



P2Pvalue Directory: using a unique open resource for research and networking

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Outline

- Drupal and why using it?
- Some key aspects of the architecture
- How to explore and access the data
- How to contribute: adding CBPP cases
- Ideas for future work & questions



What is Drupal?

- A free software framework to build web applications
- A community of +1M users and +30k developers (Drupal.org stats)
- +1M websites: whitehouse.gov, data.gov.uk, louvre.fr, mtv.co.uk, blogs.aljazeera.com, etc.
- +info: https://drupal.org/about





Why using Drupal?

- Robust architecture
- Flexibility to perform changes
- Modularity to extend with new functionalities: +25k contributed (non-core) modules
- Flexibility quite critical, taking into account the research nature of the initiative



3 key aspects of the architecture

- Flexible way to:
 - Manage permissions (who access what?): roles module
 - To **classify** (and update) the cases. For example, adding a new type of activity: taxonomy module
 - Display the contents in **several formats**: views module



Permissions and roles system

- Flexible way to manage permissions, workflow and set a "wiki-like" system
- Currently 3 main roles:
 - **Authenticated users** (open registration): permissions to add new cases, edit details about them, see different revisions (versions) of the case, etc.
 - **Moderators**: permissions to edit any kind of content, revert revisions in case of vandalism (post-moderation policy), add new terms to the vocabularies, etc.
 - Administrators: full permissions to change all the configuration parameters



Taxonomies

- Taxonomy: the practice of "classifying things or concepts"
- Using Drupal taxonomy system: a flexible way to classify and update the CBPP cases
- Currently using 11 vocabularies
- Each vocabulary has a set of "terms" that can be indexed and filtered:
 - Via URLs: http://www.directory.p2pvalue.eu/explore/typologies/type-activity/open-education
 - Via API (more details soon)



Views

- A GUI to a SQL builder: provides us a flexible way to fetch content from the database and display it in several formats:
 - HTML
 - E.g.: Use to expose the taxonomies as fields to filter by (Explore - http://directory.p2pvalue.eu/explore/cbpp-communities)
 - JSON, XML
 - E.g.: Use to create the API (http://directory.p2pvalue.eu/api-instructions)



Exploring the data

 Data gathered is licensed under a CC0 1.0 license (dedicated to Public domain -

http://creativecommons.org/publicdomain/zero/1.0/)

Explore and filter it via web



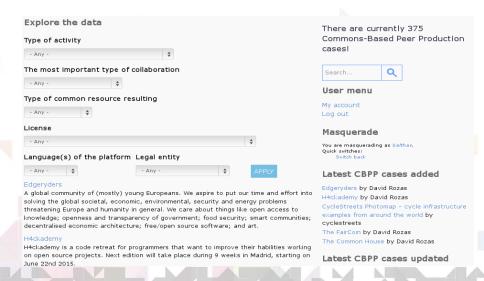
Source: https://upload.wikimedia.org/wikipedia/commons/thumb/ 8c/CCzero.svg/220px-CCzero.svg.png



Exploring the data

Let's take a look:

http://directory.p2pvalue.eu/explore/cbpp-communities





Accessing the data: the "one-click" way

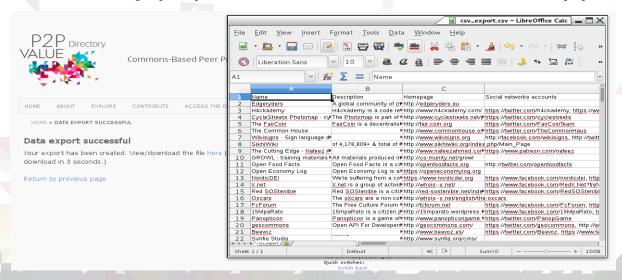
- A batch process to create an "up-to-date" version of the data in CSV
- Useful way to import it for statistical analysis (R, Calc, SPSS, etc.)



Accessing the data: the "one-click" way

Let's take a look

http://www.directory.p2pvalue.eu/download/all-cbpp





Accessing the data: the "geeky" way

- REST (Representational state transfer) service: an architectural style designed by W3C applied to the development of web services
- Currently supporting XML, JSON and PHP objects
- Useful way to be used by other applications



- Accessing the data in different formats:
 - XML (default): http://directory.p2pvalue.eu/rest/api (or .xml)
 - JSON: http://directory.p2pvalue.eu/rest/api.json
 - PHP: http://directory.p2pvalue.eu/rest/api.php

```
-<result is array="true">
  -<item>
    <nid>517</nid>
   -<name>
      Wikisigns - Sign language dictionaries of the world
    </name>
   -<description>
      Wikisigns is an open platform to create and share free sign
    </description>
   -<homepage>
      <value>http://www.wikisigns.org</value>
      <title/>
      <attributes/>
      <path>http://www.wikisigns.org</path>
     -<options>
        <querv/>
       <fragment/>
        <attributes/>
      </options>
    </homepage>
   -<social networks accounts is array="true">
        <value>http://facebook.com/wikisigns</value>
        <title>Facebook</title>
        <attributes/>
        <path>http://facebook.com/wikisigns</path>
```



- You can also perform queries using the different values of the taxonomies by adding parameters to the URL
- E.g.:http://directory.p2pvalue.eu/rest/api?languages=%22Spanish%22
 - "All the communities which include 'Spanish' as a *Language of the platform*"



- Several parameters can be combined: "AND" logic
- E.g.:

http://directory.p2pvalue.eu/rest/api?languages=%22Spanish%22&legal_entity=%22public%20institution%22

"All the communities which include 'Spanish' as a *Language of the platform* AND which have a value of "public institution" for the field *Legal entity*"

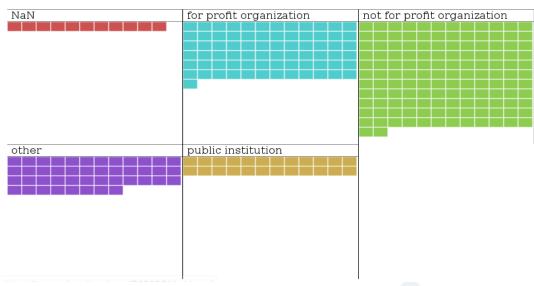


- A concrete CBPP case can be selected using the NID (Node ID
 - Unique identifier)
- E.g.: http://directory.p2pvalue.eu/rest/api.json?nid=250
 All the information about the case 250 (Drupal) in JSON
- +info: http://www.directory.p2pvalue.eu/api-instructions



Example of use of API during #P2PDataJam





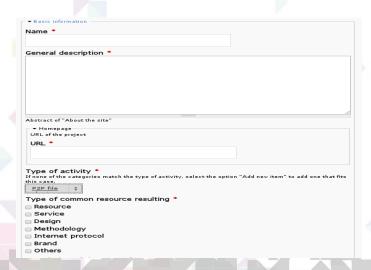
Source: screenshot from http://research.nualart.cat/p2pvalue/ retrieved 22nd June 2015

http://research.nualart.cat/p2pvalue/



Contributing

- Adding new cases or editing current ones
- Let's take a look: http://directory.p2pvalue.eu/node/add/cbpp-community





Ideas for future work

- Automatic collection of data from P2Pvalue platform
- Automatic collection of data from other sources: OpenHub of CBPP?
- Data visualisation: maps of the communities, user actions, graphical statistics, etc.
- User engagement mechanisms
- Let us know if you are playing with the data:

http://www.directory.p2pvalue.eu/contact or @p2pvalue



Any questions/feedback?

Thanks! ¡Gracias!
Ευχαριστώ! Danke! □
Grazie!

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