

Application Note

GIS

Date: April 30, 2008

Product: Mobile Mapper CX

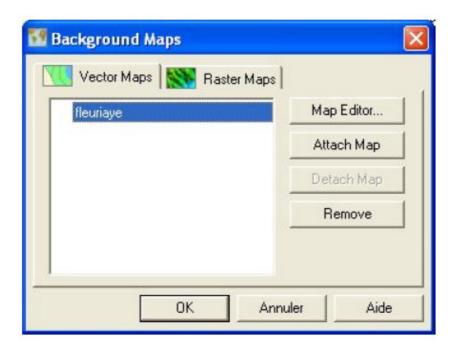
Subject: HOW CAN YOU TRANSFER MAPS TO MMCX?

1-VECTOR FORMAT

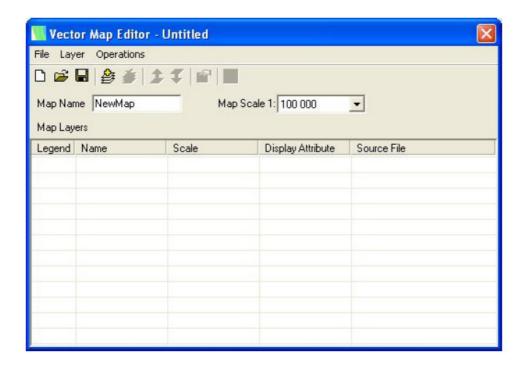
These maps are files coming from map softwares as AUTOCAD, DIGITERRA,..., their extensions are .dxf, .shp; .mif,

To use one of these files as background map in MMCX with the software MobileMapping, you first have to open the file with MobileMapper Office, and convert it into a format understandable by MobileMapping.

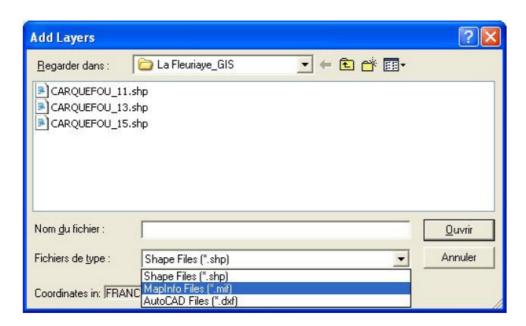
To do that, open MobileMapper Office, select "Tools-→ BackGround Maps"



In the above windows, Choose Vector Maps and click on Map Editor

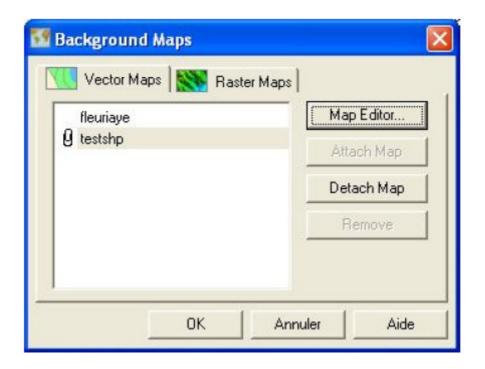


Give a name (Map name) and select "Layer->Add"



Select the format and the file, and click on "Open". Once this window is closed, go to "Operations" from Map Editor, and click on "Create Map".

Then leave the Map Editor, and record your project.



Attach Map or Detach Map, if you want or not having it as background image in MobileMapper Office

NOTA: when you do that, your coordinate system should be the same as the one of the vector file. To manage that, go "MobileMapper Office options-> select coordinate system"

It is impossible to transfer directly this background map on a SD card. Therefore, you should have installed USBSER (from the CD delivered with MMCX) on the computer where you use MobileMapper Office, and on the MMCX, in the configuration panel, after having started USB device switcher and chosen USB SERIAL for ActivSynch (do not forget to restart MMCX after having done that).

Once all the above is completed, start MobileMapping on MMCX, connect it to the computer via the USB cable, start MobileMapper Office on the computer, and inside MMO, open the menu "File->Upload to GPS->BackGround Map"



The above window should appear, and the OK button too, if the MMCX has been normally found. Click on OK



With the above windows, you can choose where you want to put the background map.

Once chosen, click on Next (suivant). If you have to install the maps on many MMCX, it is advisable to choose "SD card or hard drive". Then, it will be possible to recopy the .mmi file on other MMCX without redoing all the above procedure.



To install the same background map on other MMCX, just recopy the mmi file on the root of the other MMCX SD cards.

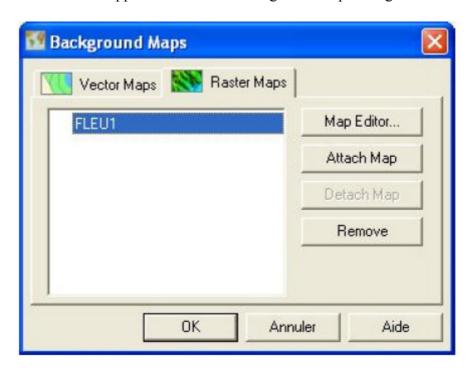
2-RASTER FORMAT

Here, the formats of the files are jpeg, bmp, gif,..., . Information allowing the positioning of the image pixels in a given coordinates system are added.

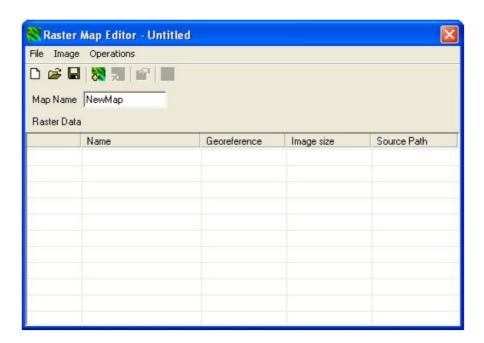
To create a background map from an image, you therefore need to calibrate it by localizing some pixels.

The procedure is as follows:

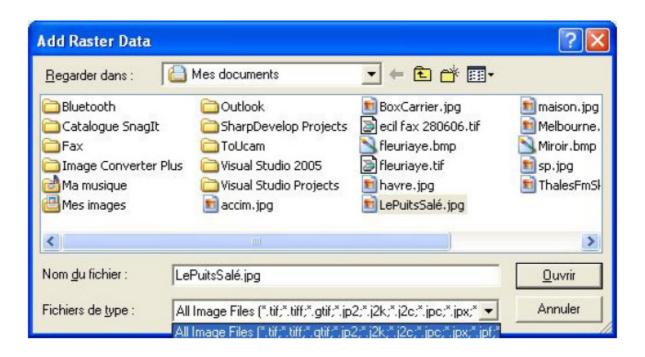
From MobileMapper Office and its background map manager:



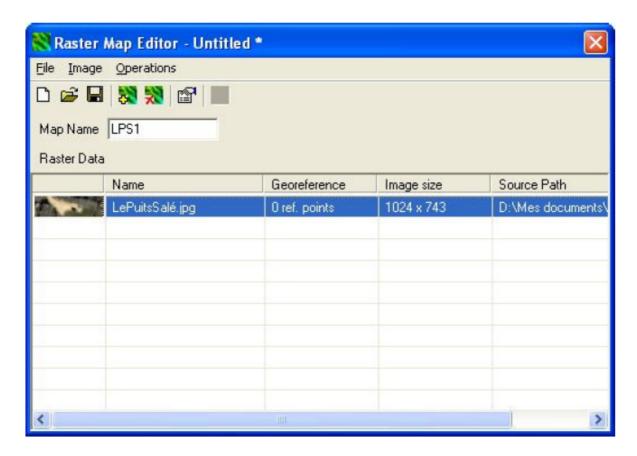
Choose Raster Map and click on Map Editor



Give a name to the map and select "Image-> Add"



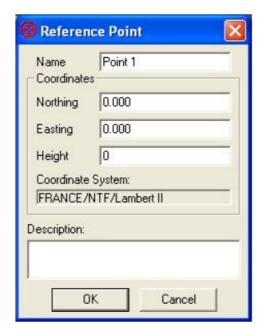
Select the chosen Image, many formats are supported



To calibrate the Image, click twice on the Image or on its line in the table

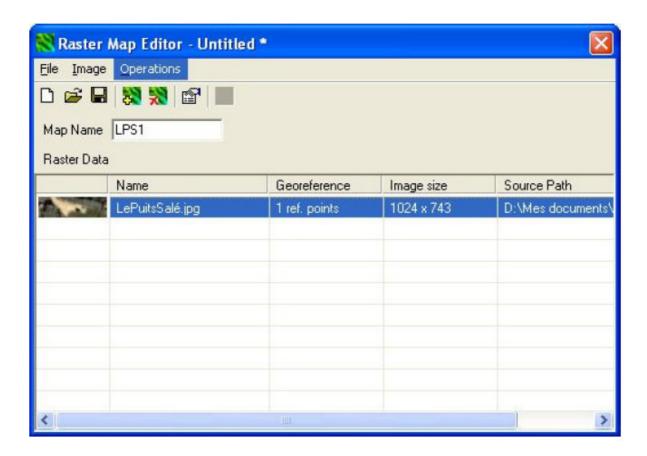


The windows allowing the calibration appears, then click on the left button and put the cross on a point you can identify and for which you know the coordinates.

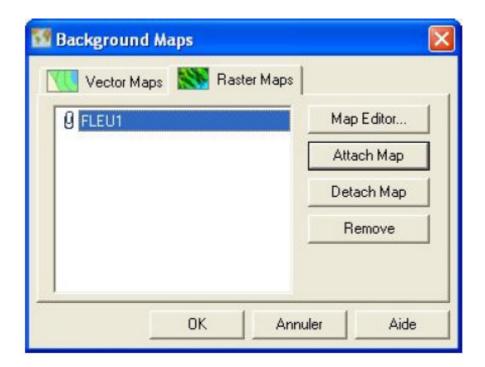


Do not forget to choose the correct coordinate system

Repeat at least for 3 known points so that you get a good Image calibration, then close the window.



In Operations, click on create Map, and in File, do a "Save" then quit.



If not already done, click on Attach Map

You will have created a GEO TIFF file, directly usable by MMCX.

This file is in:

C:\program files\MobileMapper Office\RastMap\project name\file name_geo.tif

You just need to copy the file on the SD card root.

NOTA: if the file name is over 8 characters, rename it with a name less than 8.

When the files are on the SD card, you must select the SD card as memory inside the Software MobileMapping.

To get a good quality Image, it is advisable to convert the origin Image into 16 grey levels