

# Manual for importing complete MTBO maps into OCAD course setting projects

*OCAD 11<sup>1</sup> offers a new function for importing complete OCAD map files into OCAD course setting projects. This function has great advantages for MTBO course setting as it allows respecting the colour hierarchy of ISMTBOM 2010<sup>2</sup>. The lower purple (e.g. for control circles, lines between controls) appears in the course setting project and on printed maps below paths, tracks and streets. The upper purple (e.g. for focus points of controls, control number, forbidden routes) appears above the paths, tracks and streets.*

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<sup>1</sup> The described import function operates in OCAD 11.3.3 and later versions. In case your programme version of OCAD 11 is of an earlier state execute the latest OCAD service update which can be downloaded at [www.ocad.com/en/downloads](http://www.ocad.com/en/downloads) .

<sup>2</sup> The ISMTBOM 2010 (International Specifications for Mountain Bike Orienteering Maps) can be downloaded at [www.orienteering.org/resources/mapping](http://www.orienteering.org/resources/mapping)

## Chapter 1 General information about the new function and this document

Copying complete maps into OCAD course setting projects has already been possible with earlier OCAD versions. But it required a manual copy-paste-procedure with limitations concerning the quantity of copied objects. With the OCAD 11 function importing is getting much more user friendly. Even though certain know-how about colour hierarchies is still needed in case the colours of the original OCAD templates for MTBO maps have been modified.

[Chapter 2](#) explains how you can check if the colour hierarchies of your OCAD map and OCAD course setting project are identical. If this is the case you can follow the procedure described in [chapter 3](#) for importing. Otherwise the import has to be executed according to the description in [chapter 4](#).

## Chapter 2 Checking colour hierarchies

Importing MTBO maps with identical colour hierarchies as the course setting project requires only a few clicks. If you have used the official OCAD template for MTBO maps and did not change the colour tables the colour hierarchies will be identical. But a lot of users adapt the colour tables. They add for example additional colours for graphical objects like logos of clubs or sponsors. In those cases some harmonisations are required prior to import.

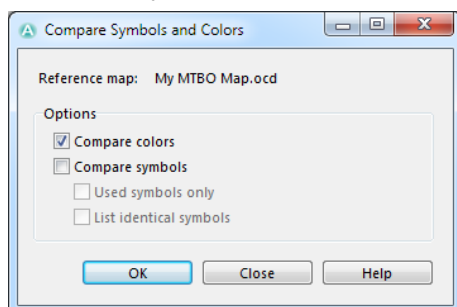
The following procedures describe how you can check if the colour hierarchies (= colour table) of your map and course setting project are identical. As the OCAD 11 Editions "Professional" and "Standard Orienteering" offer more functions the procedure for those editions is a bit simpler compared to the procedure for the other editions.

### 2.1 Simplified procedure for OCAD 11 Editions "Professional" and "Orienteering Standard"

The following simple procedure works only in OCAD 11 Professional and Orienteering Standard edition.

- Step 1** Compare the colour table of MTBO course setting project with the MBTO map:
- 1.1 Open your existing or a new course setting project.
  - 1.2 Compare both colour tables.  
*Menu: Map > Compare Symbols and Colors...*
  - 1.3 Choose your MTBO map. The window "Compare Symbols and Colors" appears.

- 1.4 Check "Compare colors" and uncheck "Compare symbols".



- 1.5 Click "OK". OCAD creates and opens a text file.  
 1.6 In case the colour hierarchies of map file and course setting project are identical you find at the end of the text file the words 'Order of colors is correct'.

## 2.2 Procedure for all OCAD 11 Editions

This procedure works in all OCAD 11 editions (OCAD 11 Orienteering Standard, Starter, Course Setting and Professional)

**Step 1** Display and export the colour table of your MTBO map:

- 1.1 Open the file of your MTBO map with OCAD
- 1.2 Display the colour table of your MTBO map:  
*Menu: Map > Colors...*
- 1.3 Click the Button "Report..." to export the colour table to an Excel table.

**Step 2** Display and export the colour table of your OCAD course setting project:

- 2.1 Open your existing or a new course setting project.
- 2.2 Display the colour table of your MTBO course setting project:  
*Menu: Map > Colors...*
- 2.3 Click the Button "Report..." to export the colour table to an Excel table.

**Step 3** Compare the two lists. In case the lists show no differences the colour hierarchy of the two files is identical.

**If the colour hierarchy of your MTBO map and the course setting project are identical see [chapter 3](#) "Importing maps based on OCAD MTBO templates".**

**If the colour hierarchy of your MTBO map and the course setting project are NOT identical see [chapter 4](#) "Importing maps with modified colour hierarchies".**

## Chapter 3 Importing maps based on OCAD MTBO templates

If colour hierarchies (= colour table) of your map file and your course setting project are identical you can execute the following procedure for the import:

- Step 1** Open a new course setting project:  
(Make sure the scale chosen for the course setting project corresponds to the scale of the map you want to import. The scale of your map can be checked in  
*Menu: Map > Set scale and coordinate system ...*

In case the scales of the two files are not identical you ...

- either have to open a new course setting project with the appropriate scale:  
*Menu: File > New ... ,*
- or you have to change the scale of one of the two files. Usually it will be the scale of the map that you want to change:  
*Menu: Map > Change Scale ...*

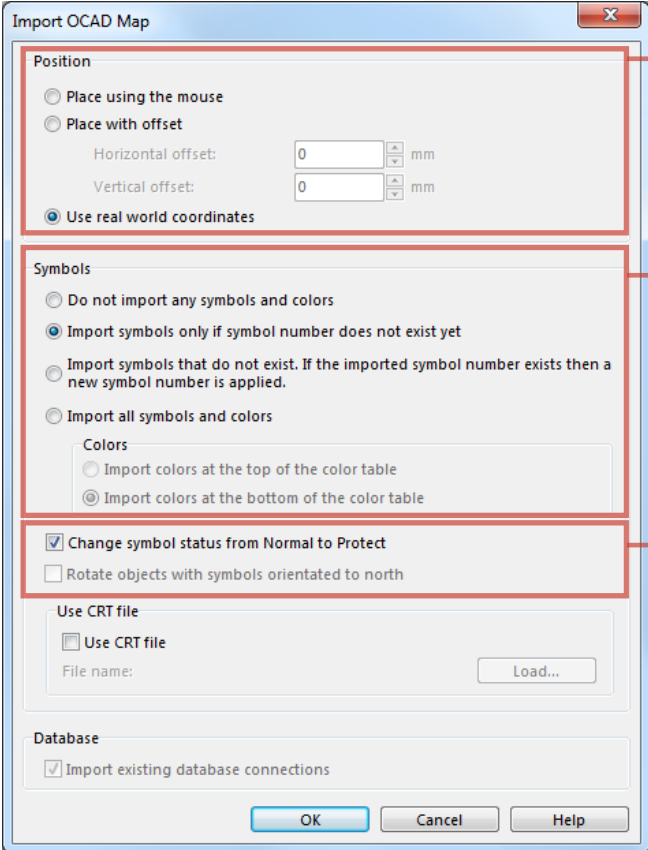
**Tip** Before importing the map file into the course setting project it is recommendable to optimise/repair your map file:

- T.1 Open your OCAD map file.
- T.2 *Menu: Map > Optimize / Repair*
- T.3 Save and close your OCAD map file.

**Step 2** Import your OCAD map into the OCAD course setting project:2.1 Menu: *File > Import*

2.2 Select the map file you want to import.

2.3 This dialogue window will pop up. It is recommended to set the parameters as following:



The screenshot shows the 'Import OCAD Map' dialog box with the following settings:

- Position:**  Place using the mouse,  Place with offset (Horizontal offset: 0 mm, Vertical offset: 0 mm),  Use real world coordinates.
- Symbols:**  Do not import any symbols and colors,  Import symbols only if symbol number does not exist yet,  Import symbols that do not exist. If the imported symbol number exists then a new symbol number is applied.,  Import all symbols and colors. Colors:  Import colors at the top of the color table,  Import colors at the bottom of the color table.
- Change symbol status from Normal to Protect,  Rotate objects with symbols orientated to north.
- Use CRT file:**  Use CRT file, File name: [ ] Load...
- Database:**  Import existing database connections.

Three explanatory text boxes are linked to the dialog by red arrows:

- Position:** If the option "use real world coordinates" is possible choose this one. In case it is not possible to select it choose the option "Place using the mouse".
- Symbols:** Choose "Import symbols only if symbol number does not exist yet".
- Symbol protection:** It is very useful to choose the option "Change symbol status from Normal to Protect". This way the map symbols will be protected in the course setting project and can only be edited if you neutralise the protection.

2.4 Press "OK".

The complete map should now be imported into your course setting project.

**Step 3** The full OCAD map is now imported into your course setting project. You can start the course setting.

## Chapter 4 Importing maps with modified colour hierarchies

If colour hierarchies (= colour table) of your MTBO map and your OCAD course setting project are not identical you can execute the following procedure for the import:

- Step 1** Open a new course setting project:  
 (Make sure the scale chosen for the course setting project corresponds to the scale of the map you want to import. The scale of your map can be checked in  
*Menu: Map > Set scale and coordinate system ...*

In case the scales of the two files are not identical you ...

- either have to open a new course setting project with the appropriate scale:  
*Menu: File > New ... ,*
- or you have to change the scale of one of the two files. Usually it will be the scale of the map that you want to change:  
*Menu: Map > Change Scale ...*

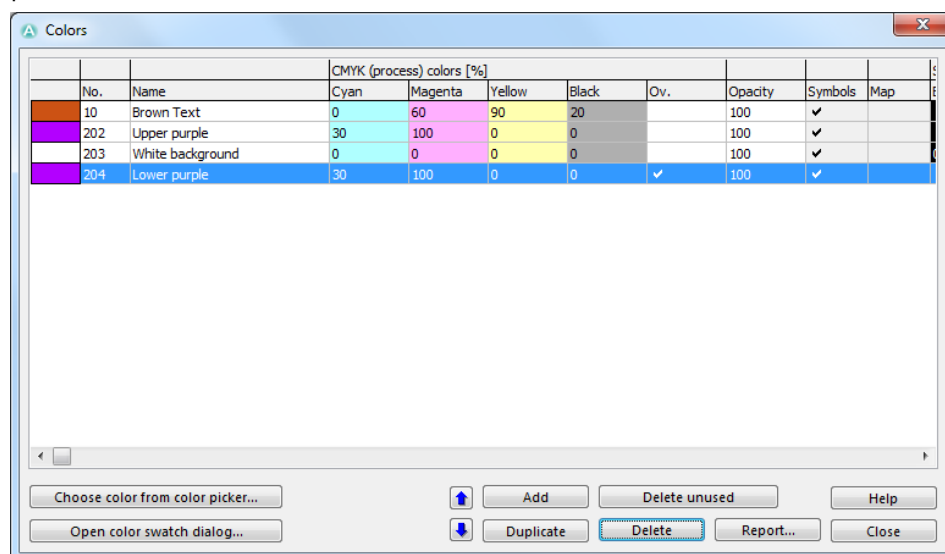
- Step 2** Delete all colours in the colour table of the course setting project that are not needed for the course setting:

- 2.1 Display the colour hierarchy of your MTBO map:

*Menu: Map > Colors...*

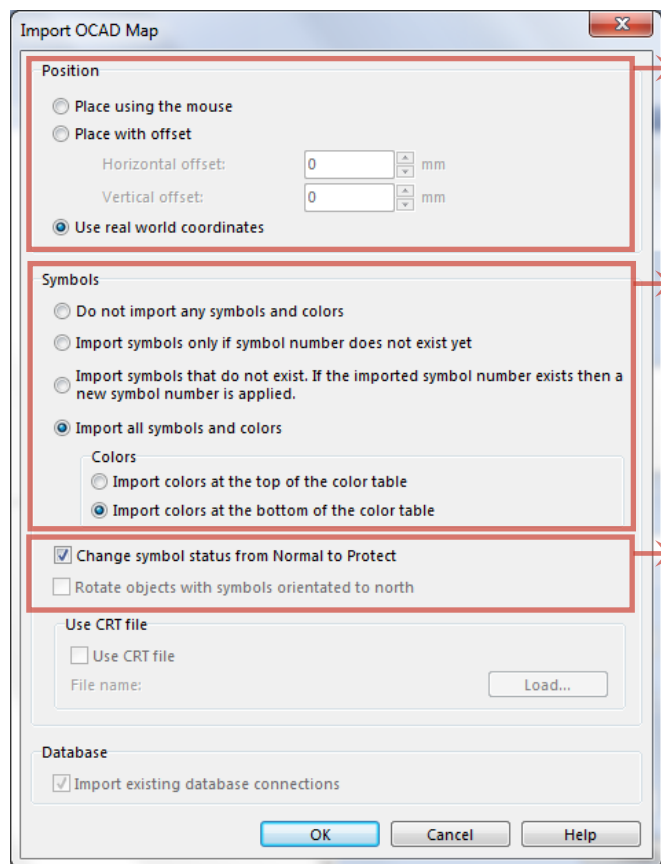
- 2.2 Delete all colours that are not used for the course setting symbols by clicking the Button "*Delete unused*".

After deleting the non-used colours your colour table should show the following picture:



- Tip** Before importing the map file into the course setting project it is recommendable to optimise/repair your map file:
- T.1 Open your OCAD map file.
  - T.2 *Menu: Map > Optimize / Repair*
  - T.3 Save and close your OCAD map file.

- Step 3** Import your OCAD map into the OCAD course setting project:
- 3.1 *Menu: File > Import*  
Select the map file you want to import.
  - 3.2 This dialogue window will pop up. It is recommended to set the parameters as following



The screenshot shows the 'Import OCAD Map' dialog box with three sections highlighted by red boxes and arrows pointing to callout boxes:



- Position:** The 'Use real world coordinates' radio button is selected. The callout box explains that if 'use real world coordinates' is possible, it should be chosen; otherwise, 'Place using the mouse' should be selected.
- Symbols:** The 'Import all symbols and colors' radio button is selected. Under the 'Colors' sub-section, 'Import colors at the bottom of the color table' is selected. The callout box instructs to choose 'Import all symbols and colors / Import colors at the bottom of the color table'.
- Symbol protection:** The 'Change symbol status from Normal to Protect' checkbox is checked. The callout box states that it is very useful to choose this option so that map symbols will be protected in the course setting project and can only be edited if the protection is neutralised.

- 3.3 Press "OK".

- Step 4** Adjusting the colour hierarchy:

The map and all its symbols and colours have been imported. The four initial colours of the course setting symbols are on top. To respect the colour hierarchy foreseen by ISMTBOM 2010 the different layers of purple have to be put at the right places.

- 4.1 Display the colour hierarchy of your course setting project:  
*Menu: Map > Colors...*
- 4.2 Adjust the order of the colours in the colour table:
  - 4.2.1 The first 3 colours (10-Brown Text, 202-Upper purple, 203-White background) stay at the top of the list.

4.2.2 The colour "204-Lower purple" has to be descended in the order. You can move the line by selecting it and clicking on the buttons with the up or down-arrows (   ) until it is at its correct position. In general the right position for "204-Lower purple" is just after the colour "Black" which is used for paths and tracks. It is possible that the colour "Lower purple" already exists at this place in the colour table. It is the colour you might have used in the map file. If this is the case, just place the colour "204-Lower purple" above the "Lower purple" of the map file. As you have adapted the colours of your map your colour table will not be identical to the one of the screenshot below. But it is important that the colours marked with arrows are at the right spots.

No.	Name	CMYK (process) colors [%]				Ov.	Opacity	Symbols	Map	Spot colors [%]							
		Cyan	Magenta	Yellow	Black					Black	Blue	Brown	Green	Yellow	Purple	Gray	
10	Brown Text	0	60	90	20		100	✓									
202	Upper purple	30	100	0	0		100	✓	✓			100				100	
203	White background	0	0	0	0		100	✓	✓	0	0	0	0	0	0	0	0
100	Black 70% (tunnel)	0	0	0	70	✓	100	✓	✓	70	0	0	0	0	0	0	0
103	Road infill	0	28	50	10	✓	100	✓	✓	0	0	50	0	0	0	0	0
105	Road borderlines	0	0	0	100	✓	100	✓	✓	100							
107	Black	0	0	0	100	✓	100	✓	✓	100							
204	Lower purple	30	100	0	0	✓	100	✓	✓							100	
110	Blue (point features)	100	20	0	0	✓	100	✓	✓		100						
111	Green (point features)	76	0	91	0	✓	100	✓	✓			100					
120	Black 70% (points)	0	0	0	70	✓	100	✓	✓	70	0	0	0	0	0	0	0
130	Black 70% (lines)	0	0	0	70	✓	100	✓	✓	70	0	0	0	0	0	0	0
140	Black 70% (areas)	0	0	0	70	✓	100	✓	✓	70	0	0	0	0	0	0	0
150	Blue (watercourse and lake)	100	30	0	0	✓	100	✓	✓	0	100	0	0	0	0	0	0
151	Blue 50% (large lake)	50	10	0	0	✓	100	✓	✓	0	50	0	0	0	0	0	0
152	Brown (lines)	0	60	90	20	✓	100	✓	✓			100					
153	Blue (marsh)	100	30	0	0	✓	100	✓	✓	0	100	0	0	0	0	0	0
160	Brown 50% (areas)	0	28	41	10		100	✓	✓			50	0	0	0	0	0
161	Settlement (areas)	38	39	100	0		100	✓	✓				50	100			
162	Yellow (narrow rides)	0	27	79	0		100	✓	✓				50	100			
171	Green 30% (areas)	22	0	28	0		100	✓	✓	0			30	0			
182	Yellow (areas)	0	27	79	0		100	✓	✓					100			
185	White for yellow (area pattern)	0	0	0	0		100	✓	✓						70		
186	Yellow 70% (areas)	0	19	55	0		100	✓	✓						70		
187	Yellow 50% (areas)	0	13	38	0		100	✓	✓						50		

**Check:** Your OCAD course setting project should now contain the complete MTBO map. The colour layers should be correct so that the course setting elements are displayed correctly. You can test this by placing a control with focus point (symbol 840) on a path track or road. The focus point should be displayed above the path, track or road. The circle should be below it. The samples below show the difference between correct and wrong colour hierarchies.



Correct colour hierarchies

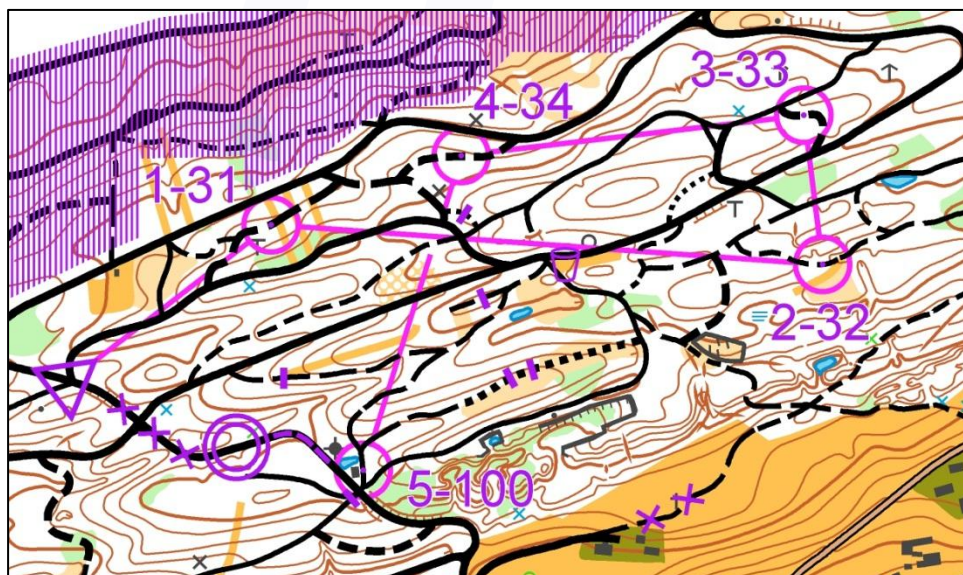


Wrong colour hierarchies



**Step 5** Harmonise the shades of purple:

It is possible that the shades of the purple used for course setting objects are not the same as the ones used in the imported map. Usually objects like "Dangerous objects across tracks" (Symbol 843) are part of the map and not of the course setting. They probably have been imported with the map. It is possible that the purple used for these objects is of a different shade like in the map sample below.



*Different colour shades for upper and lower purple*

You can harmonise the purple shades as follows:

- 5.1 Display the colour hierarchy of your MTBO map:  
*Menu: Map > Colors...*
- 5.2 Select the colour that you want to adapt.
- 5.3 Enter the values "30", "100", "0" and "0" for the CMYK values to get the colour purple.

**Step 6** The full OCAD map is now imported into your course setting project. You can start the course setting.