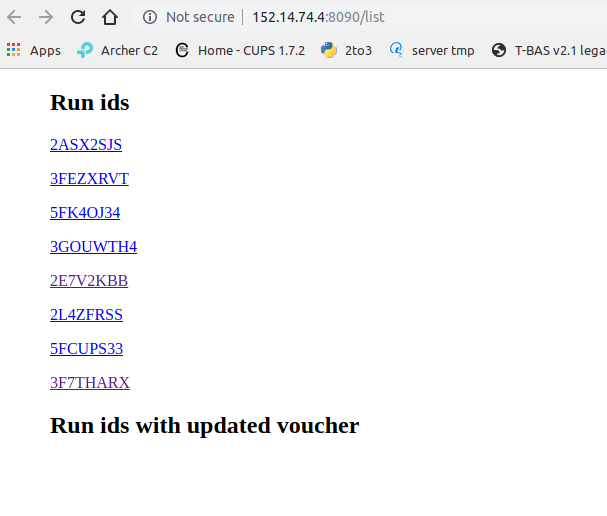
# Using DeCIFR REST Server

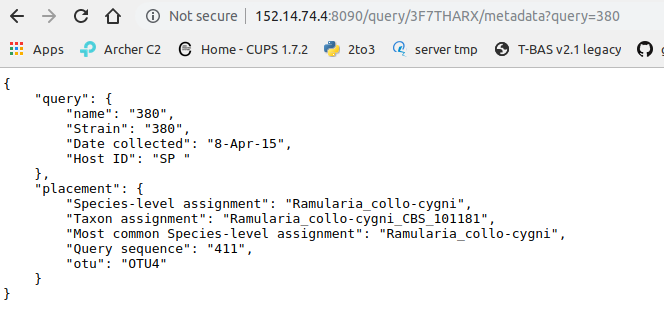
We have included the code for a REST server that can be used to share over the internet the results stored in a cifr phyloXML. The code is available at <https://github.com/ncsu-decifr/decifr-rest>

The server uses the Python framework Flask – <https://palletsprojects.com/p/flask/>. Installation instructions are included.

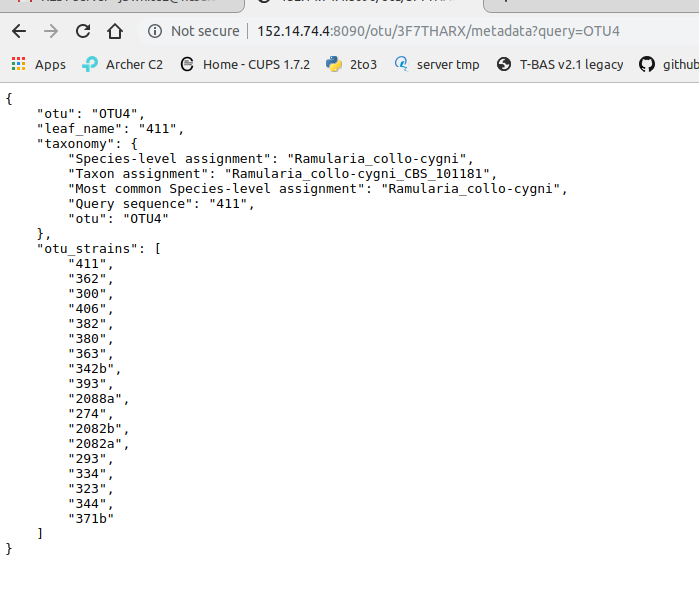
To run the server edit the location of the parameter TMP\_FOLDER to the folder holding the cifr phyloXML files.. Opening the url to /list returns a list of run ids of all the xmls in the folder.



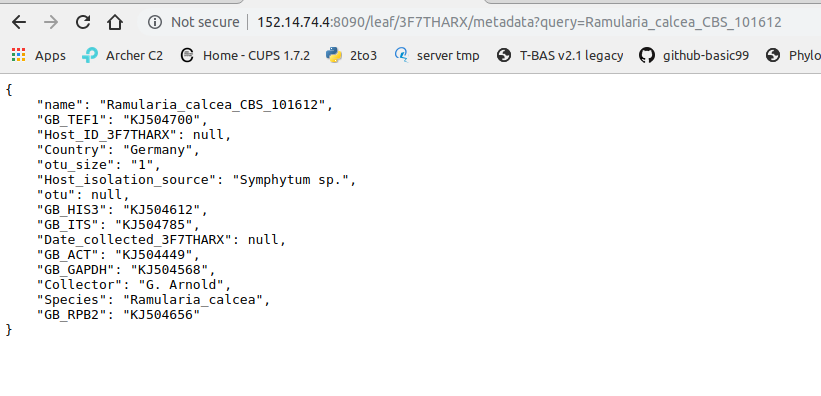
From here opening a url like /run/3F7THARX shows 3 links for the tree leaves, all the queries on the tree and a list of all the otus created. Clicking one of these links goes to another page with a list of all available leaves, queries or otus for each case. The metadata links return a json result with the available metadata.



The metadata for a query shows the metadata with the uploaded csv unknowns file if that was supplied and the placement on the tree from TBAS.



The meatadata for an otu is similar to the query metadata but also shows all the strains grouped in the otu placement.



Lastly the leafs metadata shows the metadata associated with all the leaves of the tree, either from the original reference tree of the placements.