

FAQ: MobileMapper Office

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What does MobileMapper Office software do?

MobileMapper Office is a user-friendly office software package linking the MobileMapper Pro, MobileMapper CE and ProMark3 GPS receivers to the user's Geographic Information System (GIS). Key software functions include:

- Feature library creation
- GIS data display and editing
- Uploading of GIS data and background maps to the receiver (MobileMapper Pro and ProMark3 only)
- Definition of data collection grids
- Display in different coordinate systems and map datums
- Export of data to: SHP, MIF, DXF and CSV formats
- Post-processed differential correction for submeter accuracy

How do I update to the latest version of MobileMapper Office?

First check which version you have by clicking Help>About MobileMapper Office and write down the version number. Now open an Internet browser like Internet Explorer or Firefox, delete everything in the address box, type in [ftp.magellangps.com](ftp://ftp.magellangps.com) and press ENTER. You should see the folders of Magellan's tech support ftp site. Double-click the "Mobile Mapping" folder. Then double-click the "MM Office" folder and then the "Software" subfolder. The latest version of MobileMapper Office can be downloaded for free from this folder. Installation instructions are found in the same folder.

How does MobileMapper Office handle post-processed differential correction?

The MobileMapper differential correction option is initiated by inputting an activation code into the receiver. (You only have to do this once.) This activation allows the receiver to record the L1 GPS code and carrier phase measurements that are required for post-processed differential correction. When you use MobileMapper Office's transfer utility to download a post-processing job file from the receiver's SD card, the code and carrier data files are simultaneously downloaded into the same directory. When you display this job, the presence of the corresponding GPS code and carrier measurement files alerts MobileMapper Office to display the differential correction window. You input data from a "reference station" receiver and then initiate the differential correction program.

What is a reference station receiver?

This is a GPS receiver that records GPS code and carrier data while remaining stationary over a precisely surveyed location. You can use a second MobileMapper Pro receiver or any GPS survey receiver outputting code and carrier data in the standard RINEX format. If you own a reference station receiver, you turn this receiver on prior to recording your

job files. If you do not own one, you can often download free reference station files off the World Wide Web, e.g. from <http://www.ngs.noaa.gov/CORS/> and other public sites.

What is the most common cause of problems when importing GIS files into MobileMapper jobs?

When you import GIS files, you have to identify the coordinate system and datum used to display the GIS file. You can determine what system was used, by displaying the file in your GIS or by asking the GIS manager. You typically have to ask this question only once because most GIS files in a project are in the same coordinate system. Some organizations use the same coordinate system for *all* of their files.

What is the best way to transfer data between and MobileMapper Office and the receiver?

You can either transfer data via the MobileMapper serial cable or you can remove the receiver's internal SD card and transfer data via an SD card reader. The advantage of using the data cable is convenience: it is easier to attach the serial cable than it is to remove the SD card. However, placing the SD card in a card reader allows for much faster data transfer because you can take advantage of the card reader's USB communication protocol. A USB connection is much faster than a serial connection. So if the job or background map is small, use the data cable. If you have to transfer large files, an SD card reader is the best way to go. These are available in most consumer electronics stores.

When I try to transfer data between the PC and the receiver via the data cable, the software tells me that my COM1 port is busy. What should I do?

The data cable uses a serial connection that must go through your computer's COM 1 port. Before transferring data via the data cable, you should first disable the serial connection of all PC applications that reserve the COM 1 serial port. Software programs that commonly reserve the COM 1 port include PC-PDA synchronization applications. You can temporarily disable the serial connection of these applications by adjusting their communication settings. If you cannot find the application that is reserving the COM 1 port, transfer data using an SD card reader. This is faster anyway.

I tried to import a feature library into another one and got an error message saying "Import Failed." What does this mean and how can I avoid it?

When using the Feature Library Editor's Import function, if you select a file containing more than 20 characters (excluding dot and extension symbols) in the name, the software will truncate all characters beyond the 20th. If the first 20 characters in two imported files are identical, the software displays a message saying the file already exists and generates "Import Failed" error. You should rename the second file so that its first 20 characters are not identical to any previously imported file.

Can I edit the feature libraries that are contained in my MobileMapper Pro and ProMark3 job files (.mmj)?

This is not possible because it would allow users to import a GIS file for update in the field, edit the feature library and then export the file back to the GIS with a feature library that is incompatible with other files in the project. It is very important to keep the feature library the same in the GPS receiver as it is in the GIS. For this reason, MobileMapper Office automatically generates a feature library from the same feature library contained in the imported GIS file. If you want to edit the feature library, you should do this with your GIS. But you should be very careful about the compatibility issue.

What are the limits on features and attributes names in a MobileMapper Office feature library?

Only alphanumeric characters, spaces and underscores (_) are allowed.

Maximum number of characters in a feature library name: 8

Maximum number of characters in a feature type name: 20

Maximum number of characters in an attribute type name: 10

Maximum numbers of characters in a menu-style attribute value: 30

Maximum numbers of characters in a comment-style attribute value: 30

Is it possible to select an attribute of a feature to be displayed on the map screen? For example I have loaded a shapefile with roads and I want to display the name of the road rather than its route number.

To display a particular attribute open the Feature Library Editor (under the Tools tab) and editing the library so that the attribute you want to display is the first attribute listed for the feature. Note: the Feature Library Editor will not let you edit feature libraries that are already part of job files, so you must edit the feature library BEFORE you import the shapefile. Because the Feature Library Editor works only on MobileMapper MMF files, you should edit the feature library using your GIS.

When I download jobs from the receiver to MobileMapper Office, the data is displayed on the map screen, but the job is labeled "Untitled" at the top of the screen. Why is the job not named?

Newly downloaded jobs are not opened in MobileMapper Office but rather imported to the currently open job. When you downloaded the job, the job open on the screen had not yet been named, hence the "Untitled" label. You can name the job using the standard Windows command **File > Save As**. MobileMapper Office operates in this fashion so as to allow you to download and import several files at once or from different receivers and all of them will be imported to the current job.

When I tried to upload a big job to my receiver, MobileMapper Office returned an error message saying the file was too large.

But I know there is enough memory on the SD card. What is the limit on job size that can be uploaded to the receiver?

The size of a MobileMapper job that can be uploaded to a receiver is not dependent on memory left on the receiver's SD card, but rather on how well the receiver software can access, display and edit the information on that job. If the job you are trying to upload is reported as being too large, there are two things you can do. You can use the Job Region Creation tool (Tools > Create Region to section the job into smaller regions that you can upload individually to the receiver. Or you can load into the job file only the data that need to be updated that day.

What happens if I upload a job that is just under the limit? If I append more data to it in the field, will I still be able to download it?

It is impossible to collect more data with the MobileMapper Pro receiver than it can handle. The receiver will warn you when you get close to the limit. If you continue logging data, the receiver will inform you when you reach the limit and then automatically shut down. No data will be lost or corrupted and the job will be downloadable to MobileMapper Office.

Is there a limit to the number of jobs and background maps I can upload to the receiver?

The number of jobs and background maps you can upload into the receiver is limited only by the memory left on the SD card.

When I downloaded my job to MobileMapper Office, the *.mmj file was given a *.j.m file extension. Is this file corrupted?

On rare occasions, when you download a job that has *exactly* eight characters in its name, the file extension is written as some combination of periods and letters instead of the standard *.mmj. In some cases, you can make the file readable by renaming it on your PC by changing the file extension to .mmj. However, the file is often corrupted and the data cannot be processed in MobileMapper Office for export to your GIS. You can prevent a recurrence by restricting all job names to seven or fewer characters.

Can I rename job files after downloading them to my PC?

Yes, you can rename it with as many characters as you wish. But if you do change the name of the *.mmj file, remember that you must keep the raw measurement files, i.e., the B-, D- and E-files in the same directory or you will not be able to post-process the job. Also, if you later wish to upload the job back into the receiver for updating, the characters in excess of eight will be truncated. For these two reasons, many people prefer to rename jobs, for example with a "PP" at the end of the name to designate them as having been post-processed, only prior to archiving them. When archiving a project, you should include all associated files in case you later wish to reprocess the data.

I cannot see any features in the Map Display Area even though the job is described in the Job Properties window. What should I do?

This can occur with some versions of MobileMapper Office if you downloaded the job from the receiver to a folder on your PC that contains a period (.) in the folder's name. Close the job on MobileMapper Office, use Windows Explore to rename the folder without any periods and reopen the job. The features should now appear in the Map Display Area. You should make sure you are using the latest version of MobileMapper Office – see page one of this FAQ.