Portal Version 4.3 - User Manual
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1 Introduction

1.1 Purpose of the Document

The main purpose of this document is to present a User Manual for the main user functionalities of the Portal Version 4.3, launched in production in May 2019. This document consists of an update of the User Manual for the Portal Version 3.0 published in November 2017[4].

1.2 Reference Documents

<table>
<thead>
<tr>
<th>Id</th>
<th>Reference</th>
<th>Title</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1]</td>
<td>EDP_S1_MAN</td>
<td>EDP_S1_MAN_Portal-Version1-UserManual_v1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>[2]</td>
<td>EDP_S1_MAN</td>
<td>EDP_S1_MAN_Portal-Version1.3-UserManual_v1.2</td>
<td>1.3</td>
</tr>
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</table>

*Table 1-1: Reference Documents*

1.3 Terminology

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>API</td>
<td>Application Programmer Interface</td>
</tr>
<tr>
<td>CKAN</td>
<td>(replaced by the “Data Platform”)</td>
</tr>
<tr>
<td>CSV</td>
<td>Comma separated values</td>
</tr>
<tr>
<td>Data Platform</td>
<td>Single page web app for managing and displaying datasets</td>
</tr>
<tr>
<td>DCAT-AP</td>
<td>DCAT Application Profile - Metadata specification based on the Data Catalogue vocabulary (DCAT)</td>
</tr>
<tr>
<td>DRUPAL</td>
<td>Content Management System</td>
</tr>
<tr>
<td>ECAS / EU-Login</td>
<td>EU user login page</td>
</tr>
<tr>
<td>EDP</td>
<td>European Data Portal</td>
</tr>
<tr>
<td>FME</td>
<td>Feature Manipulation Engine</td>
</tr>
<tr>
<td>GUI</td>
<td>Graphical User Interface</td>
</tr>
<tr>
<td>HTTP</td>
<td>Hypertext Transfer Protocol</td>
</tr>
<tr>
<td>JSON</td>
<td>JavaScript Object Notation (a lightweight data-interchange format)</td>
</tr>
<tr>
<td>maps.app</td>
<td>Geo-spatial data visualization application</td>
</tr>
<tr>
<td>MQA</td>
<td>Metadata Quality Assistant</td>
</tr>
<tr>
<td>RDF</td>
<td>Resource Description Framework</td>
</tr>
<tr>
<td>SOLR</td>
<td>Search engine used for portal content search and dataset search</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>SPARQL</td>
<td>Query language for linked data (RDF)</td>
</tr>
<tr>
<td>SSL</td>
<td>Secure Socket Layer</td>
</tr>
<tr>
<td>URL</td>
<td>Uniform Resource Locator</td>
</tr>
<tr>
<td>XML</td>
<td>Extensible Markup Language</td>
</tr>
</tbody>
</table>

*Table 1-2: Abbreviations and Acronyms*
2 Approach

The approach used for this User Manual was based on the identification of the main user functions of the Portal and the description of each function from the user’s perspective in terms of “How to...”. Each main function documentation consists of a screen snapshot, the steps required to execute the function and optionally a screenshot with the results.

3 Main User Functions of the Portal

This section describes all of the main user functions supported by the Portal Version 3.0. The table 1-3 below lists the described functions by module.

<table>
<thead>
<tr>
<th>Module Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Portal HomePage</td>
<td>- How to browse through the Editorial Content</td>
</tr>
<tr>
<td></td>
<td>(how to access Resources on Open Data: eLearning modules, Training Companion, Reports about Open Data)</td>
</tr>
<tr>
<td></td>
<td>- How to view / search for “Latest News”</td>
</tr>
<tr>
<td></td>
<td>- How to view / search for “Open Data Events”</td>
</tr>
<tr>
<td></td>
<td>- How to subscribe to the EDP Newsletter</td>
</tr>
<tr>
<td></td>
<td>- How to view “Tweets” on the EDP</td>
</tr>
<tr>
<td></td>
<td>- How to switch to another User Language</td>
</tr>
<tr>
<td></td>
<td>- How to search for EDP Site Content</td>
</tr>
<tr>
<td></td>
<td>- How to search for Datasets by Data Category</td>
</tr>
<tr>
<td></td>
<td>- How to search for Datasets by Keyword</td>
</tr>
<tr>
<td>2 Datasets (Data Platform)</td>
<td>Entering the Datasets-View</td>
</tr>
<tr>
<td></td>
<td>- How to filter datasets by using “Faceted Search”</td>
</tr>
<tr>
<td></td>
<td>- How to store personal queries</td>
</tr>
<tr>
<td></td>
<td>- How to filter datasets by geographical area</td>
</tr>
<tr>
<td></td>
<td>- How to download dataset distributions</td>
</tr>
<tr>
<td></td>
<td>- How to view licensing information</td>
</tr>
<tr>
<td></td>
<td>- How to switch to another user language</td>
</tr>
<tr>
<td></td>
<td>- How to browse by data catalogues</td>
</tr>
<tr>
<td>3 Visualization of Geo-Spatial Data (map.apps)</td>
<td>How to visualize geo-spatial data from a dataset resource</td>
</tr>
<tr>
<td>4 Graphical Data Visualisation Tool</td>
<td>How to visualize graphical data from a dataset resource</td>
</tr>
<tr>
<td>5 Help Desk</td>
<td>How to contact The Portal’s Help Desk</td>
</tr>
<tr>
<td>6 Metadata Quality Assurance (MQA)</td>
<td>Monitoring tool for the metadata quality:</td>
</tr>
<tr>
<td></td>
<td>- The Global Dashboard View</td>
</tr>
<tr>
<td></td>
<td>- The Catalogue details view</td>
</tr>
<tr>
<td>7 SPARQL Manager</td>
<td>How to run SPARQL Queries using:</td>
</tr>
<tr>
<td></td>
<td>- SPARQL Search</td>
</tr>
<tr>
<td>Module Name</td>
<td>Function</td>
</tr>
<tr>
<td>-------------</td>
<td>----------</td>
</tr>
</tbody>
</table>
|             | - SPARQL Assistant  
|             | - SPARQL Saving/Modifying a Query  
|             | - SPARQL Queries |

*Table 1-3: Main functions of the Portal Version 3.0*
3.1 Portal Home Page

![Figure 1: EDP Home Page (upper part)](image-url)
Figure 2: EDP Home Page (lower part)
3.1.1 How to browse through the Editorial Content of the Portal

The editorial content of the Portal is organized into 4 main menu items:

1. What we do
2. Providing Data
3. Using Data
4. Resources

1. Click on “What we do”, then on sub-menu “Our Activities”

The system displays a separate page with information on what is done in the Portal.
2. Click on "Providing Data", then on sub-menu “Practical Guide”

System displays a separate page with information on how to provide data to the Portal. This page mainly addresses the suppliers (harvested portals) of the data and metadata.
3. Click on “Using Data”

The system displays a separate page with information on how the Portal data/metadata can be (re-)used. This page mainly addresses the users of the data and metadata.

3a. Benefits of Using Open Data

By clicking on the sub-menu “Benefits of Using Data”, the system displays a page with potential benefits from the (re-)usage of Open Data.

![Benefits of Open Data](image-url)
3.b Use Cases of Open Data

By clicking on the sub-menu “Use Cases”, the system displays a list of success stories (use cases) from users having successfully (re-)used Open Data for an app, website, etc. The list can be filtered by keyword, country of origin, region, sector (data category) and type of use case.
4. **Click on “Resources”**

System displays several sub-menu items that lead to eLearning and training material as well as to a library of downloadable reports and documents about Open Data.

4a. **eLearning**

By clicking on the “eLearning” sub-menu item and then on the button on the subsequent page, the system switches to the training platform from which 16 training lessons can be directly taken online.
4b. Training Companion

By clicking on the “Training Companion” sub-menu item, the system provides detailed information on how to deliver training on the basics of Open Data as well as the corresponding supporting materials.
4c. **Reports about Open Data**

By clicking on the “**Reports about Open Data**” sub-menu item, the system provides a list of available reports on open data. The list can be filtered by keyword, year of publication, country of origin and type of report.

![Image of Reports about Open Data](image.png)

<table>
<thead>
<tr>
<th>Year</th>
<th>Country</th>
<th>Title</th>
<th>Type of Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>Europe</td>
<td>ePSI Platform PSI Scoreboard</td>
<td>Open Data Community reports</td>
</tr>
<tr>
<td>2017</td>
<td>Europe</td>
<td>ePSI platform scorecard</td>
<td>Open Data Community reports</td>
</tr>
<tr>
<td>2017</td>
<td>Germany</td>
<td>Value Creation in the Digital Age</td>
<td>Open Data Community reports</td>
</tr>
<tr>
<td>2016</td>
<td>Europe</td>
<td>Best Practice: (R)esource federated tools</td>
<td>Open Data Community reports</td>
</tr>
<tr>
<td>2016</td>
<td>Europe</td>
<td>Best Practice: Categorise openness of data</td>
<td>Open Data Community reports</td>
</tr>
<tr>
<td>2016</td>
<td>Europe</td>
<td>Best Practice: Ettaset Criteria</td>
<td>Open Data Community reports</td>
</tr>
<tr>
<td>2016</td>
<td>Europe</td>
<td>Best Practice: Develop and Implement a Cross Agency Strategy</td>
<td>Open Data Community reports</td>
</tr>
<tr>
<td>2016</td>
<td>Europe</td>
<td>Best Practice: Enable feedback channels for improving the quality of existing government data</td>
<td>Open Data Community reports</td>
</tr>
<tr>
<td>2016</td>
<td>Europe</td>
<td>Best Practice: Enable quality assessment of open data</td>
<td>Open Data Community reports</td>
</tr>
<tr>
<td>2016</td>
<td>Europe</td>
<td>Best Practice: Encourage crowdsourcing around PSI</td>
<td>Open Data Community reports</td>
</tr>
</tbody>
</table>
3.1.2 How to view / search for “Latest News”

The Home Page displays the latest 4 news items in the “Latest News” panel on the left hand side.
- Click on any of the 4 news items to display the complete news article (here: item#1).
- Or click on “More news” in order to find previously published news articles in the news archive.
3.1.3 How to view / search for “Open Data Events”

The Home Page displays the latest 4 Open Data events in the “Open Data Events in Europe” panel on the right hand side.

- Click on any of the 4 events to display the event article (here: item#1).
- Or click on “View calendar” in order to find current and future events on the events calendar.
3.1.4 How to subscribe to the EDP Newsletter

On the Portal Home Page:

- Either Click on the “Newsletter” item in the page header:

  Then, on the “Newsletter subscriptions” page:
  
  - Enter your E-Mail address
  
  - Click on the button “Subscribe”

  The system will display a notification message after successful subscription.

Or

- Enter your email address directly in the footer and click on the “Subscribe” button.

  The system will display a notification message after successful subscription.
3.1.5 How to view “Tweets” on the EDP

The Home Page displays the latest tweets on the European Data Portal in the “Tweets” panel on the right hand side.

- Click on any of the tweets to display the complete tweet on twitter.
- Scroll vertically to see previous tweets.

![Tweets by @EU_DataPortal](image)
3.1.6 How to switch to another User Language

Select another language from the language selection box located on the upper right corner of the home page.

The User Interface as well as the main editorial content is displayed in the selected language.

The EDP currently supports all 24 official EU languages + Norwegian:

- English (en), Bulgarian (bg), Spanish (es), Czech (cs), Danish (da), German (de), Estonian (et), Greek (el), French (fr), Irish (ga), Croatian (hr), Italian (it), Latvian (lv), Lithuanian (lt), Hungarian (hu), Maltese (mt), Dutch (nl), Polish (pl), Portuguese (pt), Romanian (ro), Slovak (sk), Slovenian (sl), Finnish (fi), Swedish (sv), Norwegian (no).

Note:
The following detailed editorial content – apart from the landing pages - is only available in English / French and some additional languages:

- Practical Guide (formerly “Goldbook”): (en)
- eLearning Modules: (en, fr, de, it, es, sv)
- Training Companion: (en)
- More Training Material: (en)
- Reports about Open Data: (en)
- Use Cases (en)
3.1.7 How to search for EDP Site Content

In order to search within the Portal's site content (i.e. editorial content, articles, events, reports etc.), enter any keyword in the “Search site content” text box and click on the button.

The site will display all matching content found (here for keyword “Brussels”):

![Search Result]

**Note:**
The “Search site content” does not perform any search on datasets.
In order to search for datasets from the EDP Home page, the user should refer to section 3.2.
3.1.8 How to Search for Datasets by Data Category

On the Home Page, the user may click on any of the data categories below: icon or on icon text (here: “Environment”)

The system displays all datasets found under the selected data category, as shown below (here: for dataset category “Environment”).
By clicking on the “All data” icon 🗃️, the system starts displaying all datasets across all data categories from the entire repository.

The user can scroll through the datasets found by using the pagination at the bottom of the page.
3.1.9 How to Search for Datasets by Keyword

(please refer to section 3.2.1)
3.2 Datasets (Data Platform)

The datasets section is the main access point for browsing, filtering and searching the datasets. It offers a faceted search, a full text search and a geographical search. The dataset view provides access and information to the distributions of the dataset.

The home page of this section appears like this:
3.2.1 Entering the Datasets-View

The user has the following possibilities to enter the datasets view:

- Browsing directly to http://europeandataportal.eu/data
- Opening the “Data” item in the main menu, then clicking on “Datasets” in the submenu
- Clicking on “Search” in the “Search Datasets” area, with or without a search keyword entered

3.2.2 How to filter datasets by using “Faceted Search”

The user can find suitable datasets by performing a “Faceted Search”. This means the user systematically adds properties, which the desired dataset should fulfill, e.g. a dataset should be part of a specific catalogue or category. The following properties are available:

- Countries,
- Catalogues,
- Categories,
- Tags,
- Formats,
- Licences.

Those facets are presented on the left side of the main dataset page. The available options for each facet always reflect the availability of it in the current set of results. The numbers in brackets indicate how many datasets in total have that property e.g. there are 117,610 datasets with a distribution in CSV format.
By clicking on a facet the result set is filtered by the selected property. Multiple selections are linked together by a logical “AND or “OR”. The following example will find datasets which are from catalogue “data.gov.uk” AND are in the categories “Environment” AND have a distribution in the formats (“CSV” or JSON”). Facets can be selected and deselected. In addition a key word can be entered to filter the results even more.
3.2.3 How to store personal queries

As a logged-in user it is possible to store queries. This includes the search term and selected facets. The option is available by clicking on “Save Query” on the datasets view.

The user has to enter a title and description for the query. After submitting the form by clicking on “Save Query” the current state of the search query will stored.

A list of all stored queries can be found in the user’s dashboard: Data > Dashboard > My Queries. Each user can only access their own queries. It is possible to search, sort and delete the queries. By clicking on the title of the query the respective search is executed.
3.2.4 How to filter datasets by geographical area

Many datasets are associated with geographical information. It is possible to filter the datasets by providing a location or area. Only datasets which are within this geographical area are displayed in the result set. The core idea is to select the desired geographical area by highlighting it within a provided map.

There are two approaches to provide this area:

1. The user enters a location keyword in the “Filter by location” input field on the left side, which triggers a search for suitable geo names (e.g. “Paris”). All the results are linked to coordinates. By selecting one result the location is automatically highlighted within the map. The result set is filtered accordingly.

![Filter by location](image-url)
2. The second possibility is a manual selection of a geographical area. The users first clicks on the grey square and the map enlarges automatically. Then, the user clicks on the “Pencil” button and selects an area by drawing a rectangle over the desired location with the mouse (here: Spain). The filtering is applied by clicking on “Apply”.

![Map with a drawn rectangle for location selection](image)
3.2.5 How to download dataset distributions

Besides special formats (see chapters 3.3 and 3.4) distributions are not displayed within the platform but only linked. When the user enters the detailed view of a dataset by selecting it in the search result, all available distributions are listed. For downloading a distribution, the user clicks on the “Download” button and then on the “Go to resource” icon.
3.2.6   How to view licensing information

Licensing information is available for all datasets associated with common licences, which are supported by the Licence Assistant. When available a link to the assistant is provided on left side of a dataset page.

By clicking on the licence name (here: cc-by), the Licence Assistant tool is opened in a new window, displaying relevant information for this particular licence.
By clicking on the “Data→Licensing Assistant” link in the main menu, the Licence Assistant is opened in a new window, displaying relevant information of all supported licences by the tool.
3.2.7  How to switch to another user language

The user language can be switched by selecting a language from the dropdown menu on the top. This changes the interface language and the language of metadata fields of the datasets, which are provided in multiple languages, mainly title and description.

By default the searching for datasets is performed within all available languages.
3.2.8 How to browse by data catalogues

By browsing to Data > Catalogues in the main menu, all source catalogues are listed and/or can be searched for by entering a keyword contained in the catalogue name or description.

Catalogues can also be filtered by their country of origin. This can be done by selecting one or more countries in the left country facet. The page then lists all catalogues from the selected countries.

http://www.free-country-flags.com/
3.3 Visualization of Geo-Spatial Data (map.apps)

The visualization of geo-spatial data within the European Data Portal provides previewing functionality for spatial open data. The aim is to allow the user to assess if a dataset meets specific requirements in terms of spatial and thematic coverage. The functionality that is provided in the header (links to disclaimers and language switching) is consistent in the entire portal.

3.3.1 How to visualize geo-spatial data from a dataset resource

Accessing the geo-spatial visualization is achieved via the Data Platform interface. A user searches for specific data, enters the dataset view of reasonable results and displays the available distributions (see Section 3.2.5). If a dataset distribution is supported by the geo-spatial visualization, a globe button is displayed (see Figure 3). This is the entry point into the map viewer application. Supported formats are OGC Web Map Service (WMS) and GeoJSON. If the user visits the geo-spatial visualization for the first time, an interactive user tutorial is provided to guide the use through specific functions of the user interface, similar to this written user manual.

![Figure 3 – Dataset Resource Page with Link to Geo-Spatial Visualisation.](image-url)
Once within the map viewer application, the user can decide which layers to be displayed. Most Web Map Service (WMS) instances provide more than one layer. The geo-spatial visualization provides a dialog for choosing the desired layers for display (see Figure 4).

![Selection of layers](image)

**Figure 4 – Selection of layers.**

In order to examine the resource in more detail, the user can click on a geographic feature while the “Feature Info” tool is enabled (see Figure 5). This function is only enabled if the service supports this kind of detailed query.
The different displayed layers can be examined using the "Legend" tool. If the external service provides legend graphics, the user can interpret the given symbology and temporarily disable the display of layers (see Figure 6).
The two buttons on the bottom right of the map viewer (see Figure 7) can be used to display an informational disclaimer and to start the user interface tutorial.

![Disclaimer and tutorial buttons.](image)

In some cases the user might experience the display of an error message. The geo-spatial visualization tries to support all flavors of external services but cannot guarantee to work with broken services. In these situations an error message dialog is presented and the user can decide if a support ticket shall be opened (see Figure 8).
Figure 8 – Error message dialog.
3.4 Graphical Data Visualisation Tool

This section describes the features of the graphical visualisation tool for numeric data. The features are currently available for XLS (Excel) and CSV files, except for the selection of the sheet name which is applicable only for Excel files.

Most GUI elements from the “Graph” tab (records selection, search box, filters and fields buttons) are also available on the “Grid” tab and work in the same way.

3.4.1 How to visualize graphical data from a dataset resource

As a result of a dataset search, the system displays on the “Dataset” tab all distributions (resource/data files) that are part of the selected dataset. Each XLS or CSV distribution of the dataset can be further explored by clicking on “Open Visualization” under the “Options” button – if available.
After clicking on the “Open Visualization” button, the user should execute the following steps:

**Step 1: Select a Sheet Name**

The Portal is parsing the XLS file and lists all available worksheets. Select one of the sheets contained in the XLS file.

**Step 2: The Grid View**

The grid appears once the user has clicked on a file name (and a sheet name in case of an Excel file).
Step 3: The Graph Tab

Click on the graph tab in order to display the corresponding graph.

1. Selection of the sheet name
2. Button to go back to the “Grid” view
3. Selection of a range of data records
4. Search box
5. Filters button to open the filters form
6. Fields button to open the fields box
7. Select box to select the graph type
8. Select box to select the group column (Axis 1)
9. Select box to select the series A (Axis 2)
10. Button to add series
Step 4: Filters

Once the user clicks on the filters button the filters form appears.

After clicking on “Add filter”, the available fields appear and the user can now filter the data with a specific value or range.
Step 5: Fields

Click on the “Fields” button in order to display the fields box that contains the list of available fields.

Step 6: Adding another data series

Click on the “Add Series” button to add another data series to the current graph as shown below.
3.5 Help Desk

3.5.1 How to contact the Portal’s Help Desk

The European Data Portal Help Desk can be contacted:

- **By email:** [help@europeandataportal.eu](mailto:help@europeandataportal.eu)
- **By phone:** the Portal’s Help Desk is staffed by a multilingual team of experts, who can be contacted from Monday to Friday from 09:30 to 17:30 (CET).
  - EN: (+352) 31 44 01-448
  - FR: (+352) 31 44 01-449
- **By providing comments and suggestions via the online contact/feedback form** available from the Portal’s home page.

From the header:

After clicking on the “Contact” item, the following form is displayed:
### 3.6 Metadata Quality Assurance (MQA)

The Metadata Quality Assurance is a component to monitor the quality of the metadata that is harvested from other portals or stored manually with the EDP metadata creation form. Currently, quality measurement is based on metadata schema violation against DCAT-AP 1.1 and availability of the distributions of a dataset. The MQA is running checks on a weekly basis. Each check has a duration of a couple of days. This is due to the HTTP GET requests against each single distribution in the portal, checking their availability.

In addition to the navigation buttons in the dark blue bar at the top of the page, a drop down menu allows the downloading of a report file, in which all the data generated by the MQA is contained. The report is available in various formats. The PDF report includes the charts displayed.

#### 3.6.1 The Global Dashboard View

This is the landing page of the MQA. It gives an overview of the quality situation across all catalogues, datasets and distributions in the Portal. If the user wants to investigate the mentioned issues with datasets or distributions in detail, he/she can use the catalogue selection menu on top of the page to navigate to the selected catalogue details page.

An information icon in the upper right corner is indicating that the user can get explanation texts for all diagrams on the page. The introduction text shows the planned schedule for the next check to be performed by the MQA. The bottom of the page shows the date when the last check started. If the MQA is currently running a check, then a spinning wheel beside the last check date is indicating this.

![Global Dashboard View](image)

<table>
<thead>
<tr>
<th>Top 12 Catalogues</th>
<th>County</th>
<th>Name</th>
<th>Accessibility</th>
<th>Machine Readability</th>
<th>DCAT AP Compliance</th>
<th>Known licences</th>
<th>Accessibility</th>
<th>Download URL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Access URL</td>
<td></td>
<td></td>
<td></td>
<td>Download URL</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>inspire.gov.at (at)</td>
<td>76%</td>
<td>20%</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>data.gov.at (at)</td>
<td>65%</td>
<td>80%</td>
<td>96%</td>
<td>0%</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>openneuropointer.at (at)</td>
<td>64%</td>
<td>54%</td>
<td>n/a</td>
<td>0%</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>data.gov.be (be)</td>
<td>59%</td>
<td>90%</td>
<td>17%</td>
<td>1%</td>
<td>55%</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Open Data Bulgaria (bg)</td>
<td>2%</td>
<td>60%</td>
<td>n/a</td>
<td>0%</td>
<td>100%</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>openata.sai.bnl (nl)</td>
<td>93%</td>
<td>61%</td>
<td>12%</td>
<td>0%</td>
<td>93%</td>
<td>n/a</td>
<td></td>
</tr>
</tbody>
</table>
3.6.2 The Catalogue details view

This page presents a detailed view of the issues per catalogue. The “Download as report” drop-down menu provides a list of all available catalogues. As a next step, the user can choose whether to see the catalogue dashboard, the distribution availability or dataset schema violations. The catalogue dashboard is the default view when visiting this page.
3.6.2.1 Catalogue Dashboard

The catalogue dashboard provides the same information as the overall dashboard, but only for the selected catalogue.

3.6.2.2 Distributions

This view provides a detailed report of the distributions’ status of the selected catalogue. The user can see the URLs of the distributions that were checked (access and download URL), the corresponding HTTP response codes and the dates when this issue occurred the first time. Additionally, the distributions’ format is checked for its machine readability. The machine readability check is based on the results of the Open Data Monitor project\(^1\).

\(^1\) [https://github.com/opendatamonitor/odm.restapi/blob/master/odmapi/def_formatLists.py#L44-L87](https://github.com/opendatamonitor/odm.restapi/blob/master/odmapi/def_formatLists.py#L44-L87)
3.6.2.3 Violations

The MQA checks for each dataset if it is DCAT-AP compliant. The validation is done on the metadata that is stored in the Virtuoso repository. Therefore, a JSON schema was created and is used for validation. The user can see the location where the violation occurs and its reason for each not compliant dataset of the selected catalogue.

![DCAT-AP Schema Violations](image)
3.7 SPARQL Manager

The SPARQL Manager provides a graphical user interface (GUI) for sending user defined queries to the Virtuoso SPARQL query engine.

The powerful SPARQL Protocol and RDF Query Language are primarily aimed at professionals for querying metadata as Linked Data. A basic knowledge of the DCAT-AP specification is highly recommended.

In the future, users of the SPARQL Manager will be able to save their queries for scheduled execution. Additionally a notification will be send to the user when a result has changed.

Clicking the info icon in the upper right corner will display a step-by-step walkthrough of all components with a short info about their function.

This is possible in both of modes of the SPARQL Manager, the search and the assistant mode, which will be described in the following sections.

3.7.1 SPARQL Search

In this mode you can load some predefined example queries from the right side into the editable text area to introduce yourself with the very basic SPARQL syntax. Limiting the number of returned results is possible by selecting a value from the Limit-dropdown or by editing the query directly.

Furthermore the format for the result can be selected. After clicking the Search-Button the result is displayed in Result data preview area below. The preview may be truncated depending on the size of the result. The complete result could always be downloaded as a file by clicking the Download-link on the right side.
3.7.2 SPARQL Assistant

The SPARQL assistant extends the functionality of the simple SPARQL search described in the previous section. More complex queries for datasets could be built by clicking several options in the GUI.

1. **Category/Theme**
   Select one or more Categories/Themes defined in the DCAT-AP standard to filter the results. Datasets will only be listed in the result if they belong to all selected categories/themes.

2. **Distribution format**
   Datasets can contain distributions in different formats. You can select one or more formats to exclude datasets from the result which distributions do not contain the desired formats. If your format selection by the DCAT-AP standard is too strict you may enter a custom format string at the bottom of the list, which will result in a simple text comparison in the format label field.

3. **Search for keyword**
   Enter a search term which must be found in the dataset. You can limit this to the title or the description. By enabling both options the term has to occur in the title and the description.

4. **Count number of results**
   By clicking the “only count number of results” option, only the number of results that matches the SPARQL query is returned.
3.7.3 SPARQL Saving/Modifying a Query

Once a user is logged-in, he/she has the opportunity to save custom queries. A corresponding name and the actual query as well as a result format have to be provided.

The user may as well enter an email address in order to receive a notification email from the system and a comment which describes the query.

Selecting a schedule string lets the query run automatically if the checkbox “Enabled” is selected.

If the user likes to share and lets other users see the query he/she may select the “Public” checkbox.

The same page will be displayed if the user decides to modify one of his/her queries. A list of all results on the right side lets the user decide which result he/she likes to display.
3.7.4 SPARQL Queries

The third tab displays all queries set to “public”. Upon creating or modifying a query the user may set the attribute “public”, which will make the query accessible to everyone.

Once the user is logged-in, another list with all private queries including the owned public queries will be displayed. Besides “Query name” and “Query comment”, the attribute “Enabled” visualizes if the query is currently running on a recurring time interval.

All attributes may be changed upon selecting “Details” if the logged-in user is the owner of selected query.