

The Course Setter's Guide

Stage 1 - Plan the Course

You will be sent, via email, a pdf copy of a "planning" map for your event by one of the *Street Mapping Custodians*. You will also be sent, via one of the club's *MapRun Administrators*, a link to a shared Google Docs file for the control descriptions for your event.

1. The first step is to **plan your start location**. The *Street-O Coordinator* will need this for the Calendar of Events which comes out toward the end of September, so this will need to be done ASAP. Things to consider in making this decision:
 - Is there plenty of room for parking?
 - Is there some sort of shelter from inclement weather?
 - Can people mill around without being a public nuisance?
 - Is there access to facilities such as water, toilets, playground etc.?
 - Could a mini-course be set for the very young orienteers?

Public parks or sporting fields usually satisfy these criteria.

2. The next step is to **create a rough first draft of your course**. You could do this on a paper copy of the map. However the free course setting program Purple Pen allows you to place controls on top of the pdf version of your map. This will give you a lot of flexibility in deciding the number and location of controls. Things to consider:
 - Try to avoid (where possible) high traffic areas such as major shopping centres and major roads. (This is for obvious safety reasons).
 - Try to avoid (where possible) areas of the map where the detail is hard to interpret or lacking. For example with 1:10000 Street maps, the details in urban bush areas can be "dodgy". By avoiding these areas you take out one element of luck. Remember, you shouldn't be trying to "trick" the competitors.
 - Try to set challenges and rewards for all levels of competitors. Slower competitors still like to get 90 pointers and faster competitors should still be made to make route choices and careful navigation.
 - Don't have too few controls (because then the event becomes a running race). Don't have too many controls so that the clues can't be read on the control sheet (because a small font is needed to fit on so many control descriptions). Note that with MapRun we are limited to 10 of any one type of control (i.e. 30-point, 40-point, 60-point, 90-point,) and hence there is an absolute maximum of 40 controls in total. It seems that something in the range of 30 to 35 controls works nicely.
 - Your course should be planned to minimise the temptation for competitors to pass by the Finish before they actually want to finish. With MapRun, once you have visited one control, the next time you go through the Finish area timing is stopped.

- You don't have to use the entire map. Try to get an idea of how long a reasonable route choice through all of your controls is (by measuring using a GPS or via Google Maps). Your course should be around 12km to 13km. Any shorter and the fast competitors will get all of the controls. Any longer and there will be controls that very few will visit and that can, therefore, be better used elsewhere.

Once you are happy with your course either draw it on a paper copy of the map or print it out from Purple Pen. Don't worry that your course on Purple Pen has all controls marked via the standard orienteering purple circle and not the coloured circles that will finally appear on the printed maps that the competitors will use. The creation of the competition map used in the event is done by the club *MapRun Administrator* as part of the process of putting the event up on MapRun.

3. **Go out (physically) into the streets** and for each control site choose the exact feature for the control. While at each control write a control description for the control. Things to consider:

- For each control you should choose a feature that
 - can be identified on Google Maps and
 - is easily described in an unambiguous way. e.g. Letterbox #6, Telegraph pole JU14044.
- It makes life easier later if you use a GPS app on your phone (e.g. for Android phones "GPS-Waypoints" or for Apple phones "JAS Location Tracker") to save the coordinates of each of the control sites when you visit the site.
- While scoping out your control sites keep an eye out for any map corrections. Document anything that you find on the map that needs changing.

Neither physically visiting the sites nor using an app to save the coordinates of each site is strictly necessary since in many cases it might be possible to do it all just from Google Maps. However, it is considered "good practice" to follow both of these procedures for the following reasons:

- You are out checking the accuracy of the map. This is important since the most frequent complaints from competitors are about inadequacies in the map.
- You will get a feel for the terrain and the challenges that you are asking of the competitors
- You will be getting accurate control descriptions, (Google Street View is **definitely not** always up to date)
- You will be visiting the controls in the same manner as the competitors and hence can see how difficult it would be for a competitor to locate the feature.
- The chances of errors occurring between the printed map as used on the day and the MapRun course are minimised.

Now that you have visited all of the control sites and have a control description for each control, hopefully you are happy with your course!!

Stage 2 - Send Your Work to Your MapRun Administrator

You now need to send your work on the course to your *MapRun Administrator*.

1. Control Descriptions

Ideally, we would like you to input your control descriptions into the Control Description (Google Docs) file that your *MapRun Administrator* has shared with you.

However, if you are not comfortable doing this just send your list of control descriptions to your *MapRun Administrator* via an email.

2. Your Course

Ideally, we would like you to send your course to your *MapRun Administrator* via a “kml” file. This file is a special file that contains the coordinates of each of the control sites (including the start and finish). Generating this file is discussed below.

However, if you are not comfortable doing this you can send your course via a Purple Pen file or even as a scan of the course drawn on a paper copy of the map. In this case there is likely to be a bit of “back and forth” between you and the *MapRun Administrator* to ensure the accuracy of the file that eventually will be loaded up on MapRun.

You have completed the (optional) first step in generating your course kml file if you have used a smartphone app to save the coordinates of all of the control sites (including the start and finish). In this case you can use the option in the app to export the waypoints/controls as a kml file.

For MapRun to work, given the variety of devices that competitors (and course setters) use, it is imperative that the coordinates of the control sites in the kml file are as accurate as possible. Even when the course setter has stood at the control feature and saved the coordinates via a GPS app, unfortunately the accuracy is still not good enough.

So to generate the course kml file:

- Create a new map in Google Maps.
- If you have a GPS app kml file import that into your newly created Google map. Check the accuracy of the placement of your imported control sites. If there is a discrepancy between where the marker comes up and what you can see on Google Maps (it should always be close), change the marker to match the feature on Google Maps.
- If you don't have a GPS app kml file, manually place a marker at each control site. Try to place this marker as accurately as you can.
- Rename the controls. The start needs to be labelled S1, and the finish F1. 30-points controls need to be labelled with the numbers 30-39, 40-point controls 40-49, 60-point controls 60-69 and 90-point controls 90-99.

- Reorder the controls (just by dragging a control up or down the list) so that the first control is the Start (i.e. S1) and the last control is the Finish (i.e. F1). The order of the remaining controls is not critical but having them in numerical order would assist in spotting any duplications.
- Export the control layer as a new kml file

This is the file to send to the *MapRun Administrator*.

3. **Map Corrections**

You should also send any map corrections that you have found to your *Street Mapping Custodian*. That person will arrange for the map to be updated.

One way to show what map corrections are needed would be to draw the map corrections on a paper copy of the map and then send a scan of this. Another way might be to draw the corrections on a pdf version of the map and send that.

A final option, if you are comfortable using orienteering mapping software, would be to request a relevant file to be sent to you. If you want to use this option, contact your *Street Map Custodian*.

Stage 3 - Vet Your Event

The last stage in setting your event is the “final check”.

Once the *MapRun Administrator* has your course and control descriptions s/he will generate the relevant files and upload them to the MapRun server. As part of this process they will also generate the competition map and the final control description sheet.

They will then send to you (the Course Setter) a 4-digit PIN number for your event along with a pdf of the competition course map and the control descriptions.

Since you have the PIN number for the event you (or your vetter) can “run” the event at a time that is convenient for you. (We have found that a very efficient way of checking all of the controls on your course is to do it on your pushbike.) Don't worry about your run appearing in the results for the event on MapRun. Your *MapRun Administrator* will have deleted your run before the event is scheduled to start.

You should do this final check well before your event is scheduled to be run so that if something has to be changed (in either the course, the map or the control descriptions) there is time to make the required changes.

Some Course Setting Considerations

- **Be diligent in looking for map corrections.**

The source of the most “complaints” at Street-O is, by far, inaccuracies in the map. While we have *Street Map Custodians*, their job is to look after the street map files (e.g. making sure that all of the map corrections that are found get onto the file) rather than to go out and find which corrections are necessary. As a Course Setter you can help here by being very critical of the map that you are working with when you are out doing the field work for your event.

- **Don’t set “bingo” controls.**

Another common source of complaints are controls that are hard to find on the run. Agreed, orienteering is all about careful navigation but if the map doesn’t contain enough detail, or alternatively, if the detail is too complex to be interpreted clearly no amount of careful navigation will help. Remember that our street maps are a very simplified version of what is on the ground.

- **Use 30 to 35 controls.**

It seems that with MapRun on a 1:10000 map that fits on an A4 page courses that offer a good balance between route choice challenge and having all competitors able to visit a “reasonable” number of controls use between 30 to 35 controls.