

How To Connect DBpedia with GATE Developer

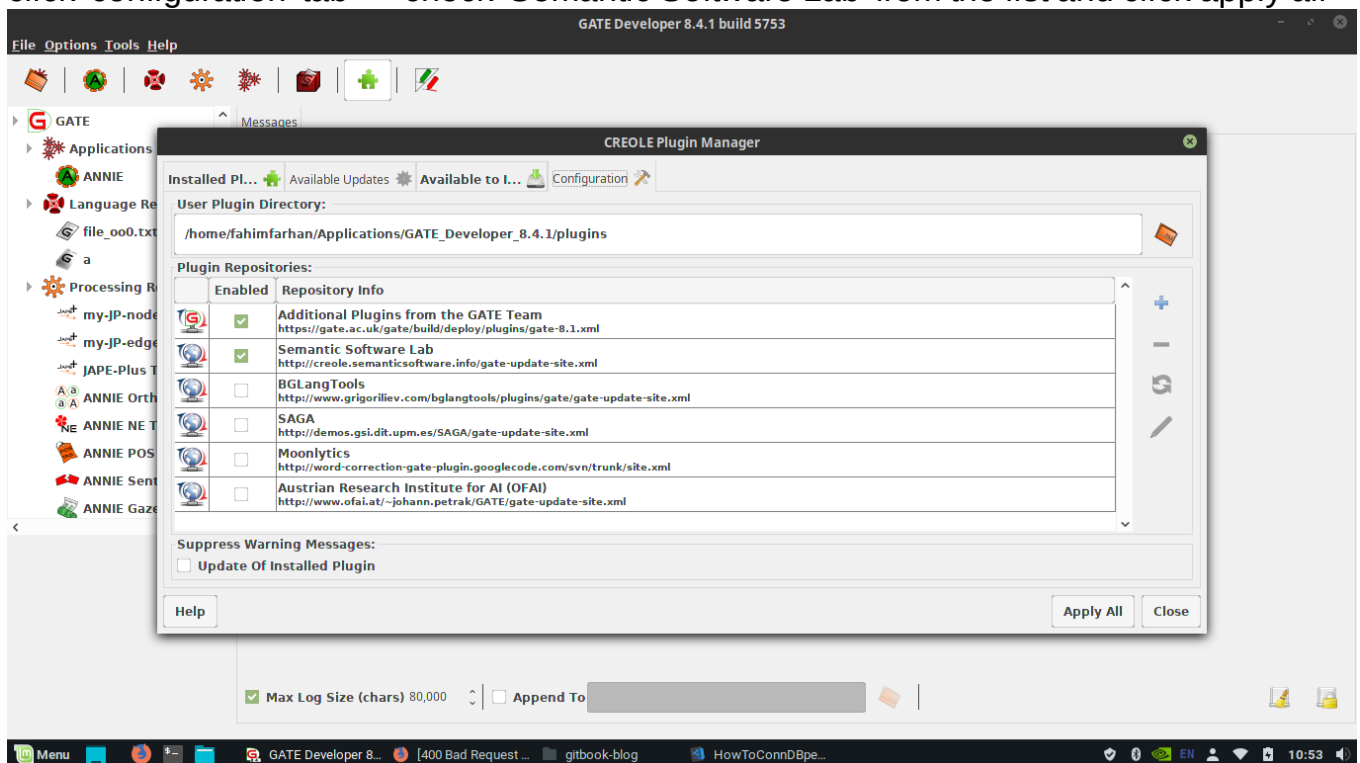
In this pdf, I'll explain how to connect dbpedia with gate. Follow my instructions precisely, and you should be able to connect DBpedia with GATE.

Prerequisite:

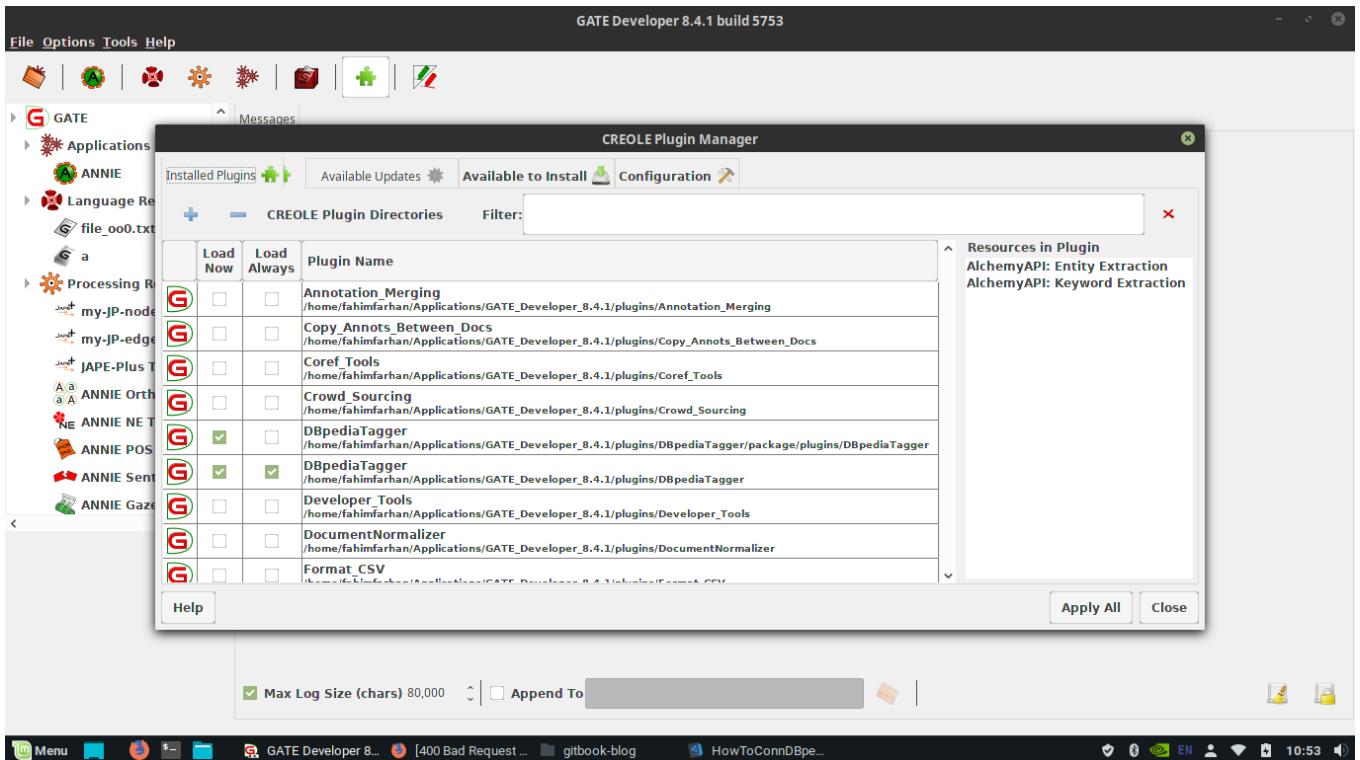
GATE developer 8.4.1 (latest GATE version is 8.5 which is completely different. You need to use maven style dependencies. Since most of the documentations are not updated yet, it's very difficult to work with 8.5. So for now, we'll stick with 8.4.1)

Steps:

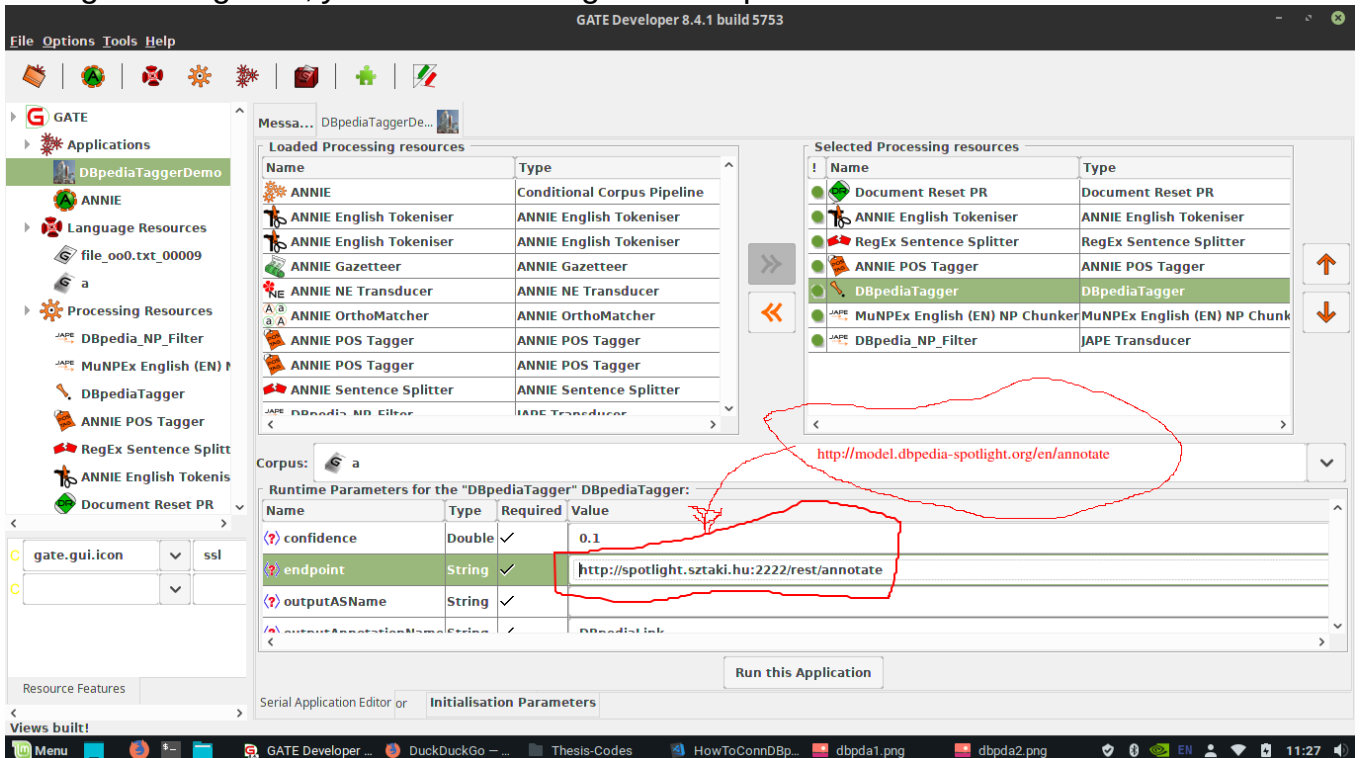
1. open GATE Developer >> MANage CREOLE Plugins (the green puzzle sign on the top right)
2. click 'configuration' tab >> check 'Semantic Software Lab' from the list and click apply all



3. click 'Available to install' tab and install DBpediaTagger and click apply all
4. click 'Installed Plugins' , you should see DBpediaTagger in the options. Select it, and click apply all, wait for the plugin to load. Then close the plugin manager.



- For a quick start, go to 'Applications' >> Ready made software >> semantic software lab >> DBpediaTagger demo application. Select DBpediaTaggerDemo, select a corpus, hit run, and you'll get network connection related exception!
- Select DBpediaTaggerDemo. On the right side panel, select DBpediaTagger. At the bottom, you'll see the runtime parameter table. In the end point, you'll see <http://spotlight.sztaki.hu:2222/rest/>. replace it with <http://model.dbpedia-spotlight.org/en/annotate>. This should fix the problem. If not, a possible reason is that the url has chaged again. You can see their github repo. There you should find the updated url. Please also note that this link is for English language. For other languages, the url will change. Best guess, you need to change the 'en' part in the url. Good luck.



- Now run it. You should get some output.

8. Select a document from corpus. Select Annotation set and annotation list. On the right, you should see DBpediaLink and DBpediaNE. They both have 'url', 'similarity score', and 'type'. Though most of the time, 'type' is NULL. URL shows the dbpedia page url, and score has a number $0 \leq \text{score} \leq 1$.

The screenshot displays the GATE Developer 8.4.1 build 5753 interface. The left sidebar shows the 'GATE' menu with 'Applications' expanded, highlighting 'DBpediaTaggerDemo'. The main text area shows a document with various annotations. A 'DBpediaTagger' window is open, displaying a table of annotations for the selected document 'file_oo0.txt_00009'. The table has columns for 'URI', 'similarityScore', and 'types'. The 'DBpediaNE' annotation is selected, showing a URI of 'http://dbpedia.org/resource/Responsible_government' and a similarity score of '0.7503938348350837'. The 'types' column is empty. The bottom status bar shows '1475 Annotations (1 selected) Select:' and 'Document Editor'.

URI	similarityScore	types
http://dbpedia.org/resource/Responsible_government	0.7503938348350837	