Process for Geocoding in QGIS Using Google and OpenStreetMap Web Map Services

Geocoding is the process of getting the corresponding coordinates for a list of addresses.

1 INSTALL MMQGIS PLUGIN

See the <u>QGIS User Manual</u> for more information on managing plugins.

Open the Plugin Manager – Plugins -> Install and Manage Plugins.

Select *Get More* in the left panel and look for "*mmqgis*" in the list of available plugins.

🧭 Plugin Manager		? <mark>×</mark>		
Installed	Plugins > Get more (179) Search	in: • names descriptions tags authors		
Get more	🗦 Lifemapper MacroEcology Ra 🦱			
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		Close Help Install,		

Click Install plugin. You will get a success message and a new MMQGIS item will be added to the menu.



2 PROCEDURE

2.1 PRE-PROCESSING

Data must be in CSV (Comma-separated Values also known as Comma-delimited) format.

If your data is stored in an Excel spreadsheet, convert it to CSV – File -> Save As -> CSV (Commadelimited) under "Save as Type".

2.2 GEOCODING USING GOOGLE MAPS

MMQGIS -> Geocode -> Geocode CSV with Google/OpenStreetMap



Navigate to your file using the *Browse* button.

Ensure the *Output Shapefile* and *Not Found Output List* locations have write privileges. The *Not Found Output List* will produce a CSV file of locations that were not able to be geocoded.

Select Google Maps under Web Service.

Click OK. Depending on the number of records, the processing may take a while.

🌠 Web Service Geocode	? ×					
Input CSV File (I/ITE-8)						
J:/Data/DMTI/EPOI/2013/NAICS-72221	Browse					
Address Field City Field						
ADDRESS	-	CITY	-			
State Field		Country Field				
PROV	-	COUNTRY	•			
Web Service						
Google Maps	•					
Output Shapefile						
C:/Users/chomuth/Desktop/del_me/NAICS-722213-LDN-geocode.shp Browse						
Not Found Output List						
C:/Users/chomuth/Desktop/del_me/notfound.csv						
OK Cancel						

Once the process is complete, the resulting shapefile will be added to your map display.



At the bottom left corner of the screen, there will be a status bar counting how many addresses have been geocoded during the process and the final count once completed.



2.3 GEOCODING USING OPENSTREET MAP

The process for using the OpenStreetMap web service is the same except *OpenStreetMap/Nominatim* is selected under *Web Service*.

🔏 Web Service Geocode		? ×
Input CSV File (UTF-8)		
J:/Data/DMTI/EPOI/2013/NAICS-72221	3-2013-LDN.csv	Browse
Address Field City Field		
ADDRESS		-
State Field	Country Field	
PROV	▼ COUNTRY	-
Web Service		
OpenStreetMap / Nominatim	-	
Output Shapefile		
C:/Users/chomuth/Desktop/del_me/NAIC	CS-722213-LDN-geocode.shp	Browse
Not Found Output List		
C:/Users/chomuth/Desktop/del_me/notfound.csv		
OK	Cancel	

At the bottom left corner of the screen, there will be a status bar counting how many addresses have been geocoded during the process and the final count once completed.



87 of 96 addresses geocoded with OpenStreetMap / Nominatim

In this case, it was unable to locate 9 addresses which are listed in the *notfound.csv* file.

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4								
5	14	POI5187608	TIM HORTONS		111 WHARNCLIFFE RD S		LONDON	Lonc
6 7	24	POI4204223	HASBEANS		COVENT GARDEN MARKET			ION
8								
9	39	POI2767159	KATANA KAFE & GRILL		2530 BLAIR BLVD		LONDON	Lonc
10								
11	63	POI5667598	TIM HORTONS		841 WHARNCLIFFE RD S		LONDON	Lonc
12								
13	80	POI4204230	TIM HORTONS		LONDON GALLERIA MALL		LONDON	LON
14								
15	83	POI4204227	TIM HORTONS		2094 DUNDAS E		LONDON	LON
10	96	0014776219			COVENT CARDEN MARKET			
18	30	F UI4770216	INTERNATIONAL BAKERT CO		COVENT GANDEN WARKET		LONDON	LOIN
19	88	POI10198185	CATHY'S SUNRISE CAFE		7271 ARKONA RD ARKONA		LONDON	LON 🚽
	4	▶ not	found (+)		: •		:	•
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3 TROUBLESHOOTING

If you receive the following error message when selecting your CSV file, open the file in Notepad and delete the blank line at the bottom if there is one. Also make sure your file does not already contain coordinates as geocoding would not be necessary.



4 SOURCES

How to Make a Web Map from a List of Addresses in a Spreadsheet – Mango Map Blog http://blog.mangomap.com/post/74368997570/how-to-make-a-web-map-from-a-list-of-addresses-in-a#

QGIS User Manual http://docs.qgis.org/2.2/en/docs/user_manual/