

OCAD 6 for Schools

A basic help guide

Free download

<http://www.ocad.com/en/downloads/freeware>

1. Introduction

This guide is meant to give a very simple outline in how OCAD 6 can be used by schools to design courses and print their orienteering maps. It is also possible to use the software to edit the map. This is beyond the scope of this document, though the limited help within the OCAD6 software, some “How to’s” created by the vendors and accessible via the internet and personal trial and error could enable the user to take advantage of the facilities.

These notes do assume a reasonable familiarity with computers, the internet and with MicroSoft Windows.

2. Acquisition of Software

The cartography behind your orienteering maps is produced on a sophisticated piece of computer assisted designed software called OCAD, developed by a Swiss company. It is used by cartographers across the world and is very highly regarded within the orienteering community.

OCAD version 9 was used to create your map but it is possible for the cartographer to create a perfectly acceptable copy of the map which is compatible with OCAD version 6. This is available as freeware from the Swiss software company. To gain a copy of the software access the internet and go to :

<http://www.ocad.com/en/downloads.htm>

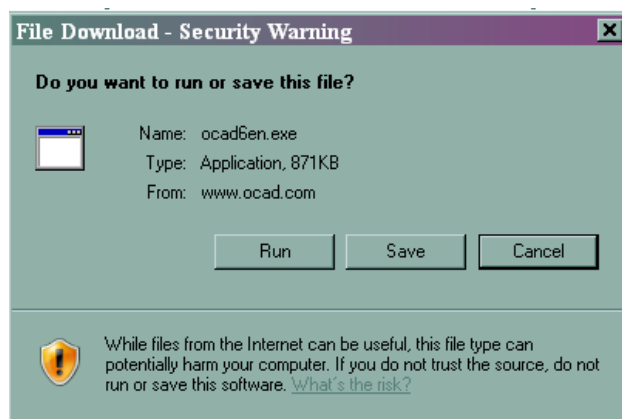
and then scroll down the screen to

OCAD 6 for Windows Free Full Version

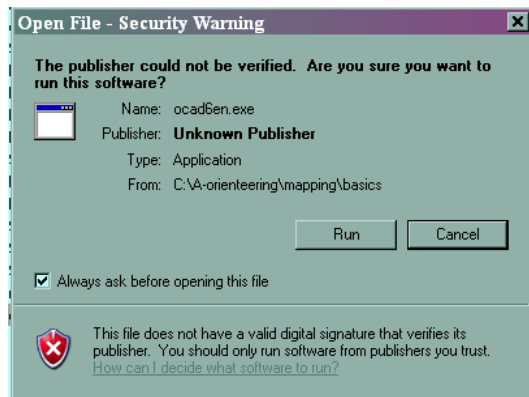
OCAD 6 is available as freeware. Selfextracting EXE file, 853 kBytes.

[English](#) [German](#) [Swedish](#) [Finnish](#) [French](#)

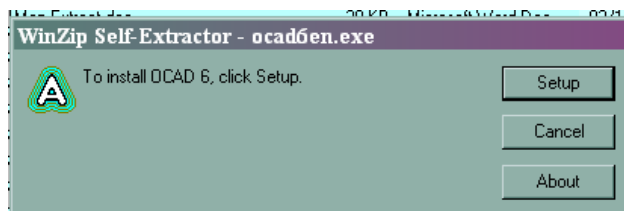
Left mouse click on English and the following window will appear



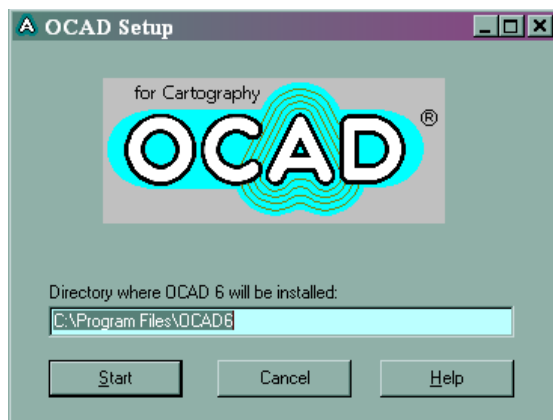
It is suggested that you press the save button to create a copy of the file to a directory of your choosing. This will create an executable file called **OCAD6en.exe** in the nominated directory. Next Left mouse double click on this file to install all the necessary OCAD files on your PC. The following window will appear.



Left mouse click on "**Run**". The next window will appear. Click on "**Setup**" and the



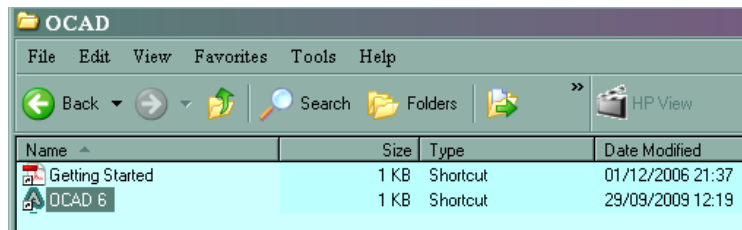
next window will ask for the directory to install the software to. Amend the directory as required and press "**Start**".



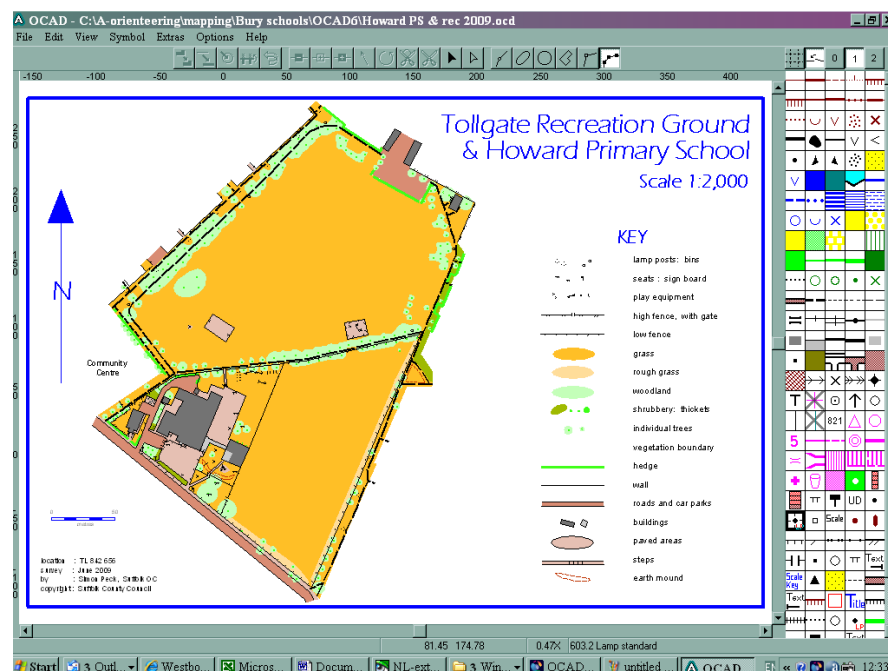
The files will be automatically created for you and an icon will appear in the directory.

3. Accessing OCAD 6

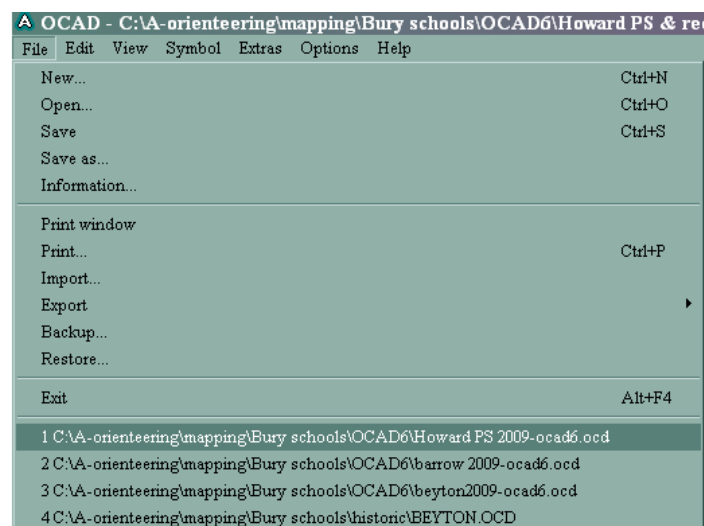
To start OCAD 6 itself simply Left mouse double click on the OCAD6 icon.



OCAD 6 will look like this. The map is to the left, various menu and function tools across the top and a symbol palette to the right.

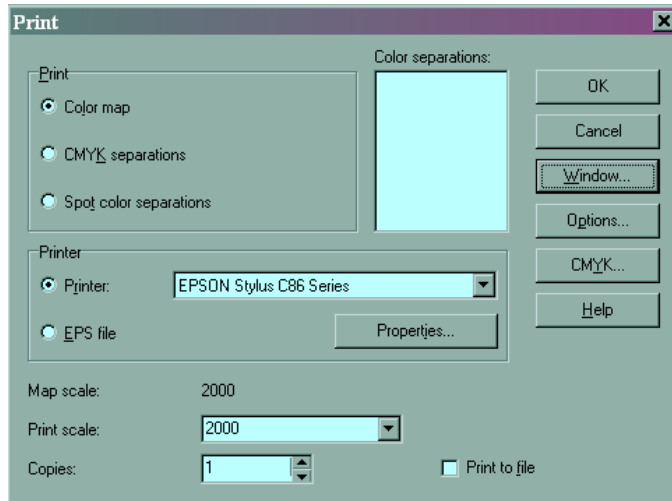


To open the file you require use the **File** drop down menu



4. Printing from OCAD 6

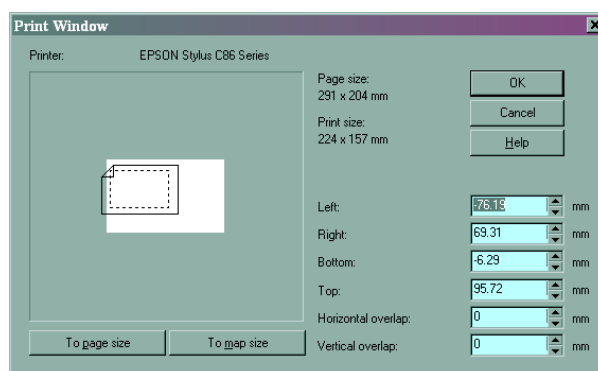
To print a map (to A4 size) click on the **File** drop down menu and select **Print** from the options offered. The following window will appear



Make sure that **Color map** button is checked and that the **Print scale** is set to the same value as the scale as appears on the map. Do not worry if the map scale is different, although they should match up and any discrepancy reported back to the cartographer (it is something that can be easily rectified and will prevent confusion at a later date).

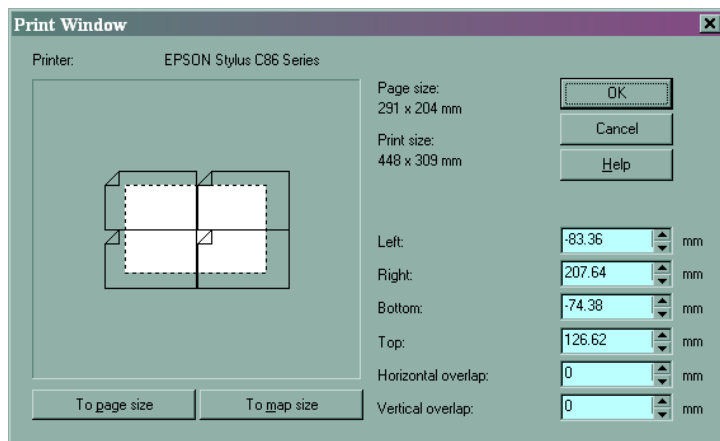
Make sure that the printer address is correct (this is dependent on your PC / Printer set-up and configuration). Press on the **Properties** button and check that the orientation of print (landscape or portrait) is correct.

Before you print press the **Window** button (3rd down on left) to check whether the map fits the paper correctly. The next window will appear. If the display on the left appear something like this the map will not print out correctly on the page.



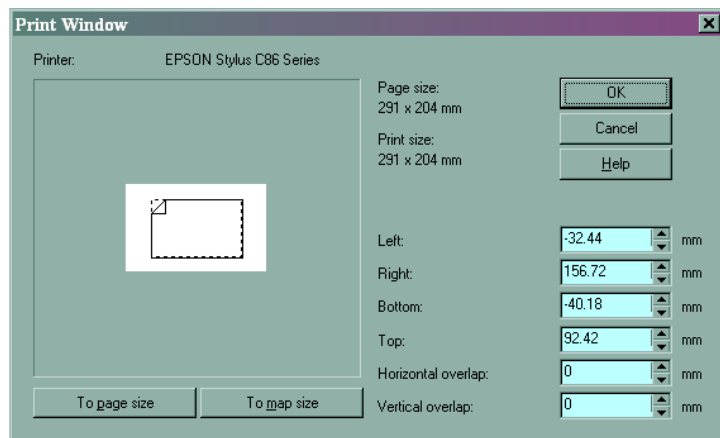
Try pressing the **To map size** button.

If, after pressing **To map size** the display then looks like this



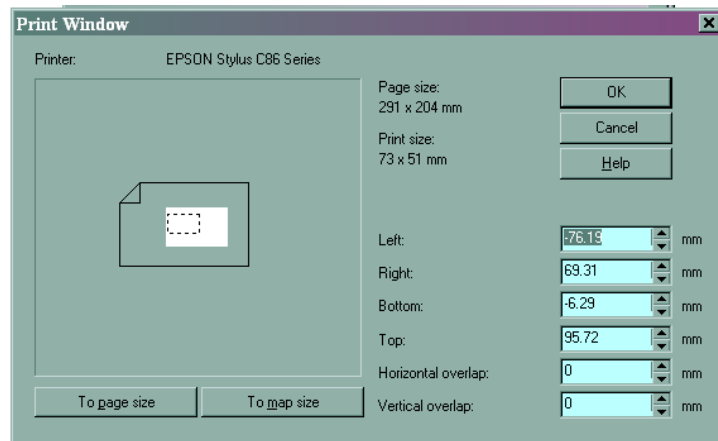
the problem is probably that the Print scale is wrong (e.g. the map is 1:2,000 but print scale is 1:1,000). Try correcting the Print scale before calling for help.

If you press the **To page size** button and get this



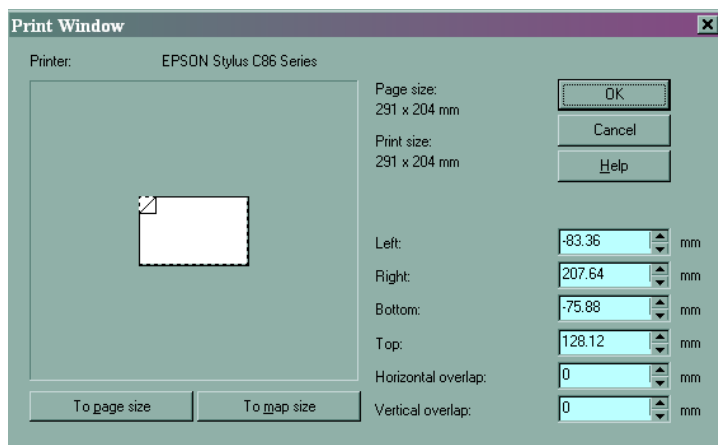
The problem is again likely that Print scale value is too low.

If you get a display like this

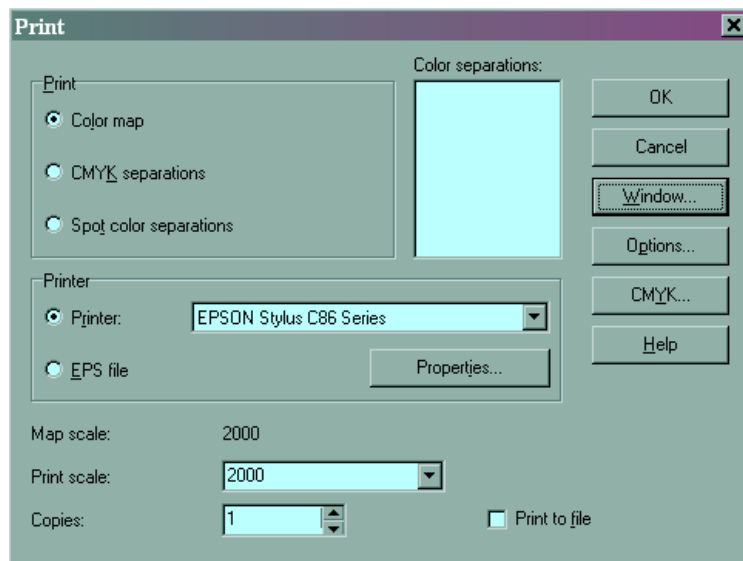


Then the print scale is too large (e.g. map scale is 1:4,000, print scale is 1:4,000)

What you are looking for is a display like this after the **To page size** or **To map size** buttons have been pressed.



Press OK on this window to return to the Print window



and press OK again to print. [You should get your normal MicroSoft messaging and possibly some dialogue that is standard to your printer.

There are some known problems with printers.

- 1) The available print areas will vary between printers (the Epson C82 and Epson C86 that are normally used by the cartographer have different footprints for example). If you are unable to get your map to fit an A4 refer to the cartographer for advice. It may be possible to edit the map layout to fit things in, or consider other alternatives.
- 2) The colours between printers vary. They are currently set up so that an Epson printer will produce colours matching the International Orienteering Federation specifications. If you colours feel wrong (too dark / dull/ light or whatever) please refer to the cartographer as all the colour settings on the map file can be varied.

5 Course Setting.

It is possible to use the OCAD6 edit facilities to alter your map file to draw you own courses. Before you do this you are strongly advised to create a master back-up version of your map file and draw up any courses you want on copies.

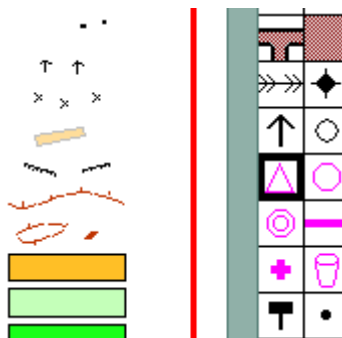
OCAD6 creates what is known is the computing world as objects. These are point symbols / lines / areas that are used to create the actual map. Each object has a variety of properties e.g. type, position, size etc.. The software does all the hard work for you so that all you need to do is select the type of symbol and where it is to be positioned on the map.

To keep things simple you need to be able to use just a few of the icons on the function bar at the top of the map display.

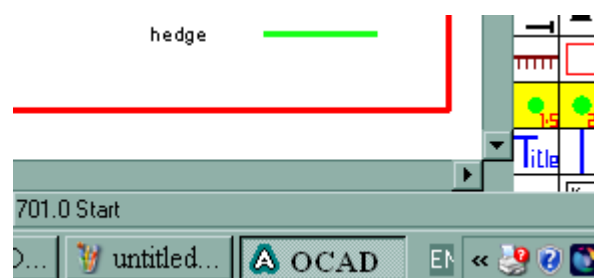
The first is the **freehand mode** button.



Click on this and then you can select a symbol from the right-hand palette and add it to the map. In this example the start triangle has been selected. The symbol has a black border on the palette now

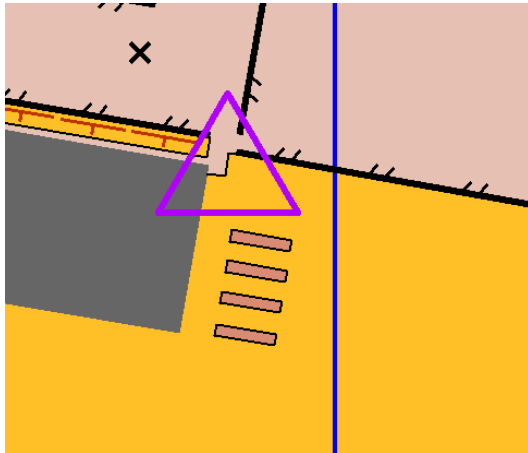


And at the bottom of the map the type of symbol being used (or to be technical, that you have focus on) is also described.

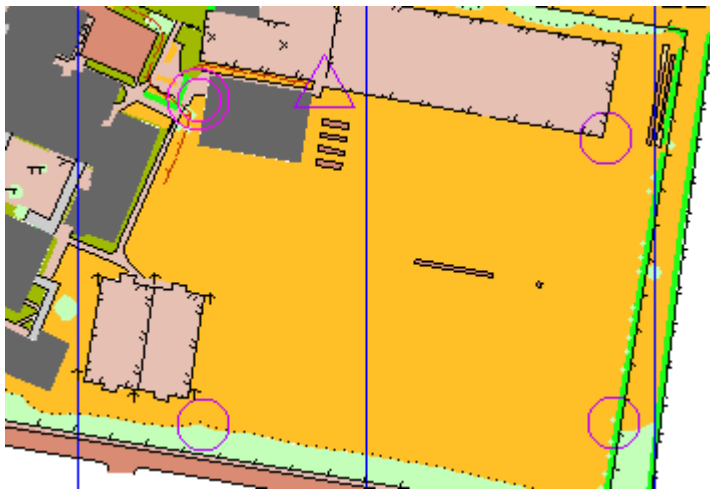


You can now mark your start of the course to the map. [You may now want to use the zoom function (found under the **View** drop down menu) and the scroll bars to drill down in to your map.]

Use the mouse to move the cursor (it should appear as a cross-hair) to the part where you want to start the course and left click on your mouse. The triangle will appear.



Now select the control circle and add all the control to your course, finally adding the double circle for the finish.



To edit the position of a control you can use a second icon, the edit point button. [Do not use the adjacent, black triangled, edit object button].

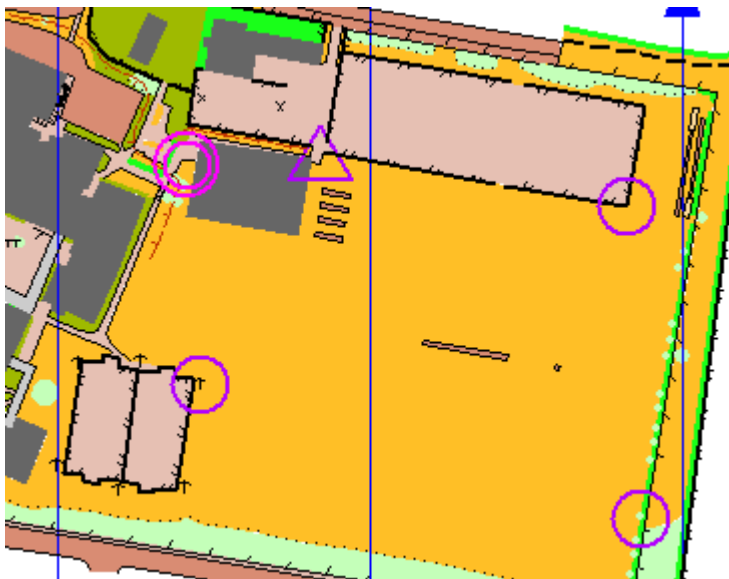


Left mouse Click on this button [the background will go white to show you have focus on the command) then Left mouse click on control you wish to edit, hold the mouse button down and drag the control to its new position before releasing the mouse button.

Warning - under OCAD 6 if you have placed a control on a point feature it is easy to select (and move !!) the point feature rather than the control. Unfortunately the text at the foot of the map does not reliably tell you what symbol you have focus on [OCAD 6 glitch - fixed in later versions]. If you don't have the control keep clicking away until you do have it - zooming in often helps. If you move the wrong feature the undo button



can come to your rescue.

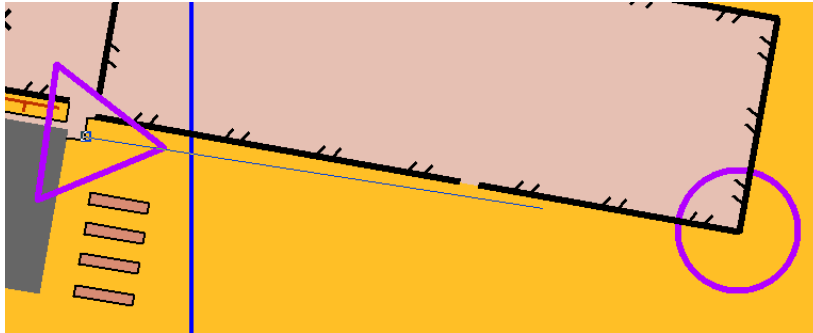


OCAD6 does not always redraw the screen immediately after you have edited it, leaving a shadow of the old map behind. To quickly redraw the map press function key five [F5] at the top of your keyboard.

To make the course look professional go to edit mode and select the start triangle and then click on the direction of area patterns button.



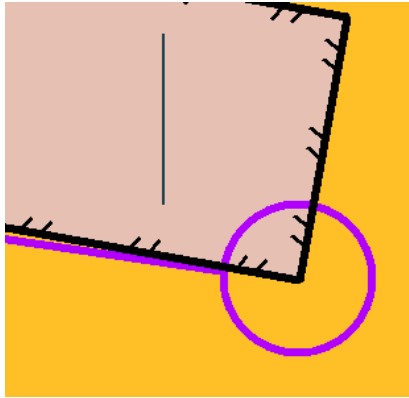
Move the cursor to the tiny square in the centre of the triangle, left mouse click and then, still holding the left button down, drag the mouse towards the centre of the circle of the first control. A faint line will appear and when you release the mouse button the triangle will be rotated in the correct direction.



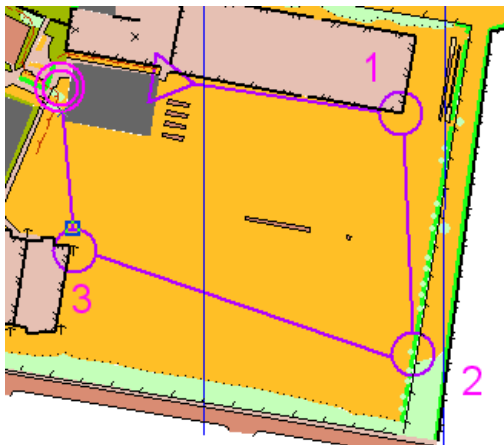
To add lines select freehand mode and the purple line from the symbol palette. Left mouse click on the apex of the triangle pointing towards the first, then, still holding the left button down, drag the mouse towards the centre of the circle of the first control, stopping on its edge. A purple line will appear and when you release the mouse button.



To add numbers select freehand mode and the purple number 5 from the symbol palette. The cursor cross-hair will have an “A” in its SE corner. Drag the mouse to where you want the number to appear (don’t obscure vital detail or the purple lines in and out of a control). Release the mouse (a faint vertical line will appear)



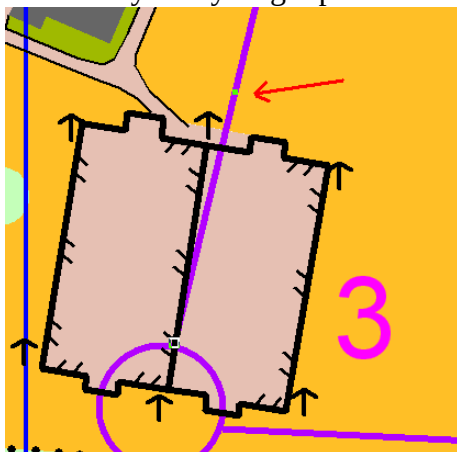
and then type the number. Repeat to add numbers to the whole course.



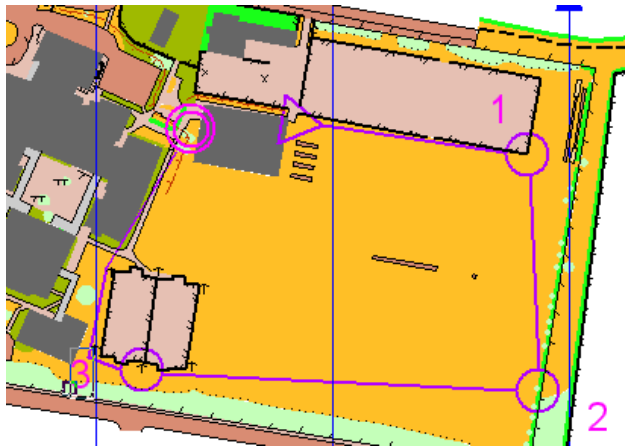
If you wish to draw a line that goes around an uncrossable feature you can edit the line by getting focus on the purple line, and then selecting the normal point function.



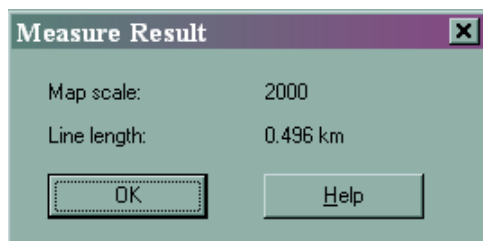
This allows you to add an extra turning point on the purple line. The new point is denoted by a tiny bright point on the line (see red arrow).



Select the edit point button, left mouse click on this point and drag the point so that the line avoids the uncrossable feature. Don't forget to move the ends of the line where it meets the circle and move the number - to make things look as neat as possible. You can put several kinks in the line if you want.



Finally you may want to measure the length of the course. This is a little fiddle using a non-standard symbol. Select the large red R from the symbol palette. This allows you to draw a fine red line from the start, through all the controls to the finish. Then select Measure from the Edit pull-down menu. The window telling you the length of the course will appear. Don't forget to delete the fine red line (select the line in edit mode and press the keyboard delete button) before you print your map.



6 Other OCAD Functions

This document has covered but a very small part of the extensive OCAD functionality. To learn more you could “have a play” on a copy of your file, use the help menu (sadly it’s not great) or use some of the “How To’s” supplied by the software vendors

<http://www.ocad.com/en/howtos.htm>.

Some of these describe functionality only available at later versions of the software (and there was something of a leap in design of the product at OCAD7) but those that do not refer to a specific OCAD version may be of use. They generally contain a set of power-point slides (with animation) to guide you through some of the functions. Those that deal with edit may be of particular use if you ever wish to change the map yourself (e.g... if a new building is erected).

7. Other electronic formats.

The cartographer can make the map available in a variety of other formats, especially for printing.

.pdf files for use with Adobe reader, but the colours seem to come out dull, certainly not true to the original colour palette.

.bmp produces high resolution but very large (25 mB +) files. The files are probably not suitable for printing as the scales are hard to manage.

.jpg compressed .bmp files, again with high resolution but generally under 1 mB and still very sharp and accurate. These can be edited using MS Paint or Photoshop software (often available with your digital camera).

.ppt putting the map in a PowerPoint presentation file. This may cause difficulties in printing to scale but could be useful for classroom lessons to teach various skills.