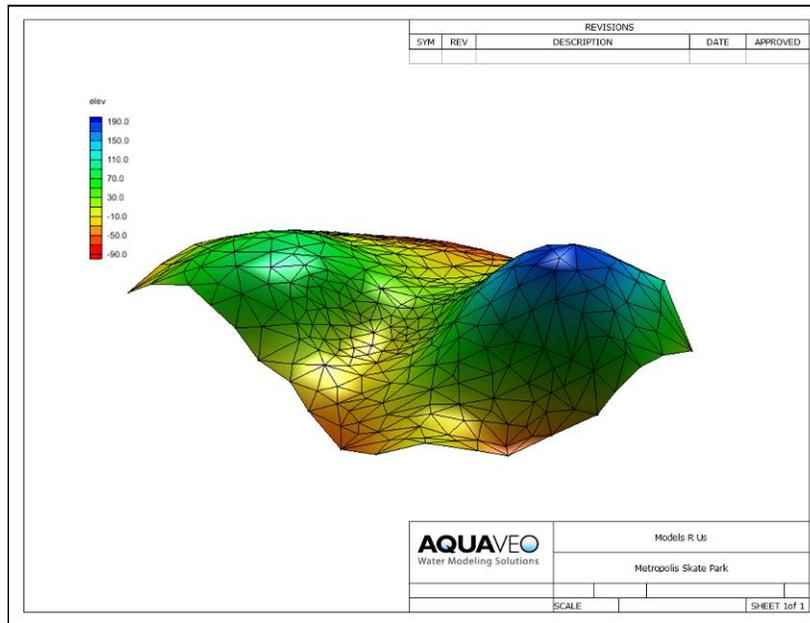


GMS 10.0 Tutorial

Printing and Exporting Images

Print and export images for use in reports and presentations



Objectives

GMS has a number of ways to print or export images for use in reports and presentations. This tutorial teaches about these different options.

Prerequisite Tutorials

- None

Required Components

- None

Time

- 10-15 minutes



1	Introduction	2
1.1	Outline.....	2
2	Getting Started	2
3	Graphical Output	2
3.1	Printing.....	2
3.2	Saving Images	4
3.3	Screen Capture	4
4	Conclusion	5

1 Introduction

This tutorial describes how to print and export images from GMS.

1.1 Outline

Here are the steps of this tutorial:

1. Printing
2. Exporting an image file
3. Copying the GMS screen to the clipboard and pasting it into another program

2 Getting Started

To get started, do the following:

1. If necessary, launch GMS.
2. If GMS is already running, select the *File / New* command to ensure that the program settings are restored to their default state.

3 Graphical Output

After creating a GMS project, the user may want to include some images of the project in a printed report or on a web site. Graphical output can be obtained from GMS in multiple ways. GMS is not designed to be a full-featured drawing package; however, users will often want to export graphics from GMS and import them into another program in order to add things like titles, borders, etc.

3.1 Printing

Printing from GMS can require multiple steps, all of which are described here. The *File* menu has two commands related to printing: **Print** and **Page Setup**. These two commands can be used to send whatever is currently displayed in the graphics window to a printer.

Page Setup Dialog

1. Go to the *File* menu and select the **Page Setup** command.
2. The *Page Setup* dialog will appear. It has three tabs: *Margins*, *Paper Size*, and *Options*.
3. In the *Margins* tab, make any necessary adjustments to the top, bottom, left, and right margins of the document before printing.
4. In the *Paper Size* tab, choose the desired type of paper (letter, legal, etc.).
5. If the printer has multiple paper sources, go to the *Paper Source* field in the *Paper Size* tab and make the desired selection.
6. Next, in the *Paper Size* tab under the *Orientation* field, choose either *Portrait* or *Landscape* for the page orientation.
7. In the *Options* tab, make any necessary adjustments to the scale of the image. This can be done in either inches or centimeters.
8. In the *Options* tab, decide whether or not to activate the *Display scale legend* option. This option includes a drop-down menu choosing a color.
9. Click **OK**.

Print Dialog

1. Go to the *File* menu and select the **Print** command.
2. The *Print* dialog will appear. It has several important fields and one button: *Name*, *Print Range*, *Copies*, and **Properties**.
3. In the *Name* drop-down menu, select the desired printer.
4. In the *Print Range* section, specify how many pages of the document should be printed; it is also possible to simply print any text that is selected by choosing the *Selection* option.
5. In the *Copies* section, specify the number of copies and whether or not those copies should be collated.
6. Click on the **Properties** button. This offers another way to specify the page orientation as either *Portrait* or *Landscape*. Make any desired changes.
7. Click **OK** to get out of the *Properties* dialog.
8. Click **OK** to print the document or selection.

Most of the time, the default settings in the *Print* dialog will be the desired settings. This simplifies the process of printing a document or selection.

3.2 Saving Images

GMS allows users to export the current display as an image file. A few different image file types are supported, including

- BMP
- JPG
- .PNG
- TIF

First, the user must read in some data:

1. Select the *Open*  button.
2. Locate and open the directory entitled *Tutorials\Intro\basics*
3. Select the file entitled “surface.gpr,” and select the **Open** button.

To export the screen as an image, do the following:

4. Select the *File / Save As* menu command.
5. Change the *Save as type* option to “Bitmap Files (*.bmp).”
6. Click the **Options** button. This will bring up the *Image scale factor* dialog.

By default, the *Image scale factor* is 1.0, meaning the size of the bitmap is the same as the current size of the graphics window. Depending on the use for the image, this may be adequate; however, if the image is to be used on a large poster, for instance, then the individual pixels will become apparent and distracting. The user can improve the quality of the image by increasing the size of the window to which the image is pasted. To do that, either increase the resolution of the computer screen or increase the bitmap scale factor in this dialog. The following step will accomplish the latter option.

7. Change the *Bitmap scale factor* to “1.5.”

A value of 1.5 means that GMS will render the display to a window that is 1.5 times greater than the current size of the graphics window.

8. Change the file name to the desired name and click the **Save** button.

Now it is possible to open the bitmap file in another program.

3.3 Completing a Screen Capture

GMS includes a **Screen Capture** command in the *Edit* menu. This command takes whatever is currently displayed in the graphics window and copies it as a bitmap to the clipboard. The image can then be pasted into another program.

1. Select the *Edit / Screen Capture*  menu command.

Notice that it is possible to specify a *Bitmap scale factor* here also. However, the clipboard has a limited amount of memory available to it; thus, it may not be able to scale the image up as much as the image it could be when saving the file to disk. If a screen capture will not paste into another program, try reducing the scale factor.

2. Leave the *Bitmap scale factor* at “1.0,” and click **OK**.
3. If the user has Microsoft Word ® installed or other software that can read a Microsoft Word ® file, go to step 5. If not, go to step 4.
4. Open up the chosen word processing program and paste the image from the clipboard into the program. This concludes this section of the tutorial. Skip to the Conclusion, Section 4.
5. Open up a new document in Microsoft Word ®.
6. Paste the image from the clipboard into the Word ® document.

It is beyond the scope of this tutorial to illustrate all the things that can be done with the image now that it is in Microsoft Word ®, but here are some things that the user might want to try.

- Right-click on the image, select *Wrap Text* and change it to “In front of text.”
- Change the image size using the sizing handles and position the image as desired.
- Crop the image using Word’s ® **Crop**  tool in the *Picture* toolbar.
- Use the *Insert* menu to add arrows and text to point out interesting features of the image.
- Create a title block and then make any desired changes to the logo and name.
- Under *Picture Tools* in the *Format* tab, use Word’s ® **Compress Pictures**  tool to reduce the file size.

4 Conclusion

This concludes the tutorial. Here are the things that the user should have learned in this tutorial:

- GMS allows printing and exporting images in a number of ways.
- Bitmaps and other types of image files can be saved at the screen’s resolution or at higher resolutions.
- The screen can be copied (at the screen’s resolution or higher) to the clipboard and pasted into other programs.