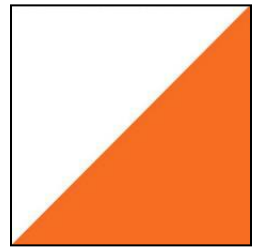


**CONDES FOR COURSE SETTING  
BASIC MANUAL**



March 2023



***Alberta***  
***Orienteering***

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# 1. PREFACE

Course setting with Condes is easy for both simple park events and complex multi-day events, and it also makes the job of the person printing the maps a whole lot easier.

Condes, a program written by Finn Arildsen, is most useful when you are doing more than a simple event or when you are using maps that are not already formatted for printing; otherwise, other software such as Purple Pen (shareware from the net) or OCAD work just as well. But there are advantages that will be described that make Condes useful even for simple events. It took a while (a few hours) until I was comfortable with Condes, and longer still to learn a lot of the neat stuff this software has, but now I would not use anything else and think it is very simple to use.

As with most software there is usually more than one way to accomplish a task in Condes. To learn this software, I suggest that you just start using it and eventually you will be an expert.

Try double-clicking or right-clicking on an object (control circles, legs, control descriptions, etc.): often a window will open that will allow you to edit the properties of that object and give you other options. Or, hover the cursor over an object and often a smart-tag will appear either explaining what the item is or providing information.

The software's help file has been expanded since earlier versions and explains in detail about the software. Another helpful source is the discussion and support section of the Condes web-site: <https://condes.net/phorum/list.php?1>. Here you can read what other people's questions were and Finn's answers...and where you can add your own question. I learned a lot about Condes from just reading past posts to that site. The help button associated with various windows is also quite good.

As you start moving around the program you will notice there are many functions I have not described – especially for example, course planning for relays or forking– but for such advanced topics the Condes help file will be best. But hopefully there is sufficient in this manual to plan most events.

The original version of this manual was used as the basis for a series of articles on using Condes written for the magazine 'Orienteering North American', written by Kim Kasperski and Adrian Zissos. The second version (2011) of the EOOOC manual was based on that series of articles. The third version (2017) was to update the manual regarding many new features in Condes 9. This fourth version (2022) is an update of the manual given the release of Condes 10 in the summer of 2019. Minor updates and edits have been made since then.

KLK

March 2023

## 2. OBTAINING AND LOADING SOFTWARE

The Condes home website is at:

<http://www.condes.net/>

and you can either go there, and click ‘Download Condes 10’ or on ‘Download’ in the menu bar of the window to obtain the Condes software, or go directly to download, <https://condes.net/download/>, and click on ‘DOWNLOAD CONDES 10’.

The installation file (install\_condes10.exe) will download; once the file finishes downloading, double-click on it and installation will start. Similar to a lot of installations, the instructions recommend that you close all other programs before installing.

The licence is a club licence: there can be any number of users as long as they are working on an event the club is running or jointly running. The information you need to activate the software is:

Club: club name as it appears in the licence

Code: code as it appears in the licence

The software will automatically check for updates if you have that set in ‘**File**’ / ‘**Standard settings for this PC...**’ / ‘**Application settings**’<sup>1</sup> (the default setting) when your computer is hooked to the internet, and notify you if there is one. You will have the choice to update or delay the update check as you wish. It is useful to read the release notes of new versions (located on the Condes website) to see what new functions Finn has added.

The built-in help file is more comprehensive than this manual and will be of more use than this one once you get past the basics.

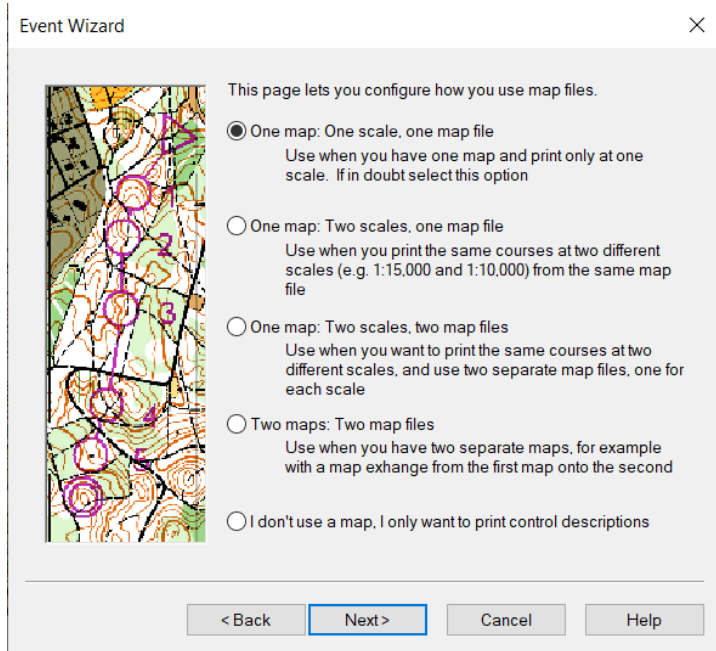
## 3. BASIC COURSE PLANNING

To create a new event, start Condes then select ‘**New event file**’ from the ‘**File**’ menu (or the ‘New Event’ icon on the tool bar) and follow the instructions of the wizard. If you had already been working on an event the last time you used the software, Condes opens that file automatically, although this depends on whether you changed settings in the menu item ‘**File / Standard Settings for this PC**’. For the multi-taskers in the audience, you can have more than one event open at the same time, each event being in its own tabbed-window.

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<sup>1</sup> Seeing as I have mentioned ‘Standard Settings for this PC’, in the tab of that window ‘**Course Layout Editor Settings**’ I prefer to un-select the two options under ‘**When you create a new course**’ as I prefer to add the course name and control description(s) myself, as I always have to move the automatically-generated items anyway – but it is a matter of personal preference.

When presented with the all the options as you progress through the new-event wizard, (for example, options of how to use map file(s) (Figure 1)), choose what you think you will use, but don't worry, everything can be changed later if you change your mind.



**Figure 1 – A screen from the ‘new event’ wizard**

I always use an OCAD map file as the map template but you can also use jpegs or bitmaps. Condes reads the scale from the OCAD file so **MAKE SURE THE OCAD FILE HAS THE CORRECT SCALE!** If you use, for example, a jpeg, you have to manually enter the scale, and know the correct resolution of the image.

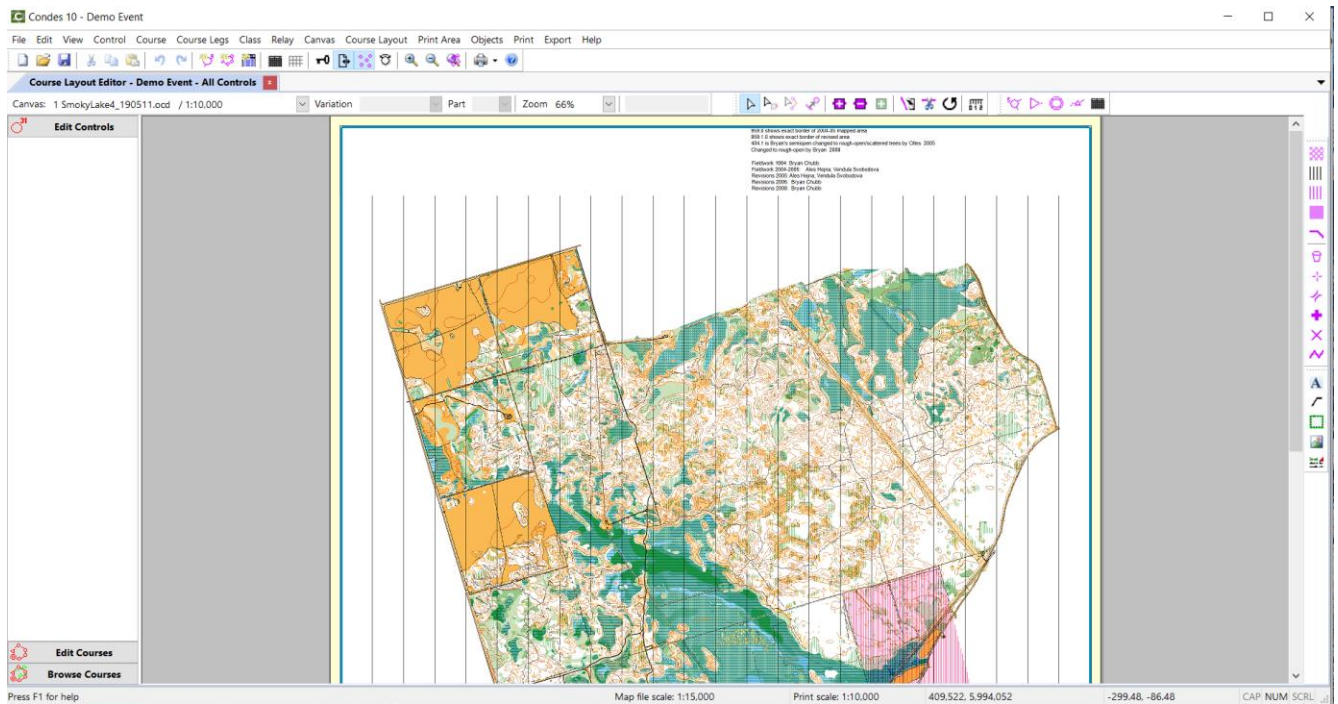
When the new event wizard is finished a window appears with a tab called ‘**Course layout editor**’ and the name you gave your event, that will show your map and all the tool bars (see Figure 2). You can move the tool bars around to suit your working style. You can also see if the scales are correct by checking the bottom of the window.

### **3.1. Panes**

On the left-hand side of the window are three tab-like boxes that you use to select either the ‘**Edit Controls**’ pane, ‘**Edit Courses**’ pane, or ‘**Browse Courses**’ pane. Clicking on the ‘Edit Controls’ pane tab will bring up the list of all controls, and on the map all the controls will be displayed. Clicking on the ‘Edit Courses’ pane takes you to the list of all the courses, and the map displays whichever course is selected in the pane. Lastly, the ‘Browse Course’ pane allows you to see more than one course at the same time so you can catch any conflicts between courses. While in ‘browse courses’, course planning tools are inactive.



At this point you have created a new event but it has no controls yet, nor courses. Now would be a good time to save the file.



**Figure 2 – Appearance of screen after finishing the ‘New event’ wizard; ready for course setting**

You are now ready to start course planning...

Well, not quite yet: first some general tips on using the software and moving around the map. As with most software there are usually many ways to do the same action, for example by selecting commands from the menus, using the icons on the toolbars or right- or left-clicking; it all depends on how you prefer to work. As you explore, try double-clicking on items or right-clicking - you will often discover faster ways to access commands or open dialogue (in this manual I sometimes call these ‘properties’) boxes.

### **3.2. Moving and zooming around the map**

Moving around the map will soon become second-nature. To move the map, click on an “empty” part of the map (i.e. not over a course object), hold the left mouse button down, and drag. This moves the map around in the window (don’t worry, you are not changing anything related to the map coordinates). You can also use the scroll bars on the bottom and right of the window if you prefer. Lastly, the scroll wheel of the mouse moves the map up or down.

To zoom in, either select the magnifier (accessed from the tool bar (magnifier icon with a ‘+’) or in the ‘View’ menu), left-click<sup>2</sup> on the map to zoom-in one step, or, again, with the magnifier-

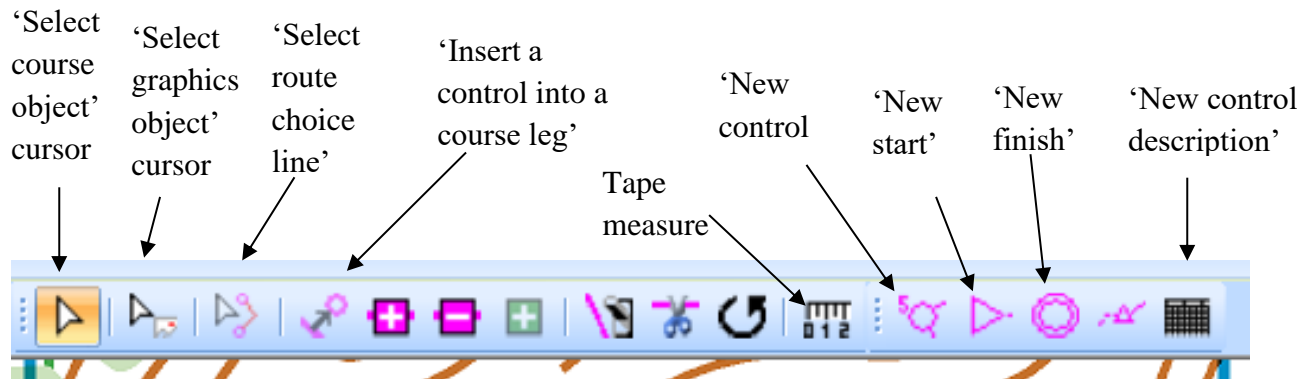
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<sup>2</sup> From now on, when I use the term ‘click’ it will mean to click the left button of the mouse. I will stipulate ‘right-click’ when the right button is to be used.

icon selected, click, hold, and drag to zoom into a specific area, or select a number in the ‘zoom’ drop-down box on the toolbar. To zoom out, click on the magnifier icon with a ‘-‘ in it, or any of the other options.

### 3.3. Selecting things

You can select all kinds of things on the map – which is how you move them or change their properties. There are two cursors that are used to select things, one for course objects (controls, leg lines, etc.) and one for any graphics or text you add (see Figure 3). Here I will focus on the former as that is the one you use for basic course planning. With the ‘**Select course object**’ cursor chosen you can click on any course-related item to select it. You can hover the mouse over an item, left-click on it to select it, right-click on it to get a context-sensitive menu, or double click on it to open its properties box.



**Figure 3 – ‘Course edit tools’ toolbar. The tools you will use most often in basic course planning are labelled. Others will be described later in this manual.**

### 3.4. Creating a course

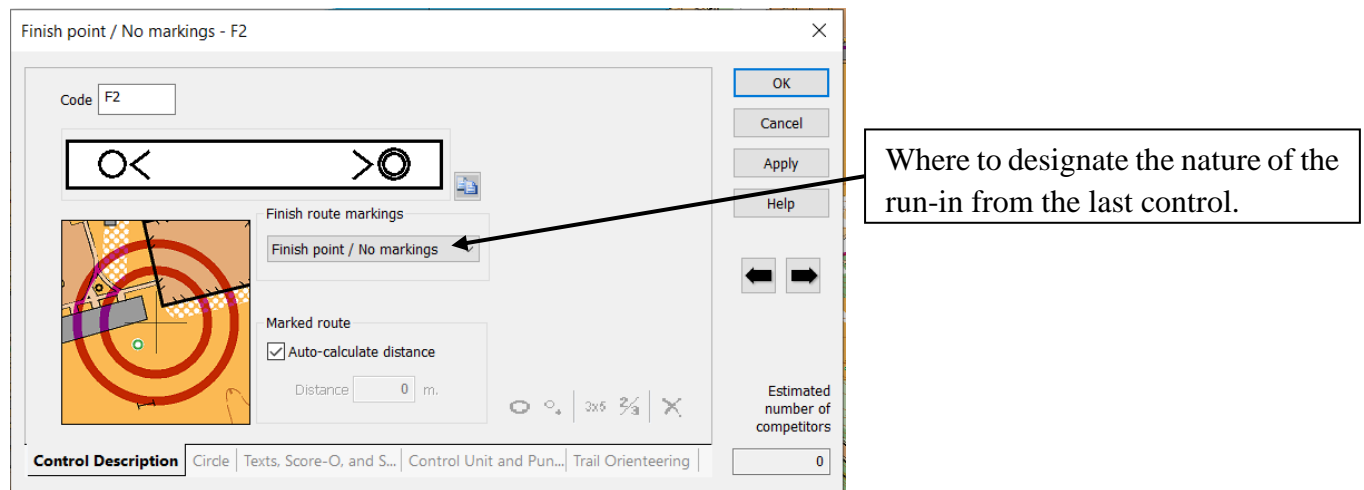
You can start in any way you want: create a bunch of controls first (click on the ‘**New control**’ tool and click on the map where you want to put a control), then link them to make a course after you select ‘**New course**’; or place your start and finish and then insert controls as you go, either by creating new ones or selecting controls already placed; or you can do it non-graphically by opening the course dialog box (double-click on the course name in the course pane) and double-click controls from the list into the order you want (of course, this only works if you have already placed controls). To keep this manual to a manageable size, I will describe just one of the possible approaches: starting with placing the start and finish. Here are the steps (refer to Figure 3):

#### 3.4.1. Add start & finish controls

In the ‘**Edit Courses**’ pane, elect the ‘**New start**’ tool and click on the map at the spot you want the start. The start triangle appears.

Condes automatically selects the ‘**New finish**’ tool so now click on the map where you want to place the finish. A useful feature in the course properties window (double-click on the course name to open it), is the check-box in ‘**Course finishes at the start point / Home**’ tab. If you check this box the location of the finish will automatically be moved with the start if you move the start location – assuming you want the start and finish to be in the same location.

By the way, the default line into the finish control is a dashed line which means there will be full markings (i.e. a flagged route) from the last control to the finish. If you want to change that, once you have finished this first pass at designing your course (or at any other time), double-click on the finish control on the map and in the window that opens, select, for example, ‘Finish point / No markings’ from the drop-down box called ‘Finish route markings’ (see Figure 4); in this case the line from the last control to the finish will change to a solid line.



**Figure 4 – Finish control properties window that opens when one double-clicks on the finish control on the map**

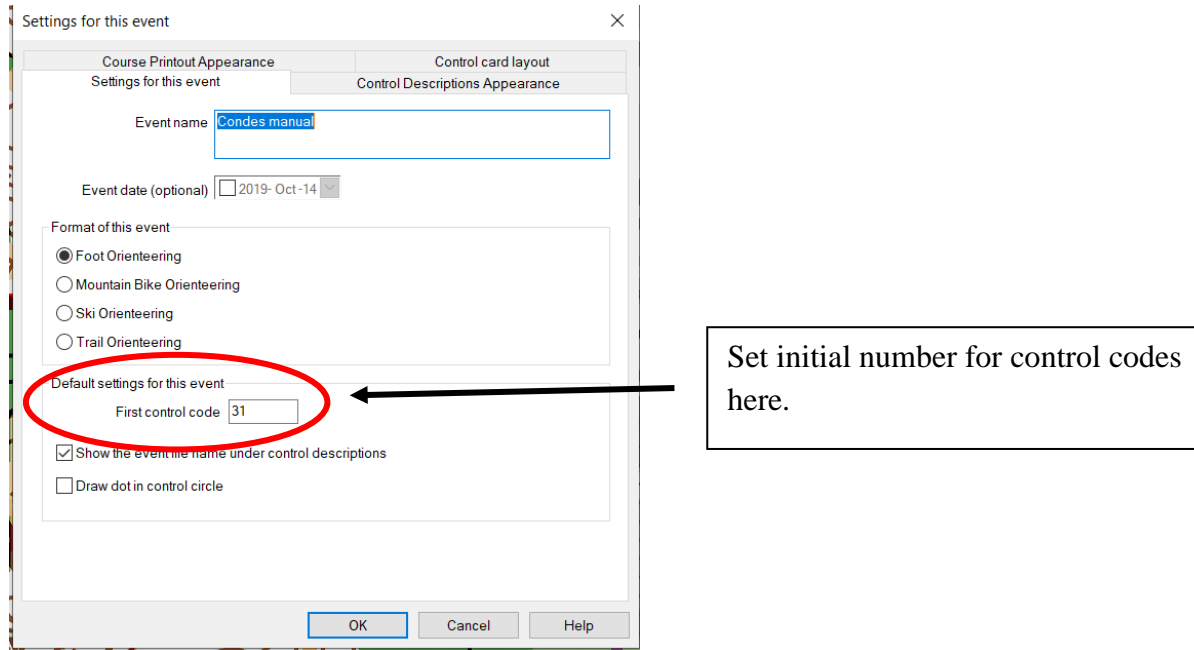
### 3.4.2. Enter course name and type

At this point (after you have placed the finish control) a window will open prompting you to name this new course and choose the type of course (e.g. normal, score-O, ski-O, mountain bike-O, etc.). Name the course (e.g. “Demo”), click ‘OK’ and the map appears with the start and finish connected by a line. You can close this window without defining a course if you want to just place controls first. You also have the option to choose which canvas the course appears on, but as I have not even mentioned what a canvas is yet, more on that later.

### 3.4.3. Add controls

Select the ‘**Insert a control into a course leg**’ tool and the line between the start and finish now becomes like a rubber band. Move the cursor to the location of your first control and click there – this spot can be either on a blank area of the map, which creates a new control, or on a

previously created control – for now create a new control by clicking on an empty spot on the map. When you click on the map a window appears in which you can type in the code for the new control (which can be numbers or letters or combinations of the two), or simply accept the default number that is there. This default starting number for the control codes can be first set in the menu ‘File’ / ‘Settings for this event’ (see Figure 5).



**Figure 5 – Window that appears when you go to the menu item ‘File’ / ‘Settings for this event’**

When you’ve entered the control code click OK and you are back on the map ready to insert your next control. Once you have inserted all the controls for your course, hit the escape key on your keyboard (or click some other icon from the tool bars) to get out of insert control mode.

You can add control circles to the map outside of creating a course by using the ‘**New control**’ tool (see Figure 3). When you select the ‘**New control**’ tool, the program automatically switches to the ‘**Edit Controls**’ pane that shows all the controls.

Once you have created this first draft of your new course / placed new controls, you can change the position of a control: zoom in to a magnification that works for you, make sure the ‘Select course object’ cursor is chosen, then click on a control to select it (it, and its control code, will turn blue), then click again on the circle, hold and drag with the mouse.

You can remove a control from a course by first, in the course you want to change, selecting the control with a mouse click and then use the keyboard delete key; or right-click and select ‘delete’ in the window that opens; or select the ‘**Control**’ menu ‘**Delete**’ command; or, open the course dialogue window (to access the course dialogue window, click on the ‘**Edit Courses**’

pane on the left, then double-click on the name of the course you want), select the control you want to delete and use the keyboard delete key <sup>3</sup>.

This does not delete the control from the event; if you want to do that, go to the **‘Edit Controls’** pane, and delete it there using the keyboard delete key (a warning window comes up that gives you various options if the control is currently used on a course).

To insert a control into the middle of an existing leg, click on the leg to select it (it will turn bright red) and then select the **‘Insert a control into a course leg’** tool and click on the control you want to add to your course (or create a new one). If you don’t select the leg before you select ‘Insert a control in a course leg’ the program will default to the start-first control leg. Or you can use the course dialogue window to add controls. As always, press the keyboard escape key to get out of insert control mode.

#### 3.4.4. Enter descriptions for each control

Once you have finalized the control locations (i.e. after field checking), enter the description for each control (of course you can change them at any time – doing this after field checking just saves you a bunch of time changing them again, and again, and...). To do this, either double-click on the control circle on the map, or on its number in the **‘Edit Controls’** pane, then, in turn, in the window that appears, click in a box of the description line to access and select the appropriate description symbol. After you have clicked in one of the control description boxes/columns you will see various tabs that you select to access groups of related symbols (see Figure 6; you will see the tab options only after you have clicked in a given box/column of the control description line). A nice feature is that only the symbol options that are allowed for that particular box/column will be accessible.

If you want to delete something that you have entered in one of the boxes, select the box and then click on the red ‘X’ in the bottom right of the window.

A very nice feature, and a real time-saver, is that the window also shows a magnified view of the control location, so you can confirm that the circle’s center is located on exactly the correct spot. You can adjust the position of the circle, if needed, from within this window, either from the **‘Control Description’** tab or the **‘Circle’** tab and then click on the **‘Nudge control position’** arrows to nudge the circle into the correct location. Even better, you can then click on the arrow on the right to move to the next control, without having to move out of the window. (Figure 7)

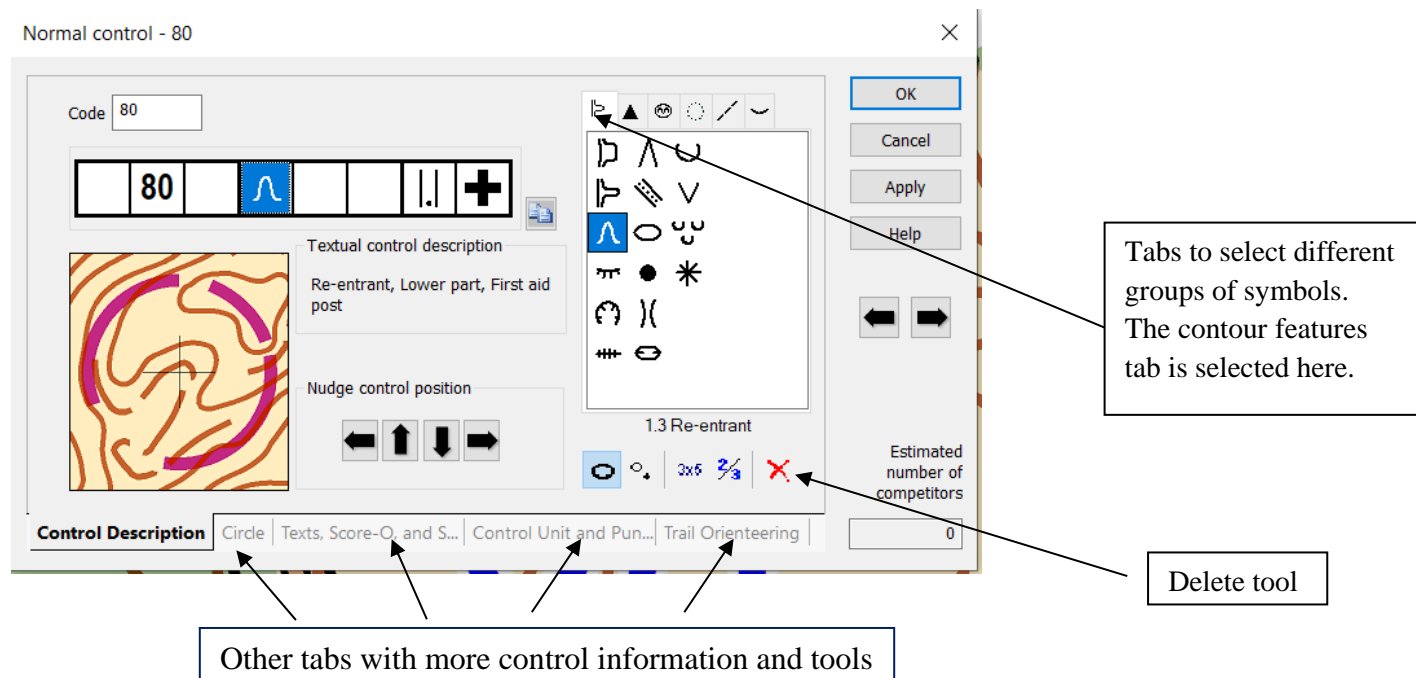
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<sup>3</sup> This is the only time I will list all the ways (that I know of) with which one can do an action. I only did this to illustrate that there are MANY ways that one can do most things – as I mentioned before, it all depends on how you prefer to work.

### 3.4.5. Climb

You can enter the climb for a course either manually in the course dialogue window (the default; see Figure 8)<sup>4</sup> or, by having Condes calculate it based on your entered values for each leg if you select the ‘Auto-calculate the climb’ check box (‘**Advanced**’ tab in the course dialogue window).

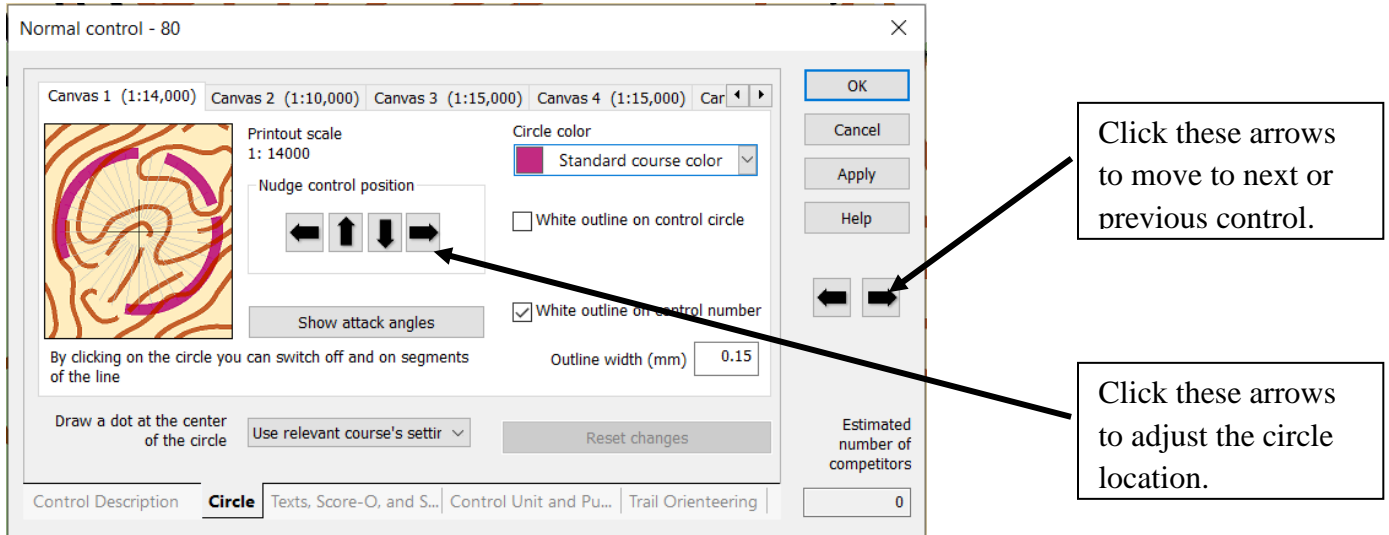
To enter the climb for each leg, select the leg, then right-click, and in the window that appears select ‘**Climb...**’. In the next window that opens you can enter the climb for that leg, after checking the box ‘**Value is valid**’. If you want Condes to calculate the climb you must do this for all legs in the course; if the climb for a leg is missing, the course will have a red background in the course pane. Any course that uses the same leg will automatically have the climb also entered for that leg. Climb can also be entered in the climb spreadsheet (‘**Course Legs**’/ ‘**Open Climb Spreadsheet...**’), but only after you first click on ‘**Auto-calculate the climb**’ in the course properties window (see Figure 8).



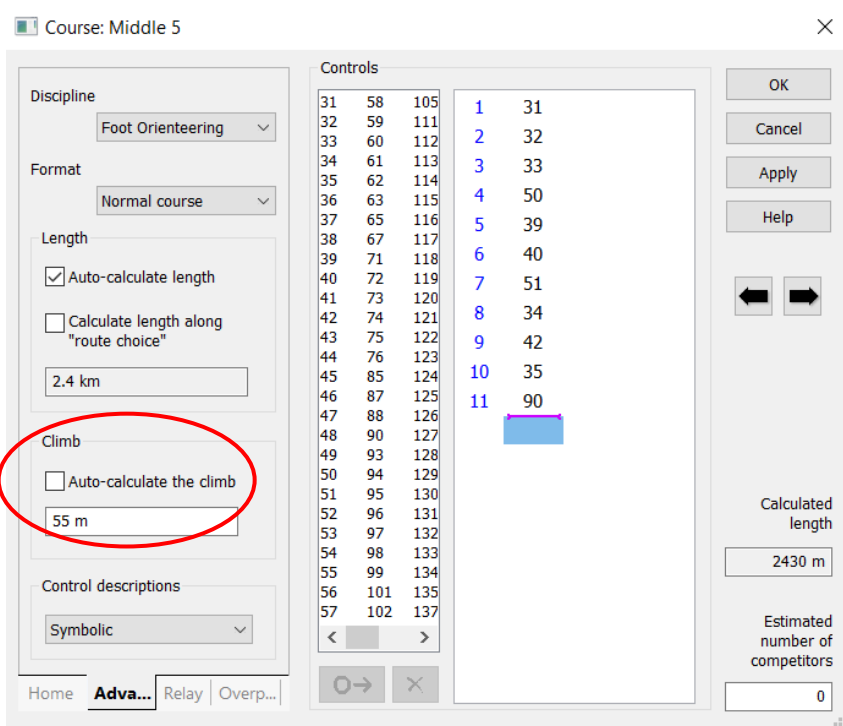
**Figure 6 – Control dialogue window that opens when you double-click on a control circle on the map, or control number in the ‘Edit Controls’ pane (‘Control Description’ tab). To the right of the window you can see the types of symbols that appear when you click in one of the control symbol boxes.**

<sup>4</sup> One clever participant in a Condes class that I gave suggested that instead of going to all the trouble of figuring out the climb, just enter “yes”, or even “lots” in the box – sure enough it shows up in the CD as “yes” or “lots”. ☺ So, for those very casual events...

I **highly recommend** that, if you want to enter the climb for each leg, do so only after finalizing the course. Otherwise, if you move a control, even a bit, you have to enter the data again. This can be done the easiest in the ‘Course Legs’/ ‘Open Climb Spreadsheet...’.



**Figure 7 – Control dialogue window that opens when you double-click on a control circle on the map, or control number in the ‘Edit Controls’ pane; ‘Circle’ tab selected**



**Figure 8 – Course dialogue window (‘Advanced’ tab) showing where you enter the amount of climb**



### 3.4.6. Place a control description on the map

Condes automatically added a control description (CD), unless, like me, you disabled that option in **'File' / 'Standard settings for this PC' / 'Course Layout Editor Settings'**. After you create a course the CD and course name are placed in the top right of the work area (zoom out, way out...they will be there). Find it, click to select it, then click, hold, and drag it to the location you want. Or, simply select the **'New control description'** tool (icon looks like a grid) to place another one by then clicking on the map where you want it. That's no problem, as only the CD in the print area will print (see section on printing basics). You can put more than one CD on the printed map: for beginner's courses we will often add both a text and symbol CD so newcomers can start to learn what the CD symbols mean.

In the CD properties window, accessed by double-clicking on the CD, with the **'Main'** tab selected (note: the 'Main' tab is not shown when you open a CD properties window in the 'Edit Controls' pane) you can select whether the CD will be used on all courses or that course only. If you chose the former, the CD properties and position will be the same for all courses – which is often not what you want. If you want to be able to tailor the properties and position of the CD for each course independently, the quickest way is to: 1. Choose to add the CD to all courses, then click OK; 2. In any course, open its CD properties window, and now select 'This course only', then 'OK'. A window appears asking if you still want a CD on all courses, click 'Yes'. In this way, all courses have CDs but you can move the CD and change its properties specifically for each course.

There are many ways to set whether a CD will display as symbols or text, but the way I always use is to double-click on the CD on the map, click on the **'Appearance'** tab in the window that appears, and under 'Appearance' select either **'Pictorial'** or **'Textual'** (see Figure 9).

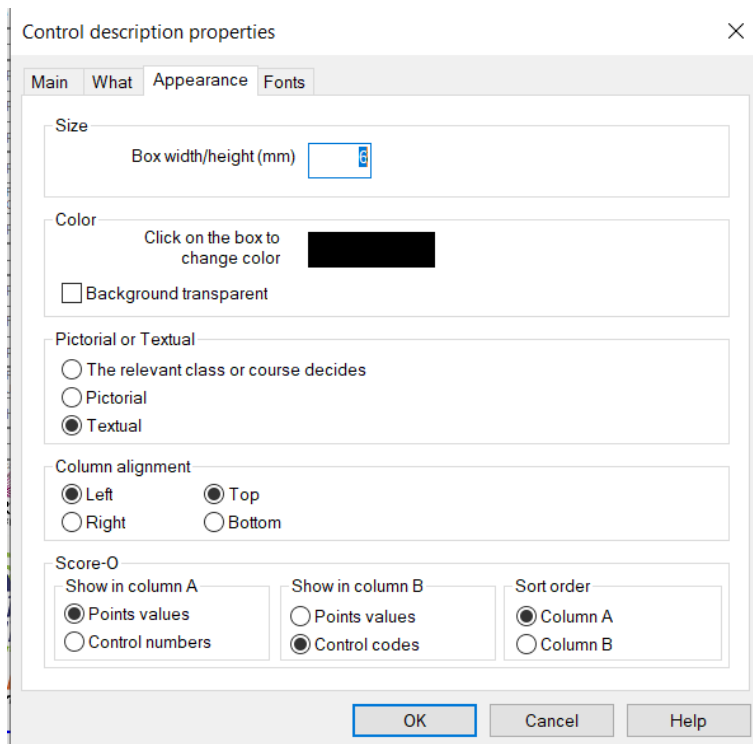
If you choose to have text displayed in the control description, Condes will automatically translate the symbols to text, although you can enter your own text, if you want to, in a control's dialogue box (in the tab labelled **'Texts, Score-O, and Status'**; see Figure 6).

Tip – if the control description box takes up too much space on the map, you can make it smaller by setting the **"Box width/height"** to 6 or even 5 mm. I rarely use the default 7 mm.

You have now created your first course.

When adding another course, a nice feature is that when you select 'New course' (from tool bar or menu) you have the option of creating a copy of an existing course for those times when you want to start with an existing course and then add or subtract a few controls to create a variation of it.





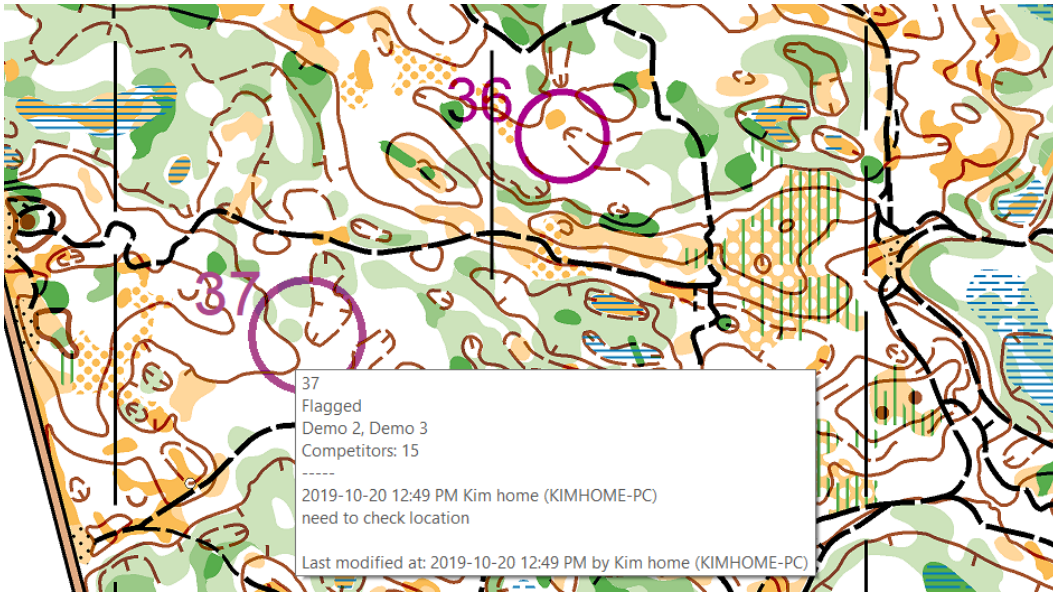
**Figure 9 – Control description properties window, ‘Appearance’ tab selected**

### 3.4.7. Other useful features

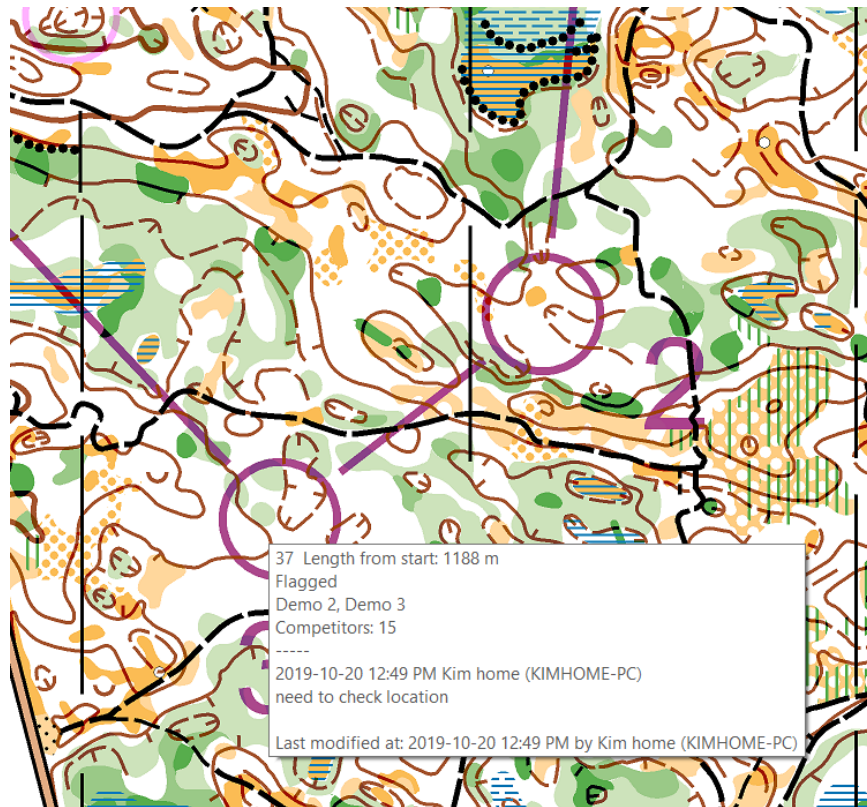
Some other useful features and time-saving tools that will help you while course planning include:

- ***Hovering.*** When you move the cursor over a control circle or leg, a tag will appear that gives you very useful information on that control or leg. What the tag shows depends on what information you have entered e.g. for a control it can include what courses it is used for, competitor load, control status (flagged, placed, collected), and any annotations (see advanced course planning section of this manual). See Figure 10. If you hover over a circle in a course displayed from the ‘Edit Courses’ pane, the distance from the start to that control will also be shown (Figure 11).

When you move the cursor over a leg in a course, the information displayed includes leg length, what course(s) it is on, which controls it joins, and if you have entered the information, competitor load (see later in manual).

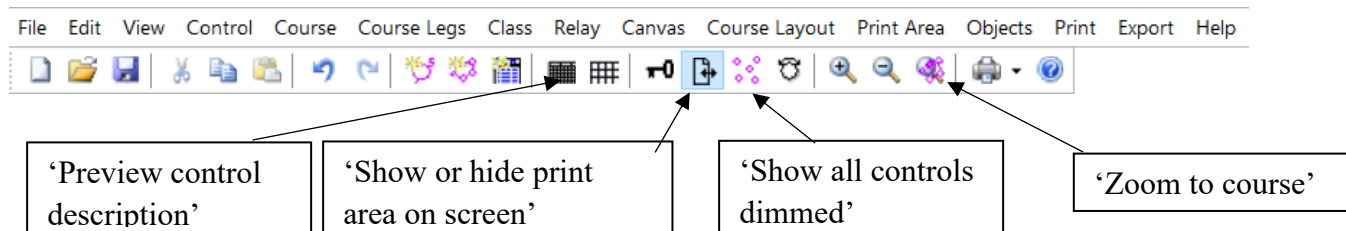


**Figure 10 – Information tag that appears when the cursor is held over a control, in this case control 37. It has been flagged, it’s on two courses (Demo 2 and Demo 3), it has an estimated competitor load of 15, and I added the annotation that its location needs to be checked.**



**Figure 11 – Information tab that appears when the cursor is held over a control in a course, in this case control #3 (37). Extra information, length from start, is shown.**

- The **‘Show all controls dimmed’** tool on the main toolbar (see Figure 12) is a new feature in Condes 10 and is really helpful when checking courses in that you can see the location of other controls relative to the course you have selected.



**Figure 12 – Menu and main functions ribbon**

- The **‘Zoom to course’** tool on the toolbar (see Figure 12) is a great option. As its name suggests it sets the zoom so that the selected course fits the whole window, which saves a lot of time zooming in and out trying to get the whole course in view;
- **‘Preview control description’** is self-explanatory; is shown in a new tabbed window that opens. Prevents surprises like printing 50 maps in a rush, late at night, only to realize a description for one of the controls on the course was missing; ☹
- Under the **‘Course Layout’** menu, **‘Highlight Adjacent controls’** highlights in red any control pairs that are closer than 30 m, so you can check that none of the controls violate that IOF rule<sup>5</sup>. Use the keyboard escape key to get out of this mode;
- **‘Course Layout’** menu, **‘Highlight Unused controls’** is self-explanatory and is useful when doing a final clean-up of your courses. Use the keyboard escape key to get out of this mode;
- The **‘Tape Measure’** (see Figure 3) is a great tool for things such as measuring distances from assembly area to start, or parking to assembly area, etc. Simply click on the tool, click on the map from where you want to start measuring, then click on the end, or bend the line if not measuring a straight line by using multiple clicks: the window that appeared gives a running sum of the distance. Use the keyboard escape key once to reset and do another measure, twice to get out of this mode.

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<sup>5</sup> Rule 19.4 from “COMPETITION RULES FOR INTERNATIONAL ORIENTEERING FEDERATION (IOF) FOOT ORIENTEERING EVENTS” (2019) states “Controls (including the start control flag) shall not be sited within 30 metres of each other (25 metres for map scales 1:5000 or 1:4000 or 1:3000). The distance between the controls is measured in a straight line.” In appendix 2, 3.5.5, it also states: “Only when the control features are distinctly different in the terrain as well as on the map, should controls be placed closer than 60 metres (30 metres for map scales 1:5000 or 1:4000 or 1:3000).” Condes checks the 30 m rule.

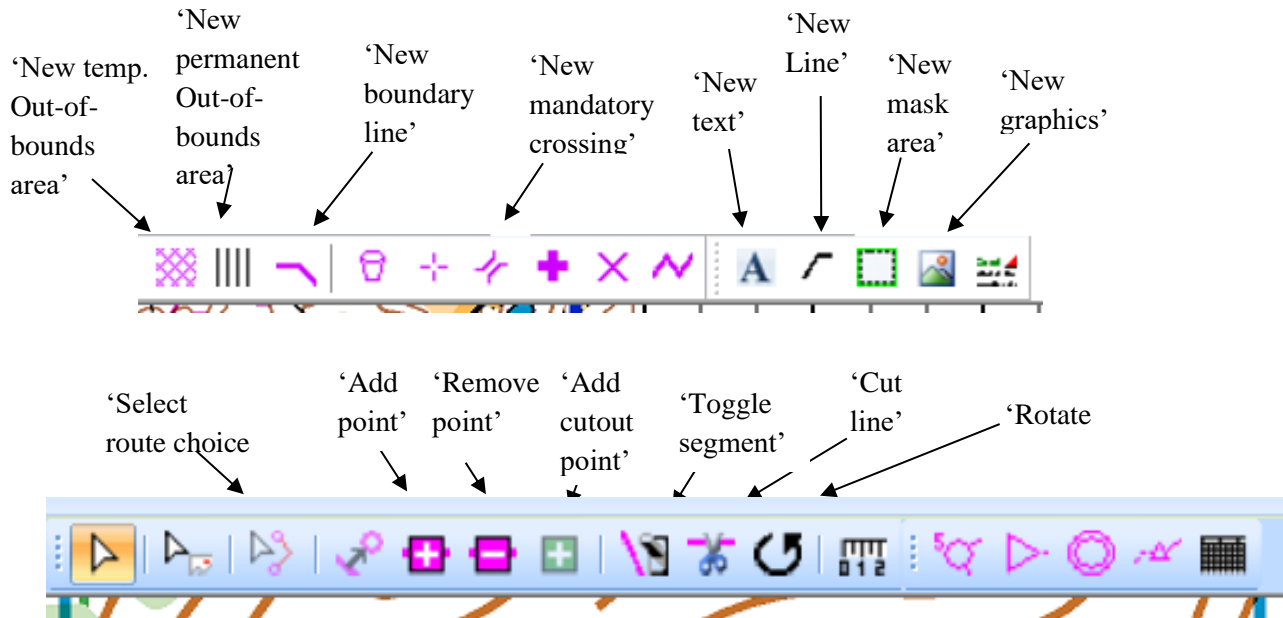
- Under the **‘Control’** menu, you can choose **‘Open control/course diagram’** which will display the standard summary of which courses a control is used on, and what its number is on that course, as well as the competitor load. As is common when displaying new information, another tabbed window appeared; to get back to your map either close the new tab or click on the **‘Course Layout Editor’** tab.

## 4. ADVANCED COURSE PLANNING

### 4.1. Adding special areas / training maps

Most of the commands for the less frequent tasks one might need to do are on tool bars as shown in Figure 13. Most are fairly self-explanatory, such as the two **‘New ... out-of-bounds area’** tools, **‘New boundary line’** tool, or **‘New mask area’** tool. They are used by clicking on the icon and then using your mouse to set the area. You do this by clicking on one point of the boundary of the area you are drawing on your map, then click again at the next spot and so on until you have built the shape you want. Double-click when creating the last vertex of the area. As you will have noticed, you can only move in straight lines.

Once you have created your object you can move it (click, hold, and drag to the new location) or edit the shape. To edit the shape, click once on the object and you will see little black boxes: you can click, hold, and drag these boxes to edit your shape as required. If you want to alter the shape, you do this by adding another little black box: use the **‘Add point’** tool and click on the boundary of the selected object where you want to add the box. Conversely, you can delete one of these black boxes by...you guessed it...the **‘Remove point’** tool.



**Figure 13 – Special functions on Condes tool bars**

If you double-click on an out-of-bounds area you have created, you get a window in which you can choose between the types of out-of-bounds areas. As well you can choose to have a solid, dashed-line, or no frame. If you double-click on a boundary line you have drawn you can set whether it is on all courses, only that course, and similarly for the canvas (see later for discussion of canvasses).

As you can see on the tool bar, there is also a refreshment point marker (for where a water stop is not at a control), mandatory crossing, first aid location, and an 'X' which you use to mark a forbidden route. Simply click the icon, and click on the map where you want them; move as required.

#### 4.1.1. Masked areas

The '**New mask area**' tool (see Figure 13) is great for creating training courses such as line-O or window-O. Once the mask is created (select tool, click on map at each corner of area, double-click to finish) it can be adjusted (location, shape, colour, whether on all courses or not) once you select it with the 'Select graphics object' cursor (this is different than all the other special areas, that are selected using the 'Select course object' cursor) and then double-click on the mask area that you created.

With the '**Add cutout point**' tool (see Figure 13) you can cut sections from inside the mask area to reveal the map – works a treat for e.g. a corridor-O. This tool only becomes active when a mask area has been selected.

If you prefer, you can mask the whole map at once, and add cut outs. To do that, under the '**Canvas**' menu, select '**Mask map...**', then follow the instructions in the window that appears (make sure the 'Select graphics object' cursor is chosen). To show the map again, just click on '**Mask map...**' again.

#### 4.1.2. Contour-only maps / hiding features

Two very helpful tools when creating training maps are found under the '**Canvas**' menu. They are '**Show/Hide Map Color Layers**' and '**Show/Hide Map Symbols**'. I imagine these only work when an OCAD file is being used as the map file. When either tool is selected, in the window that opens deselect the check box(es) of the features or colours that you do not want to be printed. This way you can, for example, easily create a contour-only map, or a map with all paths removed.

## 4.2. ***Fine tuning courses***

#### 4.2.1. Sprint Courses

Especially for sprint course, one should take note of the IOF rule that course length: "...must be given as the length of the shortest straight line from the Start via the controls to the Finish deviating for, and only for, physically impassable obstructions (buildings, high fences, lakes,

impassable cliffs etc.)<sup>6</sup>. Given that sprint courses will often involve going around buildings, and that this could significantly affect distances run, one can use the Condes tool ‘**Select route choice line**’ (see Figure 3) to set routes for legs that go around buildings, out-of-bounds areas, and so on. Simply select the course, select the route-choice tool, click on a leg, and the leg becomes a rubber-band that you can use to map the route by clicking on the map as you move along the route, starting from the beginning control in that leg. Press ‘Esc’ to finish. Right-click the route-choice line to get options, including adding a different route choice. You can also add a different route choice for the same leg by clicking on the one you created then move the mouse to the menu item ‘**Course Leg / Add route choice**’. If you have the option ‘**Calculate length along “route choice”**’ selected in the course properties window, ‘**Advanced**’ tab, Condes will then use the shortest route choice to calculate and display the overall course length.

This is analogous to what one has to do for mountain bike orienteering courses.

#### 4.2.2. Updating the map

Sometimes while you are planning an event you find you need to update the map. That is no problem if you (or an OCAD-savvy friend) simply edit the OCAD file that you are already using as the map file. However, if you need to use a file with a different name, it is simple to do: go to ‘**Canvas/Map...**’ and in the window that opens<sup>7</sup>, click on the rectangle ‘**Change file...**’ and then locate and select the file in the window that opens. Click once on the file to select it, then click on ‘Open’. This sends you back to the window that opened when you selected ‘**Canvas/Map...**’ where you click ‘OK’. You now are using the new map file. Be careful though! If the new map file was not based on the old one, it is quite likely that all your control locations will have to be redone! Although this may not be an issue if the maps have been georeferenced.

#### 4.2.3. Bending or re-positioning legs

The ‘**Add point**’ tool previously mentioned is also what you use if, for example, you want to bend a leg around an impassable feature. With the ‘Add point’ tool selected (you have to have selected the ‘Select course object’ cursor before doing this), click to select the course leg to be bent, then click on it again. A small black box appears...and, so very helpfully, a smart tag as you hover your cursor over the box that tells you what to do: click and drag to position the box along the leg, or hold the keyboard ‘Ctrl’ key while moving the box to bend the leg. You will notice that Condes automatically re-calculated the length of the course, and when you next hover the cursor over the leg, also the length of the leg. You can bend a leg as many times as you want by adding more boxes.

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<sup>6</sup> “Guidelines for Course Planning Sprint Competitions”, IOF, 2020.

<sup>7</sup> And for those of you who know OCAD...this window is where you can choose whether to include OCAD background maps or not, as well as a bunch of other OCAD details. This is very helpful in the case where a mapper has added certain map features on a background map to the main map file. This (I think) is new to Condes 10.

Adding boxes to edit legs is also useful in cases where, for example, a leg obscures a trail. Add a point at each end of the leg, then move those points until the trail (or whatever) is no longer hidden.

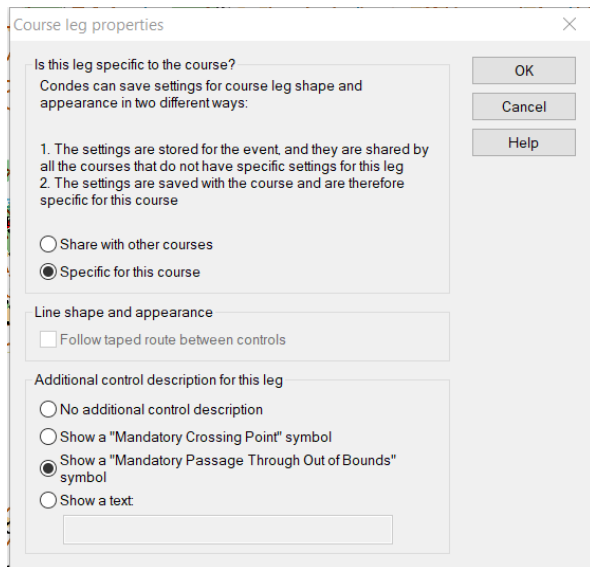
#### 4.2.4. Mandatory crossing

For city meets especially, you may need to insert a mandatory crossing point where participants have to, for example, cross a busy road at a traffic light. To do this, select the '**New mandatory crossing**' tool (Figure 13) and then click on the map where the crossing is. To align the icon to the actual crossing use the '**Rotate**' tool (select 'Rotate', click on the crossing icon and rotate with the mouse by clicking between the two arcs and moving the mouse). The mandatory crossing symbol can be lengthened or widened by moving one of the black edit boxes. You then add it to your course just like you would insert a control. Whether it appears on the CD is selected by double-clicking on the crossing icon on the map to open its properties window and select / de-select the relevant box.

#### 4.2.5. Mandatory routes

Any leg in a course can be set to cross through a mandatory crossing or a mandatory passage. This is selected in the option you see in the course leg properties window that opens when you double-click on a leg (see Figure 14). What you choose determines what Condes does. For example, choosing mandatory passage will give a line in the CD below the control at the beginning of the leg showing the special symbol for mandatory route, or, if you selected it, any text you entered. If you want to, you can then use the 'Add point' tool to edit the shape of the leg to follow the mandatory route; Condes will automatically calculate the new length of the course.

You can also choose to make special instructions specific to a course. An example is if you want to flag a leg for a beginner's course, that is also on other, more advanced courses, but you don't want to let the competitors on any but the beginner's course know that it is flagged. In this case, select both '**Specific for this course**' and '**Show a text**' for that leg for the beginner's course. You may have to manually deselect 'Show a text' in any other course that has the same leg (click '**No additional control description**').



**Figure 14 – Course leg properties window**

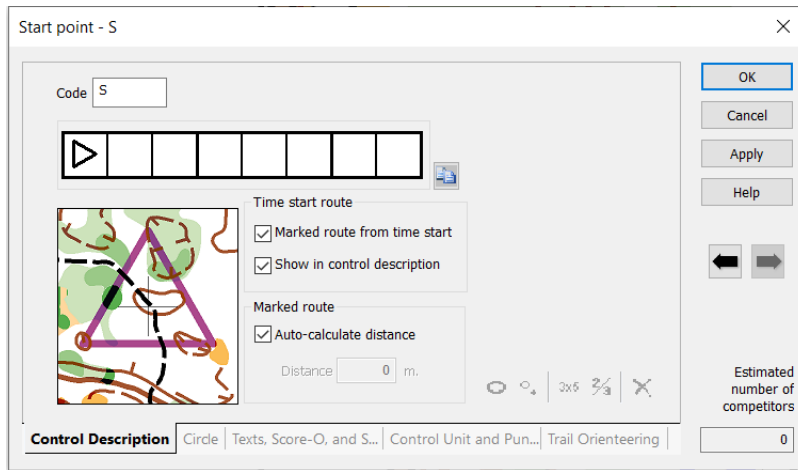
#### 4.2.6. Timing start vs. course start triangle

For events where the course start triangle is different than the timing start-point (used so competitors waiting to start cannot see the direction of travel of the people who have started before them), you can set the start properties (double-click on the start triangle to open its window; see Figure 15) and then select '**Marked route from time start**', after which other lines appear that let you show the distance to the start triangle, and, on the map, you can draw the route.

To set the timing start location on the map, select, then click, hold and drag the little black box on the dashed line leading to the triangle that appeared when you checked the box '**Marked route from time start**' (see Figure 16), to move it to the location of the timing start. To then shape the route, click on the '**Add point**' tool – the whole line between the timing start and the start triangle becomes a rubber band and you simply click along the route everywhere you want to set the route (start from the triangle and move toward the timing start; Figure 16). This can be adjusted later if you wish. Use the keyboard 'Esc' key to end setting the route.

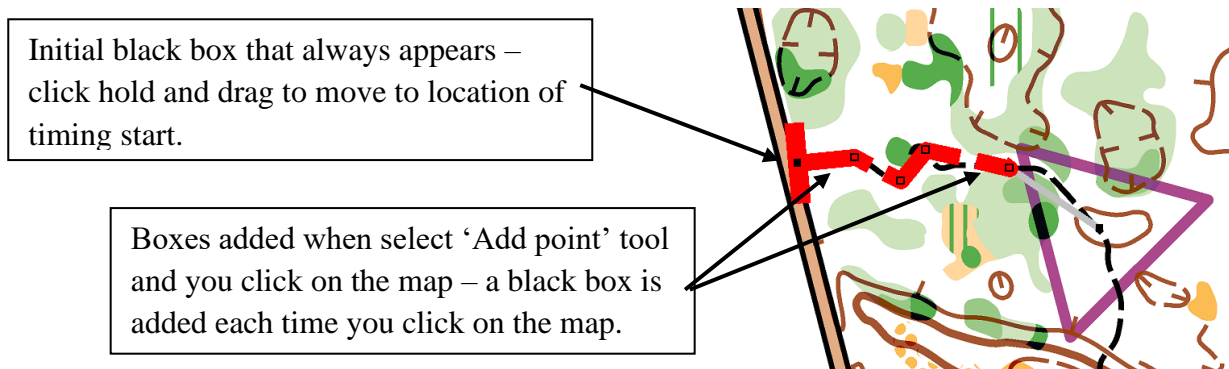
The distance (either calculated or entered by you) and mandatory route indicator will appear on the CD (Figure 15).





Condes manual				
Demo	2.3 km			
----- 170 m ----->		△		
△		○		⊙
1	31	●		
2	32	⊖		
3	33	⊖		⊙
4	34	⊖		
○ <		140 m	> ⊙	

**Figure 15 - Designating distance to course start-triangle (picture top left), and the resultant CD (picture top right). In this case the distance was calculated based on the route I drew by inserting and moving the black, edit boxes on the dashed line on the map between the timing start (vertical line) and start triangle (*start from the triangle and add boxes as you move along the leg to the timing start*; Figure 16). If you do not select ‘Marked route from time start’, no dashed line is drawn on the map, and the distance will not show on the CD.**



**Figure 16 – Creating a timing start**

#### 4.2.7. Map change

Map change is not something we use often, but it provides some really cool options for such things as training. To set a control as a map change, click once on the control to select it, then in the menu bar select ‘Control’ / ‘Map change’ or, right-click on the control circle and select ‘Map Change’. This will allow you to put control descriptions on the map that can be set to display what part of the course to include in the CD (selected in the CD properties window opened by double-clicking on the CD; in the ‘What’ tab), and when printing you can choose to

print all or parts of the course: in the print courses window, click on the ‘+’ by the course name to see the print options.

Note: you can select what part of a CD to print even if you do not designate a control as a ‘map change’ control, but you will not have the option to print only parts of the course.

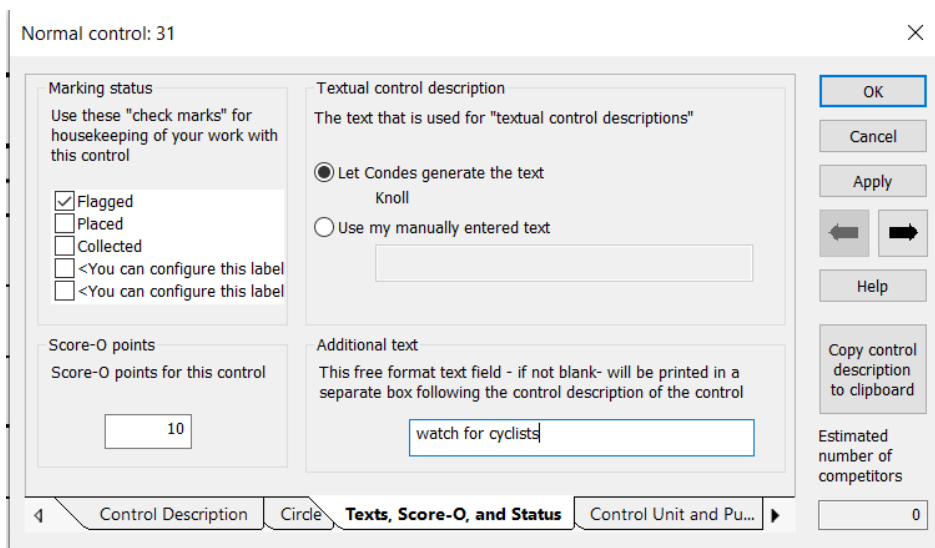
#### 4.2.8. Random controls

For events such as a Goat, there is usually a group of controls at the start which can be taken in any order. To set this up, after first clicking on the control to select it, right-click and select ‘**Random order**’ in the window that appears. On the course map, the legs to and from a random control are deleted, and beside the control its code is placed in brackets. I often draw a boundary around random controls using the ‘**New Line**’ tool, if there is more than one in the same area.

Especially nifty is that whether a control is random is specific to a course, e.g. you can have two otherwise identical courses, but in one course you can designate certain controls as random or optional controls, while the other course, with the same control(s) is a regular course.

#### 4.2.9. Special instructions on controls or legs

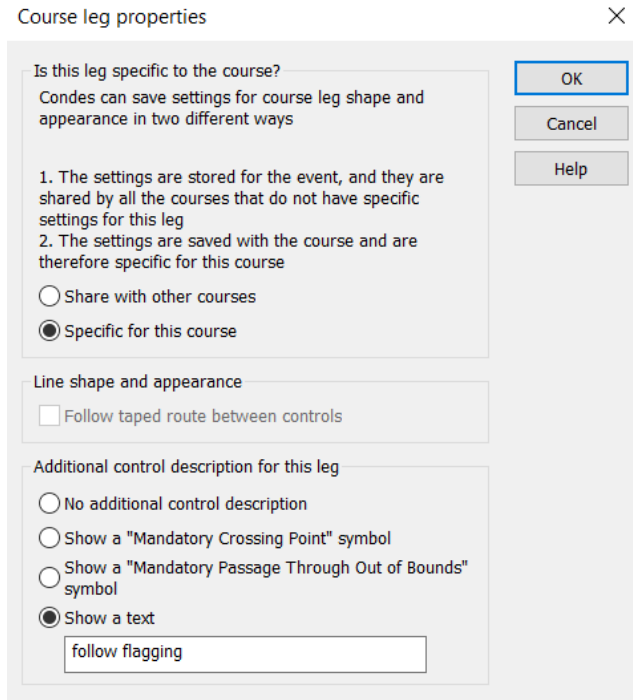
Sometimes you want to add instructions to the control description that are to be followed after a control, for example ‘watch for cyclists’. To do this, double-click on the control circle (or its number in the control pane) and select the ‘**Texts, Score-O, and status**’ tab (Figure 17). In the ‘**Additional text**’ box, add your instructions; these will be added in a separate row after (in this case) control 31 in the CD.



**Figure 17 – Control properties window with ‘Text, Score-O, and Status’ tab selected. In this example, the text ‘watch for cyclists’ will be added in a separate row after control 31 in the CD.**

Using this box for the control adds this special text to all courses where that control is used (in all canvasses). If you only want those instructions used on a specific course (e.g. ‘follow flagging’ for beginners, but not for an intermediate course that uses the same control), double-

click on the leg after the control where you want the special instructions, and in the bottom of the window that appears, select ‘**Show a text**’ and enter your text in the box below (Figure 18). This text can be set to be specific to that course, or to all courses with that leg, in the leg properties box. Note that the ‘**Follow taped route between controls**’ option in the leg properties window, cannot be selected just for a given course.



**Figure 18 – Course leg properties window with text added that will be specific to the given course. In this example, the text ‘follow flagging’ will be added in a separate row after the control at the start of the leg.**

#### 4.2.1. Renumbering and cleaning up controls

If you have been doing a lot of adding and deleting controls during your planning, it makes setting up the Sport Ident (SI) units easier if all the control numbers are in sequence, or, you have been assigned a certain range of SI numbers by your equipment manager...after the fact. To renumber your controls go to the menu ‘**Control**’ / ‘**Renumber controls...**’ and in the window that appears enter the starting number, and then Condes will renumber controls either starting from the NW corner of the map, or randomly (your choice in the window that opened). This saves a lot of time worrying about only using the correct numbers while setting up your courses. Obviously, this should only be done if you have not already hung ribbons at your locations, unless you’re willing to go out and change all the numbers on your ribbons. Special warning: **DO NOT** renumber controls if you have already entered the climb for your course legs, as you will have to redo them all (which I learned the hard way☺)!!!

If you want to renumber just one or two controls, simply change its number in its control properties window by typing over the code number in the box labelled ‘**Code**’ (top left of window) and click ‘OK’. A window will open confirming that you want to do that. By the way, to rename a course, open its property box (double-click on its name in the ‘Edit Courses’ pane), select the ‘**Home**’ tab, and type the new name in the ‘Name’ box in the top left corner of the

window. When you click ‘OK’ (top right), a warning window appears where you confirm that you want to change the name of the course.

### **4.3. Helpful stuff for managing an event**

#### **4.3.1. Extra start or finish**

If you decide it is better to create a different start for a course, as with most programs, this is easy to do. In Condes, add another start on the map, and to change a course to use that start, go to its course dialogue box (‘**Home**’ tab) and choose which start you want from the start drop-down box in the top left part of the window. One can do the same thing for a second finish.

#### **4.3.2. Competitor loading and classes**

If you want to keep a check on competitor loading on courses or at controls (especially for IOF-sanctioned events where there is often a limit to the numbers allowed at a control), you can either add it directly to a course in its course properties window, ‘**Estimated number of competitors**’ box, (bottom right corner of the window, ‘**Home**’ tab), add it to a control directly in its properties box (‘**Control Description**’ tab of the window; bottom right corner), or, by adding classes.

Add classes for the event under the menu ‘**Class**’/ ‘**New**’, and in the spreadsheet that appears, assign the correct course for the class, and an estimate of the number of competitors. Once this is done for all classes, if you hover the cursor over a control circle you will now see the competitor load. You can also see this in the controls’ spreadsheet, opened by going to the menu ‘**Control**’ ‘**Open controls Spreadsheet...**’ or courses spreadsheet (‘**Course**’ / ‘**Open course Spreadsheet...**’).

#### **4.3.3. Spreadsheet views**

The Condes spreadsheets, such as the ones mentioned above, can be invaluable aids in keeping things organized. For example, there is a column called ‘Annotations’ which will have any comments for a given control or course you have added. To add a comment to a control, select the circle on the map, then go to the menu ‘**Control**’/ ‘**Control Annotations...**’ and type in your comment or, more simply, right-click and select ‘**Control annotations**’. To add a comment to a course, select the course in the ‘**Edit Courses**’ pane, then go to menu item ‘**Course**’/ ‘**Course Annotations...**’.

For huge events, where keeping track of what has been done can be a problem, you can mark whether a control location has been flagged, placed, or collected, all of which will appear in this spreadsheet. Although to be honest, I have never got beyond marking that sites have been flagged; having an SI unit still in your backpack once you are back at your car after a long hot day is usually a good enough reminder you have yet to place that control. Of the many ways to set the status of a control, the easiest is to click to select the control, right-click, move the cursor down to ‘**Control site status**’ and select the option you want. Another is to open the control properties window, go to the tab ‘**Texts, Score-O, and Status**’ and click the appropriate box in the top left corner of the window (Figure 17).

When you print the controls' spreadsheet Condes adds the event name, date, and time printed at the bottom of the page which also helps keep track of what version you are working on. I sometimes use a printout of this sheet to take to the field when hanging flags in order to keep track of flags set, to add any comments, and to note the marker number of my GPS watch which I then use to confirm the location of the controls once back at my computer <sup>8</sup>.

Another useful spreadsheet is the courses' spreadsheet ('**Course**'/ '**Open courses Spreadsheet**') which has all the information on all courses (e.g. length, controls used, classes), as well as an annotations column where comments are displayed.

#### **4.4. Score-O, trail-O, mountain-bike-O, ski-O and training events**

Condes automatically makes the changes in course objects and CDs according to the type of event. Some of the differences from a foot orienteering event are:

*Trail-O* – You can have both foot and trail-O courses in the same event file. A trail-O control is set in the control properties window, '**Trail Orienteering**' tab, '**Trail-O Control type**'. Here you can set the number of controls at each location (up to six), and the CD is updated with this information.

*Mountain bike-O* – This adds an extra leg line (which does not print) between the start and finish which is used to calculate the optimal course length, as required for these events. The optimal route choice is drawn with the '**Select route choice**' tool (main tool bar between 'Select graphics object' tool and 'Insert a control into a course leg' tool).

*Score-O* – A Score-O is a type of foot orienteering event and is selected when creating a new course. You can set the number of points for a control in the control properties window ('**Texts, Score-O, and Status**' tab). In the CD dialogue in the 'Appearance' tab you can choose what is displayed in column A (points value or control number) and column B (points value or control code). I always choose points value / control code. You can then select whether the controls are sorted according to column A or B. Lastly, of course, there are no legs between the controls.

*Relays* – I have not planned a relay event with Condes, but after reading the help file it seems like it can handle most variations. If you want to set up a relay with Condes your best bet is to read the help file and various on-line dialogues about relays.

There are also Rogaine courses, ski-O, and string course options which are well-explained in the help file.

*Training events* – For training events when you do not know how many people will show up you can use the option of printing all-control maps with multiple CDs printed on the map, one for each training course.

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<sup>8</sup> Although for a recent event, I found that using a small, digital voice recorder worked great when I wanted to make notes when flagging or setting out controls.

To do this, add multiple CDs to the all-controls map that shows when you have the **'Edit Controls'** pane selected. In the window that appears when you add a CD, in the tab **'What'**, and drop-down box **'Course or class name'**, choose the course name. This way, people who show up can choose the course they want based on their skill, and then manually add lines between the controls of the course they choose, if they want to, before they head out. You will also notice you can print a CD for any part of a course when in the CD properties window. Not sure what you would use that for, but that is probably simply lack of imagination on my part.

#### **4.5. Importing and exporting data**

Very useful for setting up Route Gadget and OGPS<sup>9</sup> files.

For OGPS I use the menu command **'Export' 'Export maps and courses as bitmap...'**. In the window that appears choose the course(s) you want, scale, resolution (I usually choose 300 or 350 dpi; any higher and the exported file gets really large), and output format: I use JPG.

For exporting to Route Gadget use **'Export' 'Export event data'**. At least I think that is correct. You may have to check that.

## **5. COURSE PRINTING BASICS**

For people who print the maps, Condes is a great program because of all the tools it has for quickly setting up the map (logos, borders, legends) as well as allowing for easy printing. After you have used it for a while you will appreciate all the little details that save you so much time when setting up to print an event's courses (more later, but one example is being able to set a print area, that stays with the file even if you do not print a test map, or if you close the file; seems to be a simple thing, but other programs do not do that).

### **5.1. Set the print area**

First, you want to make sure your course will fit on the size of paper you chose. Fortunately, this is almost trivial in Condes.

Even more first, a definition: the print area box. This is the box that you resize and move to enclose the area you want to print. If you cannot see a coloured box anywhere, even zoomed way out, to display it click on the **'Show or hide print area frame on screen'** icon on the tool bar (see Figure 12). This icon looks like a piece of paper with a double-headed arrow on its right edge...next to the key icon. A box should appear, either in red or another colour (more about that in advanced printing). A very nice feature is that when the print area frame appears, Condes automatically changes the zoom to show the whole print frame. So, you can easily zoom to the whole print area by clicking this icon twice. Such a time saver!

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<sup>9</sup> OGPS is the shareware created by Thomas Graupner of the Manitoba Orienteering Association <http://www.orienteering.mb.ca/OGPS/>. A great tool to see where you went wrong during your race, or, admire how well you did.

You can adjust the print outline manually (click on the boundary then click, hold, and drag any of the little black boxes that appeared after you clicked on the boundary) or, you can make use of a neat option Finn has. Click on the print boundary to select it (little black boxes will appear in the corners and mid-line) and then when you right-click a window appears from which you can select '**Resize to fit course**' or '**...map**' or '**...printer's page size**' or '**...page size...**' and the print boundary will automatically adjust. This saves sooooo much time! Then move the boundary (click, hold and drag) so it is around your course. In five seconds, you can see if your course fits on the size of paper you want to use. Admittedly, you might have to tweak it a bit to get an exact fit (I think it depends on printable areas for your printer), but it still saves a lot of time.

You may have noticed that when you click on the print boundary another boundary (or boundaries) in mauve may have appeared...this is the size of the paper you chose in '**Menu**' / '**Print Setup**'. It is a very useful visual if you want to manually resize your print area or, obviously, do a quick visual check as to whether your print area fits inside the paper size selected in printer set-up.

## **5.2. Prepare the map for printing**

The next step is to get the map into printable condition. The following includes some of the most common formatting tasks and how they are done in Condes.

### **5.2.1. Adjusting positions of control numbers and what prints**

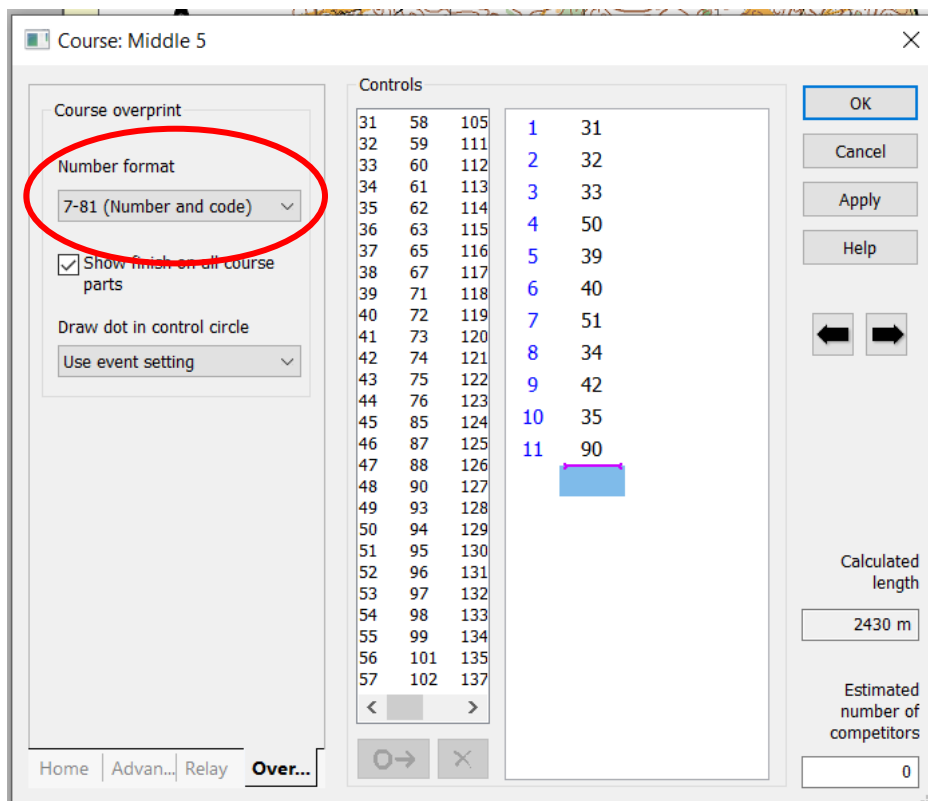
To move a control number to a more legible location, click on the control circle with the 'Select Course Object' cursor: the control circle and its number will turn blue (this is especially useful when the area has a crowd of controls). Click, hold, and drag the number to its new location.

The location of the number of the control circle is unique to each course in a canvas (more on canvasses later).

You can select whether just the control number will print, or number plus code, and so on, in the course properties / '**Overprint**' tab window's '**Number format**' drop-down box (Figure 19). (double-click on the course name in the 'Edit Course' pane, select '**Overprint**' tab),

### **5.2.2. Size of control circles**

The revised (2017) IOF standard is that the size of controls circles as printed on the map depends on the scale being used. See 'ISOM mapping standard 2017.pdf' p. 33 (p.35 of the pdf) for more details (can be downloaded from the internet). Table 1 has some common print scales with the associated size of symbols; the symbol print sizes are proportional to the map scale, so it is simple to calculate the appropriate symbol print size, based on the scale. This means that a control circle always covers 75 m side-to-side. Table 2 has the equivalent for the new sprint standard (see 'ISSprOM 2019). For sprint maps the circle diameter covers 24 m.



**Figure 19 – Course dialogue window, ‘Overprint’ tab selected, showing location where you can select the format of the control number that prints for your course**

In Condes the size of control circles etc. are automatically adjusted to fit to IOF standards, but you can change them if you want. In the window that appears when you select ‘**Canvas**’ / ‘**Course Overprint Symbols and Dimensions...**’ you have full control over sizes, fonts and colours of over-printed objects, including control codes and numbers. The latter is very handy when printing a course that has areas with a crowd of controls.

**BUT!** Truth be told, for local, casual events, more and more I use my own set of sizes, depending on many factors, including legibility, etc. I often find the IOF-regulated sizes way too big or way too small.

**Table 1 – Size of overprint symbols as a function of map scale for long and middle distance events. The symbol sizes for 1:15,000 (shaded gold) are the references for determining symbol sizes for other scales for long and middle distance events.**

Item	Dimension (mm)		
	1:15,000	1:10,000	1:7500
Control circle (diameter)	5	7.5	10
Start triangle (each side)	6	9	12
Finish inner circle (diameter)	4	6	8
Finish outer circle (diameter)	6	9	12
Leg and circle line width	0.35	0.52	0.70
Control number (height)	4	6	8



**Table 2 – Size of overprint symbols as a function of map scale for sprint courses. The symbol sizes for 1:4000 (shaded gold) are the references for determining symbol sizes for other scales for sprint maps.**

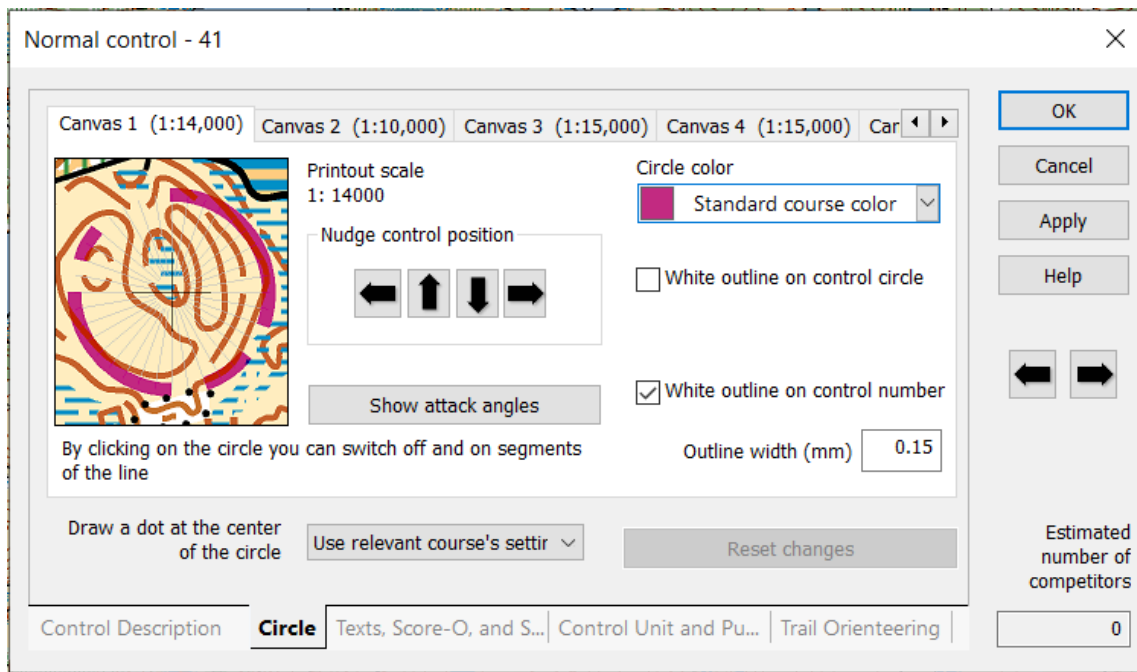
Item	Dimension (mm)		
	1:5,000	1:4,000	1:3000
Control circle (diameter)	4.8	6	8.0
Start triangle (each side)	5.6	7	9.3
Finish inner circle (diameter)	4.0	5	6.7
Finish outer circle (diameter)	5.6	7	9.3
Leg and circle line width	0.28	0.35	0.47
Control number (height)	3.2	4	5.3

### 5.2.3. White boundary around control circles or numbers

If the control number is still hard to see you can add a white boundary around it. In the control properties window, click the tab **‘Circle’** (or right-click on the selected control circle and choose **‘Control circle’**). In the window check off the appropriate box(es) to add a white boundary around the circle or its number or both (Figure 20). If you want, you can also set it for each canvas. This will add a white boundary to only that control / control number. To add a white boundary for all controls, control numbers, or legs in a canvas, go to menu item **‘Canvas’ / ‘Course Overprint Symbols and Dimensions...’**, select tab **‘Additional Dimensions and Fonts’** and check the relevant boxes.<sup>10</sup>

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<sup>10</sup> I find that if a circle or its number is in dark green, a white boundary really helps. If they are in a yellow, or even light-green, I think no boundary works best...but here we are getting into personal preferences.



**Figure 20 - Control circle fine tuning**

#### 5.2.4. Cutting circles

Sometimes the control circle line obscures a detail on the map that you think is important to see. For circles, click on the circle to select it then right-click and select **‘Control circle...’** in the window that appears; adjust the cut by clicking along the rim in the picture of the control circle (Figure 20; it will be obvious what to do).

A very nice feature is that one can do this for the circle in each canvas from the same window – simply select the appropriate canvas from the tabs at the top.

#### 5.2.5. Cutting leg-lines

In Condes 10, the program can automatically cut a leg if it crosses over an earlier leg. This is such a time saver!! Condes can also automatically cut legs when they come close to or cross through a control circle or control number. To disable, or modify these options, go to **‘Canvas’ / ‘Course Overprint Symbols and Dimensions’ / ‘Additional Dimensions and Fonts’** tab.

If you want to cut a section of a leg because it obscures an important feature, choose the **‘Cut line’** tool (the icon looks like a pair of scissors; Figure 13), click on the line to be cut to select it (it will turn red), then click again, hold and drag along the leg for the length of cut you want – a bright green line shows the length of the cut. If necessary, the length of the cut on a leg can be fine-tuned by exiting out of the cut tool (press ‘Esc’ on your keyboard), make sure the **‘Select Course Object’** cursor is selected, and then click on and drag the black squares that appear at each end of the cut (after selecting the leg, of course).

Another way to make a cut is to add points delineating the length you want to cut using the ‘**Add point**’ tool, then select ‘**Toggle segment**’ (see Figure 13) and click on the line in the segment you created. The selected section will appear or disappear each time you click in that spot with the ‘Toggle segment’ tool selected. Toggle segment also works with a segment created with the scissors tool.

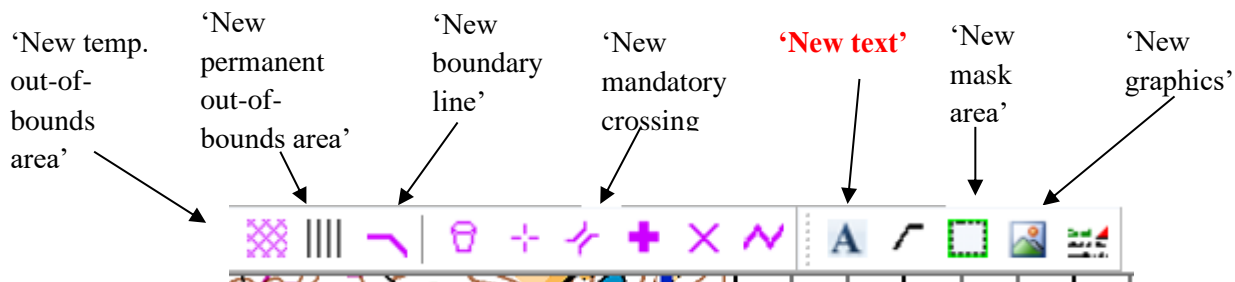
To get rid of a cut, just toggle it to appear. To clean up cut sections that you no longer want in legs, use the ‘**Remove point**’ tool to delete the little black boxes so that the line no longer has a segment that can be toggled on and off i.e. it is a solid line again. Not necessary to do, but for the finicky types...

Also remember the previously discussed way to nudge the whole leg if it is obscuring a trail by using the add point tool (section 4.2.3).

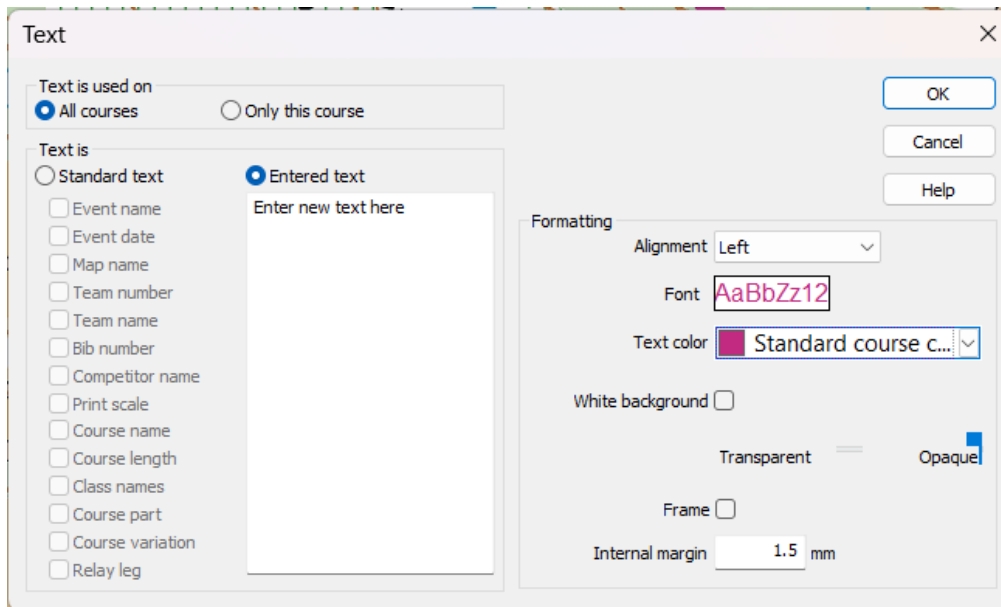
### 5.2.6. Adding text

This is for adding event or course titles, print scales, or whatever text you want. Select the ‘**New text**’ tool (see Figure 21) and click on the map where you want to put the text (can be moved later if need be). In the window that opens (Figure 22) you have the option of selecting from some standard text or entering your own, having it appear on just that course, or on all. Any standard text used will change according to the specifics of the course, while manually-entered text will be the same for all courses. From this window you also set font size, colour, alignment, and background (solid white or transparent). You can add as many text boxes as you want, wherever you want.

The cursor automatically switched to the ‘select graphics object’ cursor when you chose ‘New text’, which is what you need to select and move the text into the exact location that you want. Quite often I forget about the switch in cursors and spend a few fruitless seconds trying to select a control circle or CD after entering text...until I remember to switch back to the ‘select course object’ cursor.



**Figure 21 – The ‘course edit tools’ and ‘course symbols’ toolbars**



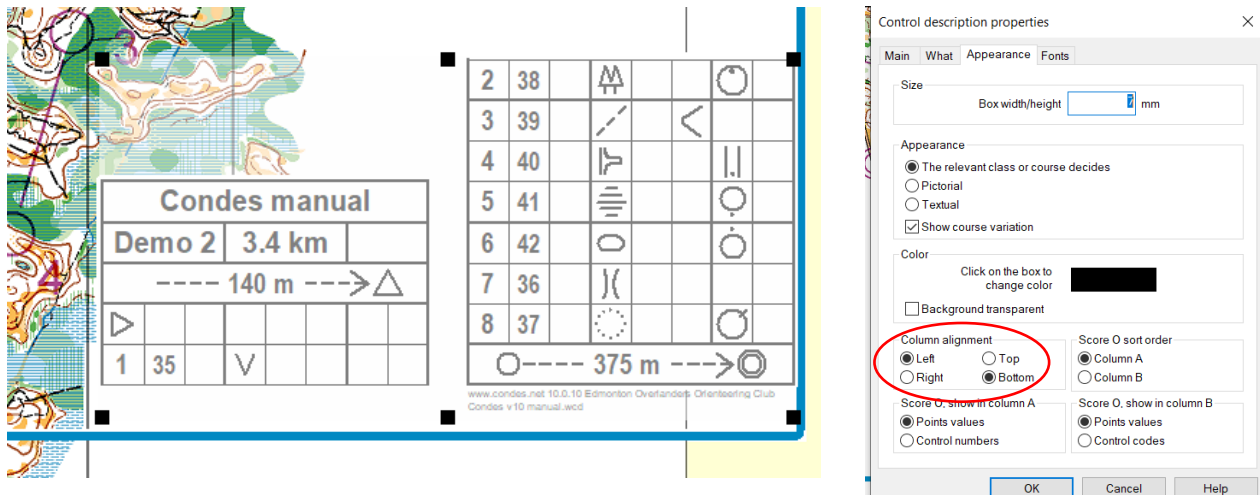
**Figure 22 – Text properties box**

Added text (e.g. course names, event names, course closing times, etc.) can be unique or the same for all courses. If you choose to have the same for all courses, the text as well as the location of the text is the same. Choose **‘Only this course’** if you need to change the location of the text between courses. You can then select the text, right-click, select copy, move to a different course, right-click and select paste. This is often faster than using the ‘New text’ tool for every item on each course.

#### 5.2.7. Adjusting the control description box (CD)

Move the control description to the location you want by clicking once to select it (‘Select Course Object’ cursor chosen), then click, hold, and drag. As described previously you can double-click on the CD to display a dialog that allows you to specify text or symbols, and adjust the size (by changing the **‘Box width/height’** in the **‘Appearance’** tab) as well as fonts (**‘Fonts’** tab) and CD colour (**‘Appearance’** tab). Finally, you can set the CD background to be transparent, or solid white in the same properties window. See Figure 9.

If there is still not enough vertical clearance for the CD, click and drag one of the little black boxes that appear when you select the CD, until the CD splits into 2 or even more columns (Figure 23, left image). How the subsequent columns align (bottom/top, left/right) is selected in the **‘Appearance’** tab of the control description properties window that opens when you double-click on the CD (Figure 23, right image).



**Figure 23 – Example of a CD in which its vertical height has been reduced by clicking and dragging one of the black boxes to form, in this case, 2 columns (left image) and ‘Control description properties /Appearance’ where you choose how to align the columns (right image)**

One can also specify the number of rows to print (in the ‘**What**’ tab of the CD properties window).

### 5.2.8. Adding graphics

Use the ‘**New graphics**’ tool (Figure 21) to add any logos, legends, or scale bars (for example)<sup>11</sup>. Condes can insert graphics from .jpg, .bmp, OCAD files, and even the map and/or course or controls from another canvas in your file (more on that in advanced course printing).

Resize the size of the graphic as necessary by clicking on it to select it, then drag one of the corner black boxes that appears, or, double-click on it with the ‘Select Graphics Object’ cursor and make adjustments in the dialogue box that opens. In the dialogue box you can also select whether it prints with a white or transparent background.

A nice feature is that you can crop the object you added by clicking it to select it, then click, hold and drag one of the black boxes in the middle of a side.

If you have many courses to print from the same canvas, it is sometimes best to select the option of the graphic appearing on ‘**Only this course**’ from its property window. Then you can move the graphic independently to fit the space available for the given course. To place the same graphic on other courses, it is easy, as instead of using the ‘New graphics’ tool, simply select the

<sup>11</sup> For those who have OCAD, an easy way to get a legend for your courses is to find an OCAD map that has a good legend, save a copy under a different file name, then, in OCAD, erase everything in the copy but the legend, and then do a clean-up in OCAD (‘Extras’, ‘optimize/repair’). Same thing for a scale bar.

graphic or text (black boxes on the edges appear), right-click, and select copy<sup>12</sup>. Then select the other course from the ‘Edit courses’ pane, right-click and select paste. Move and resize as needed.

### **5.3. Printing the map & control descriptions**

Go to the menu ‘Print’/ ‘Maps with courses...’ and in the window that appears click the box beside the course you want to print (or blank map, or all controls, or ...), make sure you are in the right canvas (more on that later), and then I suggest you select ‘Print Preview’ to make sure things are OK.

If you see a problem when in print-preview, you can go to the ‘Course Layout Editor’ tab, fix it, and you will see the change in print preview when you click back on its tab; a great time saver. If the preview looks OK, you can click ‘Print’ to print directly from the preview window or close the preview window (by clicking on the word ‘Close’, NOT by clicking the ‘x’ on the ‘Print Courses’ tab) and clicking print from the ‘Print Courses’ window. Ta Da! Your first printed map.

Loose CDs are printed by going to the ‘Print’ menu, ‘Control descriptions...’ and then choose the courses for which you want CDs. Select the appropriate radio button on the left to fill a page with CDs of one course or one copy of each course’s CD on a page. ‘Print preview’ shows what will print – use ‘Printer setup...’ to switch paper size or orientation to maximize the number of CDs per page.

‘Number of copies’ in the print window that appears after selecting ‘Print’ refers to number of pages that will print.

### **5.4. That other place to print maps from**

You can also print your courses from the ‘File’ menu ‘Print...’ command if the ‘Course Layout Editor’ ‘Edit Courses’ is the active window. When printing from here, and if you leave enough room at the bottom of the page (by adjusting the size of the print boundary), Condes prints the name of the file, the course, course length, scale, and finally the date and time of the printing. This is great during the planning stages of an event as you won’t lose track of the course version with which you are working. But of course, this is not what you use to print the maps for the competitors. This command prints whatever course is showing.

You also have the choice to print either the defined printout page area, entire canvas area (the whole map), or area covered by the course.

This is a great place to print master all-control maps for hanging flags, or controls, or picking up controls. With the date and time stamp you can make sure you are working with the most up-to-date version. To print an all-controls map with ‘File’ / ‘Print...’, make sure the ‘Edit Controls’

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<sup>12</sup> If you can’t select the object, that is because you forgot to use the ‘Select Graphics Object’ cursor. Every time you switch courses, the cursor switches to the ‘Select Course Object’ cursor.

pane is selected, add a CD, then print. As simple as that. An all-controls map can also be printed from **'Print' / 'Maps with courses...'**, but you do not get the date and time stamp there. And a final point, for events where the number of people coming is not known I will often print blank maps (from **'Print' / 'Maps with course'**) in case we were to run out of course maps. Then a volunteer has the fun of drawing in a course from the master map.

## 6. ADVANCED MAP-LAYOUT AND COURSE PRINTING

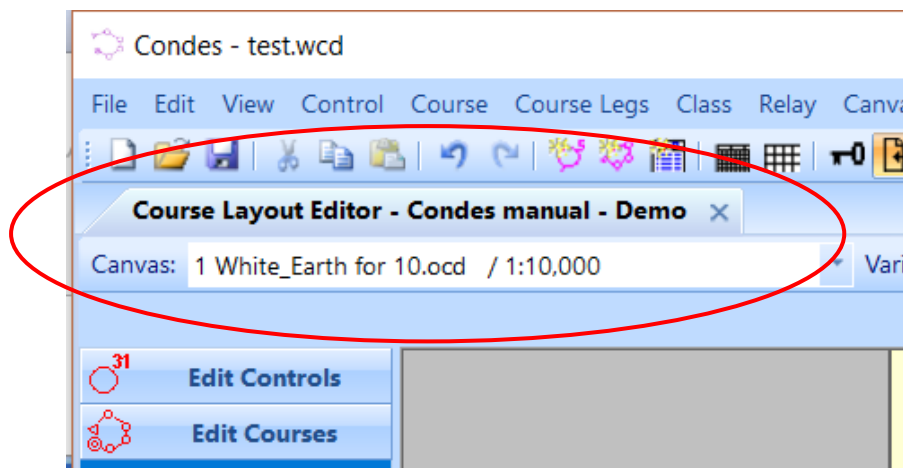
### 6.1. Canvasses

Often, even for a low-key park meet, you will want to print courses at different scales: in Condes this is easy to do by using canvasses. Canvasses are a huge time saver in that you can set the layout and print areas for each scale independently.

#### 6.1.1. Creating another canvas

In the top left-hand corner of the 'course layout editor' window you may have noticed a drop-down box labelled 'canvas' (Figure 24). In this particular example it shows that I was working on the first canvas, the map name, and the print scale.

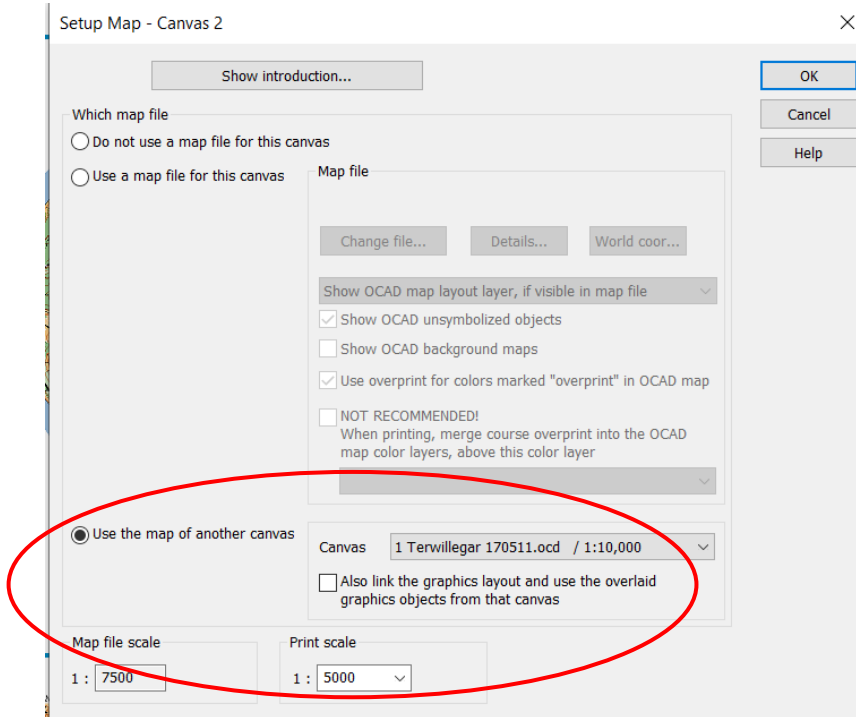
If you had selected one map and one print scale in the new event wizard, you will have a '1' in the box, plus your map name and whatever print scale you chose, because for one map/one scale you usually (why 'usually' will be explained later) only need one canvas.



**Figure 24 – Location of the 'canvas' drop-down window in Condes**

If you decide that you want to print at another scale (or 3 or 4) it is as trivial as selecting the 'Canvas' drop-down box, selecting an unused canvas number (it will be a row with just a number), then going to the menu item **'Canvas' / 'Map...'**. In the window that opens select **'Use a map file for this canvas'** and then either click on the **'Change file...'** button to go find the right file, or, what is usually the case, select **'Use the map of another canvas'** and choose

which canvas in the drop-down box (usually canvas 1). You can then select if you want to link the graphics used on that other canvas, to this new canvas. Finally, select the print scale for this canvas. You now have a second canvas to play with. See Figure 25.



**Figure 25 – Window that appears when you select ‘Map...’ from the drop-down list you see when you click on the menu item ‘Canvas’. In this case it is for canvas 2: I have selected to use the map from canvas 1, but chose not to link the graphics (my usual choice).**

### 6.1.2. Canvas properties

All courses are ‘available’ on all canvasses unless you choose otherwise. You simply do the layout, and so on, in a given canvas only for those courses you will be printing from that canvas.

#### 6.1.2.1. *Designating which courses print from which canvas*

To keep track of what courses you are printing from which canvasses you can ‘remove’ a course from a canvas by going to the menu item ‘**Canvas**’ / ‘**Add/Remove courses on this canvas...**’ or ‘**Canvas**’ / ‘**Remove current course from this canvas**’; the course name is still visible in the ‘Edit courses’ pane, but in a light-grey font if you remove it from a canvas. This may seem trivial, but not having to remember which course was being printed from which canvas makes things so easy. Condes automatically switches to the correct canvas if you click on one of the greyed-out courses in the ‘Edit Courses’ pane. Selecting what courses print from which canvas has to be done for each canvas in turn.

**BUT!** See hint in section 6.2



#### 6.1.2.2. *Separate control locations*

Control locations can either be unique or the same across canvasses; selected in ‘**Canvas**’ / ‘**Controls...**’. ‘**Canvas**’ / ‘**Controls**’ is not available when you are in canvas 1.

In an example I saw in the Condes website’s discussion forum, a course planner wanted to have a maze as part of a regular course. As explained by Finn, this could be done by using the ‘**Use separate control coordinates for this map**’ option in the second canvas that had the maze map. Unfortunately, I do not remember how it was done.

#### 6.1.2.3. *Cutting and bending circles and leg lines*

‘**Canvas**’ / ‘**Controls...**’ is also where you can select if circles will be cut in the same location, or legs bent the same, if you chose the map from another canvas for the new canvas you created. However, this is probably not advisable if the canvasses are at different scales.

#### 6.1.2.4. *Uniqueness of the print area*

The print area is unique to the canvas for a course but can either be the same for each course printed from that canvas or different for a given course. This is selected for a course when it is displayed on the map, from the menu item ‘**Print Area**’ / ‘**Configure print area**’ / ‘**Behavior**’ tab, or, much easier, click anywhere on the print boundary on the map to select it, then right-click and select ‘**Configure print area...**’ in the window that opens; then select ‘**use an individual print area size and location for this course**’. In this way you can move the print boundary for the selected course, and the print boundary for other courses in that canvas will not be affected.

## 6.2. **Importing and placing graphics or text between canvasses**

As described previously, in the graphics property window that you see when you first add a graphic, or double-click on it later (similarly for added text), you can select whether it will appear on all courses or just that course in that canvas. Other properties (size, cropping, white background, etc. can also be selected (Figure 26).

What you selected when you first created the canvas determines if those graphics are also linked to the “parent” canvas (Figure 25). If you selected ‘**Canvas**’ / ‘**Map**’ / ‘**Also link the graphics layout and use the overlaid graphics objects from that canvas**’ for the new canvas you created, that uses the map from another canvas, when you move graphics in a course on the one canvas, they will move on that course on the original canvas.

If you do not want to link the graphics between canvases because you have to reposition some of them, or otherwise change them, you simply have to copy / paste, or use the ‘**New graphic**’ tool to add the graphics to the courses you are going to print from the new canvas.

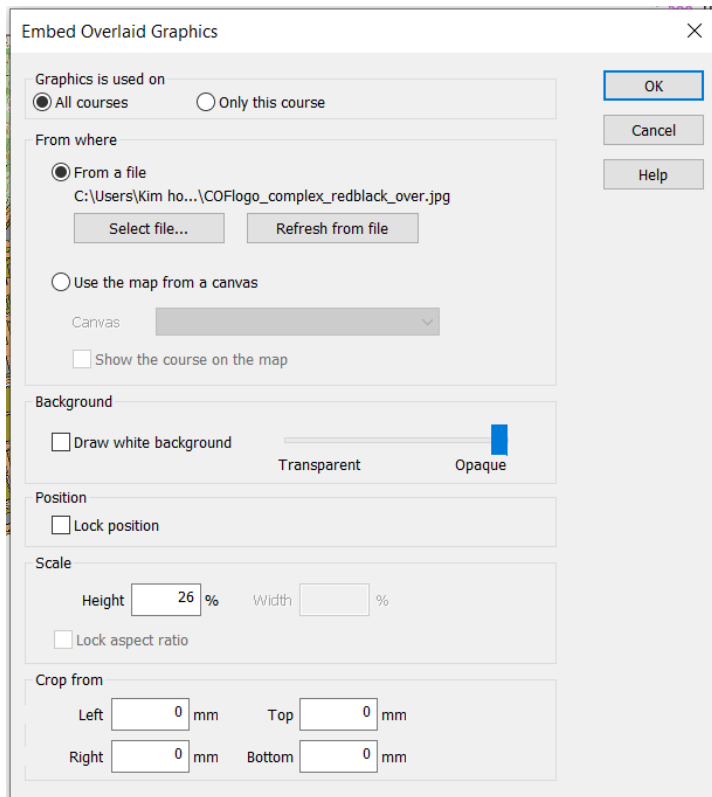
**HINT!** Do all the initial copying and pasting of graphics and text between courses before you do any “removing” of a course from a canvas (as described in 6.1.2.1) as the software takes more time to move between canvasses than it does between courses in the same canvas – again, seems trivial, but it is not once you really get moving formatting a bunch of courses. **THEN!** make the

courses specific to the canvases you will print each from (add/remove from canvas), and only then position / resize / etc. the graphics and text as needed for each course. This is assuming you did not link graphics between canvasses, and chose ‘only this course’ for the objects.

Having many courses to print at a given scale, and so potentially having to move CDs and graphics around to fit things in, is why it is sometimes easier to use more than one canvas for the same print scale. In this case, using the function to select which courses print from which canvas, keeps everything organized.

There is no one right way to deal with inserting and positioning graphics – if you use Condes often enough you will work out what is fastest for you. For example, as I have course files from many years for a given map, I find that the fastest way to format the new course file is to also open a previous year’s event file, which is already nicely formatted with all the usual graphics, then copy and paste graphics and text from the old file to the new file, simply moving back and forth between the two tabbed windows. This is especially useful as Condes positions the graphic in the same location in the new event file (which can then, of course, be adjusted) as it had in the old event file. This is actually faster than copying and pasting between courses in the same file.

Of course, the easiest and fastest is if you are lucky enough that all the text and graphics can be in the same location on every course – then simply select ‘all courses’ for each item on a given course, and all the other courses will be ready for printing.



**Figure 26 - Graphics properties window**

### 6.2.1. Inserting a course map from one canvas into another canvas

You can use the ‘**New graphics**’ tool to insert the course from a second canvas as an object in a canvas. This is handy if you want to show a section of the course as a magnified view, or really useful, to create a model map page with controls at different scales.

Click on the ‘**Use the map from a canvas**’ in the window that opens with the ‘**New graphics**’ tool, select the canvas, and make sure ‘**Show the course on the map**’ is checked. You can then crop the map to show only the section you want (click and drag on any of the boxes midway on a side). You can import the all-controls map from another canvas, in the same way as a course.

When I tried to create a page with model controls at three different scales, I used this in combination with ‘**Mask map**’, ‘**Add cutout point**’, and then shrinking/enlarging the added map sections in proportion to the scales. It took a bit of fiddling, and I did not check how big a file it ended up, but I think it is possible.

## **6.3. Other Details / Final Formatting**

You have control over the colour, size, and fonts for the control description (CD), all text you added, and the print boundary.

### 6.3.1. Printing a frame

First you have to decide if you want to print a frame around your map or not. In my opinion a frame adds a touch of professionalism, but there are times I have found that not having a frame gives you those extra few millimetres to squeeze a course onto a page. Heaven forbid that you have your competitors running off the map for the sake of your artistic sensibilities.

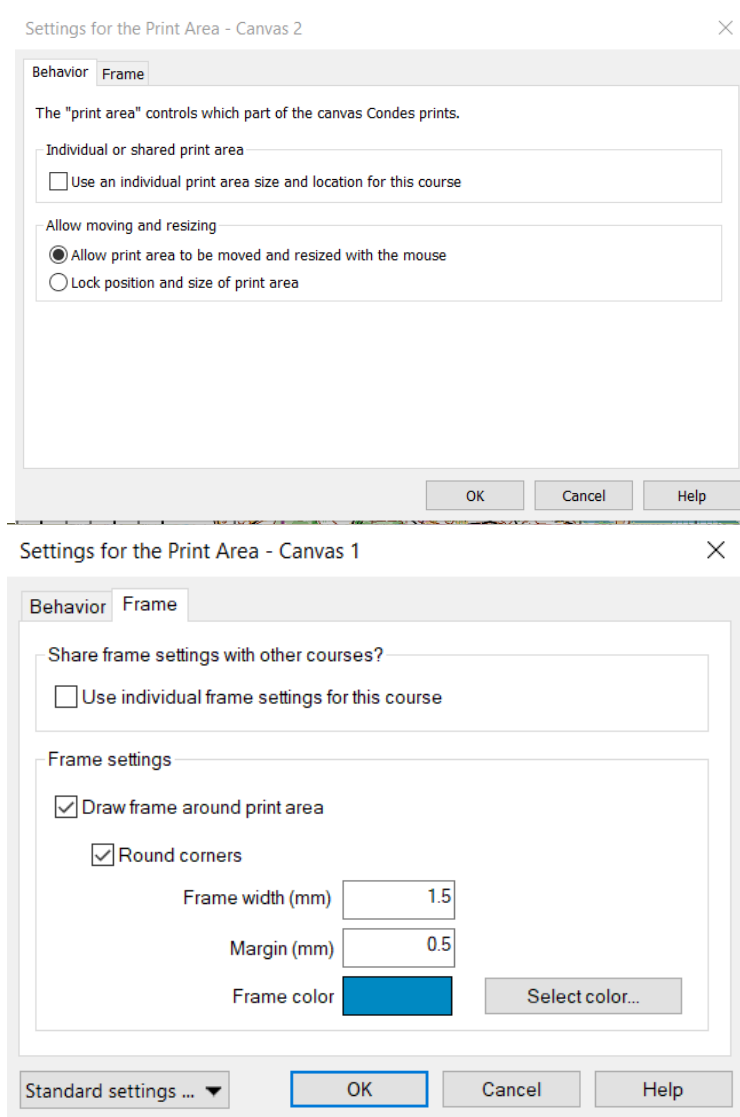
To make changes, either double-click on the boundary, or select the boundary, right-click and choose ‘**Configure print area...**’. In the window that appears (Figure 27) you can choose to have a printed frame by selecting the check box ‘**Draw frame around print area**’ in the ‘**Frame**’ tab. The other boxes are self-explanatory: set them to the thickness of the line of the frame and margin you want, as well as the colour. If you chose not to print a frame, when you next select the print boundary it will be displayed in red on your monitor.

To set the frame colour, click ‘**Select colour**’, and in the window that appears, click on the palette wheel for the colour you want, or set the values for RGB or CMYK. The print boundary will display (and of course print) in the frame colour and width you set.

I often reduce the frame line thickness (called ‘**Frame width (mm)**’ in the settings window) and margin to be able to fit a course map on a page while still having a frame. In this box you can set the dimensions you prefer as the default settings.

As you can see in Figure 27, you can also select whether the options you choose for the frame are specific to the course, or not (‘**Use individual frame settings for this course**’). An example of when this is useful is when you want to print a legend on the back of a course (see section 6.4), and you want a frame for the course but don’t want a frame around the legend.

Lastly, as I usually use the same frame properties, I have saved my settings (drop-down box in the bottom left of the ‘**Frame**’ tab) and then select those in any new course or event.

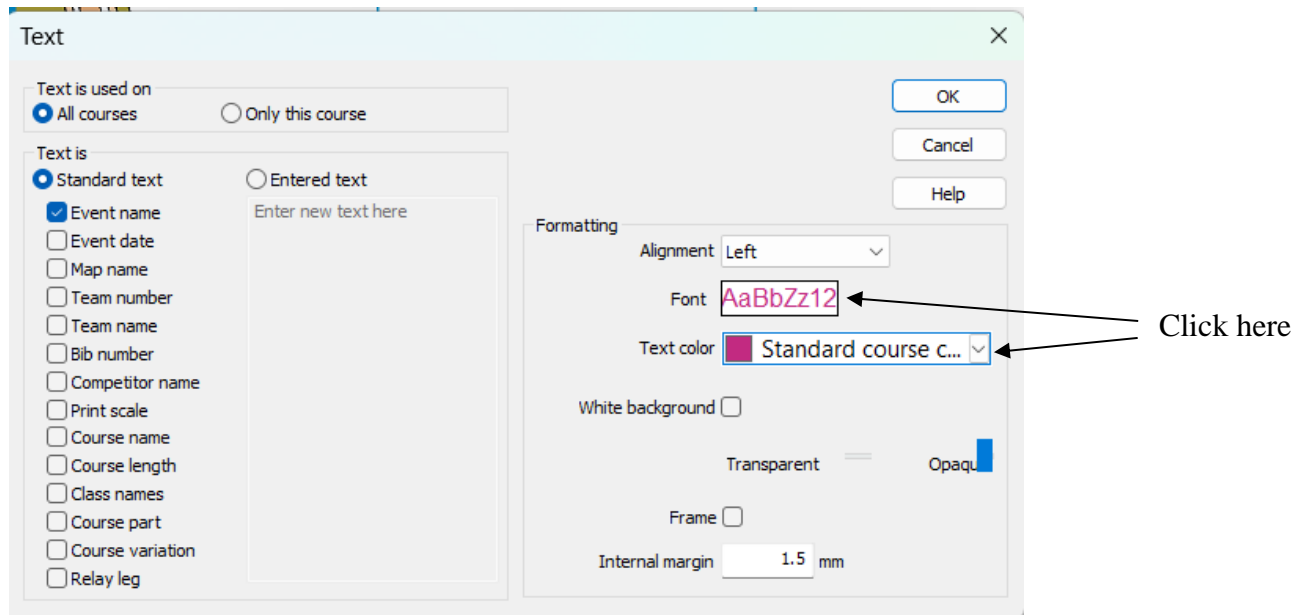


**Figure 27 – Print area properties window where you set the frame properties: ‘Behavior’ tab and ‘Frame’ tab views.**

### 6.3.2. Formatting text

This is very straight-forward...the toughest thing is to remember to select the ‘Select graphics object’ cursor so you can select text.

With the correct cursor, double-click on the text you want to format and set the font, font size, style, and colour by clicking in the appropriate boxes in the window that appears (Figure 28). You can also choose to have the background of the text transparent or solid white, with a frame, or not.



**Figure 28 – Text properties window**

### 6.3.3. Control description for Score-O

In the CD properties window you can set up the unique features of a CD for a score-O. You can play with the variations to see what it does to the CD layout for a score-O. Of course, you will only be able to test this if you are working on a score-O course. But, just to test it, you can select any course in a file you have open, open its dialogue window, and in the ‘Course type’ drop-down window, select score-O course.

### **6.4. Printing on both sizes of the page**

I often use the other side of the map to print a legend, sponsor logos, extended instructions to competitors, and so on. There might be various ways to set this up, but the following is the way that works for me.

Define a new course and call it for example ‘Legend’. Then select ‘**Use an individual print area size and location for this course**’ in the print area properties window, behaviour tab. Once done, size and move the print area boundary for ‘Legend’ so it is on a blank area of the map. Or if there isn’t one, move it off the map area into that pale yellow area in which your map is located (you can think of the yellow area as the table on which you have placed your map; the yellow area will expand as you move your print boundary). This is a little tricky, as if there is not yet any object in this print area, the print boundary can do funny things when you move it completely off the map. To avoid this, once you have moved the print boundary partly into the yellow area, insert a graphic, and then you can usually (sometimes it is finicky) finish moving the print boundary off the map. Set up your graphics, text, as you wish. I usually do not print a frame around the material on the reverse side of the map.

To then print on both sides of the paper it is a simple matter to select both the course you want to print and the 'Legend' (or whatever name you gave it) course in the '**Print**' / '**Maps with courses...**' window, make sure you have selected the duplex print option in your printer's setup, and you are ready to print. As before, it is always a good idea to choose print preview to check things; use either the page down and up keys on your keyboard to switch between the two pages, or the small blue arrow heads near the top of the Condes window.

A relatively new feature is that Condes can automatically add a lot of information, such as the course name and class, to the reverse side of the course map without going through all of the previous steps. In the '**Print courses**' window that opens when you select '**Print**' '**Maps with courses...**', select '**Class / course name on reverse side**' from the drop-down menu on the left of the window and then click the '**Text format**' button that is now available. Then, depending on what you select in the window that opened text will automatically be printed in the reverse side.

### **6.5. Printing punch cards**

If you are doing a low-key event with pin-punching, printing punch cards is now easier to do. From the menu bar select '**Print**' / '**Master control cards**' and you can print punch cards for each course. With some manipulation you can then scan, copy, paste to create multiple copies on a page to print on card stock.

## **7. MISCELLANEOUS FEATURES, TIPS, AND TRICKS**

- If you have to update the OCAD map file you are using for your event while you are in the middle of working with the map in Condes, you do not have to close Condes. Once you save the edited OCAD file (assuming you have OCAD on your computer), the change will be seen in the map in your open Condes file. This can be disabled under '**File/Standard settings for this PC**' / '**Course Layout Editor Settings**' tab;
- For those new to course planning, under the '**View**' menu there is '**Open all symbols...**' that will bring up a tab showing most of the IOF symbols in their correct location in a CD row (a control descriptions sheet is also available from the Condes web site);
- Unlike OCAD, the control numbers on a course are always visible (in OCAD they only appear in Preview mode);
- Only the map inside the print frame prints so you can print a course on only part of the map and not worry about the rest of the map showing up outside your nice border;
- Show attack angles >120 degrees: I am not sure what this would be for but it will highlight controls which have leg angles >120 ('Course layout' menu);
- I usually select black for the CD colour as black is the ink least used by the club's printer;
- If you open multiple event files the new file appears as a tabbed window so be watchful of which file you are working on!
- The 'lock control coordinates' tool (icon that looks like a key) is a nice feature when you don't want to mess up control locations by accident;
- Create your own logos in a drawing program, save as a jpeg, which can then be used on map.

**HAPPY COURSE PLANNING!**