



Aquaterra

by **CGS Labs**



INSERT POINTS & CREATE DTM





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Insert points & create DTM Tutorial

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INTRODUCTION

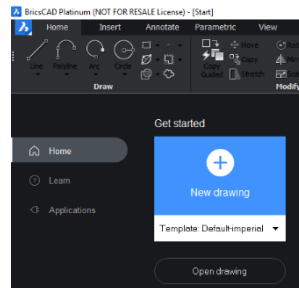
This step-by-step instructions will lead you through the workflow procedure in order to get familiar with the software environment.

You will learn how to insert points in the drawing and how to create digital terrain model from input data. Additionally, you will learn to use different DTM settings.

1. GETTING STARTED

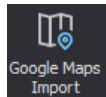
1.1 Open a new drawing

1. Open BricsCAD and select *New drawing* .
2. In the Ribbon, click on *CGS Labs* tab and select *Aquaterra* icon. Four new tabs will appear.

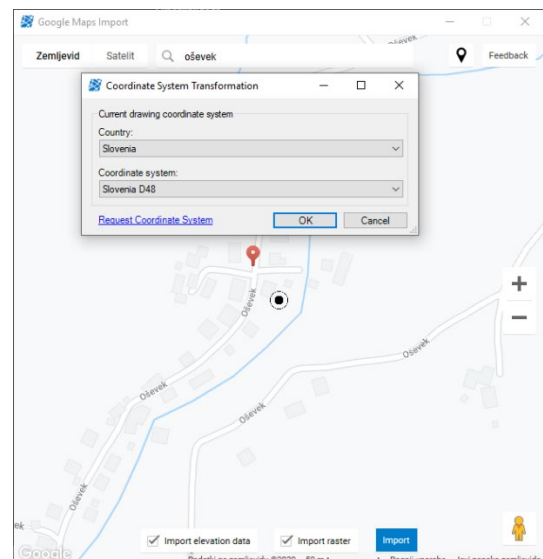
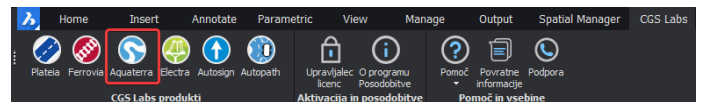


1.2 Insert points

1. Click the *Google Maps Import* tool button on the *Utility* panel on the Ribbon.



2. In *Google Maps Import* dialog box, enter a query (optional location) and press *Enter*. Zoom in to find an appropriate location, check *Import elevation data* and *Import raster*.
3. In *Coordinate System Transformation* dialog box, specify the *Country* and *Coordinate System*. Confirm with *OK*.
4. Elevation points and Raster image are inserted in the drawing. You can hide raster image by selecting *Tools* in the menu bar => *Hide/Show* => *Hide entities*.



**In case you have a file that contains point data, you can insert them with the command 11F1 (Insert points from file). For detailed information please check Help file.

2. CREATE DTM

2.1 Input data

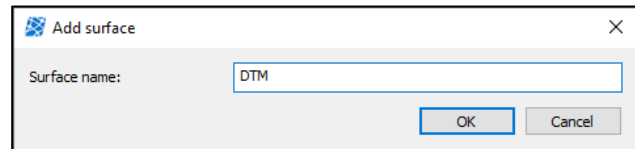
As input data we will use elevation points with X,Y and Z coordinate from the drawing.

2.2 Create DTM

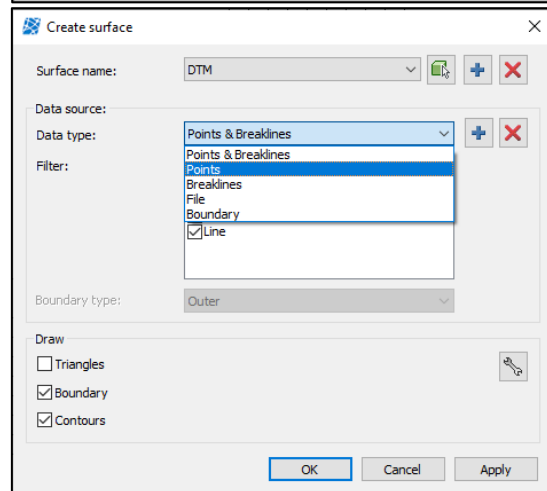
1. Click on the **Terrain** button on the Layout panel on the Ribbon.




2. In *Add surface* dialog box, specify *Surface name* and confirm with *OK*.




3. In *Create surface* dialog box specify *Data type*. As input data you can use Points and/or Breaklines. For this example select *Points* from the drop-down menu.



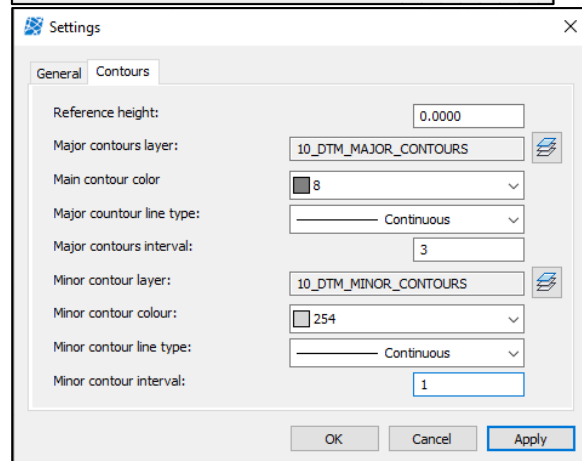
4. Click on the  button to select all the points in the drawing and press *Enter*.

5. *Create surface* dialog box appears once again. In the bottom specify, what you want to draw. Check *Boundary* and *Contours*.

6. With the  button open *Settings* dialog box. Under *Contours* tab you can define contour settings.

Main contour color: 8
Major contour interval: 3
Minor contour color: 254
Minor contour interval: 1

Confirm with *Apply* and press *OK*.



7. In *Create surface* dialog box, confirm with *Apply* and *OK*.

8. The result is DTM with boundary and contours.



**Aquaterra supports different surface types: 3D Faces, AutoCAD Civil 3D Surface, BricsCAD Surface and CGS DTM.