



## Customizing a DDI compliant repository: a detailed course with Dataverse

Geneviève Michaud, Baptiste Rouxel

### ► To cite this version:

Geneviève Michaud, Baptiste Rouxel. Customizing a DDI compliant repository: a detailed course with Dataverse. 12th Annual European DDI Users Conference. 2020. hal-03906364

HAL Id: hal-03906364

<https://sciencespo.hal.science/hal-03906364>

Submitted on 19 Dec 2022

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution - ShareAlike 4.0 International License

---

# Customizing a DDI compliant repository: a detailed course with Dataverse

Baptiste Rouxel, Geneviève Michaud,  
Center for Socio-Political Data

EDDI 2020, 12th Annual European DDI Users Conference  
DOI: 10.5281/zenodo.4298929  
December, 2, 2020

---

# **Customizing a DDI compliant repository: a detailed course with Dataverse**

Tackling issues, sharing tools and processes

## **Outline**

1. Metadata model customization
2. Setting up multilingualism
3. User interface, branding

---

# Project objectives

Set up a CESSDA Metadata Model (CMM) compliant Dataverse repository

- Customize Dataverse metadata model

Migrate CDSP study level metadata from Nesstar

- Upgrade DDI files and harmonize metadata
- Keep study + variable level metadata as DDI files for each dataset in the repository

---

# **Metadata model customization**

---

## Dataverse metadata model customization: .tsv files

Customizing a Dataverse original metadata block involves modifying a tab separated value file. A ".tsv" file targets a specific "metadata block". Operation include:

1. uploading the modified TSV file using the native API
2. triggering a SolR index update

Our custom TSV is available on GitHub here:



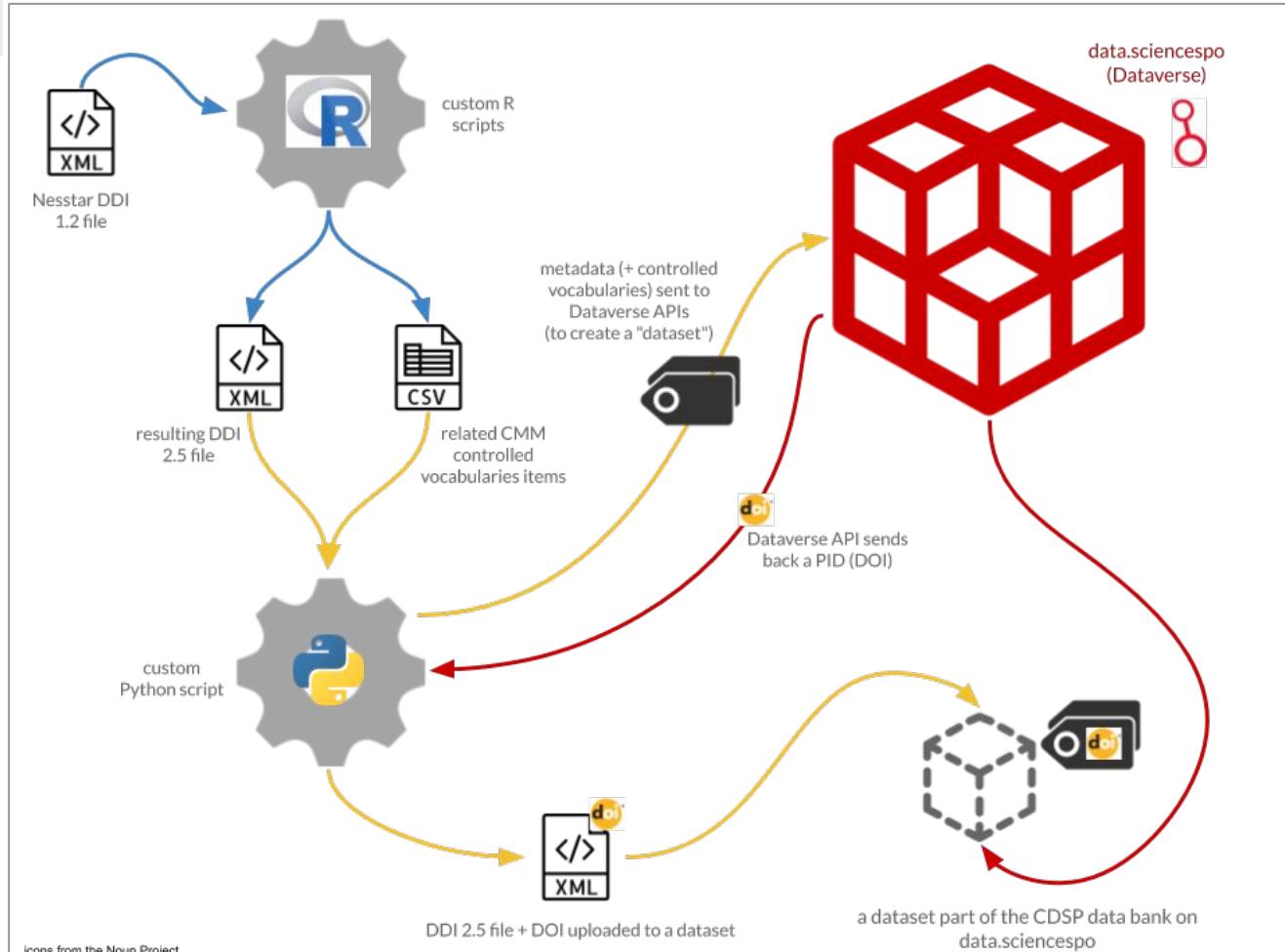
[CDSP-SCPO/dataverse-controlledvocabulary](https://github.com/CDSP-SCPO/dataverse-controlledvocabulary)

## CDSP databank migration from Nesstar to Dataverse



Custom R script  
[CDSP-SCPO/Nesstar2Dataverse](#)

Custom Python scripts  
[CDSP-SCPO/dataverse-controlledvocabulary](#)  
[CDSP-SCPO/dataverse-metadataupdate](#)  
[CDSP-SCPO/dataverse-jsonimport](#)  
[CDSP-SCPO/dataverse-ddiimport](#)



---

## Dataverse metadata model customization: issues

Adding metadata fields to the metadata model is quite easy (Create feature).

But this must be done **early** in the process, since revisions (Update and Delete features) require specific requests on underlying database with admin privileges. Further revisions should definitely be avoided (complexity + risk).

The DDI import API might not work properly if the metadata model is customized.

Multilingualism creates an additional layer of complexity.

---

# **Setting up multilingualism**

# Multilingualism: user interface

Adding languages is possible from Dataverse v4 onwards.

Steps (link to Dataverse official documentation):

- Declare new languages that will appear in the dropdown menu
- Upload a language bundle file (see the documentation to get your languages and create the bundle)

Language translations are maintained by the community and you can ask to contribute.



[GlobalDataverseCommunityConsortium/dataverse-language-packs](https://github.com/GlobalDataverseCommunityConsortium/dataverse-language-packs)

---

# Managing multilingualism: controlled vocabularies

a language bundle = multiple language property files for each language

In the language property files, you can translate a controlled vocabulary by adding a property for each language available.

## Example:

In the metadatablock TSV file, if Self-administered questionnaire: Web-based (CAWI) is a controlled vocabulary item value for ModeOfCollection, add the following line in your language property file as described in the Dataverse [documentation](#):

```
controlledvocabulary.modeofcollection.self-administered_questionnaire:_web-based_(cawi)=TRANSLATED_VALUE
```

---

## Managing multilingualism: controlled vocabularies

This process can be bit tedious and has a high risk of error if it is done manually, so we wrote a script that:

- Creates language property files for each language and different metadata blocks
- Transforms TSV controlled vocabulary values to property names
- Adds translated value to each property



[CDSP-SCPO/dataverse-controlledvocabulary](https://github.com/CDSP-SCPO/dataverse-controlledvocabulary)

# Managing multilingualism: controlled vocabularies

Search this dataverse...

 Dataverses (2)

 Datasets (313)

 Files (731)

**Dataverse Category**

Laboratory (1)

Research Project (1)

**Publication Year**

2020 (315)

**Topic Classification Term**

Elections (172)

Political behaviour and attitudes (84)

Energy and natural resources (33)

Government, political systems and organisations (22)

Social behaviour and attitudes (21)

[More...](#)

Chercher dans ce dataverse...

 Dataverses (2)

 Jeux de données (313)

 Fichiers (731)

**Dataverse Category**

Laboratoire (1)

Research Project (1)

**Publication Year**

2020 (315)

**Classification des sujets Terme**

Élections (172)

Comportements et attitudes politiques (84)

Énergie et ressources naturelles (33)

Gouvernement, systèmes et organisations politiques (22)

Comportement social et attitudes (21)

[Plus...](#)

---

## Managing multilingualism: remaining issues

There is room for improvement in the way Dataverse follows DDI schema:

- As an example, it's not possible to save and display a **title** in more than one language.
- A specific group in Dataverse community is actively working on **flexible metadata**.

---

# User interface, branding

# Repository landing page

- Dataverse landing page, headers and footers are customizable
- A clear visual setup to help users navigate between different services
  - Search for data
  - Deposit data (self deposit)
  - Contact data and metadata curators (CDSP)
- Available in french and english

FIND AND EXPLORE DATA

SciencesPo

data.sciencespo

Research data repository of Sciences Po

FIND AND EXPLORE DATA

Launched in February 2020, data.sciencespo is a repository that offers visibility, sharing and preservation of data collected, curated and processed at Sciences Po. The repository is based on the Dataverse open-source software and organised into collections. It is indexed by re3data.

**Sciences Po collection (self-deposit)**

This collection, which is managed by the Direction des ressources et de l'information scientifique (DRIS), is intended to host data produced by researchers affiliated with Sciences Po, following the self-deposit process assisted by the DRIS staff. This collection is expected to be harvested by ISIDORE, BASE, OpenAIRE.

Type of deposit: self-deposit assisted by the DRIS staff  
Deposit requirements: being affiliated with Sciences Po  
Deposit delay: immediate  
Data access delay: quick

Contact: [data.bib@sciencespo.fr](mailto:data.bib@sciencespo.fr)  
Guidebooks: [deposit data](#) / [find data](#)  
To find out more: [thematic guide on research data management](#)

**CDSP collection**

This collection managed by the Centre des données socio-politiques (CDSP) includes the catalogue of surveys, in the social science and humanities, processed and curated by CDSP engineers since 2005. This catalogue brings together surveys produced at Sciences Po and other French and international institutions. It is harvested by the French SSH portal Quetelet-PROGEDO Diffusion and by the CESSDA catalogue.

Type of deposit: at the CDSP  
Deposit requirements: deposit request and agreement  
Deposit delay: several months  
Data access delay: quick

Contact: [info.cdsp@sciencespo.fr](mailto:info.cdsp@sciencespo.fr)  
To find out more: [data deposit at the CDSP](#)

SciencesPo  
27, rue Saint-Guillaume  
75337 Paris Cedex 07  
© 2020 Sciences Po  
General terms of use

Powered by Dataverse



# User interface: consistency with our design guidelines

L'entrepôt institutionnel de données de la recherche de Sciences Po

Metrics 674 Downloads

Contact Share

Search this dataverse... Find Advanced Search

1 to 10 of 14 Results

Sort ▾

Dataverses (14)

Datasets (314)

Files (733)

Dataverse Category

Laboratory (12)  
Organization or institution (1)  
Research Project (1)

Publication Year

2020 (14)

Subject

Social Sciences (5)

Résultats électoraux

May 5, 2020 Banque de données du CDSP

ELIPSS

May 5, 2020 Banque de données du CDSP

Metrics 23,135,148 Downloads

Contact Share

Add Data

Search this dataverse... Find Advanced Search

1 to 10 of 44,100 Results

Sort ▾

Dataverses (1,659)

Datasets (42,441)

Files (0)

Subject: Social Sciences ✖

1 to 10 of 44,100 Results

Replication Data for: From Antipetismo to Generalized Antipartisanship: The Impact of Rejection of Political Parties on the 2018 Vote for Bolsonaro, published in BPSR, Vol. 15, N. 1, 2021  
Nov 26, 2020 - Brazilian Political Science Review - Dataverse  
Ribeiro, Ednaldo; Borbo, Julian; Fuchs, Mario, 2020, "Replication Data for: From Antipetismo to Generalized Antipartisanship: The Impact of Rejection of Political Parties on the 2018 Vote for Bolsonaro, published in BPSR, Vol. 15, N. 1, 2021", <https://doi.org/10.7910/DVN/GLPFG>, Harvard Dataverse, V1  
Article's DOI: <http://doi.org/10.1990/1981-382120100010003>

Regional Life Quality Survey - 2014  
Nov 26, 2020 - Regional Life Quality Survey  
Fundación Pienso, 2020, "Regional Life Quality Survey - 2014", <https://doi.org/10.7910/DVN/BTAMX>, Harvard Dataverse, V1, UNF:6:3QG8NEXx3D0PhnC8O2sA== [fileUNF]

Regional Life Quality Survey - 2014 version. It's universe covers 7 urban provinces from the Valparaíso region and evaluates 8 dimensions concerning public policy: Work, education, public security, health services, public transport, urban equipment, housing and life satisfaction....

Regional Life Quality Survey - 2015  
Nov 26, 2020 - Regional Life Quality Survey  
Fundación Pienso, 2020, "Regional Life Quality Survey - 2015", <https://doi.org/10.7910/DVN/JDHU8>, Harvard Dataverse, V1, UNF:6:uvJwUv9080ugXavWOWY1Q== [fileUNF]

Regional Life Quality Survey - 2015 version. It's universe covers 7 urban provinces from the Valparaíso region and evaluates 8 dimensions concerning public policy: Work, education, public security, health services, public transport, urban equipment, housing and life satisfaction....



# User interface: consistency with our design guidelines

Livraisons des colis et Mobilités des e-consommateurs : caractérisation des pratiques et des flux (2016)

May 5, 2020 - ELIPSS

Aguilera, Anne, 2020, "Livraisons des colis et Mobilités des e-consommateurs : caractérisation des pratiques et des flux (2016)", <https://doi.org/10.21410/7E4JOTU8V>, data.sciencespo, V2

L'enquête Livraisons des colis et Mobilités des e-consommateurs (LivMob), coordonnée par A. Aguiléra, a pour objectif d'identifier les déterminants du choix d'un mode de livraison et d'analyser tout particulièrement le rôle des territoires et des mobilités. L'enquête approfondit...

Territorial Dynamics and Wellbeing Household Survey - Colombia: Socioeconomic Data from rural-urban territories in Colombia, obtained in 2017-2018

Nov 25, 2020 - Rimisp Dataverse

Rimisp - Latin American Center for Rural Development; Universidad Iberoamericana; Universidad de los Andes, 2020, "Territorial Dynamics and Wellbeing Household Survey - Colombia: Socioeconomic Data from rural-urban territories in Colombia, obtained in 2017-2018", <https://doi.org/10.7910/DVN/YZ7Z73>, Harvard Dataverse, V1, UNF:6:7TKyDg+JcZ71XzSEaLZHbg== [fileUNF]

[English description below] Estos son los datos para Colombia de la Encuesta de Dinámicas Territoriales y Bienestar 2017-2018, parte del Programa Transformando Territorios de Rimisp, financiado por IDRC y realizado en colaboración, para su componente de investigación, con la Univ...



---

## Next steps: improving our repository

We are currently collaborating with Dataverse on:

- Multilingualism (issue [#6607](#))
- DDI compliance (DDI import/export, OAI-PMH/OAI-DDI) (issues [#7388](#) [#7387](#) [#6751](#))

# Merci !

If you have any question, contact us!

[itcdsp-scpolt@sciencespo.fr](mailto:itcdsp-scpolt@sciencespo.fr)

