# Installing and setting up OkMap Desktop

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

right of the window.

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 <b>General</b> tab and change	Preferences									
the default web map from <b>AllRailMap</b>	General View	Coordinates	Maps	Grids	Tiling	DEM	GPX	Waypoints	Routes	
to <b>Open TopoMap</b> .	Language Default web may	English OpenTopoMap								
	Behavior on st Check new Display file Receive O Receive G	artup v version on sta manager on st k Map remote d psGate remote	artup artup lata on si data on	tartup startup						
before clicking on <b>Apply</b> at the bottom		ОК			Canc	el		Apply		

13/11/2021

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 approximatey 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

Preferences															
General View Coordinates	Maps	Grids	Tiling	DEM	GPX	Waypoints	Routes	Tracks	Graphs	Toponyms	Photos	Map icons	Map comments	Georef.	Vect.data
Coordinates in statusbar	lrish (	Grid (IG)				~		Defaulti	in box co	ordinates	lrish (	Grid (IG)			~
	Metric	c coordin	nates			~	]								
	Decin	nal degre	ees			~	]								
Degrees precision	3	$\sim$						Default	north/sou	th	Ν	$\sim$			
Minutes precision	0	$\sim$						Default	east/wes	t	E	$\sim$			
Seconds precision	0	$\sim$													
Radiants precision	15	$\sim$						Home c	oordinate	s	Deg	DMM	DMS Rad	UTM	• •
Metric precision	0	$\sim$									Lat	0		N	$\sim$
											Lor	Degrees	[	E	~
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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 cordinates 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.

Preferences											2
General View Coordinates Maps	Grids Tiling	DEM GPX Way	points Routes	Tracks Gra	aphs Toponyms	Photos Map icons	Map comments	Georef.	Vect.data	Distance, area	Geocoding & Routing
Name max length	30 🔹 (6 - 30)	End position bitmap	C:\Pro	ogram Files\Ok	kMap∖data∖bitmaps	\arrow_red.png		-	A		
Line color	•	Line width	5	$\sim$	Line patter	n		$\sim$			
Text font	bc123										
Proximity circle color	-	Proximity circle opaci	ity	0.25 🜲 (0 -	1) Proximity c	ircle width	10.0 🌩 m				
Band color	•	Band opacity		0.25 🜲 (0 -	1) Band width	1	10.0 🔶 m				
Bearing line color	-	Bearing line width	1	$\sim$							
					Free hand	design	10.0 🌩 m				
Simplify: max num. points	250 🜩	Smoothing points	5	$\sim$	Walking sp	eed, flat	4.2 🜲 kn	ı/h			
Coloring according to the slope		Slope % associated v	with solid color	20 🌲 (5 -	40)						
									OK	Cancel	Apply

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.



North grid

Label background

▼ 1

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Text font

Sample

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 sixfigure 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



Irish National Grid 100 km Squares

**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: 0: 194 078 becomes 0: 19400 07800

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.