

Installing and setting up OkMap Desktop

13/11/2021

You can download and install OkMap Desktop [the version current at the above date is 17.2.1] from:

<http://www.okmap.org/en/okmapDesktopDownloads.aspx>

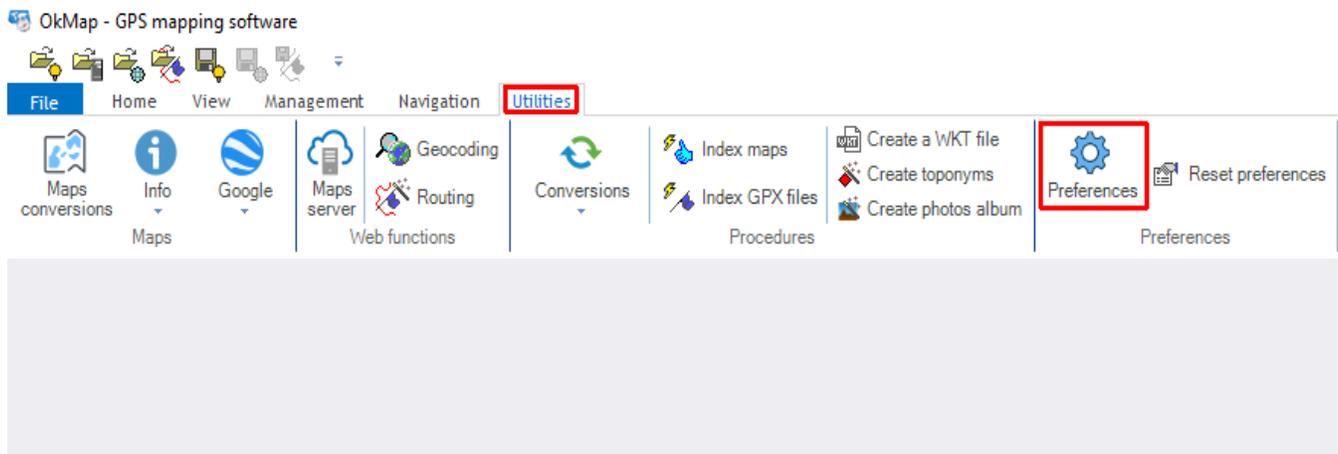
When you click on **Buy** you can choose to pay through PayPal, if you have an account, or by credit card. **OkMap Desktop** comes as a ZIP file. Extract and install it.

You should tick **Create a desktop icon** when the **Select Additional Tasks** window comes up in the installation process. It will create a shortcut for the **OkMap** program on the desktop. Double clicking on this in future will start the program.



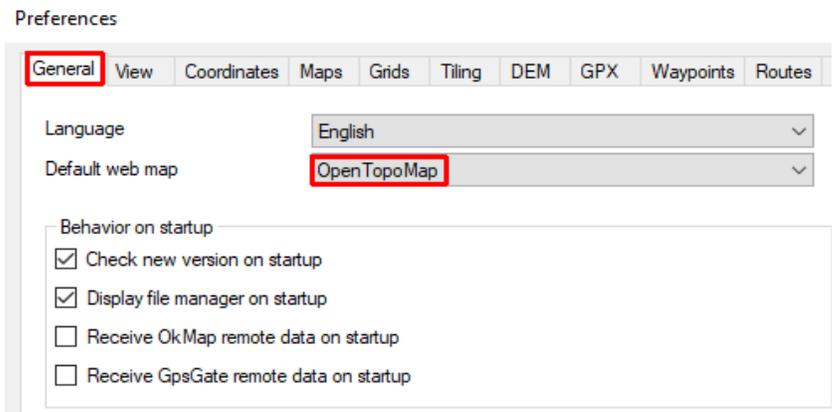
Changing some of the default settings in OkMap

The main default settings can be changed in the **Utilities** tab by clicking on **Preferences**

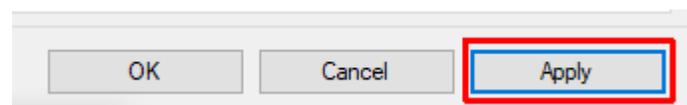


If you have a track and you don't know what to load as the underlying map layer then you can simply load the track and allow OkMap to use a web map - this will display the track wherever in the world it is.

Go to the **General** tab and change the default web map from **AllRailMap** to **Open TopoMap**.

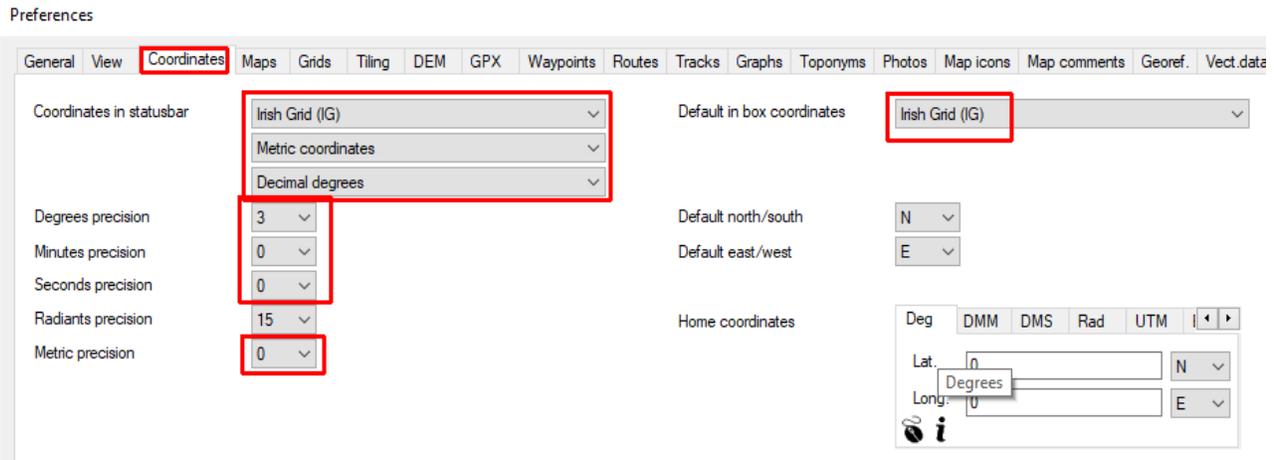


before clicking on **Apply** at the bottom right of the window.



Instead of working with the standard universal latitude/longitude coordinates where the Earth is treated as a sphere we want to use a grid obtained by treating a small part of the Earth as approximately flat. We use either the 6-digit OSI coordinate or, most probably, the more familiar **Irish Grid** with a letter and two five digit numbers e.g **O 19432 07758**. For more information see P.4

Note: grid references in *The Rambler* are given to 3 digit accuracy e.g. **O 194 078**



Go to the **Coordinates** tab and:

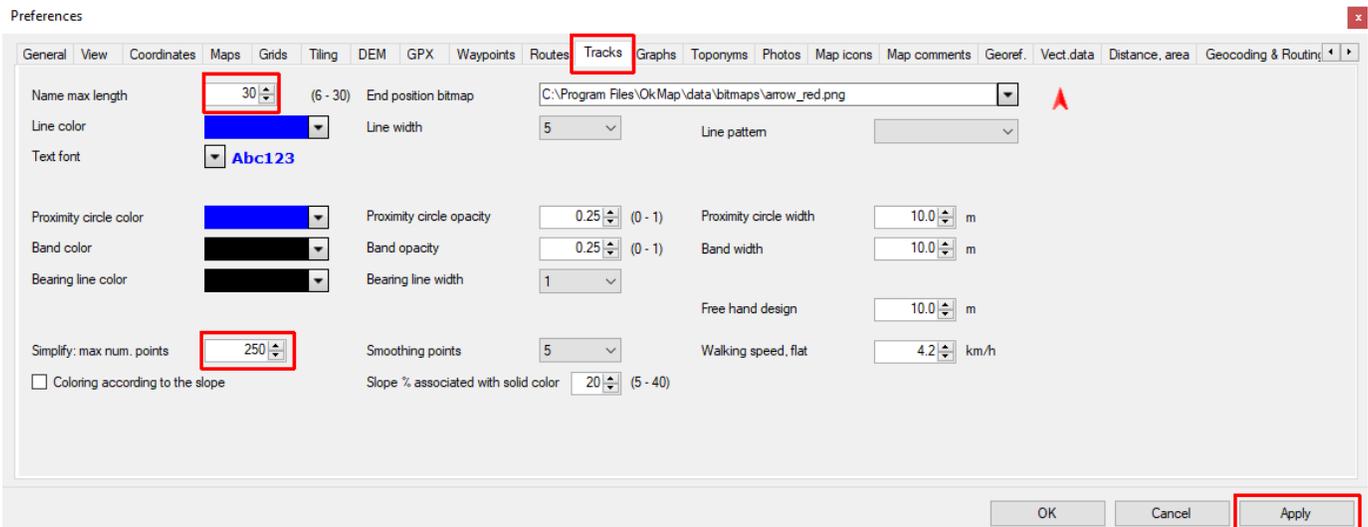
- set the **Coordinates** boxes to **Irish Grid (IG)**, **Metric coordinates** and **Decimal degrees**
- set the **Degrees precision** to **3** (decimal places), **Minute** and **Seconds** precisions to **0**
- set the **Metric precision** to **0** [no decimals] and the **Default in box coordinates** to **Irish Grid (IG)**

before clicking the **Apply** button.

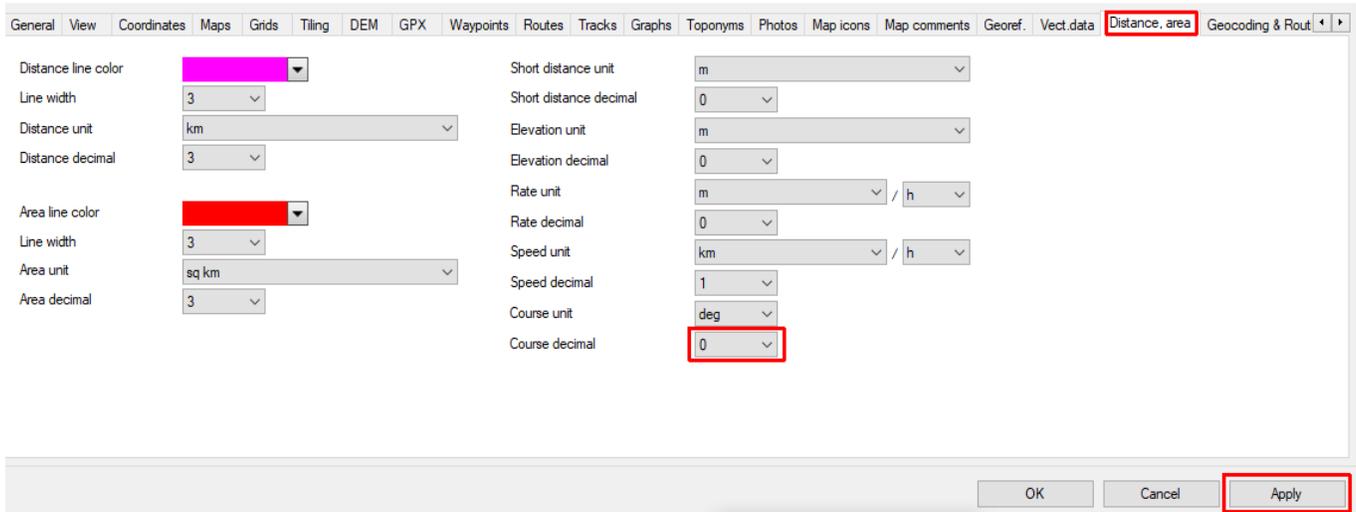
In the **Tracks** tab and in the top and bottom left-hand corners:

- Set the **Name max length** to **30** [OkMap will only allow a maximum of 30 characters in a track name]
- Set **Simplify: max num. points** to **250** [a reasonable limit to the number of points on a track when OkMap is reducing the recorded number]

before clicking the **Apply** button.

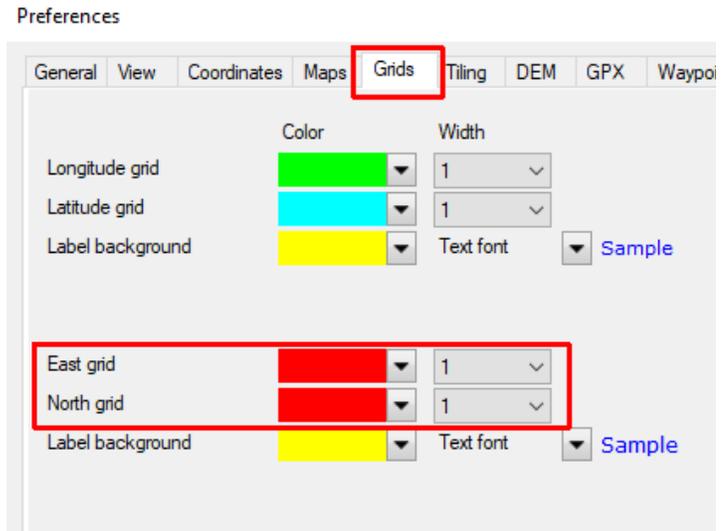


In the **Distance, area** tab and in the bottom right-hand corner set the **Course decimal** to **0** [to avoid decimals] before clicking the **Apply** button.



In the **Grids** tab change the colour to **red** and the width of the grid lines to **1** as shown.

You can choose to show this grid when a map image has been georeferenced.



Click on **OK** to close the **Preferences** window.

6-digit coordinates and OSI lettered grid references

On an OSI map the 6-figure grid references are given for the points at the corners of the map. These will help you to decide what the 6-figure reference for any other point will be. Otherwise it can be calculated as follows.

In the national grid, Ireland is described as a square 500 km by 500 km. This is further divided into 25 squares, each of which is of side 100km and each of which is given a letter.

Converting from an OSI lettered reference to a six-figure reference

Taking a scale of 100km = 1 unit the bottom left-hand corner of each square has coordinates such as:

V(0,0) W(1,0) R(1,1) H(2,3)

The OSI squares in the Wicklow area are

N (2,2) O (3,2) S (2,1) T (3,1).

To convert a letter + 3-digit grid reference to a 6-digit grid reference first add two zeroes to give a 5-digit reference.

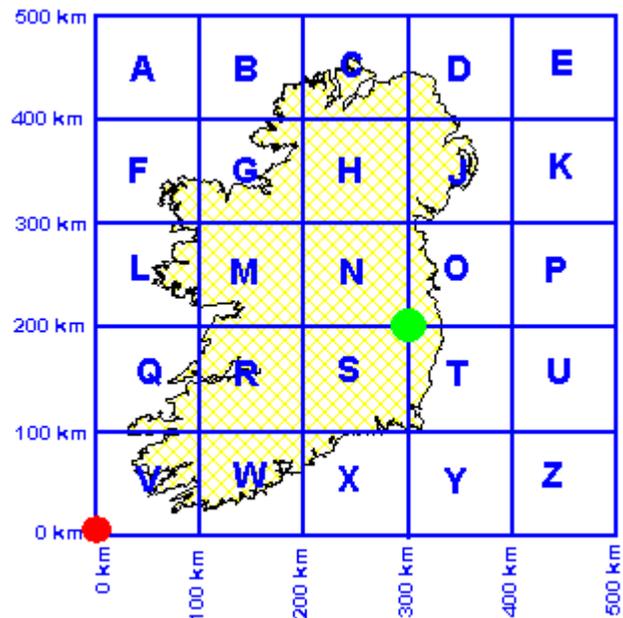
So, for example, a reference for **Ballinastoe CP** : O: 194 078 becomes O: 194**00** 078**00**

This tells you that Ballinastoe CP is **19400m** [i.e. **19.4 km**] East and **07800m** [i.e. **7.8 km**] North of the green dot which marks the origin of the **O** square

Now complete the process using **O (3,2)** by putting a **3** as the first of the 6-digit Easting coordinates and a **2** as the first of the 6-digit Northing coordinates to give:

319400 E 207800 N

This means that Ballinastoe CP is **319400m** [i.e. **319.4 km**] East and **207800m** [i.e. **207.8 km**] North of the red dot which marks the origin of the large 500 km by 500 km square.



Irish National Grid 100 km Squares