

# <odesi>: supporting different DDI (flavours) from two repository systems

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# What is <odesi>?

- Established in 2007, <odesi> is a social science survey data repository that allows users to search, explore, and download data;
- Collaborative service, where DDI-markup and data publishing / maintenance is provided by multiple libraries.







# **Service provider**

- <odesi> is a service of the Ontario Council of University Libraries (OCUL)
- Scholars Portal is the service provider for OCUL http://scholarsportal.info/

**RACER** 



Dataverse

GeoPortal

ACE



#### **Data collections in <odesi>**







- Government and commercial data sources (Statistics Canada, other government, IPSOS, Gallup, etc.)
- Aggregate across external providers (ICPSR, CORA, RDC-Master files, andsoon Dataverse)

- High-level of library data curation
- Nesstar Publisher / Web Server driven (DDI 1.2 / Codebook)



**GALLUP** 

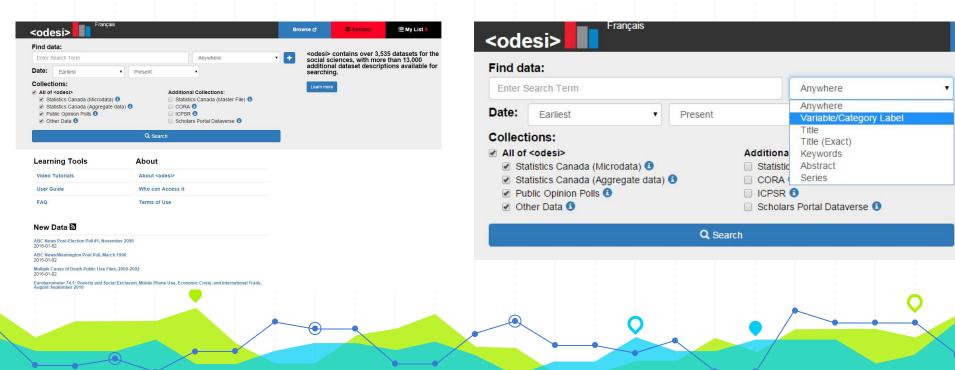


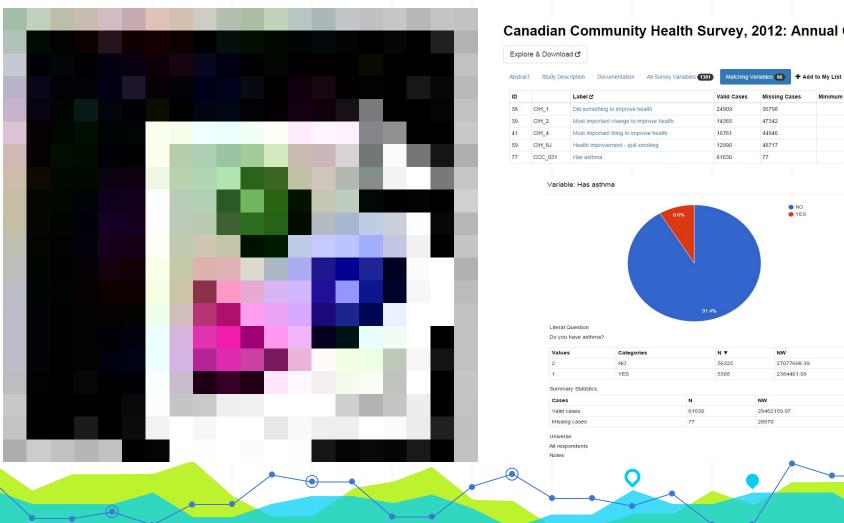
## <odesi> search

#### **Basic search**

#### **Advanced search**

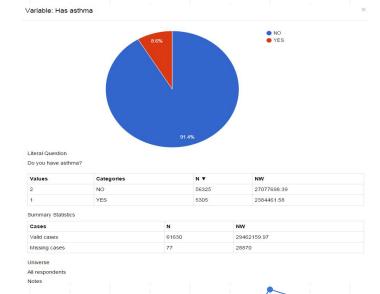
#### **Collections**



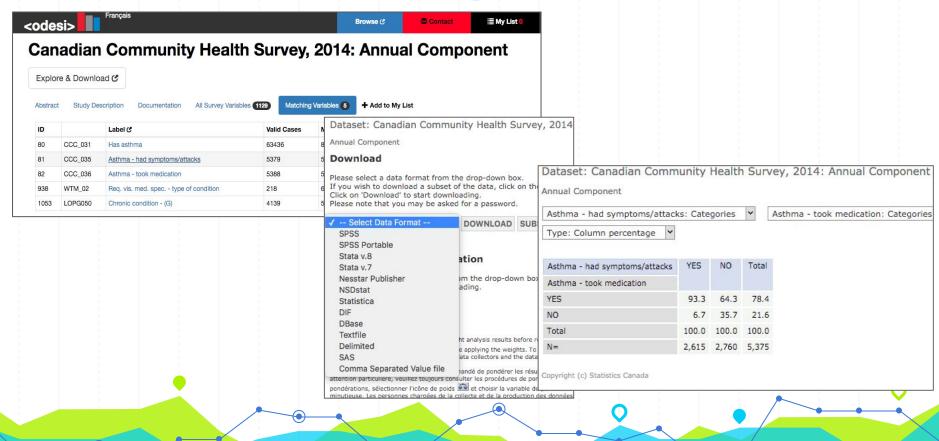


#### Canadian Community Health Survey, 2012: Annual Component

ID		Label &	Valid Cases	Missing Cases	Minimum	Maximum	Categories
38	CIH_1	Did something to improve health	24909	36798			View
39	CIH_2	Most important change to improve health	14365	47342			View
41	CIH_4	Most important thing to improve health	16761	44946			View
59	CIH_8J	Health improvement - quit smoking	12990	48717			View
77	CCC 031	Has asthma	61630	77			View



# <odesi> repository



### <odesi> publishing workflow

# Data release / added to loading list

Data released from producer (e.g. Statistics Canada)

# W. Company of the state of the

# Data acquired & cleaned / harvested

Data is downloaded, prepared, or harvested from another provider.

#### Data published

Published to Nesstar / loaded to MarkLogic for searching.

#### **DDI** markup

Description of the study, variables, data files, etc.

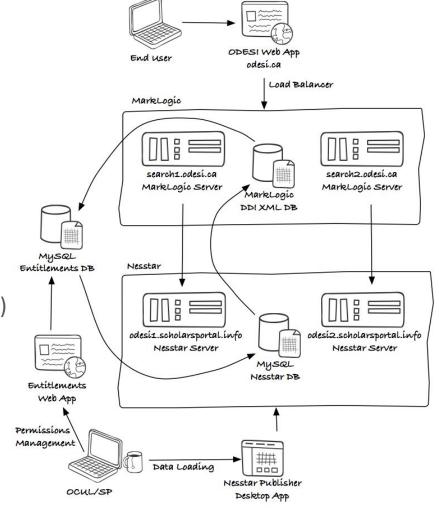
# Flavour of DDI (<odesi>/Nesstar)

- Rich, study level descriptions (library curated)
- Consistent, best practices driven
- Variable-level documentation, question text, universe notes, etc.
- Weighted frequencies
- Dataset / Study 1:1

- Mainly tabular survey data (SPSS, SAS)
- Some aggregate data, described at the study-level only
- HTML tags in XML fields

# **Technical overview**

- Frontend
  - AngularJS
  - Google Charts
- Backend
  - MarkLogic w/ REST API (DDI-ish json!)
  - MySQL
  - NodeJS

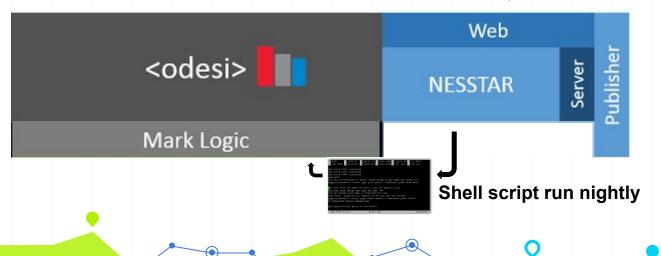


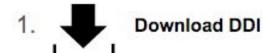
# **Harvesting / ingesting (Nesstar)**

<odesi>
Collections / ML

#### Nesstar

- <odesi>
- CORA, RDC





# 2. Edit

- 3. Upload
- 4. Q Update
- 5. Discover

# **Nesstar harvesting / ingesting steps**

- 1. Harvested using Windows directory
- 2. codeBook>docDscr>titlStmt>
  - <syear>2008</syear>
  - <slang>en</slang>
- 3. Ingested with uri prefix
- 4. Entitlements checked Append collection
- 5. Search, Visualize, Access

# **Scholars Portal Dataverse**

- Harvard IQSS Project
- Since 2012, SP Dataverse offers users online data deposit, management, and sharing platform
- Self-deposit model, anyone in the world can sign up
- 73 Dataverses, 436 Studies, 5 528 Files = approx. 170GB size

# **Dataverse collections**

- 13 OCUL schools (fall 2015)
- Multi-disciplinary
- Citation description (title, author, producer, handle/Doi)
- Support for any file format (Excel, SAS)
- Tabular data ingest, subsetting (TAB file)

AECOM Canada Ltd., "City of Kingston 2008 Travel Survey", http://hdl.handle.net/10864/11425 UNF: 5:q+38QPEabvSUtlcHrPaVcg== Data Services [Distributor] V1 [Version]



#### **Dataverse search & repository (3.6)**



SP Dataverse Network >

#### Western University Research Data Repository Dataverse

This dataverse houses research data sets created by researchers at Western University Western Libraries).

#### Western University

Sort By: Global ID

Canadian Fertility Survey, 1984

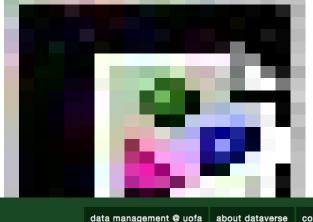
by Balakrishnan, T.R.; Krótki, Karol J.; Lapierre-Adamcyk, Evelyne

Description: The Canadian Fertility Survey (CFS 1984) was conducted in April-June 1984. Th and Humanities Research Council of Canada and executed by co-investigators from three u

Federal Elections in Ontario (1867-1911): Voting and Census Data file

by Kerr, Donald G.; UWO Social Science Computing Laboratory

Description: The Federal Elections in Ontario (1867-1911); Voting and Census Data file was dealing with the effect of religious and ethnic background on voting patterns in Canada. Sinc



UNIVERSITY OF ALBERTA
LIBRARIES

POWERED BY THE Network V. 3.6.2

#### **UAL DATAVERSE NETWORK**

ALBERTA SURVEY, 1994

doi:10.7939/DVN/10555UNF:5:PKi4F7LpFc2Uz+FdmwCtnQ== Version: 4 - Released: Mon Jan 18 10:02:33 MST 2016

**CATALOGING INFORMATION** 

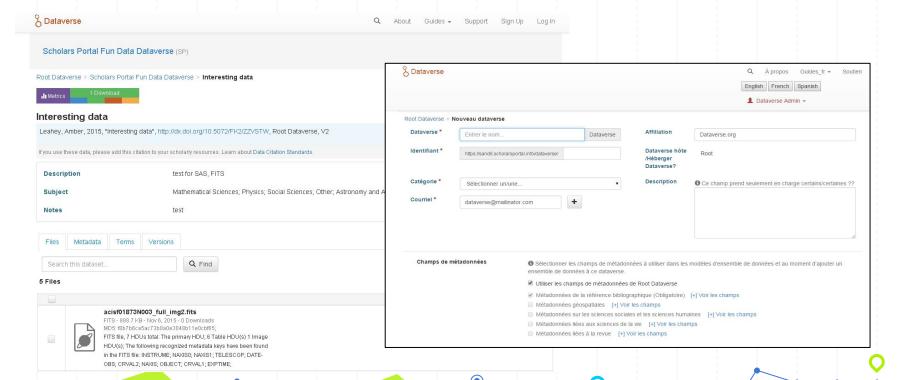
Data & Analysis

Comments (0)

Versions



#### **Dataverse search and repository (4.x)**



#### **Data publishing workflow (Dataverse)**

# Researcher collects data for study

Collects data in various formats

# Researcher creates dataverse/study

Data is described, generate citation

#### Data published

Published to dataverse network, loaded to MarkLogic for searching

#### Upload data

Tabular data ingested as tab; DDI file-level generated

#### Flavour of DDI (Dataverse)

- DDI study-level (Citation, Social Sciences metadata block)
- "Subsettable" files generate the DDI variable-level only
- Support for the description of more formats
- Tab separated files (TAB, .tsv)

# **DDI comparison: Nesstar & Dataverse**

	Nesstar Publisher	Dataverse
DDI Codebook (study-level)	Yes (1.2 compliant)	Yes (DDI-lite)
DDI Codebook (variable-level)	Yes	Some, for tabular files (TAB), no question-level editor (questions, universe, etc.)
Weighting (weighted frequencies)	Yes	No
Datasets : study ratio	Many : many	Many : many
Persistent Identifier	Manual: Any URI (1)	Automated: Handle, DOI, UNF, versioning, other URI (manual)



# **Harvesting / ingesting (Dataverse)**



## **Dataverse harvesting / ingestion steps**



#### **Download DDI**

2.

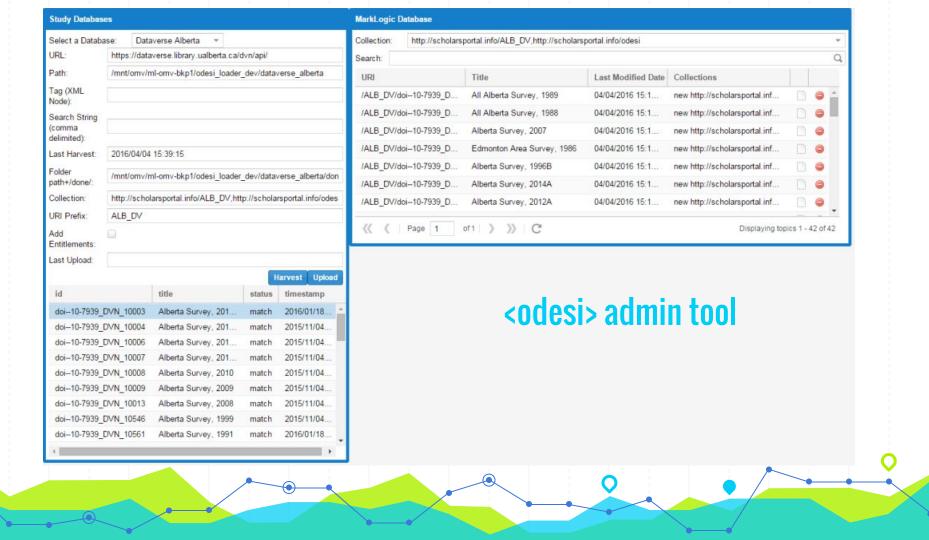
Edit



Upload



- 1. Harvested using Dataverse API 3.6-4.2
  - using url\_search="metadataSearch/dvOwnerId:219" in SQLDB tbl VDC
- 2. Inclusion of proprietary tags syear, slang
- 3. Ingested with uri prefix
- 4. Search, Visualize, Access





# 17,567

Whoa! That's a big number, aren't you proud? Number of studies in <odesi> after integration

#### **Future Directions**

**Near future** 

Better graphing w/ weights
Sorting
DDI to Marc

Not so near future

Separate document support

**Proposed** 

Combine survey variables
Add to Map



# THANKS!

# Any questions?

You can find us at <a href="mailto:datagis@scholarsportal.info">datagis@scholarsportal.info</a>