

# EVENTOS

XVI WORKSHOP REBIUN DE PROYECTOS DIGITALES  
VII JORNADAS DE OS REPOSITORIOS  
XI COLOQUIO INTERNACIONAL DE CIENCIAS DE LA DOCUMENTACIÓN

2017



Dentro



# Dendro

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2017, Salamanca

# Tail Team



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# Research Data Management

## Challenges

Issue (1) **Traditional publication workflow** [**generic**]

Issue (2) **Lack of manpower** [**for most**]

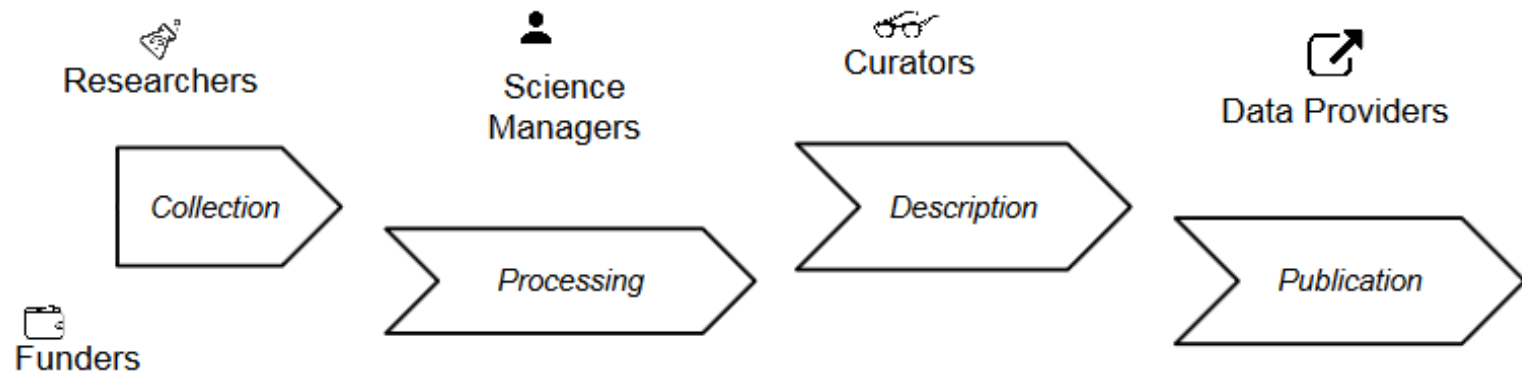
Issue (3) **Researchers unfamiliar to metadata** [**often**]

# Research Data Management

## **Opportunities**

Visibility for researchers and institutions

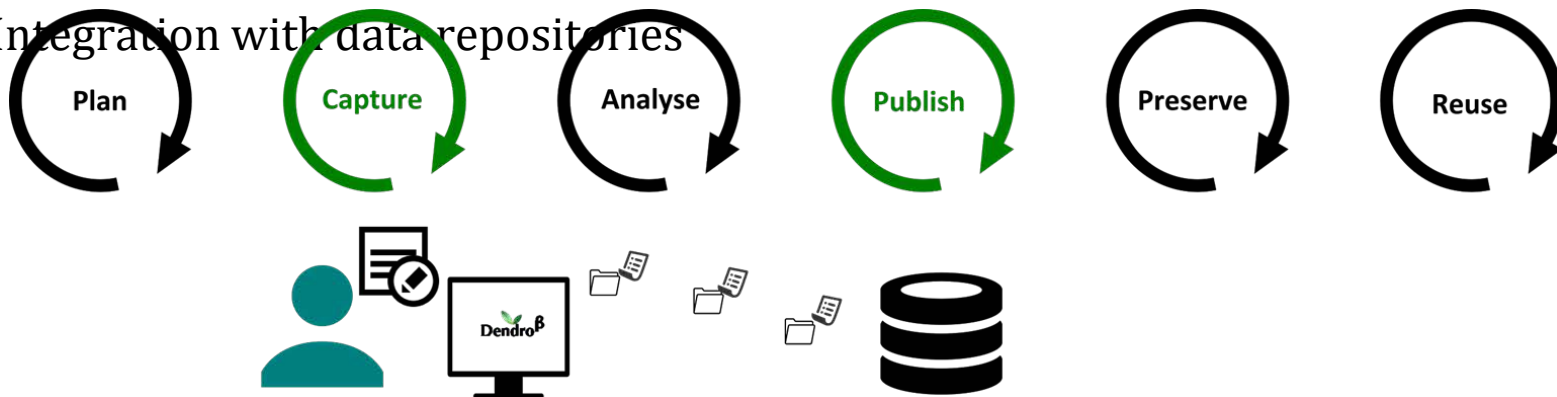
Foster collaboration and data reuse



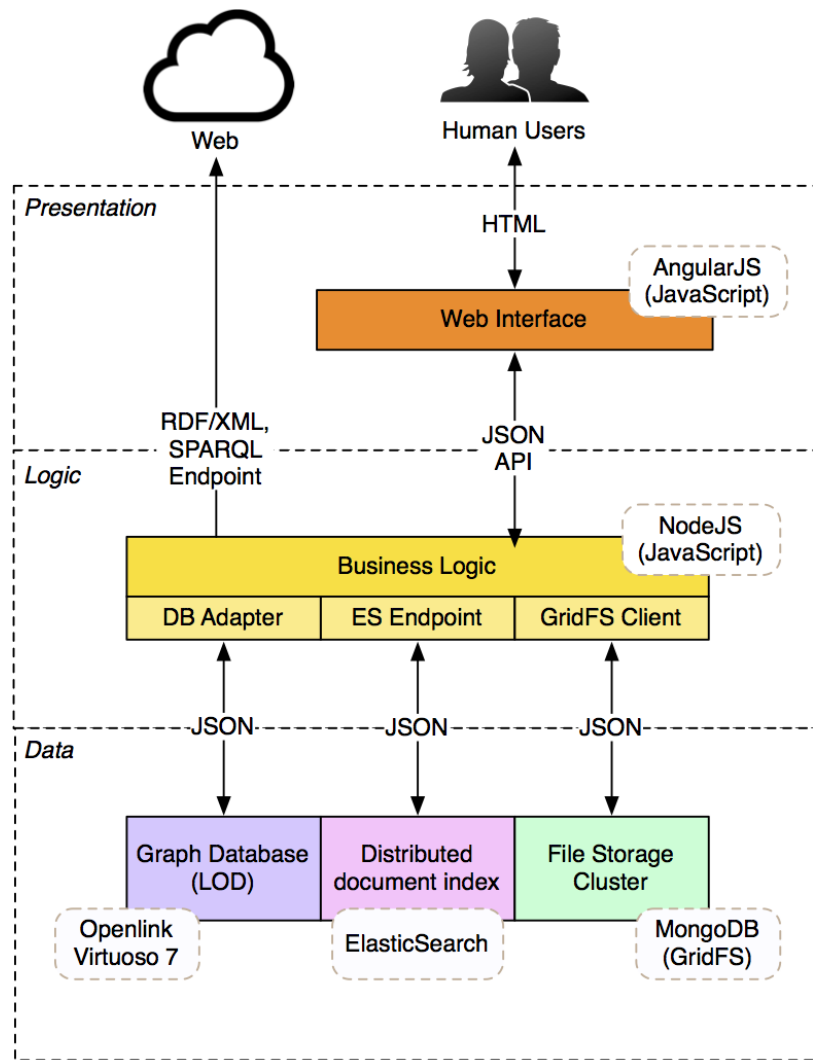
# Dendro Platform

- Data organization and description early from data creation
- Ontologies for specific research domains - Metadata as Linked Open Data

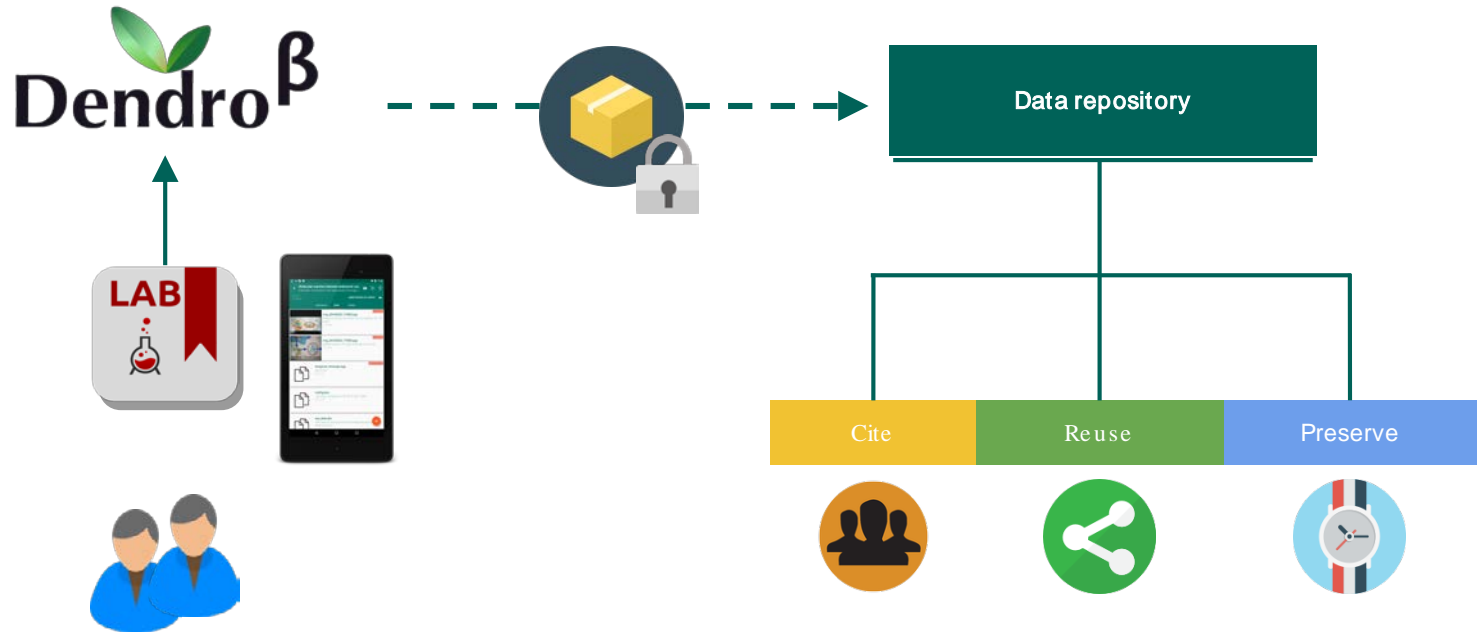
- Integration with data repositories



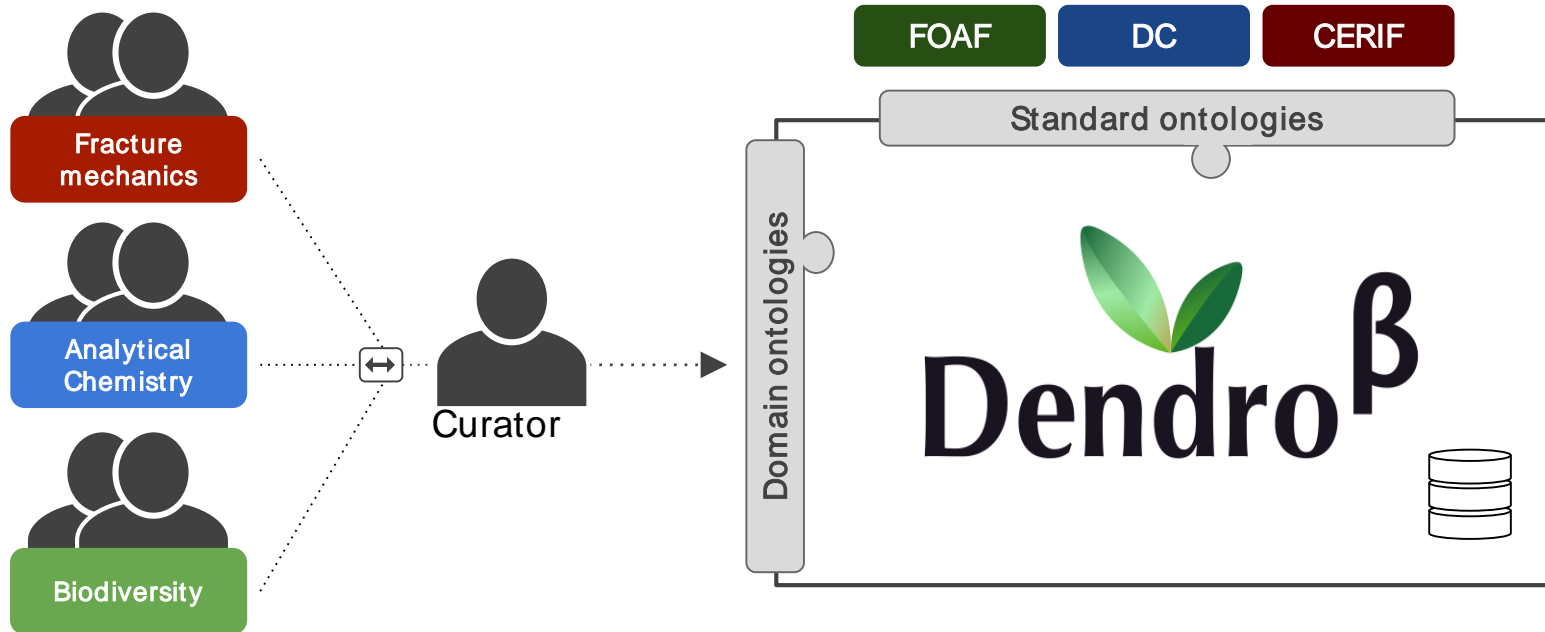
# Dendro architecture



# Dendro workflow



# Curator workflow



<b>Experimental data</b>	<b>Observational data</b>	<b>Simulational data</b>
<p><b>Analytical Chemistry</b>  <b>Double Cantilever Beam</b>  <b>Gravimetry</b>  <b>Hydrogen Production</b></p>	<p><b>Biodiversity</b>  <b>Social Sciences</b>  <b>Biological</b>  <b>Oceanography</b></p>	<p><b>Vehicle Simulation</b>  <b>Fluid Dynamics</b>  <b>Cutting and Packing</b></p>
<p>Associated with particular methodology and instruments;</p> <p>Often reproducible if experimental conditions are described.</p>	<p>Expensive and unique data;</p> <p>Time, location and details about data collection facilitates reuse;</p> <p>Available standards.</p>	<p>Results from computer models or simulations;</p> <p>Hardware, software and input variables should be part of the description.</p>

## Folder



## Selection



Up to biodata



meta



scala\_2014.jpg



observations.xls



ontTraffic.pdf

Information

Change log

Description progress

0%

COPY FROM PARENT

IN MANUAL MODE

CLEAR

gender

Male

Specimen

Lynx pardinus

Coverage



## Biological Oceanography

[Biological Oceanography](#)

observational and experimental studies...Life stage, Species count, IndividualPerSpecie...

INDIVIDUAL COUNT

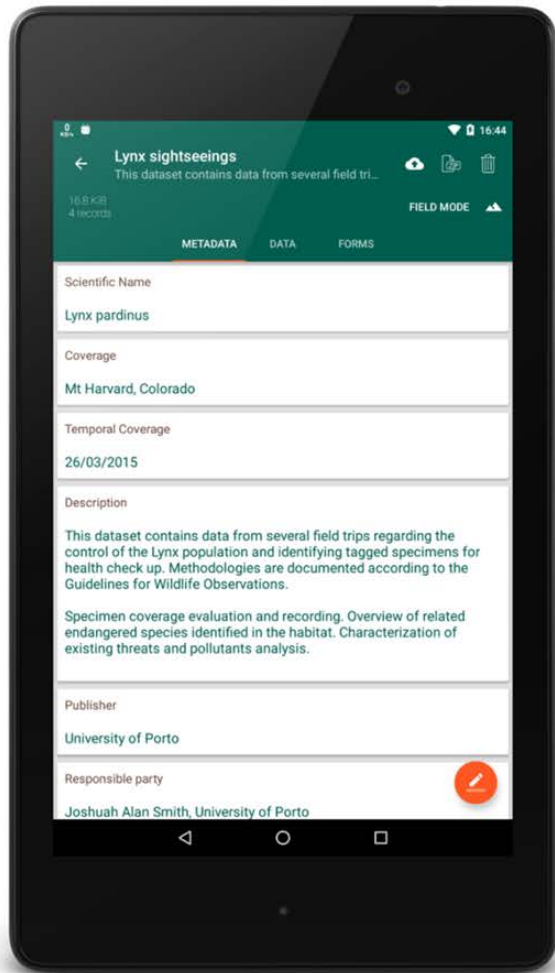
The number of individuals represented present at the time of the sampling event.

INDIVIDUALS PER SPECIES

The quantity of individuals caught per species in a sample event. E.g.: Callinectes sapidus = 5, Murgil liza = 17.

LIFE STAGE

The age class or life stage of the biological individual(s) at the time the sampling event. Recommended best practice is to use a controlled vocabulary. Examples: {"egg"}, {"eft"}, {"juvenile"}, {"adult"}, {"2 adults 4 juveniles"}.



SAVE
  UNDO
  COPY FROM PARENT
  IN MANUAL MODE
  CLEAR

### Temporal Coverage Added

26/03/2015

### Scientific Name Added

Lynx pardinus

### Coverage Added



Mt Harvard, Colorado

### ◀ Biodiversity evolution studies

For INSPIRE-represented observational data for biodiversity. Reference system identifier, Metadata point of contact...

### CONFORMITY DATE

This citation shall include the date (date of publication, date of last revision or creation) of the implementing rules adopted under Article 7(1) of Directive 2007/2/EC of the specification.

### CONFORMITY DATE TYPE

The citation of product specification shall include the data type of the implementing rules adopted under Article 7(1) of Directive 2007/2/EC or of the specification. The value domain of this metadata element a code list: - Date of creation; - Date of last revision; - Date of publication.

### CONFORMITY SPECIFICATION

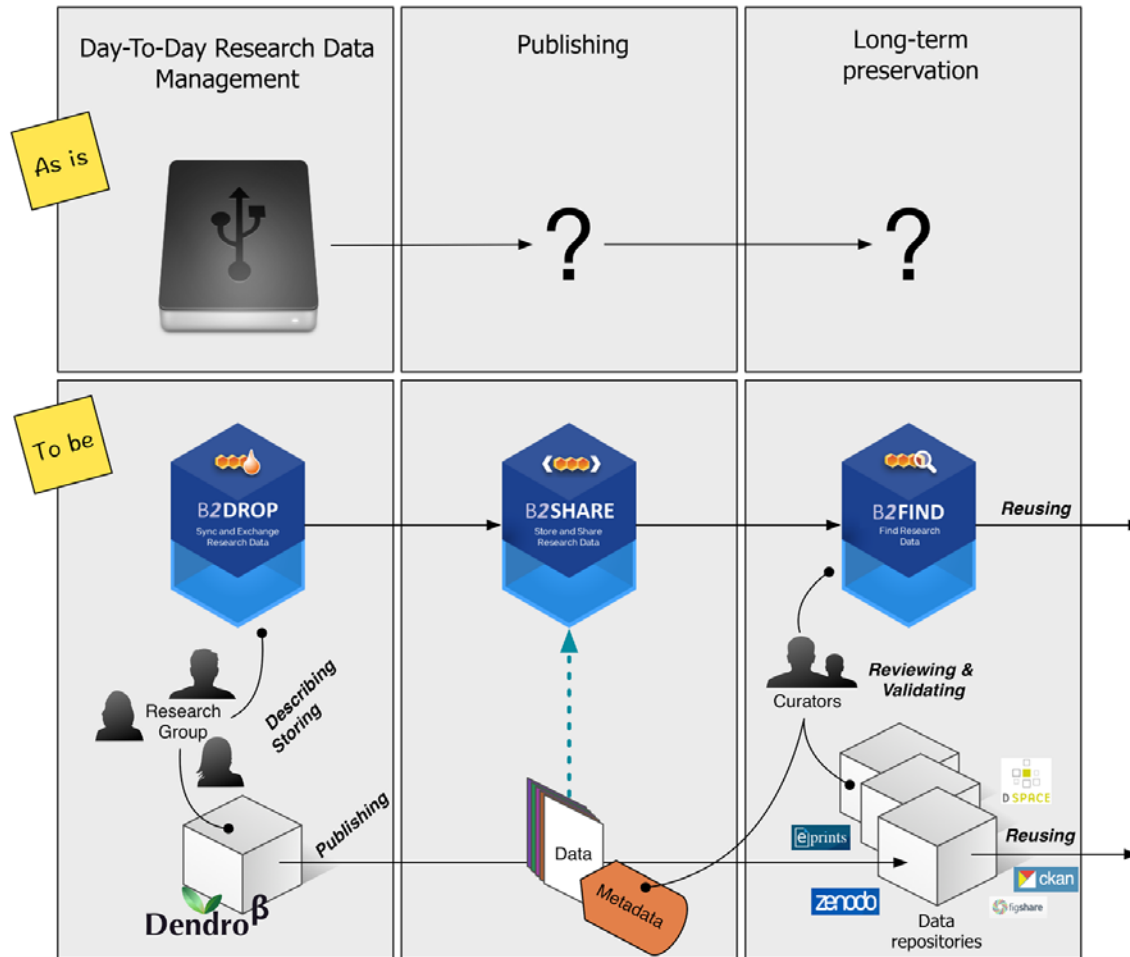
This is the degree of conformity of the resource to the implementing rules adopted under Article 7(1) of Directive 2007/2/EC or other specification.

# DataPublication@U.Porto

RDM@FEUP - EUDAT

*multi-disciplinary data description and deposit linking  
the Dendro staging platform with the EUDAT European  
Infrastructure*





To know more about EUDAT and Dendro, please visit <https://eudat.eu/> and <http://dendro.fe.up.pt>

## Create a new project

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SELECT A DESTINATION REPOSITORY ▾



#### Connect to a new repository

CHOOSE REPOSITORY TYPE ▾

#### Share on social networks

SHARE:



CLOSE

## Vehicle reservation assignment in car rental

Beatriz Oliveira

University of Porto

**Abstract:** Data for the vehicle-reservation assignment problem in a car rental company, including vehicle and reservation information, car transfers time and cost (collected for Portugal), and upgrading and downgrading policies. Data used in Oliveira, B.B., Carravilla, M.A., Oliveira, J.F. and Toledo, F. M.B., 'A relax-and-fix-based algorithm for the vehicle-reservation assignment problem in a car rental company', European Journal of Operational Research, Volume 237, Issue 2, 1 September 2014, Pages 729-737, ISSN 0377-2217, <http://dx.doi.org/10.1016/j.ejor.2014.02.018>.



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## Export

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## Metadata

**PID:** <http://hdl.handle.net/11304/12dc669e-6355-4353-b021-8887fed6528c>

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# Final Remarks

- Early data management practices [**from project day 1**]
- Engage researchers [**they are the experts**]
- Improve metadata quality [**controlled vocabularies**]
- Collaborative environment [**Social Dendro**]
- Export data packages to data repositories [**institutional CKAN instance**]

# Dendro is free and open-source

Source code [github.com/feup-infolab/dendro](https://github.com/feup-infolab/dendro)

Installer [github.com/feup-infolab/dendro-install](https://github.com/feup-infolab/dendro-install)

Publications [dendro.fe.up.pt](https://dendro.fe.up.pt)

Demo Instance [dendro.fe.up.pt/demo](https://dendro.fe.up.pt/demo)

**GitHub**

