



Virtual Orienteering with UsynligO



Why UsynligO for BOK?



- We already had extensive catalogue of high quality urban maps
- We wanted to progress quickly - as we had no existing VOCs
- We wanted to use our existing mapping and planning tools (OCAD /Condes / Purple Pen) - and minimise our learning curve
- We wanted to have multiple people being able to plan and contribute courses (including eager juniors!)
- We wanted something simple for our members to run with and support training on our existing POCs and other mapped areas
- We could see that the Scandinavians had used it in the forest - so want to give it a go 😊
- We are still open to experimenting with other technologies and can see a case for both UsynligO and MapRun

Using UsynligO as an orienteer

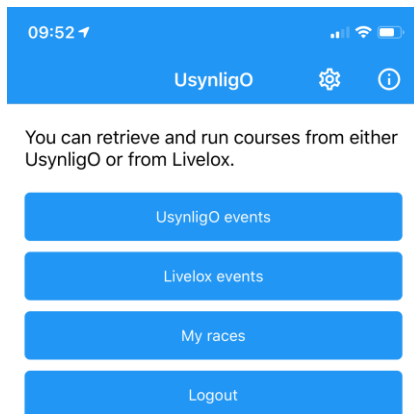




Using UsynligO as an orienteer

- Simple interface - not as many features as MapRun
- Geo aware for selecting the map you want to run (you don't need to understand a folder structure of clubs)
- Can be used as a way of distributing high quality PDF maps for home printing for those that don't want to use a smart phone
- Only starts when you click start
- Finishes when you complete the course or stop the app
- Supports both line and score courses
- Provides links to google to help people get to the start of a course
- A single link can be used to list all of BOKs events

Using UsynligO as an orienteer



You can retrieve and run courses from either UsynligO or from LiveloX.

UsynligO depends on GPS access and an accurate GPS. If UsynligO does not detect the control points or if the compass or direction hints are inaccurate, it can be helpful to:

- Verify that you have granted UsynligO "ALWAYS" access to your location
- Do NOT enable any power save program on your phone. Some phones will not update the GPS when the phone is in power save mode and the app is in the background
- Open the map application (i.e. Google maps) on your phone and validate that the compass is calibrated and that the GPS works ok.
- Be aware that the compass will not work correctly if you have a case with magnet lock.

www.bristol-orienteering-klub.co.uk

Getting Started Virtual Orienteering Courses

Getting Started Permanent Orienteering Courses

Night Training

Events BOK Weekly Training Run - Priddy - 1st - 7th June 2020

About the Club Join BOK

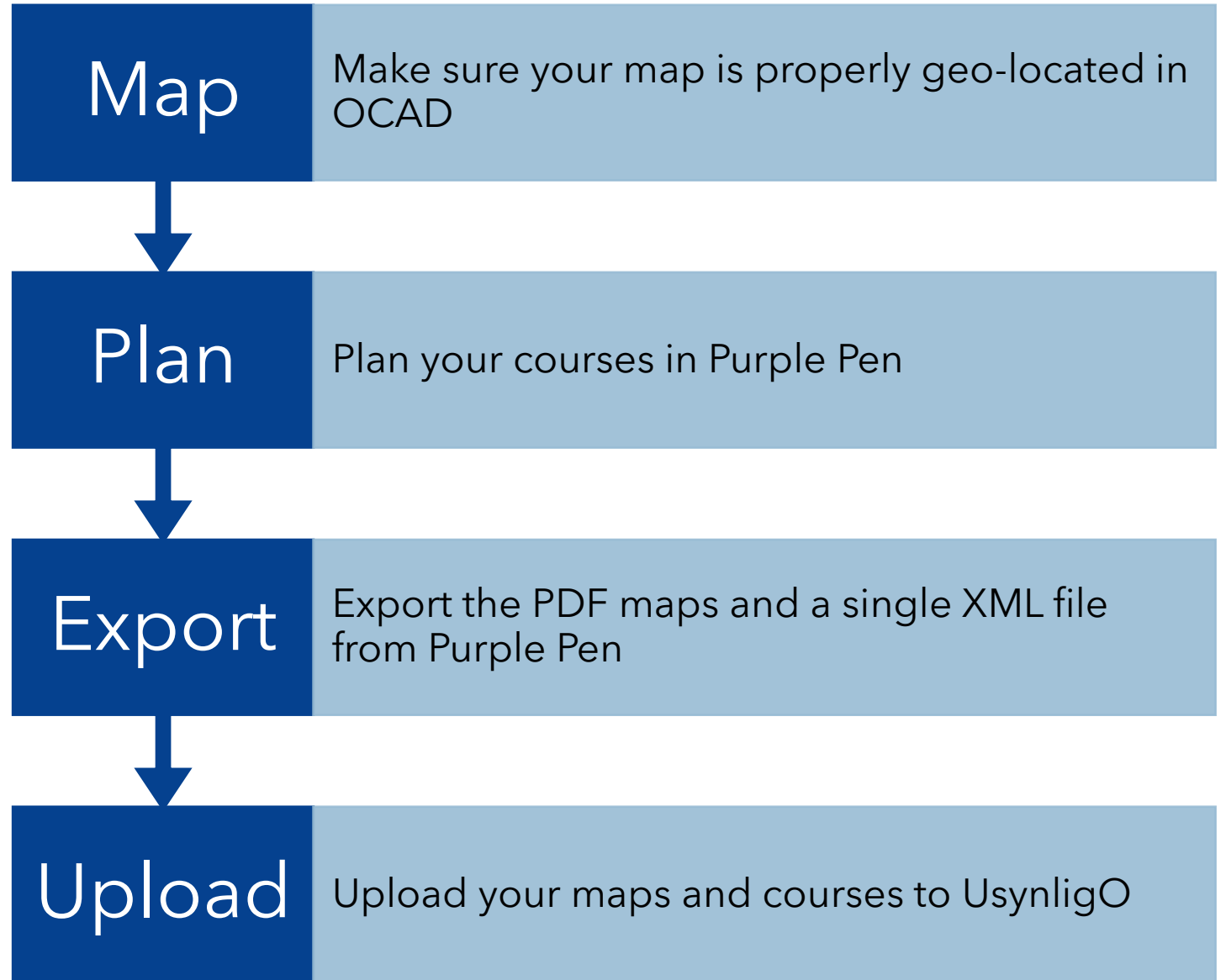
Started - Beginners, read this first

Newport, Cardiff, Bristol, Bath, M4, M49, Mendip Hills AONB, etc.

Last 7 days (155) Last 30 days (661) Last 12 months (1846) All (1865)

Event description	Published	Organizer
Urban Race - Short and Long Distance Sprints - 1:4,000 - Virtual Event - Mobile phone beeps only, no visible controls in the terrain Directions Long Sprint (4100 meter) Short Sprint (1900 meter)	May 14, 2020	Bristol Orienteering Klub (BOK)
Forest Race - White, Yellow, Short Orange, Light Green and Short Green Standard Courses -		

Using
UsynligO as a
course
planner



Using UsynligO as a course planner

- Use existing OCAD maps - only need to check geo location is accurate (more on this later...)
- Purple pen is free and easy to use for course planning - and score and line courses can be in the same file
- Multiple planners can upload courses - no administrative bottleneck - just use the same categories when uploading
- Not just urban maps in UsynligO - the Scandinavians use it extensively for forest maps
- No size limit on files (as long as using proper OCAD base maps) - and high quality printable PDFs are easily uploaded
- XML export from Purple Pen needs to be in v3.0
- All files stored on Googles application platform - so high availability and resilience
- Think carefully about control location - deep gullies or depressions can confuse GPS easily - however in testing we have found that map accuracy is the biggest issue for whether a control registers

Using UsynligO as a course planner

The screenshot displays the UsynligO software interface for planning a virtual race. The main window is titled 'Virtual Line Overscourt Wood - Purple Pen'. It features a top menu bar with options like File, Edit, View, Add, Event, Course, Item, Reports, and Help. Below the menu is a toolbar with icons for adding start, finish, control, and map exchange points, along with options for adding descriptions, map exchange, variation, and special items. A color palette at the bottom of the toolbar includes All controls, Yellow, Orange, Light Green, Green, Blue, Brown, and Black.

The central part of the interface is divided into three main sections:

- Left Panel:** A table titled 'Virtual Overscourt Wood' showing a grid of control points. The first row is 'Light Green 3.8 km'. The grid contains various symbols representing different types of controls (e.g., trees, buildings, water) and their corresponding numbers (1-14).
- Top Right Panel:** A red-bordered box containing the text 'June 2020', 'Start location: https://w3w.co/star.change.level', and 'UsynligO Virtual Race'. Below this, it states 'Contains public sector information licenced under the Open Government Licence v3.0'.
- Right Panel:** A topographic map of the 'Overscourt Wood' area. The map shows terrain contours, roads, and water features. A blue line indicates the race route, connecting 16 numbered control points. The map includes a scale of 1:7,500 and contours of 2.5m. A 'BOK' logo is visible in the top right corner of the map area.

Below the main map area, there is a blue navigation bar with the text 'UsynligO All events My events Upload event Help' and a 'Login' button on the right. Below this bar, a white box contains instructions for creating new events:

You can make new events available in UsynligO by performing these 4 steps:

1. Export a IOF 3.0 XML from your course editing program (i.e. Purple Pen - which is a free alternative)
2. [Click here to specify the IOF XML file](#)
3. Print every race to a separate PDF file and upload the mapfiles
4. [Click here to publish](#)

At the bottom of the interface, there is a world map showing the location of the course in Norway. Below the map, there is a note about publishing a ScoreO course and a news item:

News: It is now possible to add a 'Easter egg hunt' picture by editing your event under 'My events'. Your image will then be revealed piece by piece inside the compass when a new control is visited.

At the very bottom, there is a note about specifying a category for the course, with an example link: <https://usynligo.no/filter?category=MyCategory>, i.e. <https://usynligo.no/filter?category=Trondheim%20Skoleorientering>

Considerations for mapping and planning

- Using OCAD maps can have copyright issues - BOK have chosen to think carefully about the underlying data used for each map - and only used maps that have a provenance that can be attributed to open source government data i.e. OS Openstack and Environment Agency Lidar Data
- We have only used this approach for free POC/VOC maps where we make no commercial gain
- Normal risk assessment of courses still stands - even if this is classed as personal training!
- Maps that are not created from scratch using Lidar data can have inherent geo reference anomalies across an area - leading to features being up to 30 meters away from the real world geo location
- Maps must be referenced to British National Grid in OCAD - and the correct Magnetic North (this is difficult in older versions of OCAD)
- Urban maps are easier to geo locate using OCAD google map import features
- Forest maps can be much more problematic....



Thanks

Get started at:

<https://usynligo.no/> and

<https://www.bristolorienteeing.org.uk/virtual-orienteeing-courses>

<https://www.mitchellmaps.co.uk/ocad/how-tos/georeferencing-existing-orienteeing-maps>