

2018 Apr 20

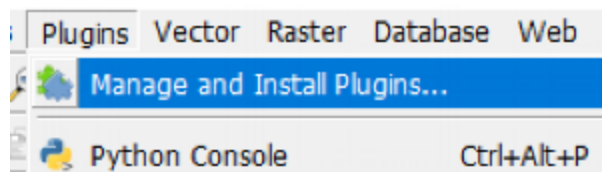
Adding Basemaps in QGIS 3.0

This post is a very quick guide on adding basemaps in QGIS 3.0. There are probably lots of options but these are the 3 that I prefer to quickly add many types of basemaps for use in QGIS.

1. Quick Map Services Plug In

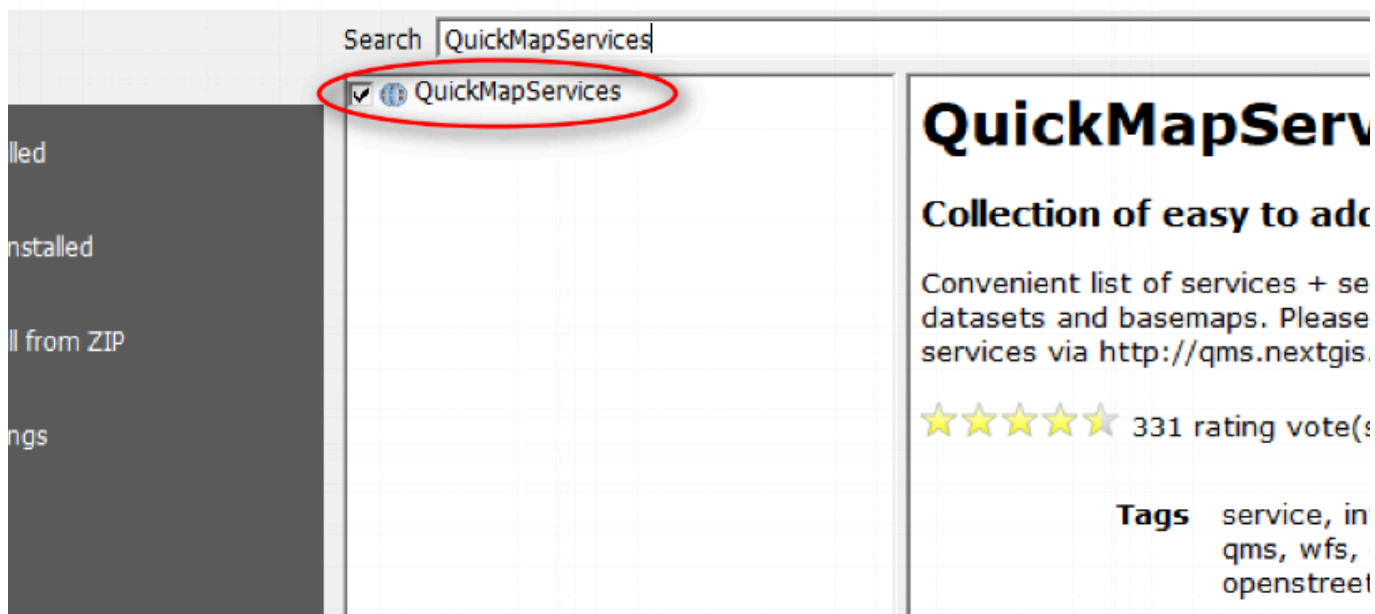
Using the QuickMapServices Plugin is probably the easiest way to add basemaps in QGIS. This beloved plugin has just been updated to work with the new QGIS 3.0. To add in the plugin just do the following:

- Open QGIS. Go to Plugins Menu >> Manage and Install Plugins...



- In the Plugins Window, search for QuickMapServices then click Install button. Note if you have this plugin installed from a previous version of QGIS then it may have been updated as well.

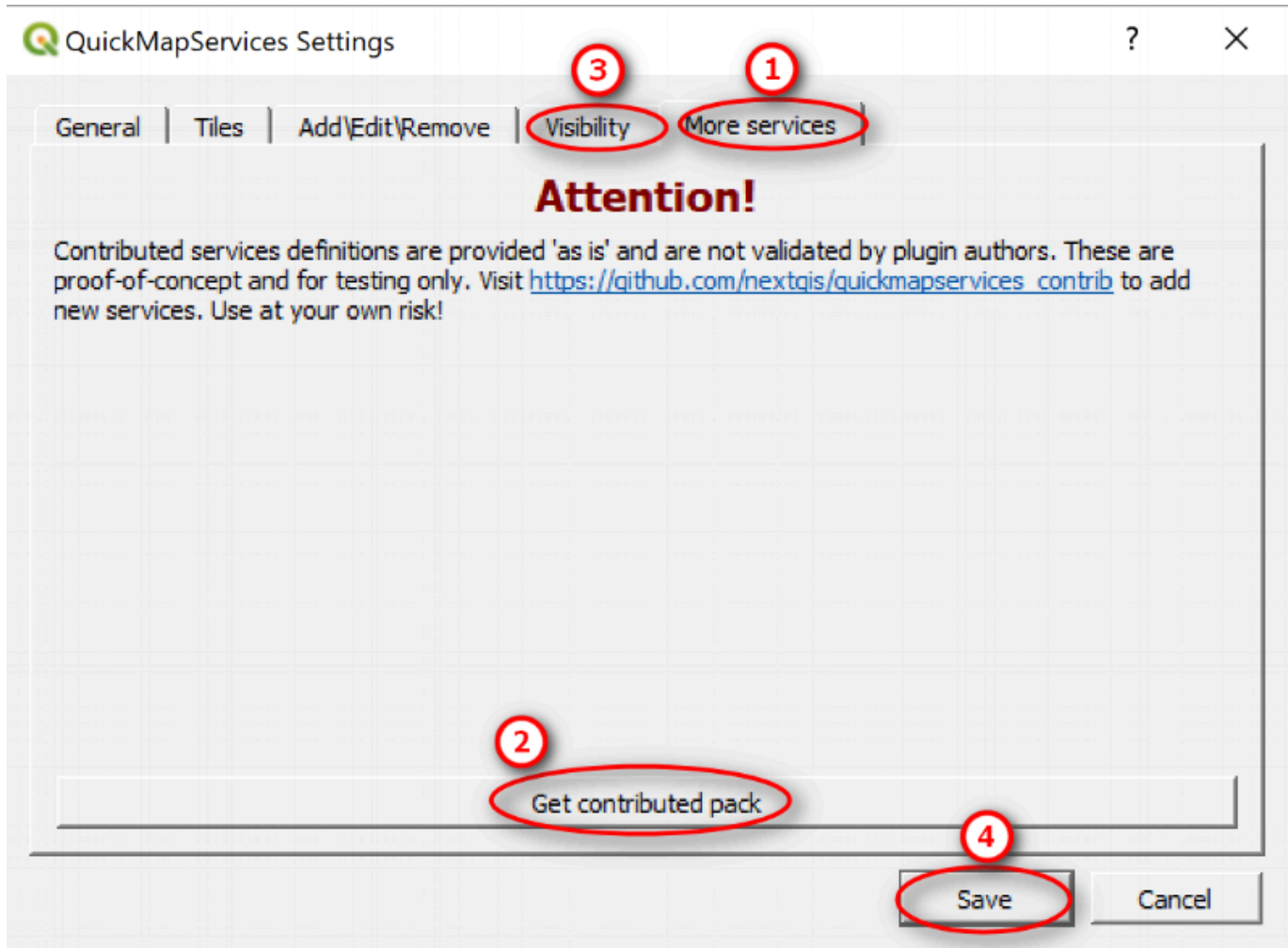
All (142)



- After it installs, you should be able to find QuickMapServices button in the Web Toolbar.

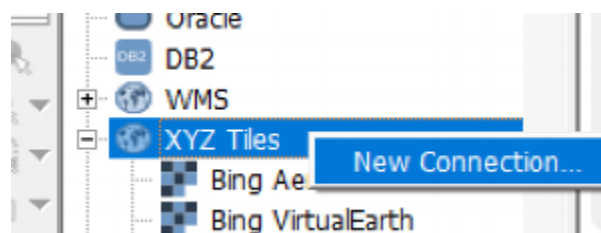


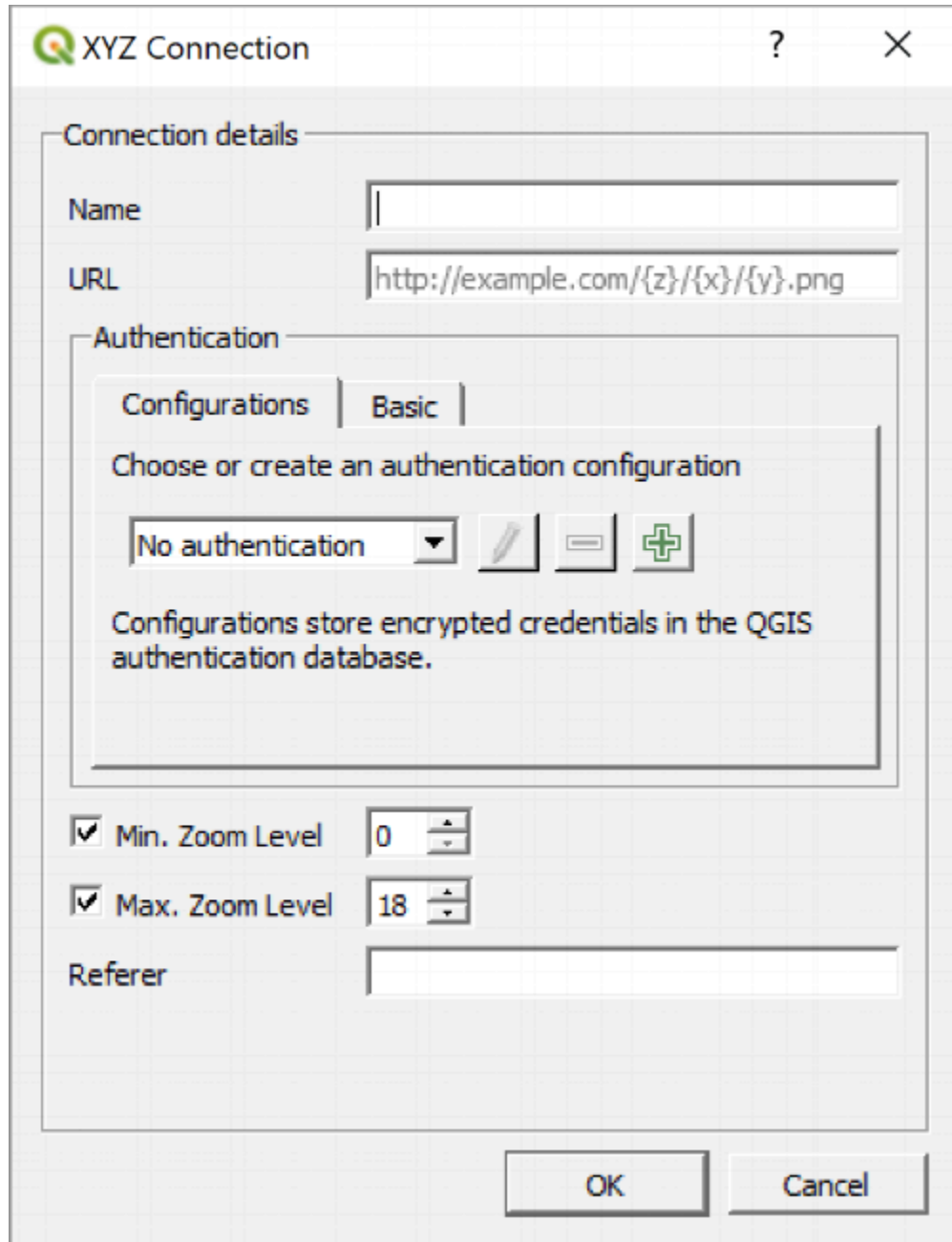
- Click on the button to get the drop down menu >> Settings. In the QuickMapServices Settings window, go to the More Services tab >> Click Get Contributed Pack to get more basemaps. Then go to the Visibility tab and turn on/off the basemaps you want to display in the menu



2. XYZ Tiles

The second way to add basemaps in QGIS is to use XYZ Tiles by connecting to a tile service. Right click on XYZ Tiles >> New Connections. In the XYZ Connection window, fill in the info and you should be good to go.

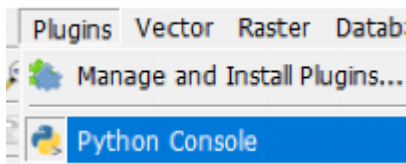




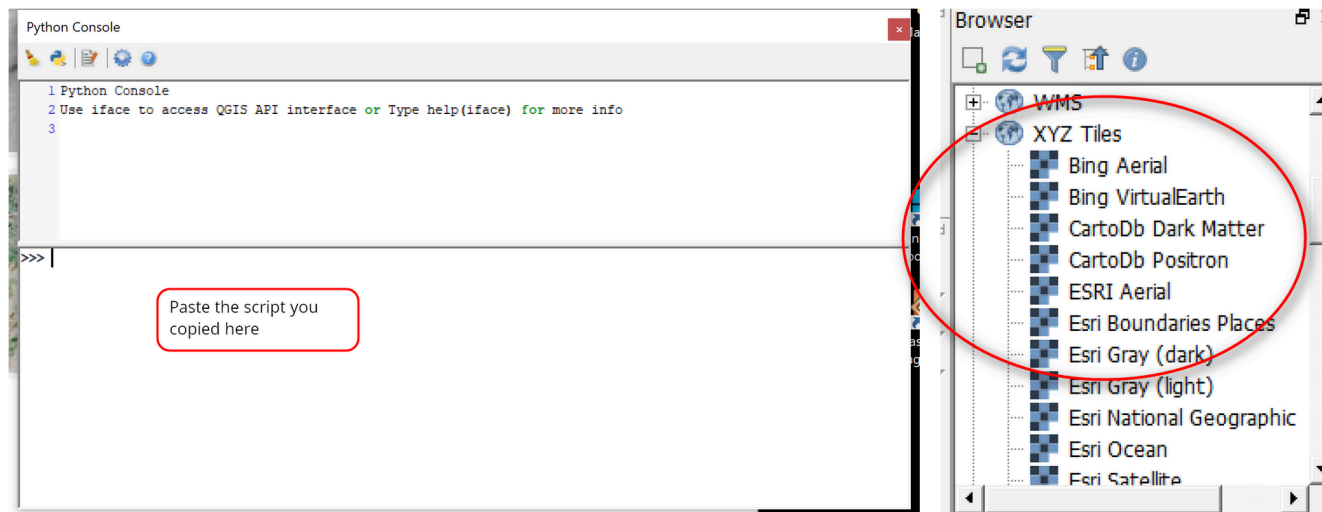
The screenshot shows the 'XYZ Connection' dialog box in QGIS. It has a title bar with a question mark and a close button. The dialog is divided into two main sections: 'Connection details' and 'Authentication'. In the 'Connection details' section, there is a 'Name' text box and a 'URL' text box containing the placeholder 'http://example.com/{z}/{x}/{y}.png'. The 'Authentication' section has two tabs: 'Configurations' and 'Basic'. The 'Configurations' tab is selected, showing a dropdown menu with 'No authentication' and three icons (edit, delete, add). Below the dropdown is a text box with the text 'Configurations store encrypted credentials in the QGIS authentication database.' At the bottom of the dialog, there are two checked checkboxes: 'Min. Zoom Level' with a value of 0 and 'Max. Zoom Level' with a value of 18. Below these is a 'Referer' text box. At the very bottom are 'OK' and 'Cancel' buttons.

But if you prefer to use a script to add in multiple basemap sources at once, here is a python script to do just that -- it is super handy. Much thanks and appreciation to the many out there for sharing their work. Go to https://raw.githubusercontent.com/klakar/QGIS_resources/master/collections/Geosupportsystem/python/qgis_basemaps.py and copy and paste this in the python console in QGIS.

- To open the Python Console, go to Plugins Menu >> Python Console.



- Then in the Python Console window, paste in the script that you copied from the URL linked above. Run it and you should see a list of basemaps under the XYZ Tiles in the Browser panel.



That's it! Add basemaps to your heart's content.

Comments (14)

Newest First

Noha 5 years ago · 0 Likes

thank you so much, it really helps a lot.

Gemma 5 years ago · 0 Likes

Thank you very much for this. The instructions are easy to follow.

Bertram 6 years ago · 0 Likes

Thanks a lot!

Jason 6 years ago · 0 Likes

Very helpful, thanks!

Alexandra Thorn 6 years ago · 0 Likes

Would it be acceptable to reproduce these instructions (with attribution of course) as part of a GIS course tutorial?

Stephanie Saephan 6 years ago · 0 Likes

Aloha Alexandra,

Thanks for asking. Yes, you may reproduce the instructions as part of you course. Send me a link to your course - I'd love to see what others are doing.

yassine 7 years ago · 0 Likes

Thanks very much Stephanie for this helpful and clear description

CLare 7 years ago · 0 Likes

Hi Stephanie,

I wonder if the maps opened (say google map) has a CSR of wgs 84, can I reproject it to another CSR and clip the map to the small region that I am interested in? Thanks

arif ismail 8 years ago · 0 Likes

I run the script

(https://raw.githubusercontent.com/klakar/QGIS_resources/master/collections/Geosupportsystem/python/qgis_basemaps.py) in QGIS 2.18, but it's not working. the message is

Traceback (most recent call last):

File "<input>", line 4, in <module>

NameError: name 'QSettings' is not defined

Update GUI

How to solve it?

Stephanie Saephan 8 years ago · 0 Likes

The script is only for QGIS version 3 and up. Use the QuickMapService plugin instead for 2.18 - it provides the same set of basemaps.

Jim 8 years ago · 0 Likes

Thanks, Stephanie! Your very clear narrative and graphics have help me immensely after a long hiatus from GIS. - Jim

(and I used all 3: the QMS & the two XYZ methods).

doug 8 years ago · 0 Likes

"these are the 3 i prefer" and gives 2, lol

Rares Ciurezu 8 years ago · 0 Likes

Thank you

MAHARO 8 years ago · 0 Likes

Thank you very much!

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