

QGIS – WMTS Tile Layers

QGIS allows you to connect to a number of common vector and raster data sources, as well as Web Map Services (WMS and WFS) and online basemaps, such as Google, Bing and OpenStreetMap. In addition, using the **Tile Layer tool** you can also connect QGIS to Web Map Tile Services (WMTS) Tile Layers, which load pre-styled image tiles for your chosen area of interest.

Create the WMTS Tiles:

Using a Translator tool, such as the **DynamicMaps GML Translator** application, you can generate WMTS Tile Images in either Bing or Google naming conventions. These tiles can then easily be loaded into QGIS or your chosen webGIS, such as the **DynamicMaps MapThat** application, to act as a basemap for your spatial data to overlay.

<http://www.dynamicmaps.co.uk/product/dynamicmaps-gml-translator/>

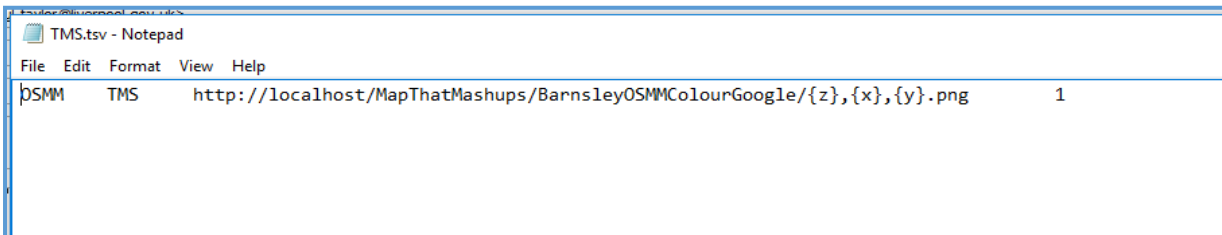


Note – QGIS can only read in WMTS tiles that have been given a Google Naming convention.



Creating a .TSV File

So that QGIS can locate and then open your WMTS tile images, you will need to create a **.TSV** file which contains the connection parameters to your tiles. You can simply use **Notepad** to create the content and then save the file with the extension **.TSV**. Below is an example **.TSV** file pointing to OS MasterMap Image tiles in Barnsley.



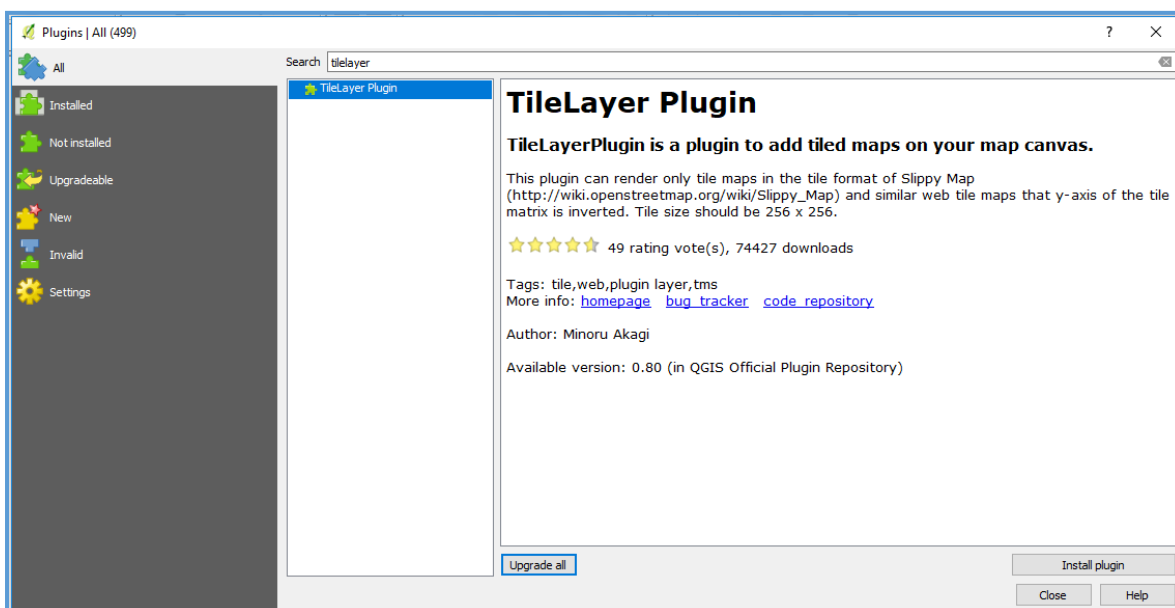
```

OSMM TMS http://localhost/MapThatMashups/BarnsleyOSMMColourGoogle/{z},{x},{y}.png 1
  
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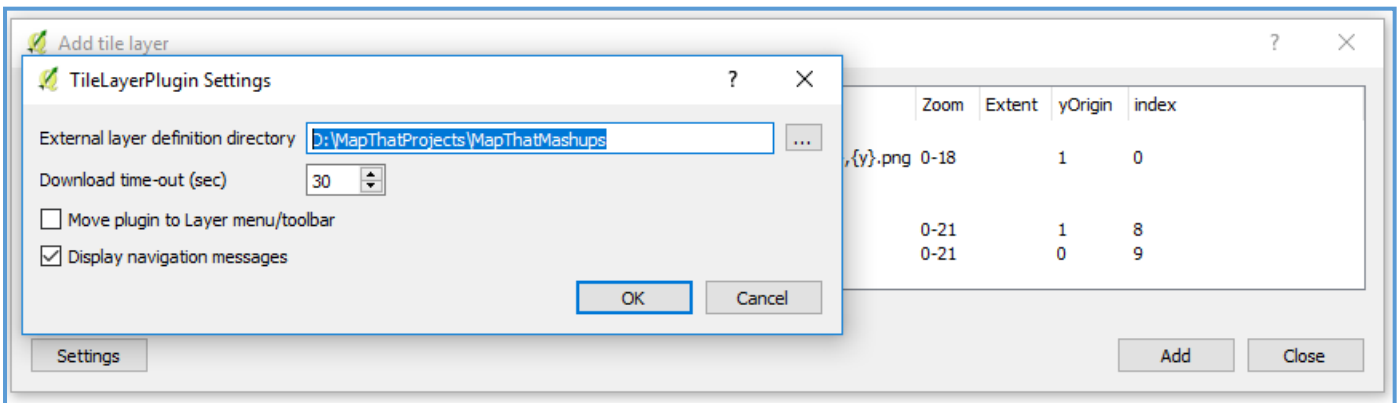
- **OSMM** – will be the name of the Tile Layer when opened into QGIS
- **TMS** – will be the copyright used within QGIS
- **http** – is the folder location for the image tiles, using the x,y,z reference for google tiles

Install the Tile Layer Plugin

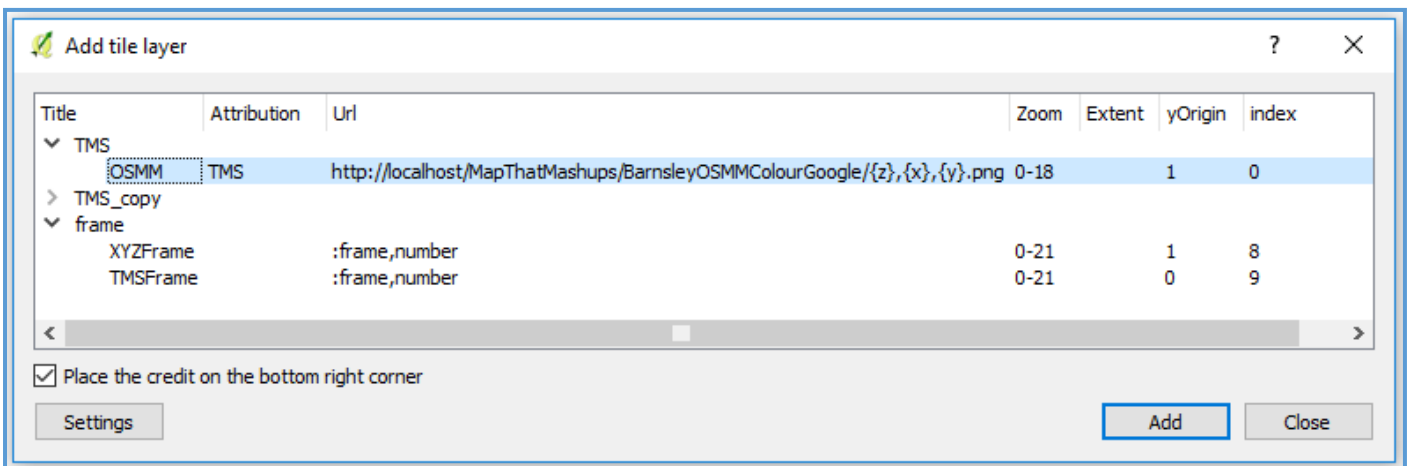
In QGIS you will need to find and install the **TileLayer Plugin**.



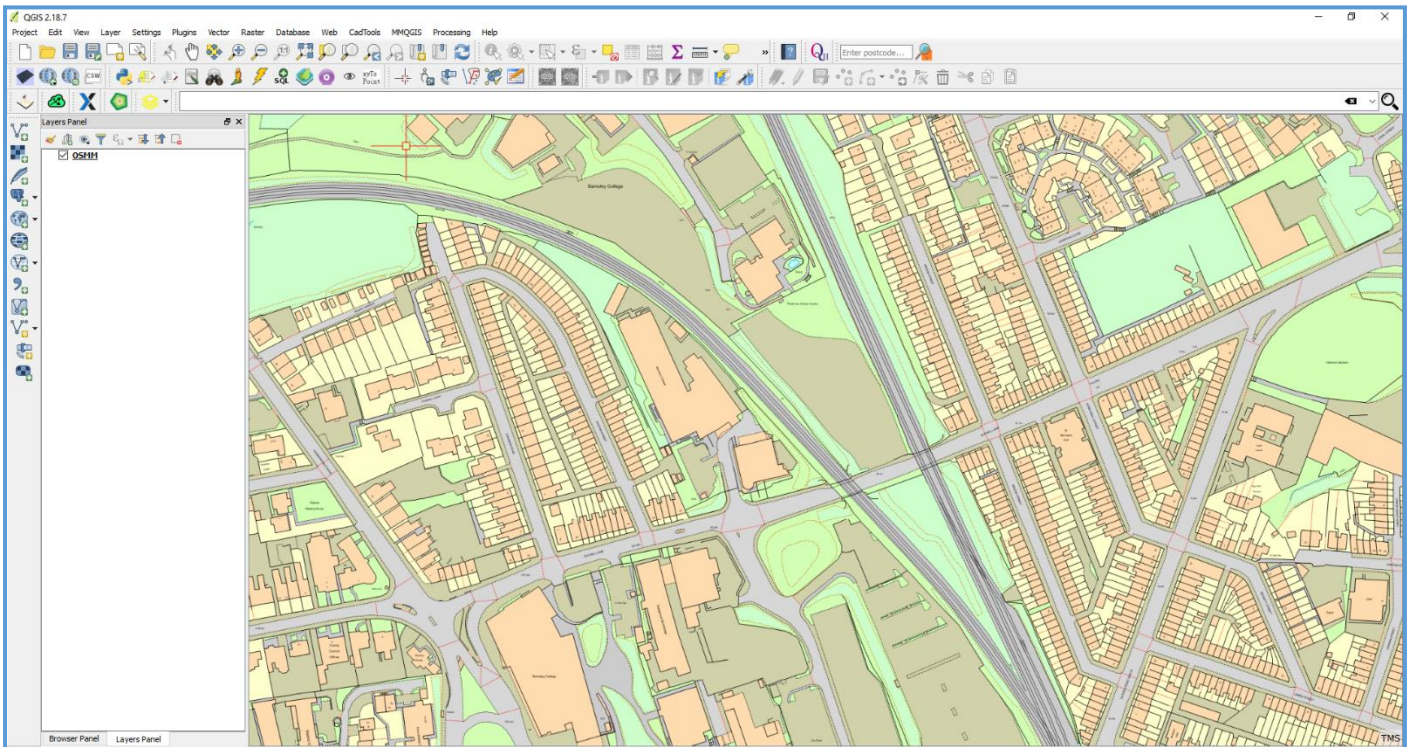
Once installed you can open the TileLayer plugin from the **Web** menu > **Tile Layer Plugin** > **Add Tile Layer**. In the Add Tile Layer plugin, choose the **Settings** button and then **browse** to find the .TSV file that you previously created.



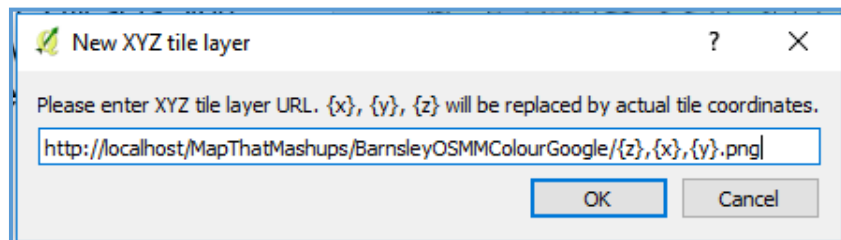
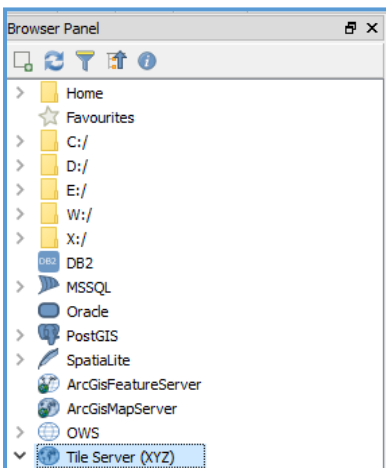
Once the .TSV file is loaded and read, any reference to WMTS tile folders will be opened into the Tile Layer tool, for example below, QGIS has read in the Barnsley WMTS tile location. Now, simply highlight that line and press **Add**.



The WMTS Tiles will now be loaded into QGIS and having zoomed to the correct location, the OS Mastermap WMTS tiles are displayed in the map.



In addition to using the Tile Layer tool, which allows you to connect to multiple WMTS tilesets, you can also use the **Tile Service** within the Browser Panel to simply connect to one WMTS service. In the **Browser** panel, choose **Tile Server (XYZ) > New Connection** and then paste the WMTS link into the New XYZ tile layer window:



<http://localhost/MapThatMashups/BarnsleyOSMMColourGoogle/{z},{x},{y}.png>

Having pressed **OK**, the WMTS Tile Layer is now added to the map:

