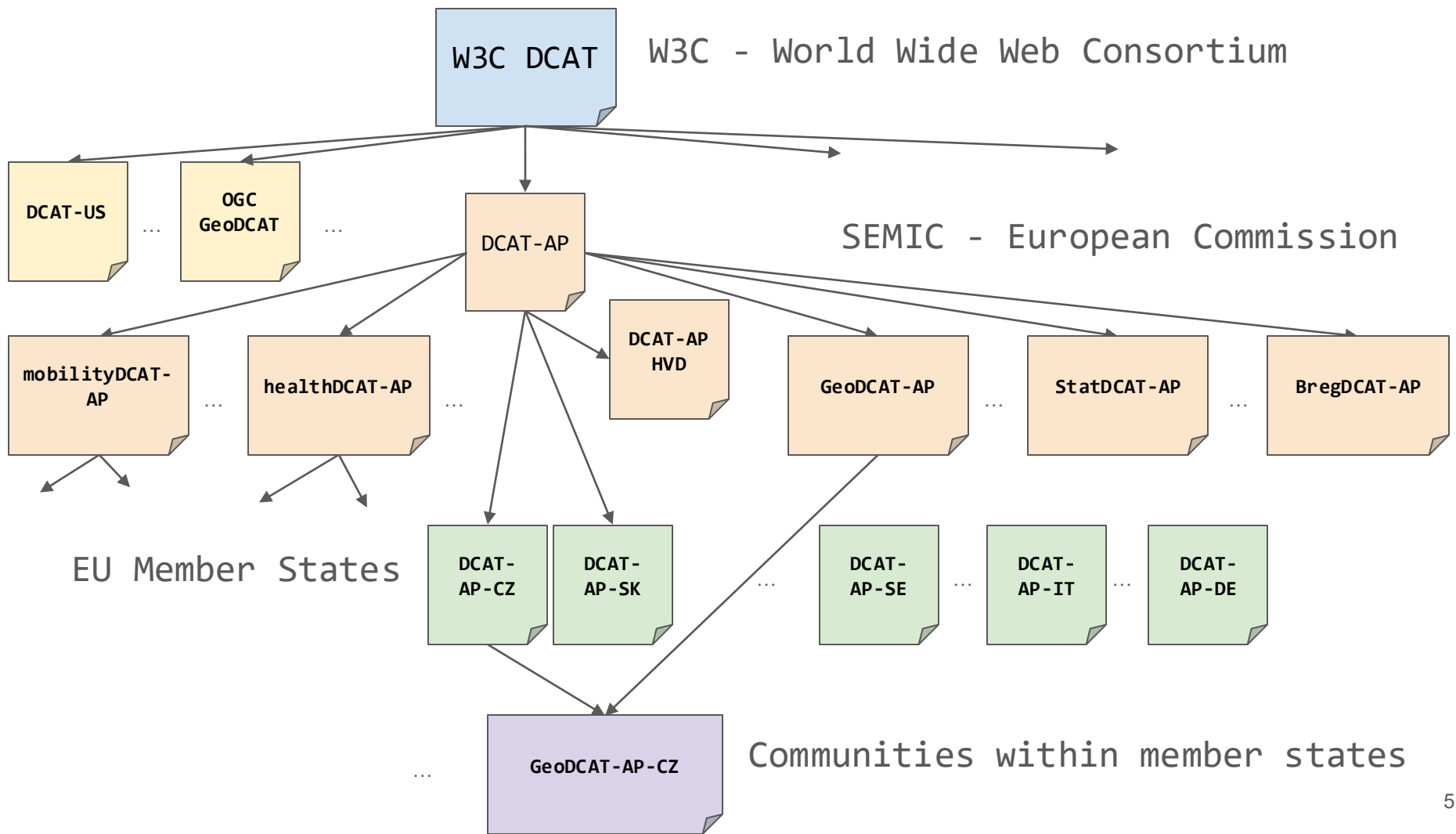
Is about
(Subject) [1..*]

Concept
profile of Concept
<https://example.com/vocabulary#Concept>

Prerequisites - APs

- DCAT - Data Catalog Vocabulary
- DCMI Metadata Terms
- SKOS Simple Knowledge Organization System
- Test





Before we go to Dataspecer...

...we need to know

1. What do we need to do
 - e.g. create a new Application Profile
 - what is the AP context
2. Which vocabularies and APs are we going to work with?
 - CCMM (AP)
 - something domain specific?
 - SKOS?
3. Which terms from which vocabularies/APs are relevant in our AP?
 - typically not all of them
4. Do we need to define new terms?
 - then we need to create a new vocabulary first

...but also

5. Are the reused vocabularies available in suitable formats, i.e. RDF using RDF Schema/OWL?
 - a. Yes - OK
 - b. No
 - i. Recreate in Dataspecer, or
 - ii. Transform to RDF Schema/OWL

Dataspecer outputs

Generated **human** readable specification

- Diagram
- Description of each term reuse
 - including profiling hierarchy
- Links to terms in their source specifications

§ 2.3 Agent

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2. Class profiles

2.1 Access rights

2.1.1 label

2.2 Address

2.2.1 address area

2.2.2 administrative unit level 1

2.2.3 administrative unit level 2

2.2.4 full address

2.2.5 label

2.2.6 locator designator

2.2.7 locator name

2.2.8 post code

2.2.9 post name

2.2.10 post office box

2.2.11 thoroughfare

2.3 Agent

2.3.1 has contact point

2.3.2 has identifier

2.3.3 name

2.4 Alternate title

2.4.1 has alternate title type

2.4.2 title

2.5 Alternate title type

2.5.1 label

2.6 Application profile

2.6.1 label

2.7 Checksum

2.7.1 checksum value

2.7.2 uses algorithm

Czech Core Metadata Model

15 September 2025

More details about this document.

Latest published version:
<https://www.ccl.org/bdd/>

Editor:
Catalogue

Abstract

This file documents Czech Core Metadata Model

§ 1. Overview

Profiled class	foaf:Agent
IRI(s)	
IRI	https://model.ccrmm.cz/research-data/Agent
Label	Agent
Definition	Any entity carrying out actions with respect to the entities Catalogue and the Catalogued Resources.
Profiles	class profile Agent (https://mff-uk.github.io/specifications/dcat-ap#Agent) Definition: Any entity carrying out actions with respect to the entities Catalogue and the Catalogued Resources. class profile Agent (https://mff-uk.github.io/specifications/dcat-dap#Agent) class Agent (foaf:Agent) Definition: An agent (eg. person, group, software or physical artifact).

Dataspecer outputs

Generated **machine** readable specification

- Description of each term reuse
- Relations to other specifications
- Relations of terms to terms from other specifications

This specification includes the following attachments.

Attachment	Link
Application profile	/dsv.ttl
XML schema	/agent/schema.xsd
XML schema	/distribution/schema.xsd

- (Optional) Technical artifacts

- XML Schemas
- JSON Schemas
- SHACL shapes
- ...

```
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
  xmlns:vc="http://www.w3.org/2007/XMLSchema-versioning"
  xmlns:ccmm="https://schema.ccmm.cz/research-data/1.0"
  xmlns:sawSDL="http://www.w3.org/ns/sawSDL" vc:minVersion="1.1" elementFormDefault="qualified" targetNamespace="https://schema.ccmm.cz/research-data/1.0">
  <xs:include schemaLocation="..../identifier/schema.xsd"/>
  <xs:import namespace="http://www.w3.org/XML/1998/namespace" schemaLocation="http://www.w3.org/XML/1998/namespace"/>
  <xs:include schemaLocation="..../contact-details/schema.xsd"/>
  <xs:include schemaLocation="..../organization/schema.xsd"/>
  <xs:complexType name="agent">
    <xs:choice>
      <xs:element name="organization">
        <xs:complexType base="xs:string" sawSDL:modelReference="http://www.w3.org/ns/prov#Organization http://xmlns.com/foaf/0.1/Agent">
          <xs:annotation>
            <xs:documentation xml:lang="en"> Organization - Represents a collection of people organized together into a community or other social,
            commercial or political structure. The group has some common purpose or reason for existence which goes beyond the set of people belonging to it and can act as an
            Agent. Organizations are often decomposable into hierarchical structures. </xs:documentation>
          </xs:annotation>
          <xs:sequence>
            <xs:element minOccurs="0" name="iri" type="xs:anyURI"/>
            <xs:element minOccurs="0" maxOccurs="unbounded" name="identifier" type="ccmm:identifier"
              sawSDL:modelReference="https://model.ccmm.cz/vocabulary/ccmm#hasIdentifier">
              <xs:annotation>
                <xs:documentation xml:lang="en"> has identifier - has identifier </xs:documentation>
              </xs:annotation>
            </xs:sequence>
          </xs:complexType>
        </xs:choice>
      </xs:complexType>
    </xs:choice>
  </xs:schema>
```


Q&A - Application Profiles

Next: Dataspecer

Dataspecer - how to run

1. Publicly available demo instance:
<https://demo.dataspecer.com>
 - no guarantees, anyone can do anything - good for testing
2. Anyone can test Dataspecer locally using Docker
 - `docker run -p3000:80 ghcr.io/dataspecer/ws`
 - Go to <http://localhost:3000/>
 - Projects will not survive container update like this! See [GitHub](#) for solution.
3. Can be deployed using Docker on a server



Creating a vocabulary
live demo?

Dataspecer packages ⓘ

Recently m

New project

Local models

Import

New package

Project Wizard

> 	test Directory	Created on 9/17/25	Changed on 9/17/25, 1:59 AM	15cce911-b5c1-4a9f-b0ea-1c640118a017	<>		+	⋮
> 	muj CCMM-AP Directory	Created on 9/3/25	Changed on 9/16/25, 11:37 PM	20f8105-298c-4869-8b0c-12e93cf83016	<>		+	⋮
> 	Muj AP Directory	Created on 9/3/25	Changed on 9/3/25, 1:09 PM	e128858-9d3c-4ea5-88fe-e3d1cc6ac372	<>		+	⋮
> 	Zoo  Directory	Created on 5/13/25	Changed on 8/31/25, 11:08 PM	6e5da437-5847-4551-a3c9-d393089319c4	<>		+	⋮
> 	test Directory	Created on 8/29/25	Changed on 8/29/25, 3:46 AM	e5c2c2e9-61fd-4552-9161-2d418df0fa47	<>		+	⋮



Vocabulary

Create and publish new RDF vocabulary, or any conceptual model, by reusing existing vocabularies on the internet.



Application Profile

Create and publish an application profile to an existing vocabulary on the internet by specifying usage of individual terms.



Data Schema

Create and publish a set of technical schemas and documentation to describe your data in JSON, XML or CSV formats.

Start a new project

Create a new vocabulary

Name*

My new vocabulary

Description

My new vocabulary for my specific domain

Base IRI

https://example.com/vocabulary#

Create

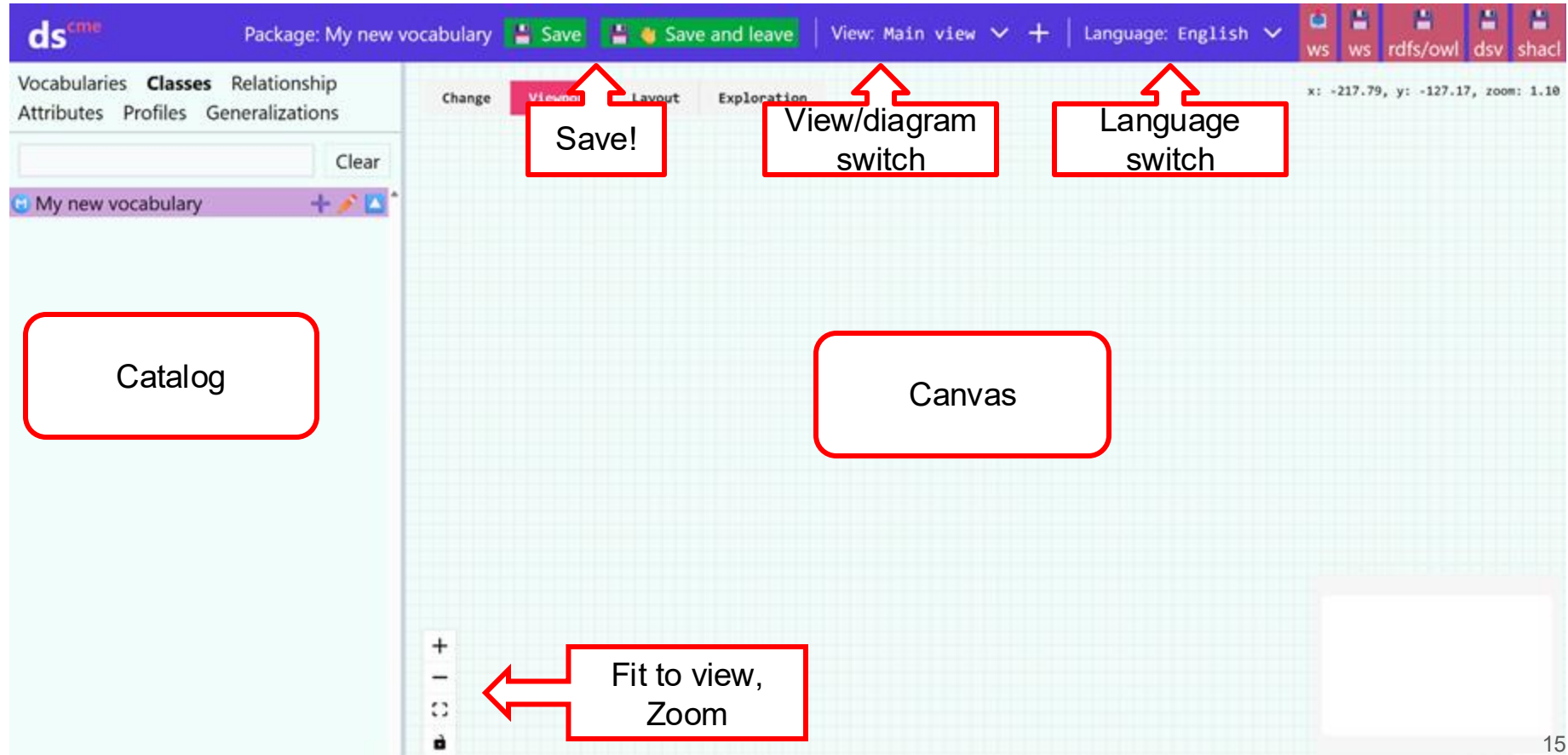
Vocabulary

Create and publish new RDF vocabularies, by reusing any conceptual model, by reusing existing vocabularies on the internet.

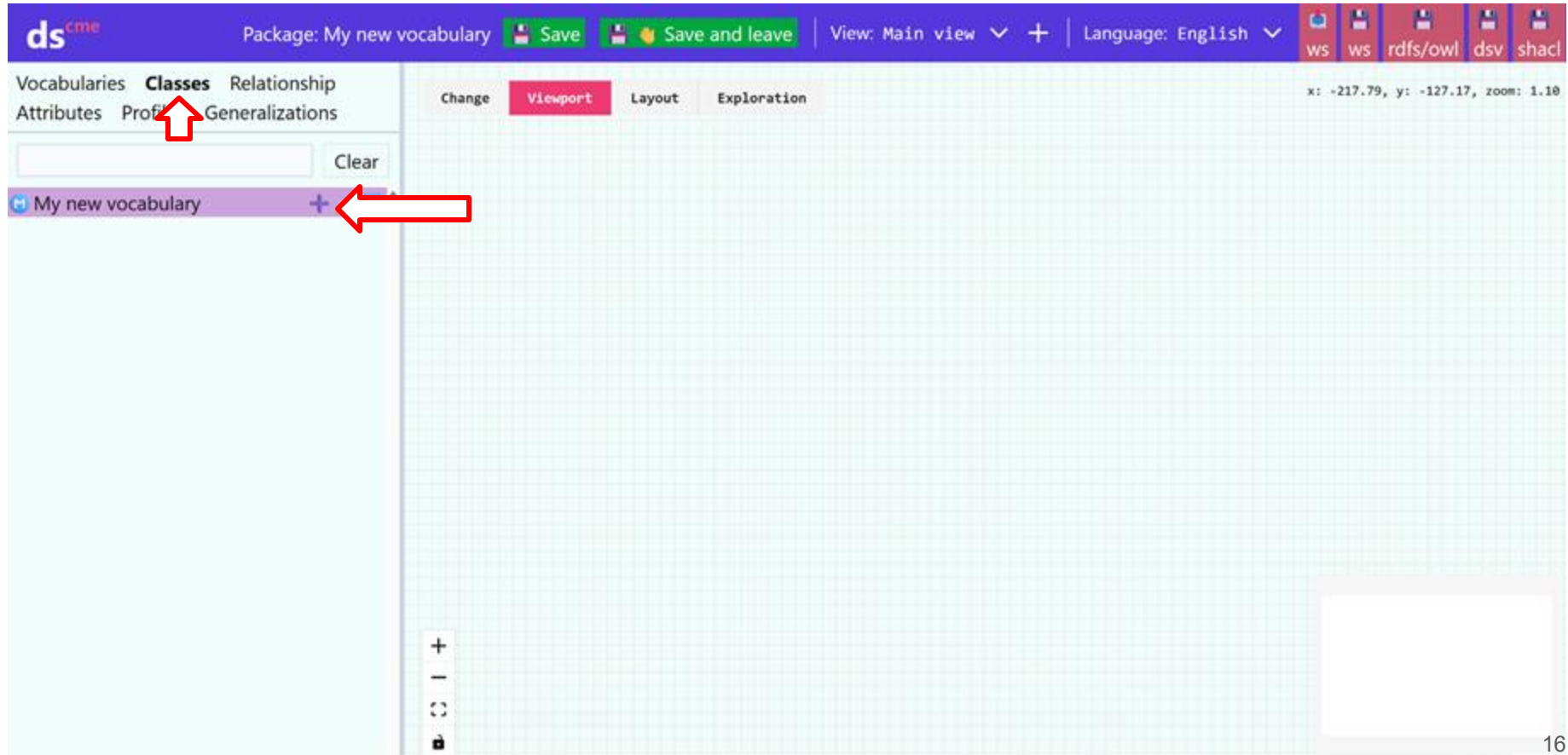
Data Schema

Create and publish a set of technical specifications and documentation to describe data in JSON, XML or CSV formats.

Dataspecer - (Conceptual) Model Editor



Dataspecer - (Conceptual) Model Editor



Dataspecer - (Conceptual) Model Editor

ds^{cme} Package: My new vocabulary  Save  Save and leave | View: Main view  + | Language: English   ws  ws  rdfs/owl  dsv  shacl

Vocabularies **Classes** Relationship
Attributes Profiles Gen

My new vocabulary

17.79, y: -127.17, zoom: 1.10

Create a new class

Model: My new vocabulary 

Name:  en 
Ludicrous Point

IRI: Absolute | Relative
LudicrousPoint

Specializations of: There is nothing to specialize

Definition: 

External documentation URL:

 Create  Cancel

Dataspecer - (Conceptual) Model Editor

The screenshot displays the Dataspecer Conceptual Model Editor interface. The top bar features the 'ds^{cme}' logo, the package name 'My new vocabulary', and buttons for 'Save' and 'Save and leave'. It also includes view and language settings. The left sidebar contains a 'Catalog' section with a search bar and a list of vocabularies: 'My new vocabulary', 'Ludicrous Point', 'Timely Law', and 'Zippy Program'. The main workspace is a 'Canvas' where three conceptual model elements are placed. Each element is a purple rectangle with a label and a URI: 'Ludicrous Point' with 'https://example.com/vocabulary#ludicrousPoint', 'Timely Law' with 'https://example.com/vocabulary#timelyLaw', and 'Zippy Program' with 'https://example.com/vocabulary#zippyProgram'. The interface includes various toolbars for editing and viewing, and a status bar at the bottom right showing coordinates and zoom level.

ds^{cme} Package: My new vocabulary Save Save and leave View: Main view + Language: English ws ws rdfs/owl dsv shacl

Vocabularies **Classes** Relationship Attributes Profiles Generalizations

Change Viewport Layout Exploration x: -217.79, y: -127.17, zoom: 1.10

Clear

My new vocabulary +

Ludicrous Point

Timely Law

Zippy Program

Catalog

Ludicrous Point
<https://example.com/vocabulary#ludicrousPoint>

Timely Law
<https://example.com/vocabulary#timelyLaw>

Zippy Program
<https://example.com/vocabulary#zippyProgram>

Canvas

Dataspecer - (Conceptual) Model Editor

The screenshot displays the Dataspecer Conceptual Model Editor interface. The top header bar is purple and contains the 'ds' logo, the package name 'My new vocabulary', and buttons for 'Save' and 'Save and leave'. It also shows 'View: Main view' and 'Language: English'. On the right side of the header, there are icons for different file formats: 'ws', 'ws', 'rdfs/owl', 'dsv', and 'shacl'.

On the left side, there is a sidebar with tabs for 'Vocabularies', 'Classes', 'Relationship', 'Attributes', 'Profiles', and 'Generalizations'. The 'Attributes' tab is selected. Below the tabs, there is a search bar with a red arrow pointing to it, and a list of vocabularies, including 'My new vocabulary'.

The main workspace has a light blue grid background. It features a toolbar with icons for information, edit, link, delete, and copy. Below the toolbar, there are three conceptual model elements, each represented by a purple box with a white border. The first element is 'Ludicrous Point' with the URI 'https://example.com/vocabulary#ludicrousPoint'. The second element is 'Timely Law' with the URI 'https://example.com/vocabulary#timelyLaw'. The third element is 'Zippy Program' with the URI 'https://example.com/vocabulary#zippyProgram'. A red arrow points to a plus sign icon located between the 'Timely Law' and 'Zippy Program' elements, indicating the action to add a new element.

ds^{cme} Package: My new vocabulary Save Save and leave View: Main view + Language: English

Vocabularies Classes Re Attributes Profiles Ger

My new vocabulary

Create a new attribute

Model: My new vocabulary

Name: en + Cheeky Issue

IRI: Absolute | Relative
cheekyIssue

Specializations of: There is nothing to specialize

Definition: +

Domain: Ludicrous Point

Range: rdfs:Literal

External documentation URL:

Create Cancel

ws rdfs/owl dsv shacl

x: 0.00, y: 0.00, zoom: 1.00

cabulary#timelyLaw

Vocabularies Classes Relationship
Attributes Profiles Generalizations

 Clear

My new vocabulary

Cheeky Issue

Lively Month

Change

Viewport

Layout

Exploration

x: 0.00, y: 0.00, zoom: 1.00

Ludicrous Point

<https://example.com/vocabulary#ludicrousPoint>

- Cheeky Issue

- Lively Month

Timely Law

<https://example.com/vocabulary#timelyLaw>

Zippy Program

<https://example.com/vocabulary#zippyProgram>

Vocabularies Classes Relationship
Attributes Profiles Generalizations

 Clear

My new vocabulary

Cheeky Issue

Lively Month

Change

Viewport

Layout

Exploration

x: 0.00, y: 0.00, zoom: 1.00



Ludicrous Point

<https://example.com/vocabulary#ludicrousPoint>

- Cheeky Issue

- Lively Month



Timely Law

<https://example.com/vocabulary#timelyLaw>

Zippy Program

<https://example.com/vocabulary#zippyProgram>

My new vocabulary

Cheeky Issue

Lively Month

Create connection

Type: Relationship | Generalization

Model: My new vocabulary

Source: Ludicrous Point

Target: Zippy Program

Name: en +

Fierce Law

IRI: absolute | relative

https://example.com/vocabulary#fierceLaw

Definition: +

Create

Discard

vocabulary#timelyLaw

Vocabularies Classes Relationship
Attributes Profiles Generalizations

 Clear

My new vocabulary

Cheeky Issue

Lively Month

Change

Viewport

Layout

Exploration

x: -20.38, y: -5.00, zoom: 1.00

Ludicrous Point

<https://example.com/vocabulary#ludicrousPoint>

- Cheeky Issue

- Lively Month

Fierce Law

Timely Law

<https://example.com/vocabulary#timelyLaw>

Zippy Program

<https://example.com/vocabulary#zippyProgram>

Vocabularies Classes Relationship

Attributes Profiles Generalizations

Change

Viewport

Layout

Exploration

x: -20.38, y: -5.00, zoom: 1.00

Create connection

Type: Relationship | **Generalization**Model: My new vocabulary 

Source: Zippy Program

Target: Timely Law

 Create Discard

ds^{cme}

Package: My new vocabulary

Save

Save and leave

View: Main view

+

Language: English

ws

ws

rdfs/owl

dsv

shacl

Vocabularies

Classes

Relationship

Attributes

Profiles

Generalizations

Clear

My new vocabulary

Cheeky Issue

Lively Month

Change

Viewport

Layout

Navigation

Save, leave

Ludicrous Point

https://example.com/vocabulary#ludicrousPoint

- Cheeky Issue

- Lively Month

Fierce Law

Timely Law

https://example.com/vocabulary#timelyLaw

Zippy Program

https://example.com/vocabulary#zippyProgram

Local models

Import

New package

Project Wizard

> 	My new vocabulary Directory	Created on 9/18/25	Changed on 9/18/25, 11:33 AM	2343bb24-dad6-418c-910b-70b169b7a2d9
> 	test Directory	Created on 9/17/25	Changed on 9/17/25, 1:59 AM	15cce911-b5c1-4a9f-b0ea-1c640118a017
> 	můj CCMM-AP Directory	Created on 9/3/25	Changed on 9/16/25, 11:37 PM	20ff8105-298c-4869-8b0c-12e93cf83016
> 	Můj AP Directory	Created on 9/3/25	Changed on 9/3/25, 1:09 PM	ef128858-9d3c-4ea5-88fe-e3d1cc6ac372
> 	Zoo   Directory	Created on 5/13/25	Changed on 8/31/25, 11:08 PM	6e5da437-5847-4551-a3c9-d393089319c4
> 	test Directory	Created on 8/29/25	Changed on 8/29/25, 3:46 AM	e5c2c2e9-61fd-4552-9161-2d418df0fa47
> 	Stenclák test Directory	Created on 4/24/25	Changed on 8/27/25, 10:54 PM	92b9d4a1-fb04-40e2-abe1-f2cec0356ba2
> 	Czech Core Metadata Model Directory	Created on 8/18/25	Changed on 8/18/25, 4:33 PM	4f4a337a-b13d-470f-b4d8-3a44d0a05b3f

<> 🔍 + ⋮

Export specification

Show documentation (en)

Modify documentation template

Preview specification

Rename

Modify raw data

Remove

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- 1. Overview
- 2. Classes
 - 2.1 Ludicrous Point
 - 2.2 Timely Law
 - 2.3 Zippy Program
- 3. Properties
 - 3.1 Cheeky Issue
 - 3.2 Fierce Law
 - 3.3 Lively Month
- 4. Used prefixes
- 5. Attachments

My new vocabulary

18 September 2025

▼ More details about this document

Latest published version:

<https://www.w3.org/todo/>

Editor:

[Dataspecer](#)

Abstract

This file documents **My new vocabulary**.

§ 1. Overview



```
@prefix owl: <http://www.w3.org/2002/07/owl#>.
@prefix prof: <http://www.w3.org/ns/dx/prof/>.
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#>.
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>.
@prefix : <https://example.com/vocabulary#>.
```

```
<https://example.com/vocabulary#> a owl:Ontology, prof:Profile.
:ludicrousPoint a owl:Class, rdfs:Class;
  rdfs:label "Ludicrous Point"@en;
  rdfs:isDefinedBy <https://example.com/vocabulary#>.
:fierceLaw a rdf:Property, owl:ObjectProperty;
  rdfs:label "Fierce Law"@en;
  rdfs:isDefinedBy <https://example.com/vocabulary#>;
  rdfs:domain :ludicrousPoint;
  rdfs:range :zippyProgram.
:livelyMonth a rdf:Property, owl:DatatypeProperty;
  rdfs:label "Lively Month"@en;
  rdfs:isDefinedBy <https://example.com/vocabulary#>;
  rdfs:domain :ludicrousPoint;
  rdfs:range rdfs:Literal.
:cheekyIssue a rdf:Property, owl:DatatypeProperty;
  rdfs:label "Cheeky Issue"@en;
  rdfs:isDefinedBy <https://example.com/vocabulary#>;
  rdfs:domain :ludicrousPoint;
  rdfs:range rdfs:Literal.
:timelyLaw a owl:Class, rdfs:Class;
  rdfs:label "Timely Law"@en;
  rdfs:isDefinedBy <https://example.com/vocabulary#>.
:zippyProgram a owl:Class, rdfs:Class;
  rdfs:label "Zippy Program"@en;
  rdfs:isDefinedBy <https://example.com/vocabulary#>;
  rdfs:subClassOf :timelyLaw.
```

▼ Local models

📁 Import

📁 New package

🔧 Project Wizard

> 📁	My new vocabulary Directory	Created on 9/18/25	Changed on 9/18/25, 11:40 AM	2343bb24-dad6-418c-910b-70b169b7a2d9	<>	🔧	+	⋮
> 📁	test Directory	Created on 9/17/25	Changed on 9/17/25, 1:59 AM	15cce911-b5c1-4a9f-b0ea-1c640118a017	<>		+	⋮
> 📁	můj CCMM-AP Directory	Created on 9/3/25	Changed on 9/16/25, 11:37 PM	20ff8105-298c-4869-8b0c-12e93cf83016				
> 📁	Můj AP Directory	Created on 9/3/25	Changed on 9/3/25, 1:09 PM	ef128858-9d3c-4ea5-88fe-e3d1cc6ac372				
> 📁	Zoo 🇨🇪 🇧🇪 🇨🇿 Directory	Created on 5/13/25	Changed on 8/31/25, 11:08 PM	6e5da437-5847-4551-a3c9-d393089319c4	<>	🔧	+	⋮
> 📁	test Directory	Created on 8/29/25	Changed on 8/29/25, 3:46 AM	e5c2c2e9-61fd-4552-9161-2d418df0fa47	<>	🔧	+	⋮
> 📁	Stenclák test Directory	Created on 4/24/25	Changed on 8/27/25, 10:54 PM	92b9d4a1-fb04-40e2-abe1-f2cec0356ba2	<>	🔧	+	⋮
> 📁	Czech Core Metadata Model Directory	Created on 8/18/25	Changed on 8/18/25, 4:33 PM	d54a372a-b13d-479f-b8d8-2ce4c9a06b25	<>	🔧	+	⋮

Open Model Editor

Relations to existing vocabularies?

Vocabularies Classes Relationship
Attributes Profiles Generalizations

Clear

My new vocabulary



Change

Viewport

Layout

Exploration

x: -6.00, y: 19.00, zoom: 1.00

Ludicrous Point

<https://example.com/vocabulary#ludicrousPoint>

- Cheeky Issue
- Lively Month

Fierce Law

Timely Law

<https://example.com/vocabulary#timelyLaw>

Zippy Program

<https://example.com/vocabulary#zippyProgram>

Vocabularies Classes Relationship
Attributes Profiles Generalizations

Change

Viewport

Layout

Exploration

x: -6.00, y: 19.00, zoom: 1.00

Clear

My new vocabulary



Add vocabulary

Vocabulary from URL

Well-known vocabularies

Create new vocabulary

Vocabulary Turtle file (*.ttl) URL:

<https://www.w3.org/ns/dcat3.ttl>

Alias:

dcat



Add vocabulary

Vocabulary from URL

Well-known vocabularies

Create new vocabulary

Select vocabulary from bellow to import. You can import multiple at once.

- ☐ ADMS - Asset Description Metadata Schema
- ☐ Core Location Vocabulary - Legacy version
- ☐ Core Location Vocabulary 2.1.0
- ☐ DCAT - Data Catalog Vocabulary
- ☐ DCAT-AP vocabulary, the r5r namespace
- ☐ DCMI Metadata Terms
- ☐ European Legislation Identifier (ELI)
- ☐ FOAF (Friend of a Friend) Vocabulary
- ☐ ODRL Version 2.2
- ☐ OWL 2 - Web Ontology Language
- ☐ Profiles Vocabulary
- ☐ RDFS - Resource Description Framework

Vocabularies **Classes** Relationship
Attributes Profiles Generalizations

 Clear

- DCAT - Data Catalog
 - Vocabulary
 - Catalog
 - Catalog Record
 - Catalogued resource
 - Data service
 - Dataset
 - Catalog
 - Dataset series
 - Data service
 - Dataset
 - Catalog
 - Dataset series
 - Dataset series
 - Distribution
 - Relationship
 - Role
 - My new vocabulary
 - Ludicrous Point

Change

Viewport

Layout

Exploration

x: -6.00, y: 19.00, zoom: 1.00

Ludicrous Point

<https://example.com/vocabulary#ludicrousPoint>

- Cheeky Issue
- Lively Month

Fierce Law

Timely Law

<https://example.com/vocabulary#timelyLaw>

Zippy Program

<https://example.com/vocabulary#zippyProgram>

ds^{cme}

Package: My new vocabulary

Save

Save and leave

View: Main view

+

Language: English

ws

ws

rdfs/owl

dsv

shacl

Vocabularies

Classes

Relationship

Attributes

Profiles

Generalizations

Clear

DCAT - Data Catalog

Vocabulary

Catalog

Catalog Record

Catalogued resource

└ Data service

└ Dataset

└ Catalog

└ Dataset series

Data service

Dataset

└ Catalog

└ Dataset series

Dataset series

Distribution

Relationship

Role

My new vocabulary

Ludicrous Point

Change

Viewport

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Exploration

x: -6.00, y: 19.00, zoom: 1.00

Ludicrous Point

https://example.com/vocabulary#ludicrousPoint

- Cheeky Issue

- Lively Month

Dataset

dcat:Dataset

Fierce Law

Timely Law

https://example.com/vocabulary#timelyLaw

Zippy Program

https://example.com/vocabulary#zippyProgram

“Show/hide”

Vocabularies **Classes** Relationship
Attributes Profiles Generalizations

 Clear

- DCAT - Data Catalog
 - Vocabulary
 - Catalog
 - Catalog Record
 - Catalogued resource
 - Data service
 - Dataset
 - Catalog
 - Dataset series
 - Ludicrous
 - Point
 - Data service
 - Dataset
 - Catalog
 - Dataset series
 - Ludicrous Point
 - Dataset series
 - Distribution
 - Relationship

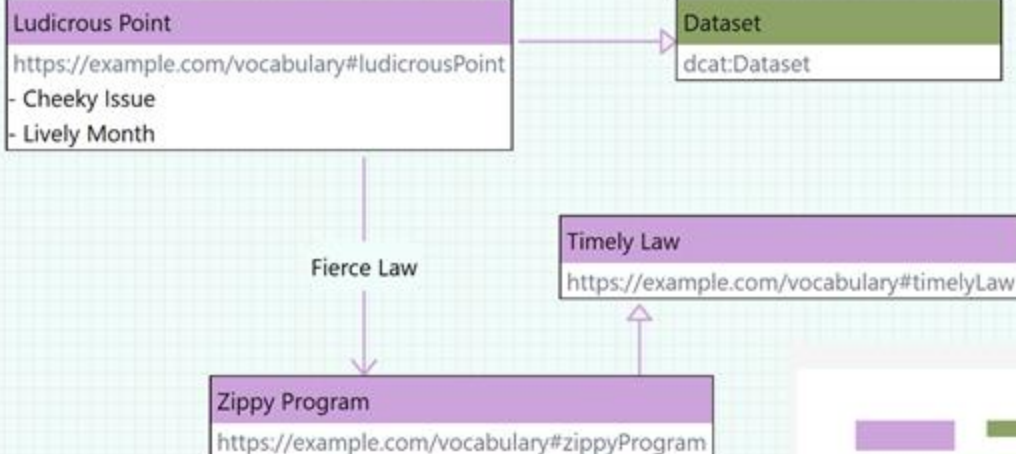
Change

Viewport

Layout

Exploration

x: -6.00, y: 19.00, zoom: 1.00



§ 2.1 Ludicrous Point

IRI <https://example.com/vocabulary#ludicrousPoint>

Label Ludicrous Point

Subclass of [Dataset](#)

← → ↻ w3.org/ns/dcat#Dataset



DCAT 3 Vocabulary

This is a namespace for use with [Data Catalog Vocabulary \(DCAT\) Version 3](#)

This version

<http://www.w3.org/ns/dcat>

Latest version

<http://www.w3.org/ns/dcat/>

Date

2024-09-22

Revision

3.0

Author

David Browning, Riccardo Albertoni

Contributors

W3C Data Exchange Working Group (DXWG)

Q&A - Vocabularies in Dataspecer

Next: Application profiles in Dataspecer

Creating an application profile

live demo?

Local models

Import New package Project Wizard

>	My new vocabulary	Directory	Created on 9/18/25	Changed on 9/18/25, 11:40 AM	2343bb24-dad6-418c-910b-70b169b7a2d9	<>	📦	+	⋮
>	test	Directory	Created on 9/17/25	Changed on 9/17/25, 1:59 AM	15cce911-b5c1-4a9f-b0ea-1c640118a017	<>	📦	+	⋮
>	műj CCMM-AP	Directory	Created on 9/3/25	Changed on 9/16/25, 11:37 PM	20ff8105-298c-4869-8b0c-12e93cf83016	<>	📦	+	⋮
>	Műj AP	Directory	Created on 9/3/25	Changed on 9/3/25, 1:09 PM	ef128858-9d3c-4ea5-88fe-e3d1cc6ac372	<>	📦	+	⋮
>	Zoo 🐘 🐘	Directory	Created on 5/13/25	Changed on 8/31/25, 11:08 PM	6e5da437-5847-4551-a3c9-d393089319c4	<>	📦	+	⋮
>	test	Directory	Created on 8/29/25	Changed on 8/29/25, 3:46 AM	e5c2c2e9-61fd-4552-9161-2d418df0fa47	<>	📦	+	⋮
>	Stenclák test	Directory				<>	📦	+	⋮

Start a new project



Vocabulary

Create and publish new RDF vocabulary, or any conceptual model, by reusing existing vocabularies on the internet.



Application Profile

Create and publish an application profile to an existing vocabulary on the internet by specifying usage of individual terms.



Data Schema

Create and publish a set of technical schemas and documentation to describe your data in JSON, XML or CSV formats.

← → ↺ model.ccmm.cz/research-data/en/

Czech Core Metadata

15 September 2025

▼ More details about this document

Latest published version:
<https://www.w3.org/todo/>

Editor:
[Dataspecer](#)

Create an application profile

Enter the URL of the specification on the internet from which a new application profile will be created. The specification is imported into the newly created package.

URL*

<https://model.ccmm.cz/research-data/en/>

Name

My new CCMM profile

Description

My new CCMM profile for my very specific context

Base IRI

<https://example.com/profile/profile#>

Create

Vocabularies

Classes

Relationship

Attributes

Profiles

Generalizations

Clear

core-location				
core-location-ap				
Czech Core Metadata Model				
Czech Core Metadata Vocabulary				
DataCite				
DCAT 3 Default Application				
Profile				
DCAT-AP 3.0.1 based on DCAT 3				
DAP				
dcat3				
dcat3				
dublin_core_terms				
dublin_core_terms				
eli				
foaf				
legacy_adms				
legacy_adms				
legacy_adms				
legacy_locn				
model				
My new CCMM profile				
ns				
ns				
ODRL22				

Change

Viewport

Layout

Exploration

x: 50.31, y: -190.74, zoom: 2.00

+

-

↺

↻

ds^{cmm} Package: My new CCMM profile Save Save and leave | View: View for My new CCMM profile + | Language: English ▼ ws ws rdfs/owl dsv shacl

Vocabularies **Classes** Relationship Attributes
Profiles ←

Clear

- core-location
- core-location-ap
- Czech Core Metadata Model
 - Access rights
 - [Access rights] -> label
 - Address
 - [Address] -> address area
 - [Address] -> administrative unit
 - level 1
 - [Address] -> administrative unit
 - level 2
 - [Address] -> full address
 - [Address] -> label
 - [Address] -> locator designator
 - [Address] -> locator name
 - [Address] -> post code
 - [Address] -> post name
 - [Address] -> post office box
 - [Address] -> thoroughfare
 - Agent
 - [Agent] -> has contact point
 - [Agent] -> has identifier
 - [Agent] -> name
 - Alternate title

Change Viewport Layout Exploration

x: 170.22, y: -23.75, zoom: 1.43

+
-
↺
↻

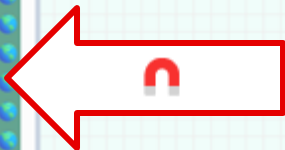
Alternative 1: Pick what to profile

ds^{cme} Package: My new CCMM profile **Save** **Save and leave** View: View for My new CCMM profile **+** Language: English **ws ws rdfs/owl dsv shacl**

Vocabularies Classes Relationship Attributes
Profiles Generalizations

Change **Viewport** Layout Exploration x: 170.22, y: -23.75, zoom: 1.43

Clear

- [Checksum] -> uses algorithm
- Checksum algorithm
- Contact details
- [Contact details] -> data box
- [Contact details] -> email
- [Contact details] -> has address
- [Contact details] -> phone
- Data service
- [Data service] -> endpoint URL
- [Data service] -> label
- Dataset 
- [Dataset] -> has alternate title
- [Dataset] -> has description
- [Dataset] -> has distribution
- [Dataset] -> has funding
- reference
- [Dataset] -> has identifier
- [Dataset] -> has location
- [Dataset] -> has other language
- [Dataset] -> has primary language
- [Dataset] -> has provenance
- [Dataset] -> has related resource
- [Dataset] -> has resource type
- [Dataset] -> has subject

ds^{cmo}

Package: My new CCMM profile

Save

Save and leave

View: View for My new CCMM profile

Language: English

ws

ws

rdfs/owl

dsv

shacl

Vocabularies
Classes
Relations
Profiles
Generalizations

[Checksum] -> uses algorithm
Checksum algorithm
Contact details
[Contact details] -> data box
[Contact details] -> email
[Contact details] -> has address
[Contact details] -> phone
Data service
[Data service] -> endpoint URL
[Data service] -> label
Dataset
[Dataset] -> has alternate title
[Dataset] -> has description
[Dataset] -> has distribution
[Dataset] -> has funding
reference
[Dataset] -> has identifier
[Dataset] -> has location
[Dataset] -> has other language
[Dataset] -> has primary language
[Dataset] -> has provenance
[Dataset] -> has related resource
[Dataset] -> has resource type
[Dataset] -> has subject

Create a class profile

Model:
My new CCMM profile

Profile of:
Dataset [Czech Core Metadata Model]

Name:
es en it cs fr el ar ja da
☐ Change in profile

IRI:
Absolute | Relative
Dataset

Specializations of:
There is nothing to specialize

Definition:
ja en cs it es fr el ar da
☐ Change in profile

A collection of data, published or curated by a single source, and available for access or download in one or more representations.

Usage note:
☐ Change in profile

External documentation URL:

Role:
Undefined

Create

Cancel

x: 170.22, y: -23.75, zoom: 1.43

Vocabularies Classes Relationship Attributes
Profiles Generalizations

Change

Viewport

Layout

Exploration

x: 170.22, y: -23.75, zoom: 1.43

Clear

- [Checksum] -> uses algorithm
- Checksum algorithm
- Contact details
- [Contact details] -> data box
- [Contact details] -> email
- [Contact details] -> has address
- [Contact details] -> phone
- Data service
- [Data service] -> endpoint URL
- [Data service] -> label
- Dataset
- ↳ Dataset
- [Dataset] -> has alternate title
- [Dataset] -> has description
- [Dataset] -> has distribution
- [Dataset] -> has funding
- reference
- [Dataset] -> has identifier
- [Dataset] -> has location
- [Dataset] -> has other language
- [Dataset] -> has primary language
- [Dataset] -> has provenance
- [Dataset] -> has related resource
- [Dataset] -> has resource type

Dataset

profile of Dataset

<https://example.com/profile/profile#Dataset>

ds^{cme}

Package: My new CCMM profile

Save

Save and leave

View: View for My new CCMM profile

+

Language: English

ws

ws

rdfs/owl

dsv

shacl

Vocabularies

Classes

Relationship

Attributes

Profiles

Generalizations

has d

Clear

Czech Core Metadata Model

[Dataset] -> has description

[Dataset] -&; has distribution

[Description] -> has description

type

[Distribution - data service] ->

has documentation

[Time reference] -> has date type

DCAT 3 Default Application Profile

[Dataset] -> distribution

[Dataset] -> dataset

distribution

[Dataset] -> has distribution

DCAT-AP 3.0.1 based on DCAT 3 DAP

[Dataset] -> dataset distribution

[Dataset] -> has distribution

[Distribution] -> documentation

[Distribution - data service] ->

has documentation

Change

Viewport

Layout

Exploration

x: 170.22, y: -23.75, zoom: 1.43

Dataset

profile of Dataset

<https://example.com/profile/profile#Dataset>

Distribution

profile of Distribution

<https://example.com/profile/profile#Distribution>

Create a new relationship profile

Model: My new CCMM profile

Profile of: has distribution [Czech Core Metadata Model]

Name: en has distribution ☐ Change in profile

Domain: Dataset

IRI: Absolute | Relative
Dataset.hasDistribution

Specializations of: There is nothing to specialize

Definition: en fr cs es it el ar ja da ☐ Change in profile
An available Distribution for the Dataset.

Usage note: en ☐ Change in profile
For the distribution of data in the form of files use instances of class Distribution – downloadable file. For the distribution of data through service use instance of class

Domain cardinality: 0..* 0..1 1..* 1..1 ☐ Change in profile

Range: Distribution

Range cardinality: 0..* 0..1 1..* 1..1 ☒ Change in profile

External documentation URL:

Mandatory level: Mandatory

☒ Create

☒ Cancel

ds

Package: My new CCMM profile

Save

Save and leave

View: View for My new CCMM profile

Language: English

ws

ws

rdfs/owl

dsv

shacl

Vocabularies

Classes

Relationship

Attributes

Profiles

Generalizations

has d

Clear

[Dataset] -> has validation result

[Dataset] -> is described by

[Dataset] -> publication year

[Dataset] -> qualified relation

[Dataset] -> title

[Dataset] -> version

Date type

[Date type] -> label

Description

[Description] -> description text

[Description] -> has description type

Description type

[Description type] -> label

Distribution

↳ Distribution

Distribution - data service

[Distribution - data service] -> conforms to specification

[Distribution - data service] -> description

[Distribution - data service] -> has access service

[Distribution - data service] -> has documentation

Distribution - downloadable file

[Distribution - downloadable file] -> access URL

[Distribution - downloadable file] -> byte size

Change

Viewport

Layout

Exploration

x: 170.22, y: -24.75, zoom: 1.43

Dataset

profile of Dataset

https://example.com/profile/profile#Dataset

has distribution

[1..*]

Distribution

profile of Distribution

https://example.com/profile/profile#Distribution

+

-

↺

↻

React Flow

has d

Clear

- core-location
- core-location-ap
- Czech Core Metadata Model
- Access rights
- [Access rights] -> label
- Address
- [Address] -> address area
- [Address] -> administrative unit level 1
- [Address] -> administrative unit level 2
- [Address] -> full address
- [Address] -> label
- [Address] -> locator designator
- [Address] -> locator name
- [Address] -> post code
- [Address] -> post name
- [Address] -> post office box
- [Address] -> thoroughfare
- Agent
- [Agent] -> has contact point
- [Agent] -> has identifier
- [Agent] -> name
- Alternate title
- [Alternate title] -> has alternate title type
- [Alternate title] -> title
- Alternate title type
- [Alternate title type] -> label
- Application profile
- [Application profile] -> label
- Checksum

Dataset

profile of Dataset

<https://example.com/profile/profile#Dataset>

< <recommended> >

- title profile of title [1..1]

has distribution

[1..*]

Distribution

profile of Distribution

<https://example.com/profile/profile#Distribution>

Local models

📁 Import

📁 New package

🔧 Project Wizard

> 📁	My new CCMM profile Directory				<>	🔗 + ⋮
	Created on 9/18/25	Changed on 9/18/25, 12:23 PM	b7202e46-08ad-4c4a-a7b7-468f88a40a42			
> 📁	My new vocabulary Directory				<>	📄 Export specification
	Created on 9/18/25	Changed on 9/18/25, 11:40 AM	2343bb24-dad6-418c-910b-70b169b7a2d9			📄 Show documentation (en)
> 📁	test Directory				<>	📄 Modify documentation template
	Created on 9/17/25	Changed on 9/17/25, 1:39 AM	15cce911-b5c1-4a9f-b0ea-1c640118a017			📄 Import from url
> 📁	műj CCMM-AP Directory				<>	🔄 Backup to file
	Created on 9/3/25	Changed on 9/16/25, 11:37 PM	20ff8105-298c-4869-8b0c-12e93cf83016			📄 Duplicate
> 📁	Műj AP Directory				<>	✏️ Rename
	Created on 9/3/25	Changed on 9/3/25, 1:09 PM	ef128858-9d3c-4ea5-88fe-e3d1cc6ac372			📄 Modify raw data
> 📁	Zoo 🇷🇺 🇧🇪 Directory				<>	🗑️ Remove
	Created on 5/13/25	Changed on 8/31/25, 11:08 PM	6e5da437-5847-4551-a3c9-d393089319c4			
> 📁	test Directory				<>	
	Created on 8/29/25	Changed on 8/29/25, 3:46 AM	e5c2c2e9-61fd-4552-9161-2d418df0fa47			
> 📁	Stenchiák test Directory				<>	
	Created on 4/24/25	Changed on 8/27/25, 10:54 PM	92b9d4a1-fb04-40e2-abe1-f2cec0356ba2			
> 📁	Czech Core Metadata Model Directory				<>	🔗 + ⋮

	Abstract
1.	Overview
2.	Class profiles
2.1	Dataset
2.1.1	has distribution
2.1.2	title
2.2	Distribution
3.	Used prefixes
4.	Attachments

My new CCMM profile

18 September 2025

ReSpec

► More details about this document

Abstract

This file documents **My new CCMM profile**.

§ 1. Overview



Alternative 2:
Profile everything first, then clean up

ds^{cme} Package: My full CCMM profile Save Save and leave View: View for My full CCMM profile + Language: English ws ws rdfs/owl dsv shacl

Vocabularies Cl Profiles Generalizations

Change Viewport Layout Exploration x: 31.42, y: 24.12, zoom: 0.95

Clear

- core-location
- core-location-ap
- Czech Core Metadata Model
- Czech Core Metadata Vocabulary
- DataCite
- DCAT 3 Default Application
- Profile
- DCAT-AP 3.0.1 based on DCAT 3
- DAP
- dcat3
- dcat3
- dublin_core_terms

The screenshot shows the ds.cme web application interface. At the top, there is a header bar with the ds.cme logo, a package name 'My full CCMM profile', and buttons for 'Save' and 'Save and leave'. There are also view and language settings. Below the header, the main content area is divided into sections. On the left, there is a sidebar with a search bar and a list of vocabularies. The 'Czech Core Metadata Vocabulary' is highlighted with a red arrow. The 'Czech Core Metadata Model' is also highlighted with a red arrow. The main area on the right shows a grid view of the selected vocabulary.

ds^{cme} Package: My full CCMM profile Save Save and leave View: View for My full CCMM profile + Language: English

Vocabularies Classes Relationship Attributes
Profiles Generalizations

Change Viewport Layout Exploration

x: 31.42, y: 24.12, zoom: 0.95

core-location
core-location-ap
Czech Core Metadata Model
Czech Core Metadata Vocabulary
DataCite
DCAT 3 Default Application

ds^{cme} Package: My full CCMM profile Save Save

Vocabularies Profiles Classes Relationship Attributes
Profiles Generalizations

Change Viewport Layout Exploration

x: 31.42, y: 24.12, zoom: 0.95

model
My full CCMM profile
Access rights
[Access rights] -> label
Address
[Address] -> address area
[Address] -> administrative unit
level 1
[Address] -> administrative unit
level 2
[Address] -> full address
[Address] -> label
[Address] -> locator designator
[Address] -> locator name
[Address] -> post code
[Address] -> post name

ds^{cme} Package: My full CCMM profile Save Save

Vocabularies Profiles Classes Relationship Attributes
Profiles Generalizations

Change Viewport Layout Exploration

x: 31.42, y: 24.12, zoom: 0.95

dublin_core_terms
dublin_core_terms
eli
foaf
legacy_adms
legacy_adms
legacy_adms
legacy_locn
model
My full CCMM profile
ns

&

Vocabularies

Classes

Relationship

Attributes

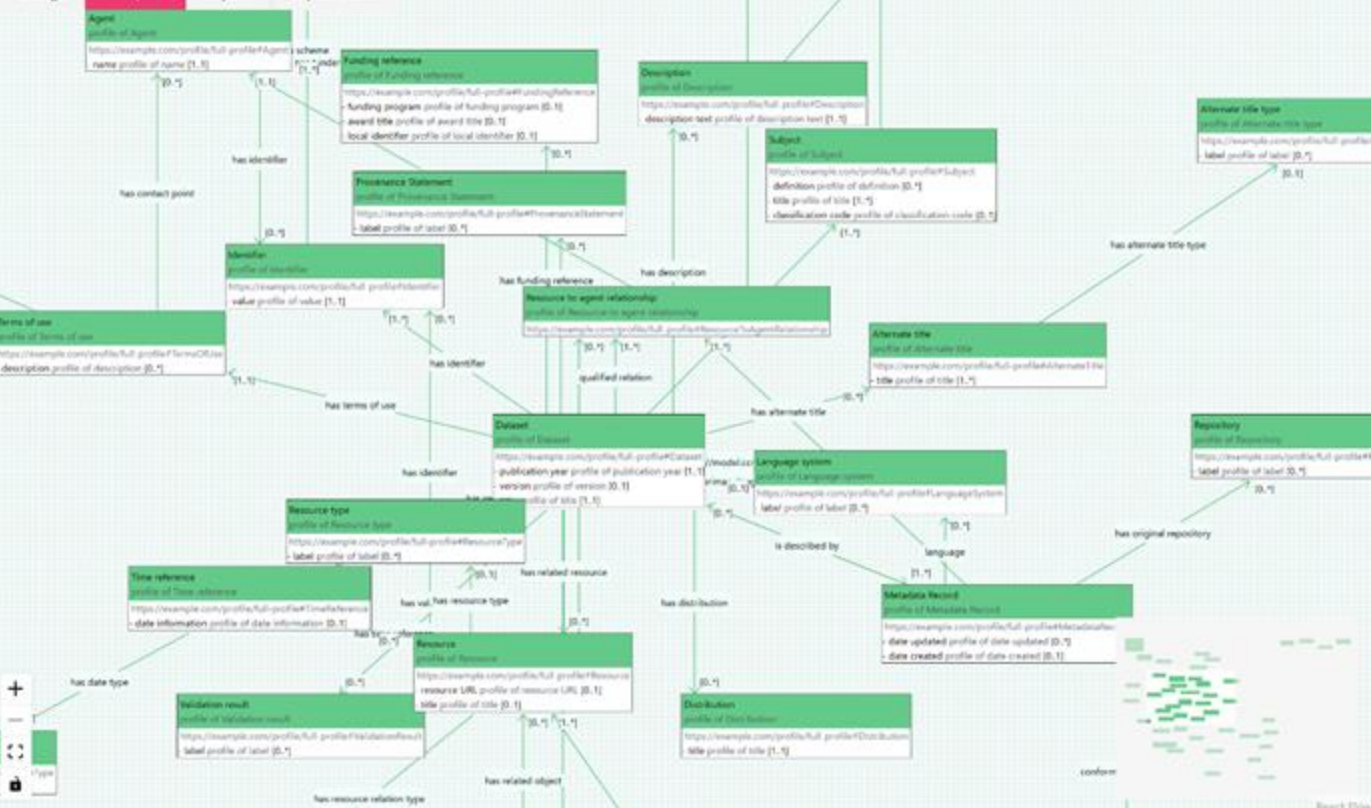
Profiles

Generalizations

Clear

DCAT-AP 3.0.1 based on DCAT 3	
dcat3	
dcat3	
dublin_core_terms	
dublin_core_terms	
eli	
foaf	
legacy_adms	
legacy_adms	
legacy_locn	
model	
My full CCMM profile	
ns	
ns	
ODRL22	
prov	
prov-o	
r5r	
r5r	
rdf	
rdfs	
rdfs	
skos	

Change Viewport Layout Exploration



AP: Adding more specifications to profile

ds^{cme} Package: My new CCMM profile Save Save and leave View: View for My new CCMM profile + Language: English WS

Vocabularies Classes Relationship Attributes
Profile Generalizations

Change Viewport Layout Exploration

Add vocabulary

Vocabulary from URL Vocabularies Create new vocabulary

Vocabulary Turtle file (*.ttl) URL:
https://www.w3.org/ns/dcat3.ttl

Alias:
dcat

Be warned, that the import is not optimized for large files.

✓ Add vocabulary(s) ✕ Cancel

For Non-Dataspecer vocabularies in RDF files using RDFS/OWL

The screenshot shows the 'ds.cme' web interface. At the top, there's a navigation bar with the logo, package name 'My new CCMM profile', and buttons for 'Save' and 'Save and leave'. Below this is a sub-header with 'Vocabularies', 'Classes', 'Relationship', and 'Attributes'. A red arrow points to the 'Vocabularies' tab. The main area displays a list of vocabularies on the left and a 'Add vocabulary' dialog on the right. The dialog has a 'Vocabulary from URL' button, a text input for the 'Vocabulary Turtle file (*.ttl) URL' containing 'https://www.w3.org/ns/dcat3.ttl', and an 'Alias' input containing 'dcat'. Red arrows point to each of these three fields. At the bottom of the vocabulary list, there is a '+' button, which is also pointed to by a red arrow. A large red-bordered box on the right contains the text 'For Non-Dataspecer vocabularies in RDF files using RDFS/OWL'. At the bottom right, there are buttons for 'Add vocabulary(s)' and 'Cancel'.

▼ Local models

📁 Import

📁 New package

🔧 Project Wizard

> 📁	My full CCMM profile	Directory				<>	🔗	+	⋮
	Created on 9/18/25	Changed on 9/18/25, 12:47 PM	ce5353cc-9acb-43e4-8671-8c8e82e65f64						
> 📁	My new CCMM profile	Directory				<>	🔗	+	⋮
	Created on 9/18/25	Changed on 9/18/25, 12:23 PM	b7202e46-08ad-4c4a-a7b7-468f88a40a42						
> 📁	My new vocabulary	Directory				<>			
	Created on 9/18/25	Changed on 9/18/25, 11:40 AM	2343bb24-dad6-418c-910b-70b169b7a2d9						
> 📁	test	Directory				<>			
	Created on 9/17/25	Changed on 9/17/25, 1:59 AM	15cce911-b5c1-4a9f-b0ea-1c640118a017						
> 📁	múj CCMM-AP	Directory				<>			
	Created on 9/3/25	Changed on 9/16/25, 11:37 PM	20ff8105-298c-4869-8b0c-12e93cf83016						
			a5-88fe-e3d1cc6ac372						
			651-a3c9-d393089319c4			<>			
			52-9161-2d418df0fa47			<>			
						<>			

- 📄 Export specification
- 📄 Show documentation (en)
- 📄 Modify documentation template
- 📄 Import from url
- 🔄 Backup to file
- 📄 Duplicate
- ✎ Rename
- 📄 Modify raw data
- 🗑 Remove

For Dataspecer generated
vocabulary/AP specifications
(or their previews!!)

Import specification(s)

URL

File

URL*

https://demo.dataspecer.com/api/preview/en/index.html?iri=2343bb24-dad6-418c-910b-70b169b7a2d9

Import

ds^{cmo} Package: My new CCMM profile Save Save and leave | View: View for My new CCMM profile + | Language: English ▾ ws ws rdfs/owl dsv shacl

Vocabularies **Classes** Relationship Attributes
Profiles Generalizations

Clear

- legacy_adms
- legacy_adms
- legacy_adms
- legacy_locn
- model
- My new CCMM profile**
- My new vocabulary
- Ludicrous Point
- Timely Law
- ↳ Zippy Program
- Zippy Program
- ns
- ns
- ODRL22
- prov
- prov-o
- r5r
- r5r
- rdf
- rdfs
- rdfs
- skos
- skos
- spdx-ontology

Change **Viewport** Layout Exploration x: 0.00, y: 0.00, zoom: 1.00

Dataset
profile of Dataset
`https://example.com/profile/profile#Dataset`
<<recommended>>
- title profile of title [1..1]

has distribution
[1..*]

Distribution
profile of Distribution
`https://example.com/profile/profile#Distribution`

ds

Package: My new CCMM profile

Save

Save and leave

View: View for My new CCMM profile

Language: English

ws

ws

rdfs/owl

dsv

shacl

Vocabularies

Classes

Relationship

Attributes

Profiles

Generalizations

Clear

Agent

Agent

Agent

Agent

Organization

Person

Organization

Group

Organization

Organization

Person

Person

Class

Agent Class

Class

Datatype

Document

Document

Documentation

Document

Image

PersonalProfileDocument

Group

Image

Change

Viewport

Layout

Exploration

x: 0.00, y: 0.00, zoom: 1.00

Dataset

profile of Dataset

https://example.com/profile/profile#Dataset

<<recommended>>

title profile of title [1..1]

has distribution

[1..*]

Distribution

profile of Distribution

https://example.com/profile/profile#Distribution

Ludicrous Point

profile of Ludicrous Point

https://example.com/profile/profile#ludicrousPoint

+

-

↔

🗑️

ds cm Package: My new CCMM profile Save Save and leave | View: View for My new CCMM profile + | Language: English ▼ ws ws rdfs/owl dsv shacl

Vocabularies Classes **Relationship** Attributes
Profiles Generalizations

Clear

Change Viewport Layout Exploration x: 0.00, y: 0.00, zoom: 1.00

L [Data service] -> format
 L [Distribution] -> format
 L [Distribution] -> format
 L [Distribution -
 ownloadable file] -> has format
 Has Format
 Has Part
 L [Cataloged Resource] -> has
 art
 L [Catalogue] -> has part
 Has Version
 Instructional Method
 Is Format Of
 Is Part Of
 Is Referenced By
 L [Cataloged Resource] -> is
 referenced by
 L [Dataset] -> is referenced by
 Is Replaced By
 Is Required By
 Is Version Of
 Language
 L [Cataloged Resource] ->
 language

Dataset
 profile of Dataset
<https://example.com/profile/profile#Dataset>
 <<recommended>>
 - title profile of title [1..1]

has distribution
[1..*]

Distribution
 profile of Distribution
<https://example.com/profile/profile#Distribution>

Ludicrous Point
 profile of Ludicrous Point
<https://example.com/profile/profile#ludicrousPoint>

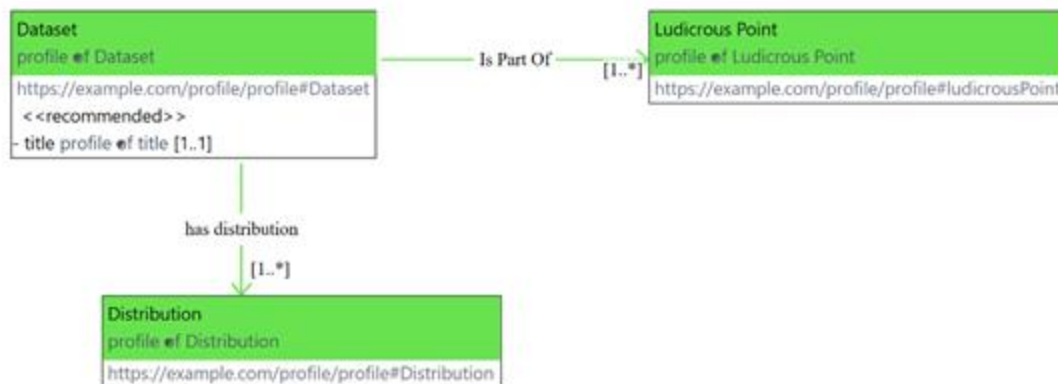
The screenshot shows the 'ds cm' software interface. On the left, a sidebar lists various relationships, with 'Is Part Of' highlighted by a red arrow. The main workspace displays a diagram with two green boxes: 'Dataset' (profile of Dataset) and 'Distribution' (profile of Distribution). A green arrow labeled 'has distribution' with a cardinality of '[1..*]' connects them. A second green box, 'Ludicrous Point' (profile of Ludicrous Point), is also shown. The top bar includes package information, save buttons, a view dropdown, language settings, and a toolbar with icons for workspace, rdfs/owl, dsv, and shacl. The bottom right corner shows a zoomed-in view of the diagram elements.

Clear

TABLE OF CONTENTS

Abstract

1. Overview
2. Class profiles
 - 2.1 Dataset
 - 2.1.1 has distribution
 - 2.1.2 Is Part Of
 - 2.1.3 title
 - 2.2 Distribution
 - 2.3 Ludicrous Point
3. Used prefixes
4. Attachments



Profiled class [dcat:Dataset](#)

IRI(s)

IRI <https://example.com/profile/profile#Dataset>

Label Dataset

Definition A collection of data, published or curated by a single source, and available for access or download in one or more representations.

Hierarchy ▶ profiles class profile [Dataset](#) (<https://model.ccmz.cz/research-data/Dataset>)
Definition: *A collection of data, published or curated by a single source, and available for access or download in one or more representations.*

▶ profiles class [Dataset](#) ([dcat:Dataset](#))
Definition: *A collection of data, published or curated by a single source, and available for access or download in one or more representations.*

▶ specializes class [Catalogued resource](#) ([dcat:Resource](#))
Definition: *Resource published or curated by a single agent.*

§ 2.3 Ludicrous Point

Profiled class <https://example.com/vocabulary#ludicrousPoint>

IRI(s)

IRI <https://example.com/profile/profile#ludicrousPoint>

Label Ludicrous Point

Hierarchy ▶ profiles class [Ludicrous Point](https://example.com/vocabulary#ludicrousPoint) (<https://example.com/vocabulary#ludicrousPoint>)

▶ specializes class [Dataset](#) ([dcat:Dataset](#))

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Abstract

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 - 2.1 Ludicrous Point
 - 2.2 Timely Law
 - 2.3 Zippy Program

§ 2.1 Ludicrous Point

IRI <https://example.com/vocabulary#ludicrousPoint>

Label Ludicrous Point

Subclass of [Dataset](#)

Dataspecer - additional features

Dataspecer packages ⓘ

Recently modified first



en

Local models

Import

New package

Project Wizard

>	My new CCMM profile	Directory	Created on 9/18/25	Changed on 9/18/25, 1:07 PM	b7202e46-08ad-4c4a-a7b7-468f98a	<>	⚙	+	:
>	My full CCMM profile	Directory	Created on 9/18/25	Changed on 9/18/25, 12:47 PM	ce5353cc-		⚙	+	:
>	My new vocabulary	Directory	Created on 9/18/25	Changed on 9/18/25, 11:40 AM	2343bb24-dad6-418c-910b-70b169b7a2d9				
>	test	Directory	Created on 9/17/25	Changed on 9/17/25, 1:59 AM	15cce911-b5c1-4a9f-b0ea-1c640118a017				
>	můj CCMM-AP	Directory	Created on 9/3/25	Changed on 9/16/25, 11:37 PM	20ff810f-				
>	Můj AP	Directory	Created on 9/3/25	Changed on 9/3/25, 1:09 PM	ef12885f-				
>	Zoo	Directory	Created on 5/13/25	Changed on 8/31/25, 11:08 PM	6e5da437-5847-4551-a3c9-d393089319c4				
>	test	Directory	Created on 8/29/25	Changed on 8/29/25, 3:46 AM	e5c2c2e9-61fd-4552-9161-2d418df0fa47				
>	Stenclák test	Directory	Created on 4/24/25	Changed on 8/27/25, 10:54 PM	92b9d4a1-fb04-40e2-abe1-f2cec0356ba2				

From zip file = Restore
(need to delete original first)

Backup
(zip file)

- Import specification
- Show documentation (en)
- Modify documentation template
- Import from url
- Backup to file
- Duplicate
- Rename
- Modify raw data
- Remove

Dataspecer - additional features

Dataspecer packages ⓘ

↓ Recently modified first



en

Local models

Import

New package

Project Wizard

>	My new CCMM profile	Directory	Created on 9/18/25	Changed on 9/18/25, 1:07 PM	b7202e46-08ad-4c4a-a7b7-468f6c	<>	⚙	+	:
>	My full CCMM profile	Directory	Created on 9/18/25	Changed on 9/18/25, 12:47 PM	ce5353cc-		⚙	+	:
>	My new vocabulary	Directory	Created on 9/18/25	Changed on 9/18/25, 11:40 AM	2343bb24				
>	test	Directory	Created on 9/17/25	Changed on 9/17/25, 1:59 AM	15cce911-b5c1-4a9f-b0ea-1c640118a017				
>	můj CCMM-AP	Directory	Created on 9/3/25	Changed on 9/16/25, 11:37 PM	20ff8105-298c-4869-8b0c-12e93cf83016				
>	Můj AP	Directory	Created on 9/3/25	Changed on 9/3/25, 1:09 PM	ef128858-9d3c-4ea5-88fe-e3d1cc6ac372				
>	Zoo	Directory	Created on 5/13/25	Changed on 8/31/25, 11:08 PM	6e5da437-5847-4551-a3c9-d393089319c4				
>	test	Directory	Created on 8/29/25	Changed on 8/29/25, 3:46 AM	e5c2c2e9-61fd-4552-9161-2d418df0fa47				
>	Stenclák test	Directory	Created on 4/24/25	Changed on 8/27/25, 10:54 PM	92b9d4a1-fb04-40e2-abe1-f2cec0356ba2				

From URL - import existing
Dataspecer-based
specification (e.g. CCMM)

- Import specification
- How documentation (en)
- Modify documentation template
- Import from url
- Backup to file
- Duplicate
- Rename
- Modify raw data
- Remove

Dataspecer - additional features

Dataspecer packages ⓘ

⏴ Recently modified first



🌐 en

Local models

📁 Import

📁 New package

🔧 Project Wizard

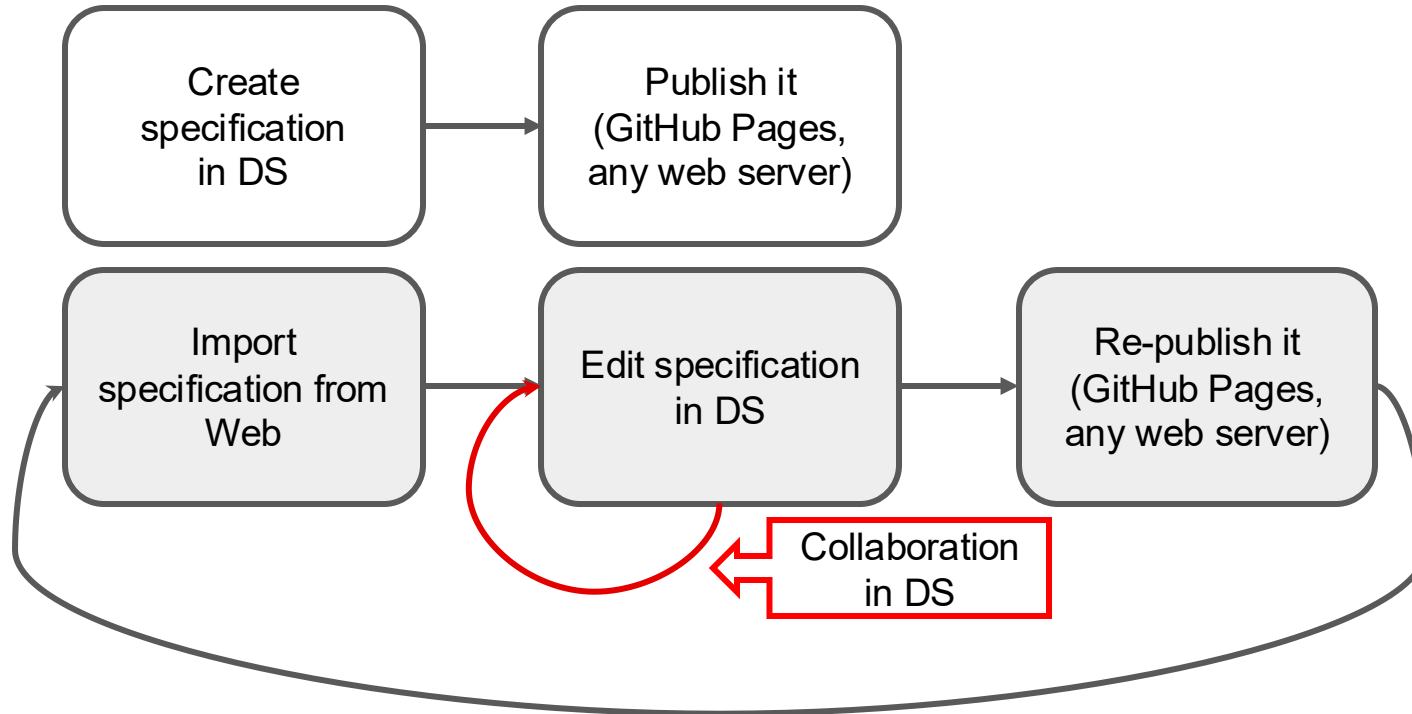
>	📁	My new CCMM profile	Directory	Created on 9/18/25	Changed on 9/18/25, 1:07 PM	b7202e46-08ad-4c4a-a7b7-468f88a40a42	<>	📄	+	⋮
>	📁	My full CCMM profile	Directory	Created on 9/18/25	Changed on 9/18/25, 12:47 PM	ce5353cc-9acb-43e4-8671-8c8e82e65f64	<>	📄	+	⋮
>	📁	My new vocabulary	Directory	Created on 9/18/25	Changed on 9/18/25, 11:40 AM	2343bb2				
>	📁	test	Directory	Created on 9/17/25	Changed on 9/17/25, 1:59 AM	15cce91				
>	📁	můj CCMM-AP	Directory	Created on 9/3/25	Changed on 9/16/25, 11:37 PM	20ff8105				
>	📁	Můj AP	Directory	Created on 9/3/25	Changed on 9/3/25, 1:09 PM	ef128858-9d3c-4ea5-88fe-e3d1cc6ac372				
>	📁	Zoo	Directory	Created on 5/13/25	Changed on 8/31/25, 11:08 PM	6e5da437-5847-4551-a3c9-d393089319c4				
>	📁	test	Directory	Created on 8/29/25	Changed on 8/29/25, 3:46 AM	e5c2c2e9-61fd-4552-9161-2d418df0fa47				
>	📁	Stenčlák test	Directory	Created on 4/24/25	Changed on 8/27/25, 10:54 PM	92b9d4a1-fb04-40e2-abe1-f2cec0356ba2				

Human-readable
documentation
customization

- 📄 Export specification
- 📄 Show documentation (en)
- 📄 Modify documentation template
- 📄 Import from url
- 🔄 Backup to file
- 📄 Duplicate
- ✎ Rename
- 📄 Modify raw data
- 🗑 Remove

Dataspecer - typical workflow

Dataspecer (DS) - typical workflow



We have an application profile

What next?

Dataspecer - data structures

live demo?

▼ Local models

📁 Import

📁 New package

🔧 Project Wizard

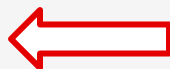
> 📁	My new CCMM profile Directory	Created on 9/18/25	Changed on 9/18/25, 1:07 PM	b7202e46-0	Data structures	<>	📁	+	⋮
> 📁	My full CCMM profile Directory	Created on 9/18/25	Changed on 9/18/25, 12:47 PM	ce5353cc-9acb-43e4-8671-8c8e82e65f64		<>	📁	+	⋮
> 📁	My new vocabulary Directory	Created on 9/18/25	Changed on 9/18/25, 11:40 AM	2343bb24-dad6-418c-910b-70b169b7a2d9		<>	📁	+	⋮
> 📁	test Directory	Created on 9/17/25	Changed on 9/17/25, 1:59 AM	15cca911-b5c1-4a9f-b0ea-1c640118a017		<>	📁	+	⋮

My new CCMM profile



COPY IRI

+ CREATE DATA STRUCTURE



Reused data specifications



SET REUSED DATA SPECIFICATIONS

Generate artifacts

CONFIGURE ARTIFACTS

GENERATE .ZIP FILE

GENERATE WITH RELATIVE PATHS

Data structure editor

[ARTIFACTS](#)[SET ROOT ELEMENT](#)

Start by clicking on **set root element** button to set class as a root of the schema.

Version: @ 2025-09-10 10:42:41

Class search

Dataset **My new CCMM profile**

A collection of data, published or curated by a single source, and available for access or download in one or more repre...



Data structure editor

[ARTIFACTS](#)[SET ROOT ELEMENT](#)

Dataset

Data structure for Dataset. Collection of data, published or curated by a single source, and available for access or download in one or more representations.

Dataset (datová_sada)

Add interpreted surroundings

Ancestors

Dataset **My new CCMM profile** 

Attributes

**title** **My new CCMM profile**

A name given to the dataset.



Associations

**Is Part Of** **My new CCMM profile** → Ludicrous Point

A related resource in which the described resource is physically or logically included.

**has distribution** **My new CCMM profile** → Distribution

An available Distribution for the Dataset.



Backward associations

There are no associations available.

[CLOSE](#)[CONFIRM \(3\)](#)

Data structure editor

ARTIFACTS

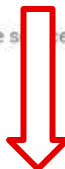
SET ROOT ELEMENT

Dataset

Data structure for Dataset. A collection of data, published or curated by a single source, and available for access or download in one or more representations.

Dataset (datová_sada)

- title(title): String [1..1]
- Is Part Of (is_part_of): Ludicrous Point (ludicrous_point) [1..*]
- has distribution (has_distribution): Distribution (distribuce) [1..*]



Add interpreted surroundings

Ancestors

Ludicrous Point

My new CCMM profile



Attributes

There are no attributes available.

Associations

There are no associations available.

Backward associations



Is Part Of My new CCMM profile ← Dataset

A related resource in which the described resource is physically or logically included.



CLOSE

CONFIRM (1)

Data structure editor

[🖨️ ARTIFACTS](#)[🔗 SET ROOT ELEMENT](#)

Dataset

Data structure for Dataset. A collection of data, published or curated by a single source, and available for access or download in one or more representations.

▼ Dataset (datová_sada)

— **title** (title): String [1..1]

 ▼ **Is Part Of** (is_part_of): Ludicrous Point (ludicrous_point) [1..*]

— **backwards association Is Part Of** (is_part_of): Dataset (datová_sada) [0..*]

— **has distribution** (has_distribution): Distribution (distribuce) [1..*]

Data structure editor

Dataset

Data structure for Dataset. A collection of data, published or curated by a single source, and available for access or download in one or more representations.

Dataset (datová_sada)

— **title** (title): String
[1..1]

— **Is Part Of** (is_part_of):

Ludicrous Point (ludicrous_point) [1..*]

— **has distribution** (has_distribution): **Distribution** (distribution) [1..*]

schema.json

```
{
  "$schema": "https://json-schema.org/draft/2020-12/schema",
  "$id": "/my-new-ccmm-profile/schema.json",
  "title": "Datová sada",
  "description": "Kolekce dat poskytovaná či řízená jedním z",
  "type": "object",
  "required": [
    "id",
    "type",
    "title",
    "is_part_of",
    "has_distribution"
  ],
  "properties": {
    "id": {
      "type": "string",
      "format": "iri"
    },
    "type": {
      "type": "string",
      "format": "iri"
    },
    "title": {
      "type": "string"
    },
    "is_part_of": {
      "type": "string",
      "format": "iri"
    },
    "has_distribution": {
      "type": "array",
      "items": {
        "type": "string",
        "format": "iri"
      }
    }
  }
}
```

Generate artifacts

- | | |
|---|---|
| ☒ JSON schema |    |
| ☐ JSON-LD context |    |
| ☐ JSON examples |    |
| ☐ XSD schema |    |
| ☐ CSV schema |    |
| ☐ RDF-to-CSV |    |
| ☐ SPARQL |    |
| ☐ SHACL |    |
| ☐ ShEx |    |

[CLOSE](#)

Data structure editor

Dataset

Data structure for Dataset. A collection of data, published or curated by a single source, and available for access or download in one or more representations.

Dataset (datová_sada)

- **title** (title): String [1..1]
- **Is Part Of** (is_part_of): Ludicrous Point (ludicrous_point) [1..*]
- **has distribution** (has_distribution): Distribution (distribution) [1..*]

schema.xsd

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:sawSDL="http://www.w3.org/2001/XMLSchema" >
  <xs:complexType name="datová_sada" sawSDL:modelReference="dataset">
    <xs:annotation>
      <xs:documentation xml:lang="ar">
        مجموعة بيانات منشورة أو مجموعة من قبل مصدر ما و متاح الوصول إليها أو تحميلها
      </xs:documentation>
      <xs:documentation xml:lang="cs">
        Datová sada - Kolekce dat poskytovaná či řízená jednou entitou
      </xs:documentation>
      <xs:documentation xml:lang="da">
        Dataset - En samling af data, udgivet eller udvalgt af en enkelt kilde
      </xs:documentation>
      <xs:documentation xml:lang="el">
        Σύνολο Δεδομένων - Μία συλλογή από δεδομένα, δημοσιεύεται ή διαχειρίζεται από μία πηγή
      </xs:documentation>
      <xs:documentation xml:lang="en">
        Dataset - A collection of data, published or curated by a single source, and available for access or download in one or more representations.
      </xs:documentation>
      <xs:documentation xml:lang="es">
        Conjunto de datos - Una colección de datos, publicada o curada por una única fuente, y disponible para ser accedida o
      </xs:documentation>
    </xs:annotation>
  </xs:complexType>
</xs:schema>
```

Generate artifacts

- | | |
|--|---|
| ☐ JSON schema |    |
| ☐ JSON-LD context |    |
| ☐ JSON examples |    |
| ☒ XSD schema |    |
| ☐ CSV schema |    |
| ☐ RDF-to-CSV |    |
| ☐ SPARQL |    |
| ☐ SHACL |    |
| ☐ ShEx |    |
| ☐ ShEx Map |    |

CLOSE

vc:minVersion="

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download in one

vibles para ser ac:

My new CCMM profile



COPY IRI

Dataset

data structure

DELETE

OPEN DATA STRUCTURE

+ CREATE DATA STRUCTURE

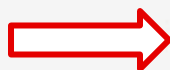
Reused data specifications



SET REUSED DATA SPECIFICATIONS

Name

Generate artifacts



CONFIGURE ARTIFACTS

GENERATE .ZIP FILE

GENERATE WITH RELATIVE PATHS

Default (showing)

Generated artifacts

Default (Yes) ▼ JSON (schema, context)



No ▼ JSON examples

Default (Yes) ▼ XML (schema, lifting, lowering)



No ▼ CSV (schema, RDF to CSV)

No ▼ SPARQL queries

No ▼ SHACL shapes

No ▼ ShEx

No ▼ OpenAPI specification (experimental)

Default (Yes) ▼ Documentation

No ▼ PlantUML diagrams

Set which families of artifacts should be generated for a given data specification.

Abstract

1. Overview

2. Class profiles

2.1 Dataset

2.1.1 has distribution

2.1.2 Is Part Of

2.1.3 title

2.2 Distribution

2.3 Ludicrous Point

3. Data structure specification for Dataset

3.1 Overview of JSON structure

3.1.1 Object Dataset

3.1.1.1 Property id

3.1.1.2 Property type

3.1.1.3 Property title

3.1.1.4 Property is_part_of

3.1.1.5 Property has_distribution

3.2 Overview of XML Structure

3.2.1 Imports

3.2.2 Root Entities of the XSD Schema

3.2.3 Root element <datová_sada>

3.2.4 Root complex type datová_sada

3.2.5 Element <iri>

3.2.6 Element <title>

My new CCMM profile

18 September 2025

ReSpec

[► More details about this document](#)

Abstract

This file documents **My new CCMM profile**.

§ 1. Overview



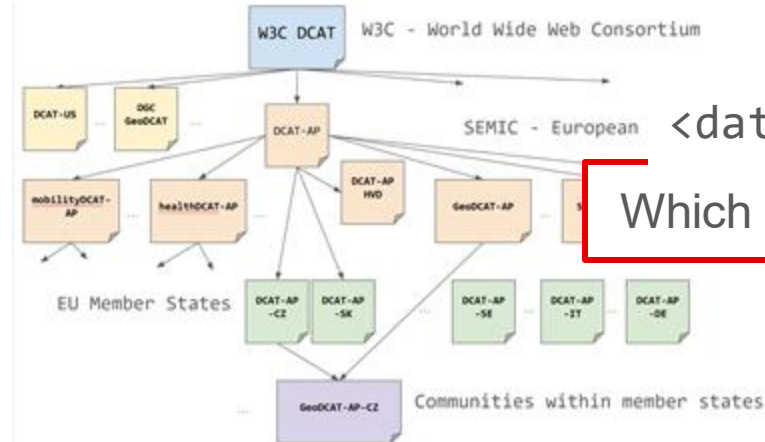
Dataspecer approach vs manual approach

Dataspecer approach

- starts from the semantic layer - meaning
- represents relations to other specifications
- keeps technical artifacts consistent
- generated interlinked documentation
- further machine-processable representation
 - Linked Data based
- can be used by non-technical people

Manual schema creation

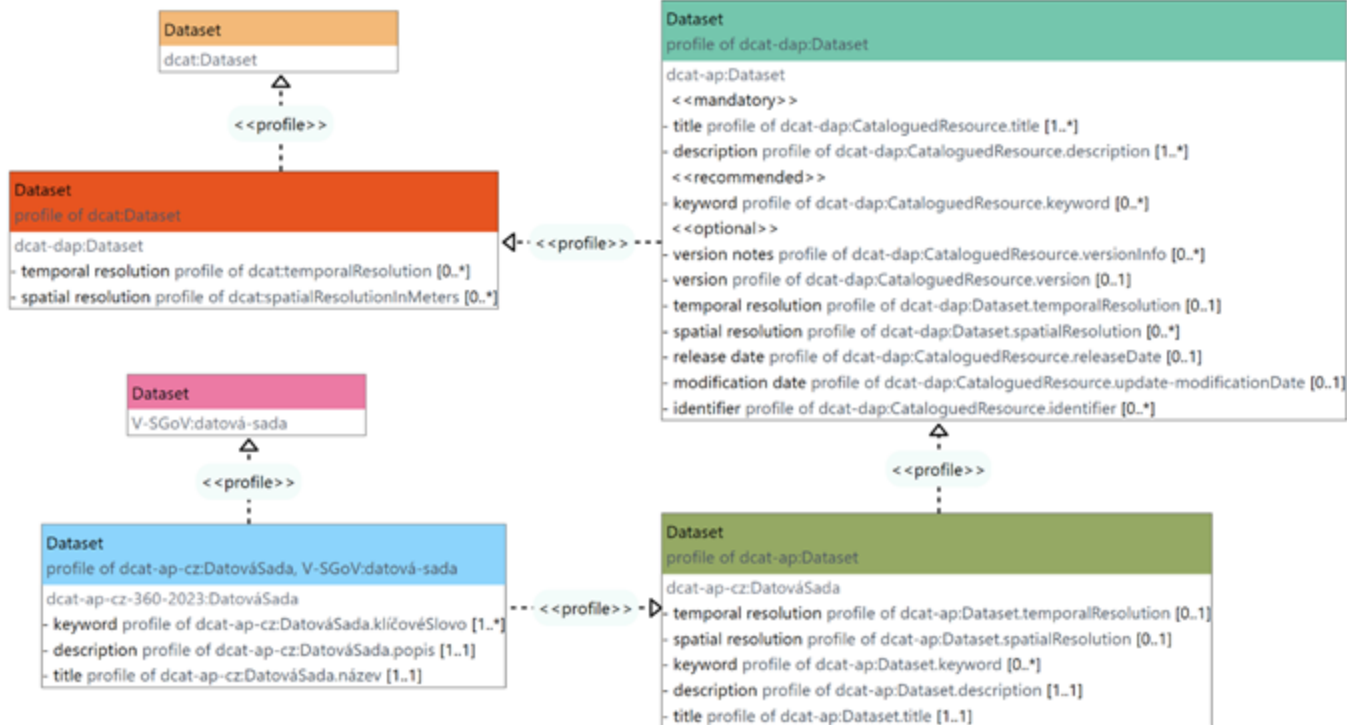
- isolated schemas
- unclear meaning of elements/keys
- unclear relation to the rest of the world
- cannot be created nor understood by non-technical people



Vocabularies Classes Relationship Attributes Profiles Generalizations

Clear

- core-location-ap
- DCAT 3 Default Application Profile
- DCAT-AP 3.0.0 based on DCAT 3 DAP
- DCAT-AP-CZ - terms of use
- DCAT-AP-CZ: Basic data model for data catalogs
- DCAT-AP-CZ: Specifikace pro vyhlášku č. 360/2023 Sb., o dlouhodobém řízení informačních systémů veřejné správy
- dcat3
- dcat3
- dublin_core_terms
- dublin_core_terms
- eli
- foaf
- legacy_adms
- legacy_locn
- ns
- ODRL22
- prov-o
- r5r
- rdfs
- rlmju
- skos
- spdx-ontology
- time



We have an application profile
We have data structures
We have some JSON/XML schemas

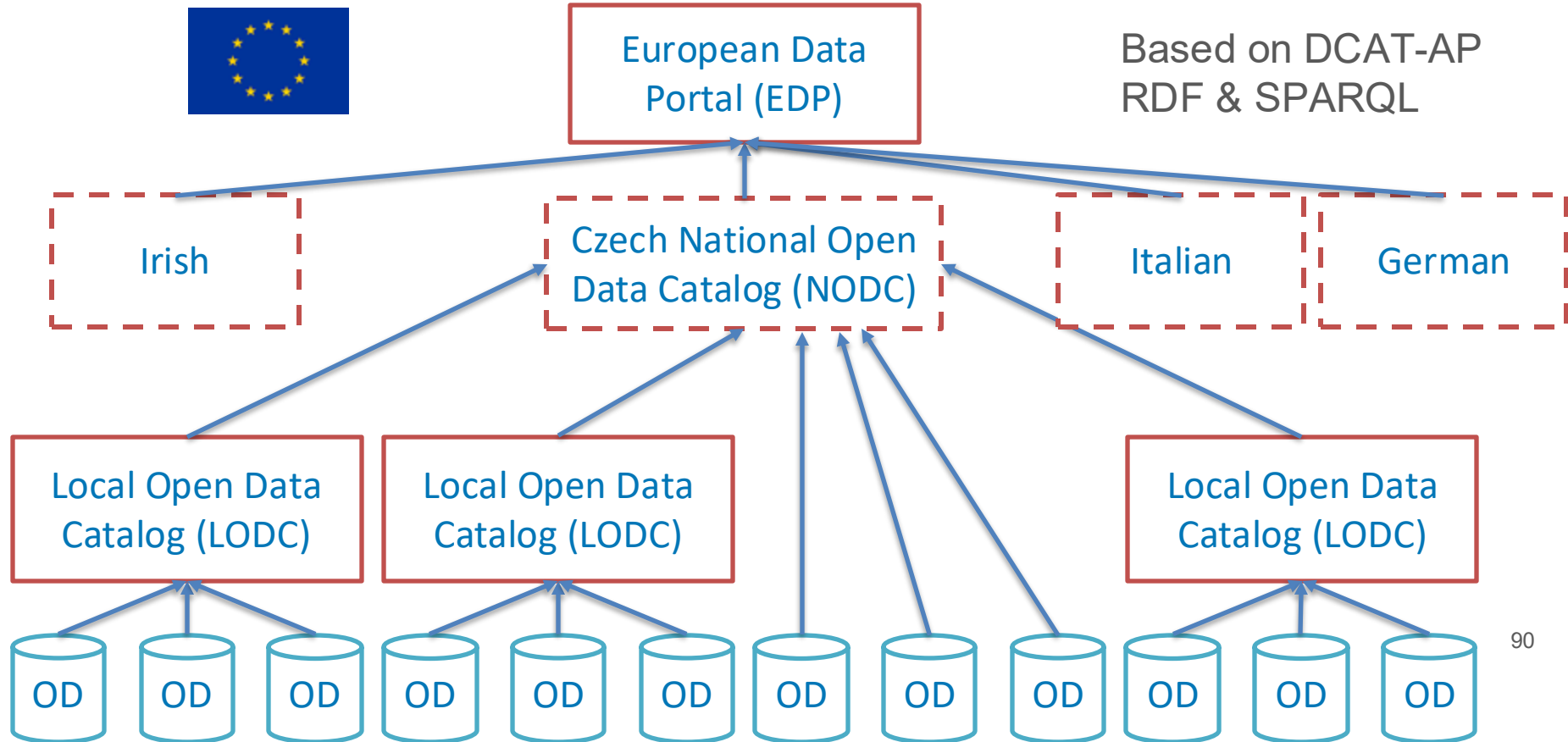
What next?

Implementation in a repository - based on the AP

1. Internal representation of corresponding data
 - a. Relational DB?
 - b. Document DB?
 - c. File system? XML? JSON? RDF?
2. User interface for viewing/editing records
 - a. Configurable?
 - b. Need for developers?
3. Configuration of indexes for search
4. Export for harvesting services
 - a. How will it look like?
 - i. Protocols
 1. OAI-PMH (& XML)?
 2. SPARQL (& RDF)?
 3. ...? REST (& JSON)?
 - ii. Conceptually
 1. According CCMM
 2. According to AP
 3. ... According to DCAT-AP?
 - iii. Data format
 1. XML - XML Schema?
 2. JSON - JSON Schema?
 3. RDF - SHACL?

Data structures from
Ddataspecer may help?

Example: Public administration data harvesting hierarchy



Using Dataspecer to create Application Profiles

Jakub Klímek



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