Guide to OCAD's Symbol Conversion Tool

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Version 4, 20 Sep 18, still a draft. I have some unresolved questions shown in the text in italics.

Why you should Do This

The IOF has introduced a new specification for orienteering maps, ISOM2017. OCAD has changed its standard symbol tables to suit, this includes a lot of re-numbering. What's more it has taken the opportunity to change its colour tables, including numbering.

As well as benefitting from the latest standards, it pays to have your OCAD files on the latest symbols. Combining files which use different symbol and colour sets – even just pasting in a few objects such as a club logo - is a recipe for disaster.

The 2017 changes relate only to standard orienteering maps. The IOF is working on changes to the sprint and MTBO specifications, but they have not been brought in yet.

Background

The Symbol Conversion Tool in OCAD 12+ was introduced to help convert symbols from ISOM2000 to ISOM2017. Read about it in the Wiki before you go any further. The link is https://www.ocad.com/wiki/ocad/en/index.php?title=Symbol_Set_Conversion

This guide incorporates some practical hints about the OCAD tool, and the complication that many maps have variations and extra symbols and colours. It doesn't address everything, comments are welcome.

There are two ways to convert your symbols. One is to learn about the "CRT table". This is a text file which can be used to "change every X to a Y". The devil is in the detail, but once you get a table set up for "old symbols to new symbols" you may be able to use it for a number of files with a similar set of symbols. You need attention to detail, as files often got their symbols from a previous one, which got them from a previous one…… The symbol numbers have changed over the years, and symbols added by mappers can have any old numbering.

The other way is OCAD's tool, which insulates you from CRT tables. It all works brilliantly on a file which has absolutely no variations form OCAD's most recent ISOM2000 symbols. Unfortunately this is rare. The variations can be passed on to the new file, but they bring with them old colour numbers. So as well as thinking about oddball symbols, you have to think about oddball colours.

Step 1 Cover your Bases

The conversion tool is in the Map menu, down the bottom. It alters the current file and undo doesn't work. Your only escape is to close the file without saving.

Save the file first – SAVE AS

Step 2 List Non-Standard Symbols

Start the conversion tool. The lines that are green will convert easily, and are pre-ticked. The lines that are white have no direct translation in the new set. If this is your first conversion make a list. Note how many objects each one has. (The first time I did this, on a 4-year-old map done by a tidy mapper, there were 100!)

Step 3 Decide on Each Symbol

Easy ones first.

Some OCAD symbol sets contained preliminary symbols for other disciplines, eg Ski-O and MTBO. They probably have no objects. No action is required, they will drop out of the new set. I found about 30 of these.

Some symbols may not match the new symbol set because they had non-standard numbers before. (Symbol numbers have changed over the years.) You might be able to find the appropriate new symbol by clicking in the box under "new symbol set". If so, fill it in. (In my test I was able to find new homes for half a dozen.) When you fill the "new symbol" in, the tick-box gets filled in, too.

Warning modified 20 Sep. I thought I was able to find a "new home" for the minimum bank, rockface and cliff. Turns out that they weren't in the OCAD symbol set before; the mapper had defined them with tags down (logical); and OCAD now includes them with tags up (illogical IMHO). Mr OCAD claims that "feet up" is logical because then you "drag downhill" to position it. The bottom line is that user-defined symbols may APPEAR to be in the new symbol set, but are they identical? A rotation is not the right answer if the symbol centroids differ.

Most mappers have visible symbols for special cartographic purposes. In my test I found a minor watercourse and track with no gaps, probably used for very short objects; several variations of fence used for eg no tags, or may be hidden for red courses, and corresponding optional ruined fence and crossing point, perhaps even a half crossing point for places where space is tight. You'll want to pass these through to the new symbol set so give them a tick. I found a dozen of these.

Some symbols are invented by mappers to help with drawing or map maintenance, and they are hidden for printing. They can include GPS tracks, waypoints and numbers, notes to self or future mappers, lines traced off aerial photos, areas completed or needing further attention etc etc. Give these a tick too, they should stay in the file. If they are hidden they will stay hidden. I found 40 of these.

Then there are text variations and special symbols used in logos. Give these a tick too, you'll want them to pass through. I found a dozen. These last two categories depend a lot on the history of the file, the mappers involved etc.

Warning modified 20 Sep: Passing these user-defined symbols through is hazardous. If the symbol number used in the unconverted file is used by the new OCAD symbol set, you'll end up with wrong results. If you're lucky point objects will try to turn into line objects etc, and you'll get a red "+". If you're unlucky you may get objects of two different symbols ending up the same – and you may not notice! OCAD has acknowledged an error here, but they have only fixed it in the 2018 version ☹ If you are using OCAD 12… (advice yet to be formulated – it's a mess!)

You might find it worthwhile to cancel out of the conversion dialogue so you can look at these problem symbols in the unconverted file. In some cases they may be near-duplicates. Get this list right before proceeding – every symbol is either going to be converted, carried through unchanged,

or deleted. Best not to delete symbols that have any objects. They will become invisible on any print-outs, and how do you know if they were important?

Step 4 Do the Conversion

Go back into the conversion dialogue, make sure the good symbols are all ticked, and click OK.

Step 5 NZ-Specific Steps

The auto conversion will have changed all blue circles (which we use for troughs) into squares. Select all objects with the blue square (Select menu) and change them to the blue asterisk, which is our new trough.

We now do tanks as blue squares. Select all objects with a black circle and change to the blue square.

Check your green circles, crosses and dots. Over the years the numbering for these has been a merry-go-round. If necessary, change them round but be sure you do them in the right order, or you'll get objects sharing the same symbol.

Unresolved Note: The new symbols for minimum bank (2), cliff and passable rockface are upside-down. Any ideas how to fix these easily???

Step 6 Inspect the Result

It's fairly common to overlook something. I often spot things better on paper. However objects that have lost their symbol only show up as on the screen, as a red "+". It might pay to hide all symbols, and then select what is left with a cursor box.

Unresolved Note: I am getting unsymbolised object for the former minimum ruin, and minimum cliff, anyone else getting this?

Step 7 The Colour Table

You're not finished yet. OCAD has re-jigged the colour values to suit digital printing (CMYK) and used new colour numbers. The new symbols use these. The old symbols use the old colours, and since they are at the top of the colour table they may block out objects with the new colours.

Take a look (Map menu, Colours). The new colours are 1 and 2-digit numbers and the top one is 50 (Upper Purple). Any colours above that, most likely 3-digit numbers, are old ones. You need to change them.

SAVE AS, again. You may want to come back to this point. If this is your first conversion, make a list of all the old-style colours.   In my test, I found 17.

Step 8 Decide on Each Colour

Ideally all symbols with Old Colour X can be changed to New Colour Y. A few might need to stay in existence for their CMYK values, or occasionally for their position in the table.

Go thru your list and make a decision on what its new number is going to be. Most are fairly obvious but If you weren't the cartographer, you might need to fish around in the unconverted file to see what symbols used some of the less obvious colours.

Step 9 Replace Redundant Colours

In the Symbol menu choose the Replace→Colour option, and work your way down the table. Careful, you can't back out of some of this (except by close-without-saving.)

You can then see in the colour table, those colours that have no symbols and objects depending on them. Delete those colours. Warning again, I think if you over-do the delete button you can't abandon this dialogue!

Step 10 Rearrange Special Colours

If you have any old colours that don't translate, do two things with them. Give them a number in the 900 series, perhaps related to the basic colour (eg if you need another black which is now colour 2, give it 902). OCAD has said it will stay clear of the 900 numbers. Second, move them down to the appropriate place in the colour table. If in doubt put them just below the nearest similar colour.

Unresolved Note: I appear to be able to change a colour number on the fly, whereas you can't do that with symbol numbers unless it has no objects. Any dangers in this?