

Demonstration Video

Didger 4 – Part 4

Digitizing and Setting the Project Limits and Scale

PART 4

1. Introduction
2. Digitizing Points, Polylines and Polygons
3. Modifying the Project Limits and Scale

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1. Welcome to Golden Software’s demonstration video for Didger 4 – Part 4. In this demonstration I’ll be covering the topic of digitizing objects and modifying the project limits and scale.
 2. After the tablet or the image is calibrated, or you imported a georeferenced image, a data or vector file into Didger, you can begin digitizing. Digitizing is the process of transferring paper document information, image information, or other data to your computer by creating points, lines, and areas that are spatially related and have real world coordinates. In this example, I imported a georeferenced image.
 - a. Points are used to represent spot locations, like a well location, a sample location, or if you just need to find out the specific coordinates for a particular point on a map or graph. To digitize a point, go to **Digitize | Point**, or click on the *Digitize Point* icon on the toolbar. You then have the option to specify some properties in the Property Inspector. You can change this information now, or you can go straight to digitizing. In this example, I will change the information in the Property Inspector before digitizing:
 - i. In the **Digitize Data Attributes** section, you can enter up to four IDs for your point. This can be something like a Well Name, Field location, etc.
 - ii. You can also enter the ID information after you digitized the point by going to the **Increment Settings** section and checking the *Enter Data After Creation* check box. If you want the ID information to be automatically incremented (like if you will create 7 objects and they will have a Primary ID of 1 to 7 respectively), you can check the *Auto Increment* check box and then you will need to fill in the information below. If you are going to create many points and you are going to digitize them one right after another, check the *Create Several* check box. In this example, I will check *Auto Increment*. I’ll start with a value of 1 and have an *Ending Increment Value* of 7. I’ll keep the *Increment Value* of 1, but I’ll change the *ID Prefix* to “MW-“. I’ll also clear the *ID Suffix* field.
 - iii. If I scroll down, I can see the **Symbol Properties** section. The **Symbol Properties** section will show you the shape, color, and size of the point you will create. I’ll choose a solid diamond shape, and I’ll change the *Color* from blue to red. I’ll also change the *Size* from 0.05” to 0.15”.
 - iv. The **Label Properties** section allows you to modify the point labels. Click where it says to *<Click here...>* to open the **Label Position Editor** dialog box. You can label the points with one of the four IDs. Since we created a Primary ID, I’ll select the *Primary ID* label and click *Add*. I’ll choose to position the label to the left of the point by clicking on the little arrow to the left of center. You can see the preview of the label position to the right.

When you have set the properties you want, click *OK*. Move the cursor over the plot window and your cursor will turn into a bulls eye shape. Click on the screen or on the

tablet where you want the symbol to be located. In this case, I'm digitizing all 7 of the monitoring wells so I'll click on each one.

After the symbols are created, you can change any of the properties of that symbol selecting it and changing the properties in the Property Inspector. For example, I'll select this symbol and I'll choose to change the symbol color and shape. You can see that the symbol properties have immediately updated.

- b. Polylines are used to represent lines, such as roads, contours, rivers, or political boundaries. To digitize a polyline, go to **Digitize | Polyline**, or click on the *Digitize Polyline* icon on the toolbar. You have the option to specify some properties for the polylines you will digitize in the Property Inspector. You can change this information now, or you can go straight to digitizing. In this example, I will change the information in the Property Inspector before I start digitizing:
 - i. The **Digitize Data Attributes** section is the same as if you are digitizing points.
 - ii. In the **Increment Settings** section, I'll check *Create Several* so I can digitize multiple polylines one right after the other.
 - iii. I'll scroll down and I have the option to set the **Line Properties** and the **Label Properties**. The **Line Properties** is where you specify the line *Style*, *Color*, *Width*, and any *Start or End Styles* such as arrowheads.
 - iv. Click in the **Label Properties** section to label the polyline with one of the four IDs. I didn't create any ID information, so I'll won't click there.

When you have set the properties you want, move the cursor over the plot window. The cursor will change into a bulls eye shape. You can digitize a polyline in one of two ways: 1) You can click on each point that makes up the polyline, but that does not produce a very smooth polyline, or 2) You can hold the mouse button down and trace the polyline with the button being held down. This is called stream mode digitizing and does produce a very smooth polyline. Double click to end digitizing a polyline. For the sake of speed, I won't be digitizing the polylines very accurately. Once all the polylines are digitized, I hit the *Esc* key to end being in digitizing mode.

If after the polyline is created, you want to change any of its properties, all you have to do is select the polyline and change the properties in the Property Inspector. For example, I'll change the line color of this polyline to red and I'll change the width to 0.05".

- c. Polygons are used to represent a closed area, like a lake or a building. A polygon is similar to a polyline in Didger, except the first and last vertices occupy the exact same XY position. To digitize a polygon, go to **Digitize | Polygon**, or click on the *Digitize Polygon* icon on the toolbar. You have the option to specify some properties for the polygons you will digitize in the Property Inspector. You can change this information now, or go straight to digitizing. In this example, I will change the information in the Property Inspector before digitizing:
 - i. The **Digitize Data Attributes** section is the same as when you are digitizing points or polylines and is where you can enter up to 4 IDs for your polygons.
 - ii. In the **Increment Settings** section I'll uncheck the *Create Several* since I'll only be digitizing one polygon.
 - iii. I'll scroll down and you can see the **Line Properties**, **Fill Properties** and **Label Properties**. The **Line Properties** section is where you specify the line *Style*, *Color*, and *Width* for your polygon.
 - iv. The **Fill Properties** section is where you will specify the fill *Pattern* for the area inside the polygon. You can choose many different types of fill patterns, and

Foreground and *Background* colors. I'll choose a crosshatch fill pattern and I'll choose a foreground color of blue.

- v. Click in the **Label Properties** section to label the polygon with one of the four IDs. I didn't enter any ID information, so I won't click there.

When you have set the properties you want, move the cursor over the plot window and it will turn into a bulls eye shape. You can digitize a polygon in the same two ways as digitizing a polyline, either by clicking on the individual points or by holding the mouse button down and tracing the polygon boundary. Double click to end the polygon.

If after the polygon is created, you want to change any of its properties, all you have to do is select it and change the properties in the Property Inspector.

3. To customize your project, you can change the limits and scale.
 - a. Go to **View | Project Limits**. Here you can specify the *X* and *Y Min/Max* values. These determine the extents of your project space. If the project has a projection assigned to it, then these values would be in units of meters. This particular project is not projected, so the units are whatever I set the *Calibration Units* to.
 - b. I can also choose to set the limits automatically based on the *Project Extents*. That will get rid of any extra white space around my objects.
 - c. In this dialog box, I can also set the *X* and *Y Axis Scaling* or *Length* values. These values determine the physical size of the project space and will come in handy when you go to export or print the project.
 - d. Choosing to *Set Proportional XY Scaling* forces the *X* and *Y* dimensions to be scaled equally.
 - e. Click *OK* and the project limits and scale are modified.
4. This concludes my demonstration of digitizing and modifying the project limits and scale.