

Demonstration Video

Surfer 9 - Part 12

Saving, Exporting and Printing

PART 12

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1. Welcome to Golden Software's demonstration video for Surfer 9 – Part 12. In this demonstration I'll be covering the topics of output and concluding this presentation.
 2. I will first go to **File | Open** and open the sample file called *Contours.srf*. Let's say we just created this project. After you've created your Surfer project, you can save a file for future use by going to **File | Save** or **Save As**. Since this was already previously saved, I'll select **Save As**.

Select the location where you wish to save the file, give the file a name (I will simply change the name), and click *Save*.

3. You can also export the project to many different file formats for use in other programs.
 - a. Go to **File | Export** and you have the option to export a file in many different file formats. You can export to vector files (such as AutoCAD DXF, Golden Software GSI, vector PDF, MapInfo MIF, or ESRI SHP), or you can export to raster formats (such as JPG or TIF). You can also export to georeferenced image formats, such as a GeoTIFF. I'll demonstrate how to export a map to GeoTIFF format, but first I'll click *Cancel* to close the **Export** dialog.
 - b. You can export a single map to GeoTIFF. If you have only a single map in your project, then you can go directly to **File | Export**. If you have multiple objects in your project, such as a color scale, additional maps, or drawing objects as I do here, then you need to select the map you wish to export and go to **File | Export**.

In the **Export** dialog, choose to save the file in *Tagged Image (*.tif)* format and type in a file name. Check the *Selected objects only* check box if you selected the map before going to **File | Export**, and click *Save*.

The **Export Options** dialog will appear. On the **Size and Color** page, choose the resolution you wish to export the image in (I'll enter 300 dpi), and a color depth value. In most cases, 24-bit true color (also known as RGB color) is appropriate.

Then click on the **Spatial References** page. Choose the radio button next to *Save spatial reference information in* and then check the check box next to one (or more) of the 5 supported georeferencing formats. For example if I check the check box next to *Internal file format* and click *OK*, the TIF file will be exported in GeoTIFF format. If I also check the check box next to *ESRI World file*, then a GeoTIFF file will be created in addition to an ESRI TFW file. Choose as many formats as you like.

I will leave the defaults on the **TIFF Options** page and click *OK* to export the image.

- c. You can also export contours to a 3D DXF or SHP file. To do this, select the *Contours* layer in the **Object Manager** that you want to export, and go to **Map | Export Contours**. Choose a location to save the file to and give the file a name.

The *Save as type* drop down menu gives you three options. You can choose to save a 3D DXF file, a 2D SHP file, or a 3D SHP file.

Both the 2D SHP and 3D SHP formats export the Z values to the DBF file, the difference is simply how the line is written to the SHP file. The 2D SHP exports a shape 2D polyline type where each vertex along the line comprises an X and Y coordinate. The Z coordinate for each vertex is only stored in the associated DBF file. The 3D SHP exports a shape polyline Z type where each vertex along the line comprises an X, Y, and Z coordinate. The Z coordinate for each vertex is also stored in the associated DBF file.

I'll choose to export a 3D DXF file. Note that exporting the contours to one of these file formats will only export the contour lines themselves. The text labels, line colors and fill properties will be ignored. I'll click *Save* to export the file.

- i. For example, I'll go to **File | New | Plot Document**.
 - ii. I'll go to **Map | New | Base Map**, select the 3D DXF file I just exported and click *Open*.
 - iii. Click *OK* in the **DXF Import Options** dialog.
 - iv. See that the map is created from simple lines. The colors, text and all other objects were not exported. If I opened this DXF file in AutoCAD, I could select the individual lines and see that each one had a Z value associated with it.
4. You can print your project to any Windows compatible printer or PDF printer driver by going to **File | Print**. The **Print** dialog box gives you the option to click the *Properties* button to set the properties for your printer driver, you can set the *Number of copies* to print, select the *Print range* (which only applies when printing the worksheet window, you can print the entire worksheet or only the selected worksheet cells), and the *Print Method*.

The *Print Method* offers you three ways to control how the document is printed on the page:

- a. *Truncate* clips all objects that extend past the page margins to the page margins, which are specified in the project under **File | Page Setup**. For example, if your plot is larger than the page size, only the portion of the plot within the page margins is printed. You also have the option to change the scale the plot is printed at. A scale of 100% is the actual size of the plot, 200% is twice as large, and 50% is half as large.
- b. *Fit to Page* automatically reduces the size of the plot so that it fits within the specified page margins for the project.
- c. *Tile* breaks the drawing into page sized pieces and generates multiple pages of output. This is useful if your plot is larger than your page size. You can print the plot to multiple pages. You can also set the *Scale* of the plot when printing using the *Tile* printing method, and set the *Overlap* amount between the pages.

Click *OK* and the file will be printed. I'll click *Cancel* to close the dialog.

5. Technical support has always been a high priority at Golden Software. If you ever have any problems using Surfer or any questions, please give us a call at 303-279-1021. Or, you can go to **Help | Feedback | Problem Report** to email us a problem report, **Suggestions** to email us any suggestions you have to improve Surfer, or **Information Request** if you would like some additional information. Our contact information can also be found by going to **Help | About Surfer**.

That concludes my demonstration of Surfer 9. You can get more experience using Surfer by walking through the Tutorial, accessed by going to **Help | Tutorial**. Thanks for watching.