MMS DESIGN
Survey & Engineering Solutions

OUTPUT TO GOOGLE EARTH WITH MODEL MAKER SYSTEMS SOFTWARE

Background

In this tutorial, I will explain the procedure to export data from MMS software to the well-known and free software program, Google Earth™. When new functions are added to any of the toolbars or main menu of our software, it might not automatically be available in your existing setup. To make sure you have all the newest toolbar options available you will have to reset the toolbars.

Things to remember about the Google Earth link:
1) Presently only CAD lines, Strings, Irrigation and DTM and contours are exported, anything else must be converted into one of these entity types.
2) This feature only works on version 6.22 and Survey Maker 3.22 or later.
3) It is suggested to get the latest version of Google Earth (or at least ver. 5) obtainable from www.google.com. The free version works fine.

Step 1:
Option 1 (Fig 1) :
To reset your main menu
Click on Settings > Customize Toolbar > Format Layout

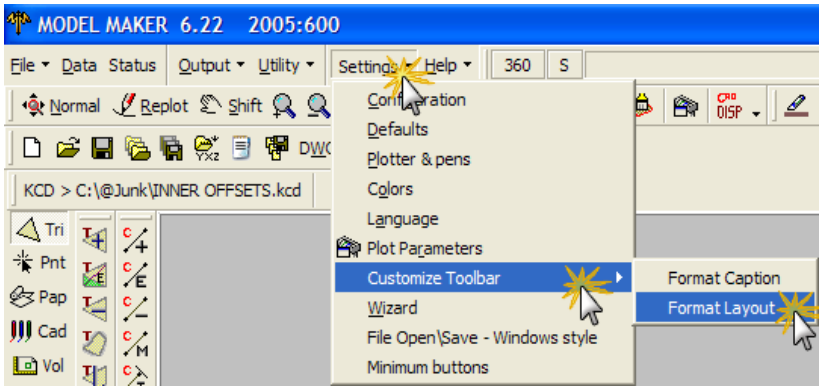


Fig 1

Option 2 (Fig 2):
If the Layout button is not available on the Main Menu toolbar, simply right click on any toolbar and click Customize.

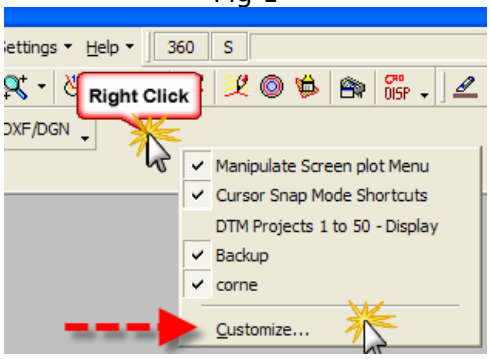


Fig 2

Option 3:
See the "About the MMS screen toolbars and menus" below.

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Step 2:
Fig 3
Click on Main Menu (highlight it) > Reset > Click Ok in the dialog that pops up > Click Close

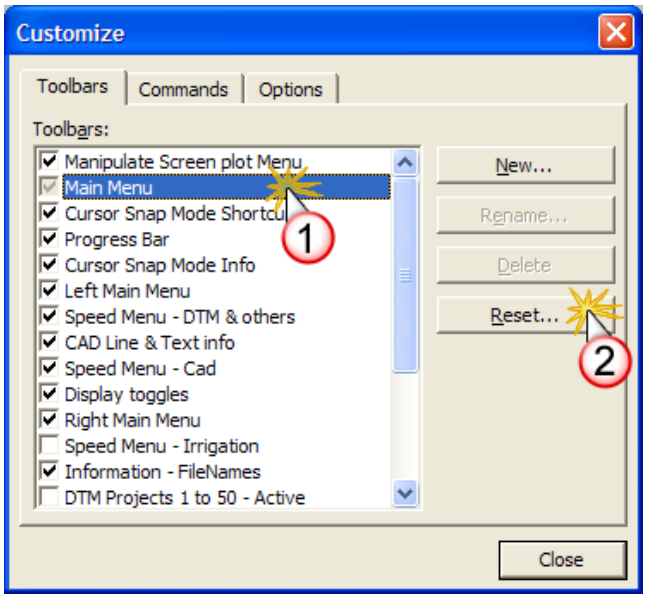


Fig 3

Step 3:
Fig 4
The new Google Earth function should be available in the Output dropdown menu on the Main Menu

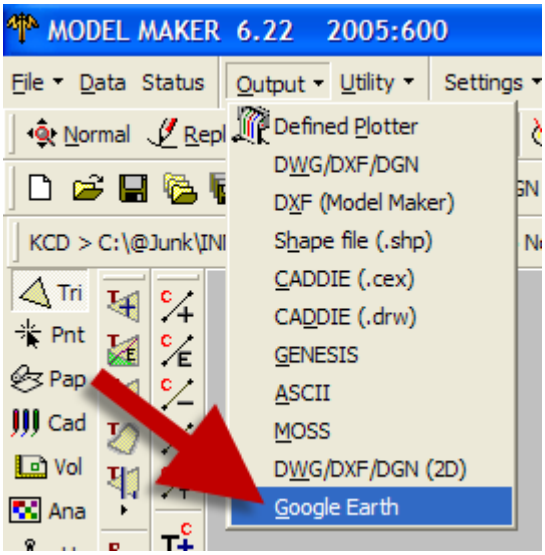


Fig 4

Step 4: To use the new function, simply do what you always do by drawing and designing at leisure, and when finished, simply click on Output > Google Earth

Tip: Remember to convert from all other entities to CAD lines or strings where applicable before this step.

Step 5:
Fig 5
(1-4) Set the parameters relating to the location of your project.

Tip: (2) bear in mind that the "From Datum" setting Cape-Clarke is only related to projects located inside the borders of South Africa. It also takes longer to process to GE.

(5) Only CAD lines, Strings, Irrigation and DTM contours are exported. Anything else like circles, horizontal alignments etc. should first be converted to CAD lines or strings. You can change the color for each type of data.

(6) "clamp to ground" means that your project data will be draped onto the Google Earth 3D model which is not scaled 100%. Use this feature for presentation purposes only.

(7) When all is set up, either click on "Google Earth" which will open Google Earth and display your project automatically or "Save As KML File…" which will compile a kml file which you can email to your client who can simply open the file and view your project inside Google Earth on his own PC!

Tip: Please note that your client should also have Google Earth installed for the KLM file option to work.

(8) In some areas Google Earth is not very accurate in it's positioning of the images. You will find that the information which is 100% correct in Model Maker will not plot perfectly on Google Earth's images. The Constant function will allow the user to shift the info MM sends out to fit onto the images.

Warning: by applying a constant, you are actually altering the co-

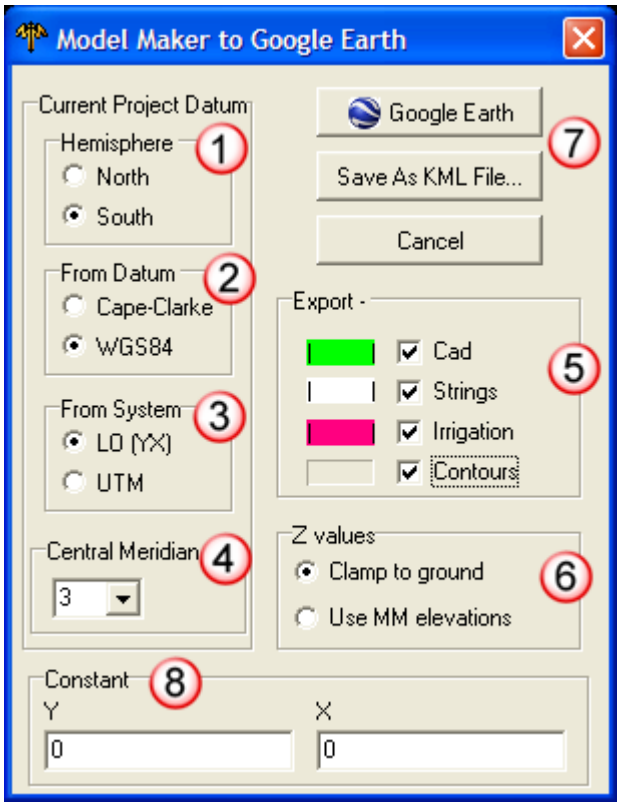


Fig 5

ordinates to fit better onto Google Earth, so please use this function for presentation purposes only! The co-ordinates in MM will remain un-altered.

Step 6:

Be patient, large files takes longer to compile and almost just as long to open in Google Earth – depending on your internet connection speed of course.

About the MMS screen toolbars and menus.

If you use the Customize Toolbars option and you do not see the <Format Layout> option but only <16>, as in Fig 6 below, your toolbar settings are very old. In this case it is then best to delete the toolbar settings file so that all settings are as it was initially designed.

To delete the toolbars settings file, close the program and then use Windows Explorer and go to the C drive and folder - C:\Program Files\MMSystems\MM\Settings. Then delete the file ModelMaker.tol and thereafter you can run the program again.

For RM the file is in …..\RM\Settings and name is RoadMaker.tol
For PM the file is in …..\PM\Settings and name is PipeMaker.tol
For SM the file is in …..\SM\Settings and name is SurveyMaker.tol

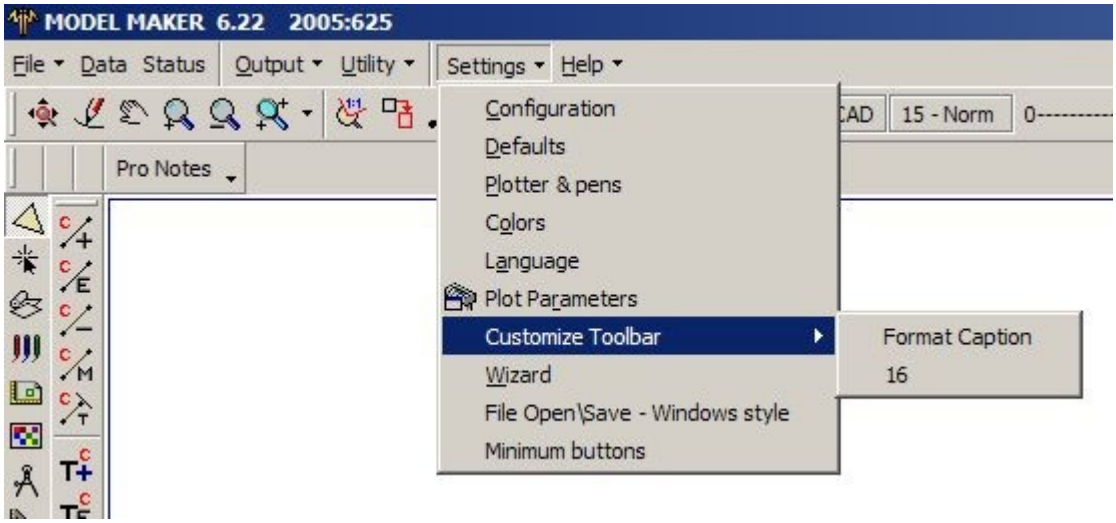


Fig 6