The core API is a tool that allows to retrieve data from the TheyBuyForYou knowledge graph. (Slide 1, 8 segundos)

The API is organised around REST principles and It is composed of 27 basic resources which are divided into 5 main groups, considered as first-level resources:

* Awards - /award
* Contracts - /contract
* Contracting processes - /contractingProcess
* Organisations - /organisation
* Tenders - /tender

In the following table you can see for each group which would be the related resource in the API. (Slide 2, 30 segundos)

There are two ways to access the data. The first one is directly through the browser, in the domain <http://data.tbfy.eu/kg-api/> in which a welcome message will be shown when it is ready. (10 segundos)

Let’s try an example in which the list of tenders is displayed to later obtain specific information about one of them

The second way to access the data is through the swagger API interface, which is available at this uri

In this swagger visualization we can find the 27 resources at a single glance and, within each one of them, we can see all the filters that can be applied. Required fields will be indicated with an asterisk.

Now, we are going to reproduce the same previous example in which we are going to obtain a list of tenders but that contain the sequence of characters "ibm" in the title.

As you can see, we have obtained the searched list in which the fields id, title, description, status and creationDate are displayed. Swagger also allows us to download the results in a JSON file

Our next step will be to obtain the information of a specific tender, so we are going to use the id of the first result and we are going to enter it in the resource identifier parameter, which, as it is mandatory, is marked with an asterisk as mentioned above.

Using swagger, we can also know the requested uri that we can put in a browser.

Once we have obtained all the information on the tender, the next step will be to get the information from the second level resources related to items, contracting processes and documents

Starting with the items, we have to enter again the identifier in the required box and, after executing the query, the list of items will be shown with information about the description and the schema used.

Other information that we can obtain as a second-level resource is the list of contracting processes associated to the tender. The process is the same as the previous one, we enter the identifier, run the query and obtain the list with the information about the identifier of the contracting process and the creation date

Finally, the last second-level resource we can get from this tender, is the list of documents. It is the same process and we obtain the list with the identifier, the type of document, language and uri where it can be found

So far, we have seen how to use basic API resources. The real power of this API is being able to build added-value services in combination with other tools on the platform.

We will show how to combine the searchAPI with the CoreAPI, so, given an initial text in a language, we will get a list of awarded organisations that participated in similar contracting processes in the same or different language,

To achieve this, a python notebook has been created with google colaboratory which, using a form, we start from a text in Italian and, using the SearchAPI, we are going to obtain the related documents, in English,

First, we execute the first form which calls to the SearchAPI, requesting the five more similar documents in Ebglish

The next step is to get the tenders related to these documents, for that, the notebook makes the query to the coreAPI. The list of tenders is displayed with all the needed information

Once we have the list of tender, we need to know the organisations that have participated in these tenders so the notebooks makes again the query to the core API. The organisations are displayed with its name, the name of the award and the description of the tender

Finally, we will show the python code used and how easily three calls to the coreAPI can be made, the first one to obtain all the contracting processes, the second one to return the awards and, finally, another one to get the final list of organizations

If anyone is interested in taking a test drive, this notebook is available at the theybuyforyou guithub