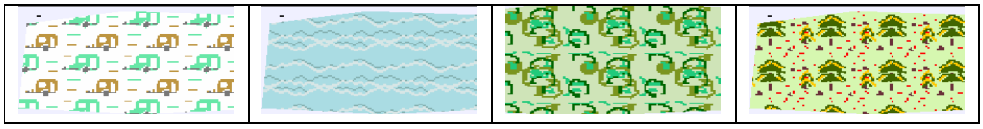
Multi Coloured Polygons
on
Garmin devices/maps



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Introduction

Garmin TYP files at present only cater for 2 coloured polygons, or lines . Only POIs can have as many colours as you like.
Today, many sat navs, show polygons and lines with more than two colours, giving them greater depth and a more modern look.

The current TYP file structure does allow for additional polygon / line types and so in theory this should not be difficult to do.

Meanwhile, if you produce your own custom IMG maps, using cgpsmapper or mkgmap , TYPWiz4 can help you create polygons with up to 6 colours - 6 coloured lines will follow later.

The idea is to create multiple polygons which overlap and include them in your mp or polygon style file - see later.

The idea is straightforward, but process problematic as its hard to imagine overlapping polygons.

Then consider this:

- Apart from the base polygon, the rest of the polygons have one colour transparent, and one solid.
- Your base polygon must have a draworder lower than the other ones if both its colours are solid.
- All polygons must have bitmaps
- Keeping track of groups of polygons can become a nightmare

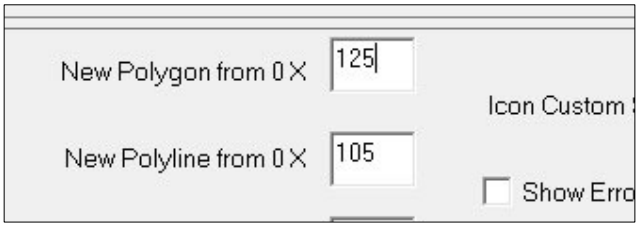
Typwiz4 simplifies the process

Getting Started

Polygons	Colours
1	2
2	3
3	4
4	5
5	6

1) Decide on the number of colours,ie 4 - see table above.
2) Decide on the number types for a group of polygons.

In Settings --> Preferences, you can specify the starting number: we have set ours at 0x125

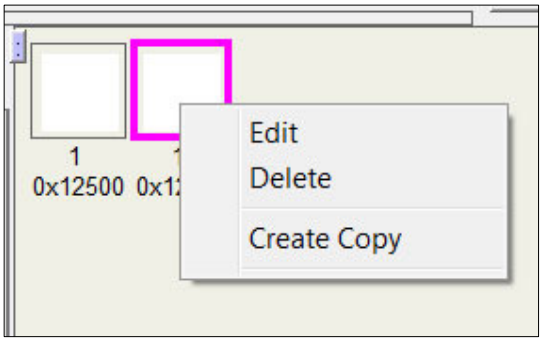


3) Create your base polygon. A base polygon is the one with the lowest draworder.

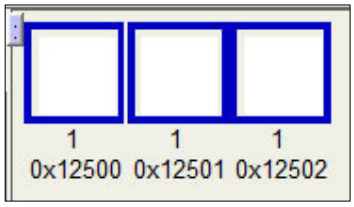
4) Double click to edit and give it an appropriate name , say Golf. Click OK

5) Right click and click 'Create Copy' .

Do this twice - no need to set draworders,as this gets done later.



6) Now you have 3 polygons, 12500, 12501 and 12502.

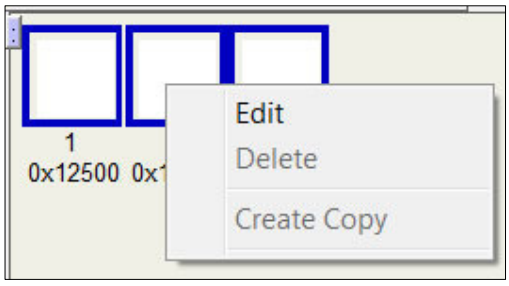


Editing Multi Polygons

SHIFT Click on your polygons to select or deselect - see table for number of polygons needed.

When you SHIFT click, the polygon is outlined in blue.

Right Click on one of the 'Blue outlined' polygons and click Edit.



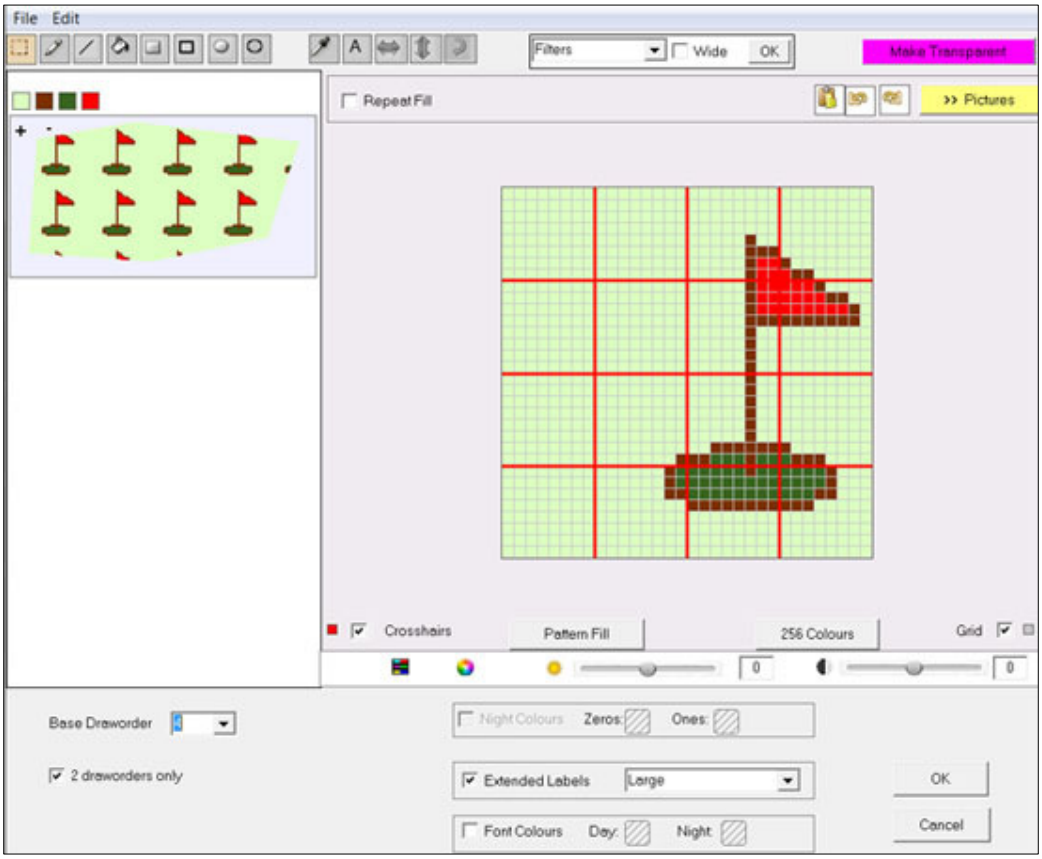
Typwiz4 uses the following polygon colours:

a) 2 two colours of the base polygon
b) the ***2nd*** colour of other polygons in the group - this is always a solid colour,whereas the first colour is always transparent. Colours , if they are the same, are altered in tone.

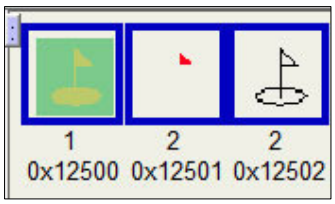
When editing , you can also change the colours,set the baseline draworder value, set the font colors or type for the group of polygons.

Set Draworders

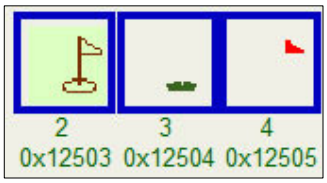
Your base polygon draworder determines the draworder of all the other polygons in the group.



Their draworder orders are always higher than the base polygon - see below



If the '2 draworder' box is unticked each polygon gets a different draworder: - 2,3,4



On certain devices this option may be preferable.

You can also set the draworder of the base polygon.

Notice : draworders are maximised when saving a typ file.

Set Font Colours

To make it easier to detect groups of pois , give each group a different font colour.

Set Font type

Using this option sets the font type for all the polygons with the group.

Importing Pictures

Click the yellow picture button to import a jpg or bmp.

The colours of your picture are maximised to the number of colours of your palette.

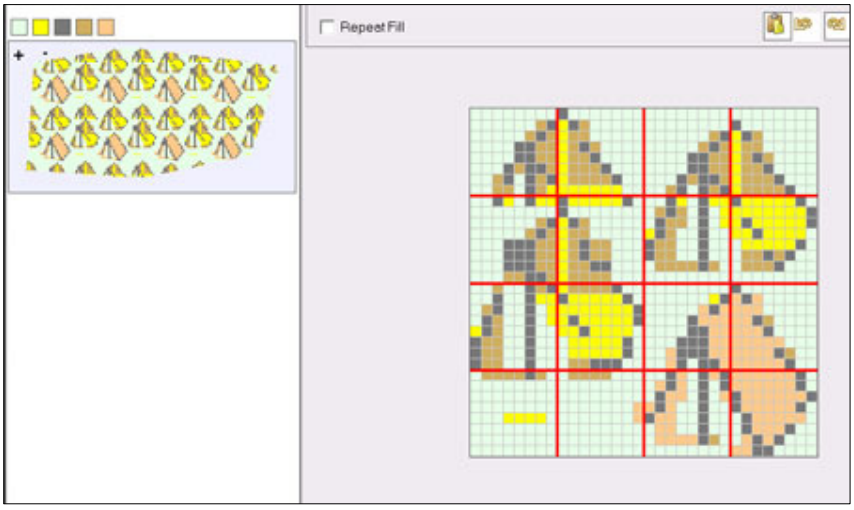
original	2	3	4	5	6

The results are never going to be what you expect and colours will need to be changed by the user to obtain the desired effect.

Cutting and Pasting

You can cut & paste within your picture or use this option when transferring multi polygons from one typ file to another - make sure you have created the necessary polygons first.

A tent has been selected, then cut then pasted on the same bitmap.



Example of mkgmap script

You need to load the **polygons** sheet which should come with your style sheet.

For our 'golf course' example we used 3 polygons adding the following code:

leisure=golf_course [0x12503 resolution 24 continue]
leisure=golf_course [0x12504 resolution 24 continue]
leisure=golf_course [0x12505 resolution 24]

Note:

1) the first two lines require 'continue'.

2) To reduce overheads it is not advisable to use a resolution lower than 23 when using multi polygons

Example of cgpsmapper script

You repeat the polygons altering the type number.

[POLYGON]
Type=0x12503
Data1=(50.68954,-3.62274),(50.68903,-3.62291),(50.68894,-3.62257),(50.68972,-3.62214)
[END]

[POLYGON]
Type=0x12504
Data1=(50.68954,-3.62274),(50.68903,-3.62291),(50.68894,-3.62257),(50.68972,-3.62214)
[END]

[POLYGON]
Type=0x12505
Data1=(50.68954,-3.62274),(50.68903,-3.62291),(50.68894,-3.62257),(50.68972,-3.62214)
[END]