

Find an example **DEF** paragraph that is already setup, e.g. for Bing or OSM and paste that as a new DEF paragraph, repeating this for MapBox Colour and MapBox Grey. Ensuring that you keep the **DASH indent** to the left side of the new DEF statement.

Edit the new Paragraphs to change any existing value that refers to Bing or OSM to now be **MAPBOXCOLOUR** and **MAPBOXGREY**.

- Change the value for the **BaseLayer** in the first line of the new paragraph to be the name as defined in the MTLayers.py e.g. **def MapBoxColour**
- Change the value for the BaseLayer in the 5th line (the QgsRasterLayer reference) of the new paragraph to be the name as defined in the MTLayers.py e.g. **MapBoxColour** – the one shown in brackets.
- Repeat to add a reference to MapBoxGrey as well.
- Now edit each statement to insert the correct URL for these new WMTS feeds. This will be on the line starting with XML=”<GDAL_WMS>
 - MapBox Colour = <https://api.tiles.mapbox.com/v4/mapbox.streets/{z}/{x}/{y}.png>
 - MapBox Grey = <https://api.tiles.mapbox.com/v4/mapbox.light/{z}/{x}/{y}.png>

Edit the MT_MAP_COLOURSETS Table:

Finally, you will need to update the **MT_MAP_COLOURSETS** table so that there is a reference to the new basemaps.

Open the → MT_MAP_COLOURSETS table in SQL and insert a new record for MapBoxColour and MapBoxGrey.

The name of each new Basemap reference will need to be spelt the same as within the two python files you have just edited.



MAP_ID	COLSETINDEX	DESCRIPTION	VMLMM_FLAG	DB_ID	GML_TABLEN...	DEFAULT_VALUE	FEATURESET
1	7	OS Mastermap Colour	1	39	OSMM_Leicester	Y	NULL
2	8	OS MASTERMAP BW	1	39	OSMM_Leicester	N	NULL
3	1	VML Colour	0	31	POOLEVML	N	NULL
4	2	VML B/W	0	29	POOLEVML	N	NULL
5	3	VML Street View	0	31	POOLEVML	N	NULL
7	11	Mapquest	0	1	NULL	NULL	NULL
8	12	OSM mapnik	0	1	NULL	NULL	NULL
9	13	OSM Hike & Bike	0	1	NULL	NULL	NULL
10	14	europa	0	1	NULL	NULL	NULL
11	15	Road	0	1	NULL	NULL	NULL
12	16	Aerial	0	1	NULL	NULL	NULL
13	17	Hybrid	0	1	NULL	NULL	NULL
14	18	MapBoxColour	0	1	NULL	NULL	NULL
15	19	MapBoxGrey	0	1	NULL	NULL	NULL
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Note - While the name of the Layer needs to be written as captial letters within the MTLayers.py file, the name can be non-case sensitive within the MT_Map_Coloursets table.

We now have a connection between the MTLayers.py which opens the background maps for printing and the MT_MAP_COLOURSETS which controls the values that are provided to the user in the Scale Printing tool. So as the user chooses the option of MapBoxColour or MapBoxGrey in the print tool, the system then checks that this is a valid value in the **MTLayers.py** file, and uses the Connection parameter as defined in the **MAP.Py** file.