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ZW Geo

ZWGeo 2021

Version 2021.0.00 (20-07-2020)

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1 Description

Application ZWGEO is application (add-on) which help in surveyor work, in following areas:

1 Mark points on project by name and number

2 Add possibility of save points in external text files

3 Add possibility of load points from external text files

2 Requirements

ZWGeo is an application (add-on) for ZWCAD 2021. It works with the most recent version of ZWCAD 2021.

3 Support

Technical support is available from 8 am to 4 pm from Monday to Friday, we invite you to contact us by e-mail or telephone.

E-mail: pomoc@zwcad.pl

Phone: 33 474 04 03

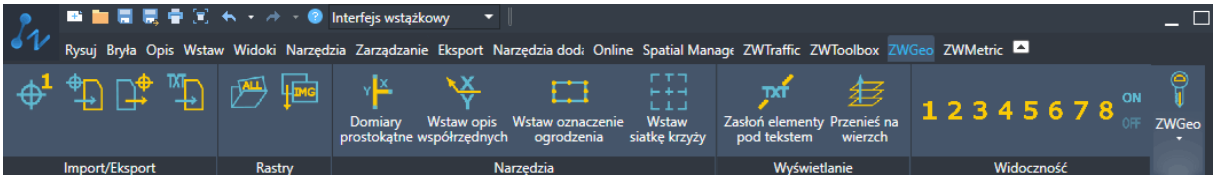
4 Installation

Application installs automatically after run downloaded installation package.

Default application is installed in folder `C:\Szansa\ZWGEO\2021\EN`. In time of installation, it's possible to set different installation path. This is not recommended especially in Windows Vista, Windows 7, Windows 8, Windows 10. Build in UAC function in this systems lock some functions of application.

After correct installation and run ZWCAD. Application ZWGEO 2021 should load automatically. On ZWCAD window, there should be toolbar as below.

If for some reasons application and menu will not be loaded automatically, You can load it manual following instructions on chapter **Błąd! Nie można odnaleźć źródła odwołania.**.

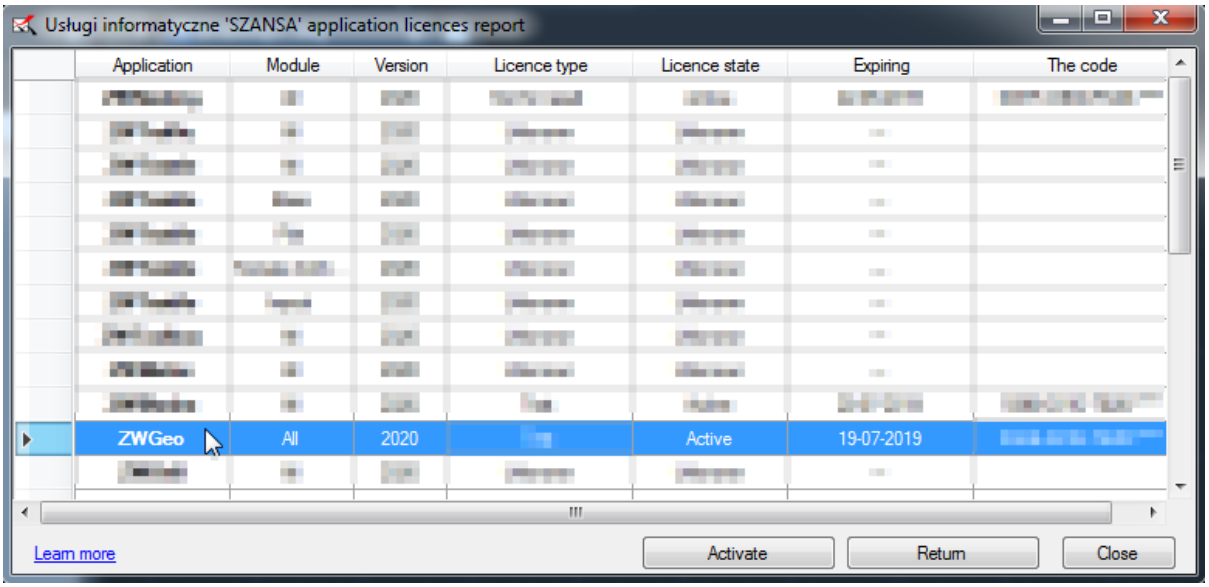


5 Activation of application

Activation must be completed on an account with administrative privileges.

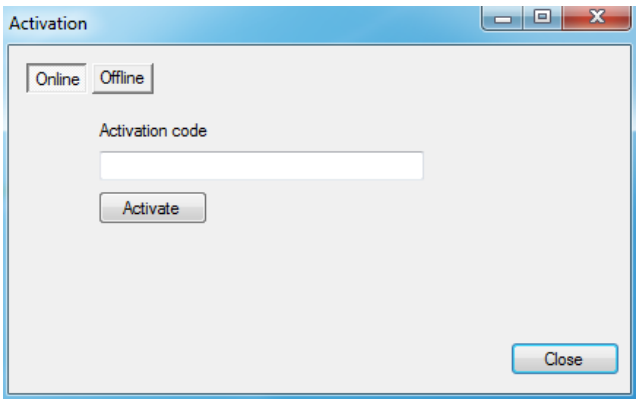
Once the trial period of 30 days runs out, a license will be needed in order to use the program. After receiving the payment, an e-mail with an activation code will be sent.

In order to activate the program, use the command ZWGeo:Activate or click on this icon in ZWGeo toolbar. The following window will appear: Once Activator has been launched, the following window will be displayed:



Please click on "**Activate**".

A choice between activating the appliaction online or offline will be present.

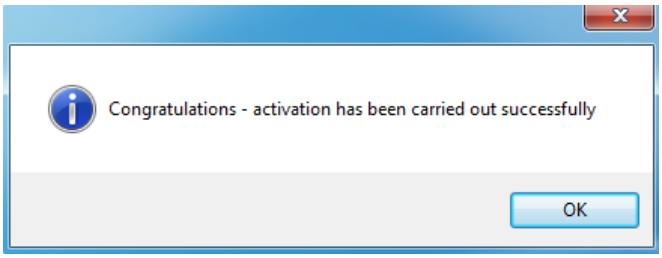

Activation
Online
Offline
Activation code
Activate
Close

5.1 Online Activation

Please note: Online activation requires an Internet connection. If there is no internet connection available please use the Offline Activation.

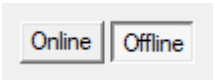
In the field "**Activation code**" please type in the information sent during realization of the order, afterwards click on "**Activate**".

An information window will pop up confirming the activation.

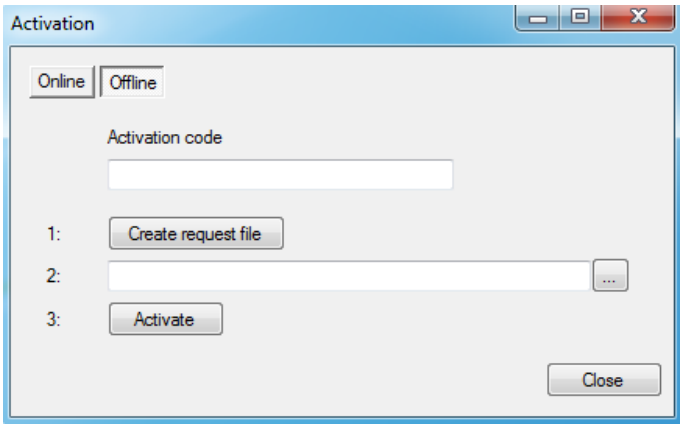


Once ZWCAD is launched, all functions of the program should be loaded and available.

5.2 Offline Activation

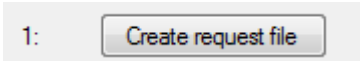
In the "**Offline**" tab 

additional steps are required to complete the activation.

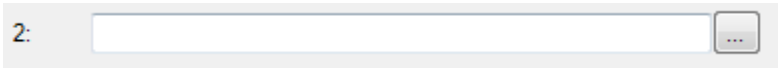


In the field "**Activation code**" please type in the information sent during realization of the order.

Afterwards it is necessary to click on "Create a request file", it will create an additional file which needs to be saved on the desktop or in any other directory of the computer.



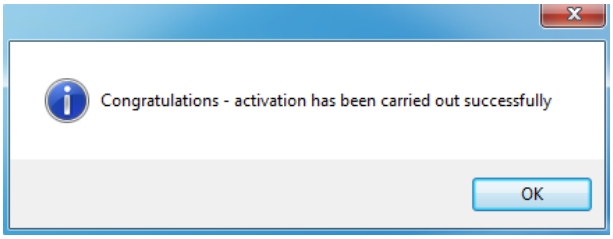
The file needs to be sent in a form of an attachment to, pomoc@zwcad.pl and a reply will consist of response file which then needs to be loaded in the activator:



Response file needs to be saved on the computer and its localization needs to be determined by clicking on the following icon ....

Once the response file is loaded, click on "**Activate**".

An information window will pop up confirming the activation.



Once ZWCAD is launched, all functions of the program should be loaded and available.

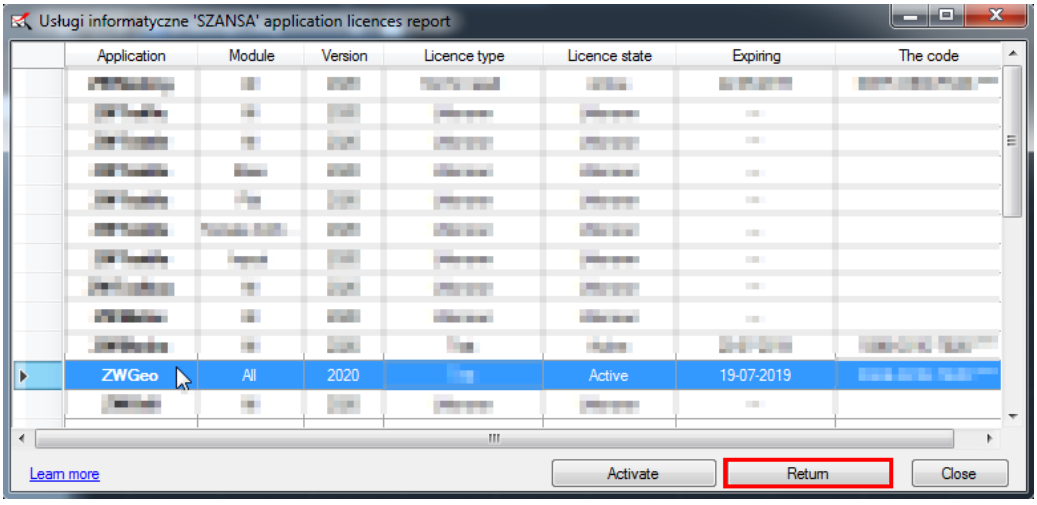
5.3 Transfer of a license

The license of UISZANSA applications in the form of a program code can be transferred to a different workstation.

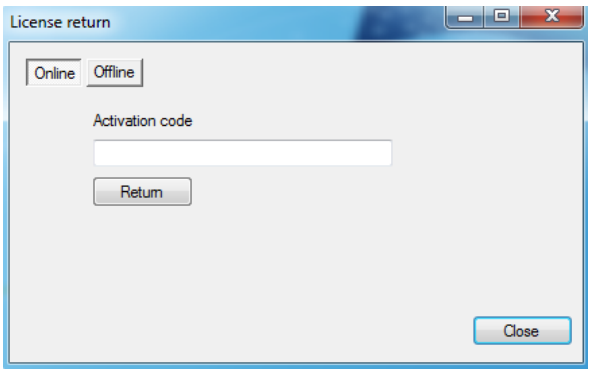
In order to transfer the license to a different computer, it is necessary to return the active license and once that is done, it will be possible to activate the license on a different Workstation.

5.3.1 Returning the license

License return is available in the UISZANSA Activator window.



Once "**Return**" has been clicked on, an additional window will appear in which it will be possible to return the license, either online or offline.

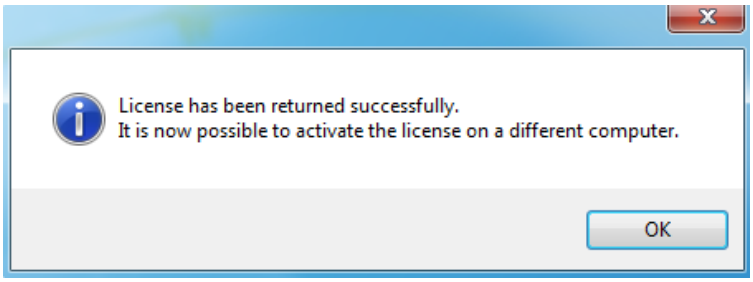


5.3.1.1 Online return

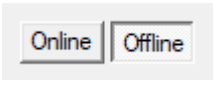
Please note: Online return requires an Internet connection. If there is no internet connection available please use the Offline return (3.1.2 Offline return).

To carry out the online return, please type in your license details followed by clicking on "**Return**" .

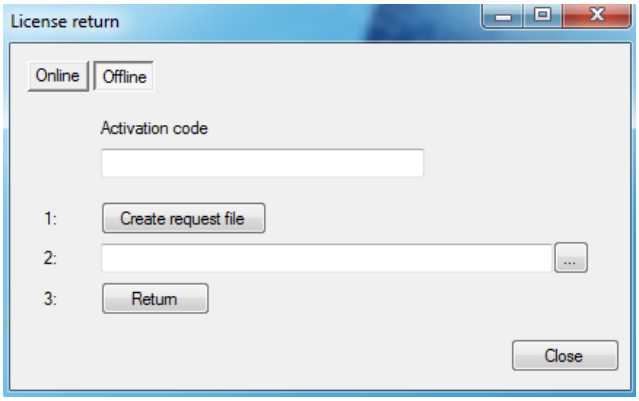
Once confirmed, the license will be usable on a different workstation.



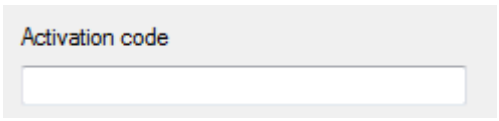
5.3.1.2 Offline return

In the „**Offline**" tab 

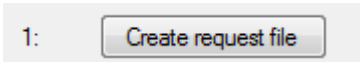
additional steps are required to complete the return of a license.



In the field „Activation code" please type in your license details.



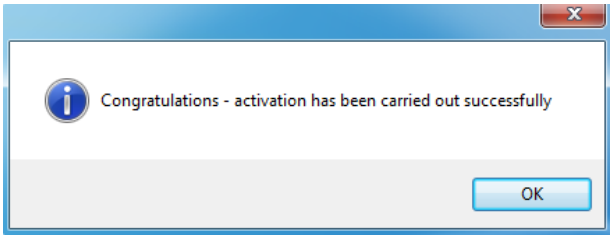
Afterwards it is necessary to click on "Create a request file", it will create an additional file which needs to be saved on the desktop or in any other directory of the computer.



The file needs to be sent in a form of an attachment to, pomoc@zwcad.pl and a reply will consist of response file which then needs to be loaded in the activator:

Response file needs to be saved on the computer and its localization needs to be determined by clicking on the following icon .

Once the response file is loaded, click on "**Return**"



Once ZWCAD is launched, all functions of the program should be loaded and available.

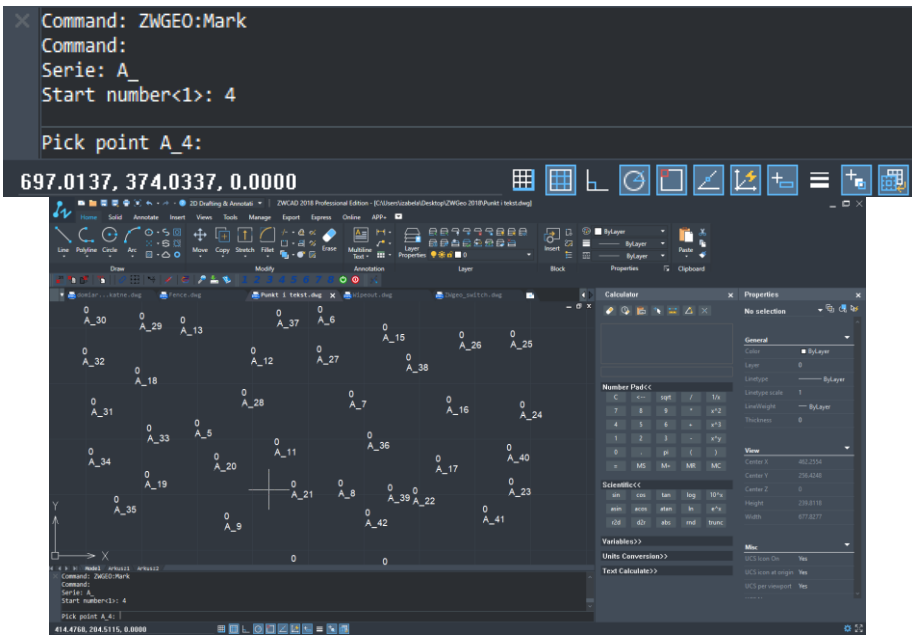
6 ZWGEO Commands

6.1 Mark points

`Command: ZWGEO:MARK`

Command let user mark points by insert point entity and text containing series and number in points clicked by User.

After run command User will be asked to input series and start number. After click each point in clicked point inserted will be point and text where number will be increased by 1 in each point.

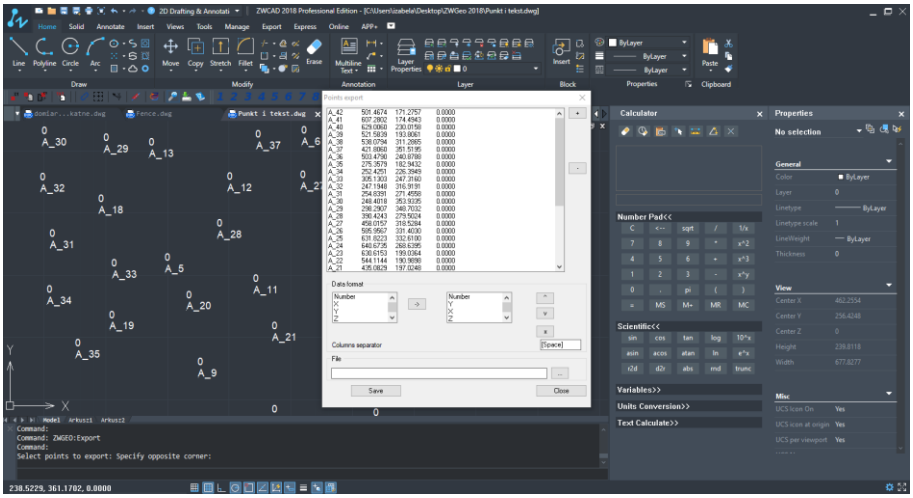


6.2 Save points

`Command: ZWGEO:EXPORT`

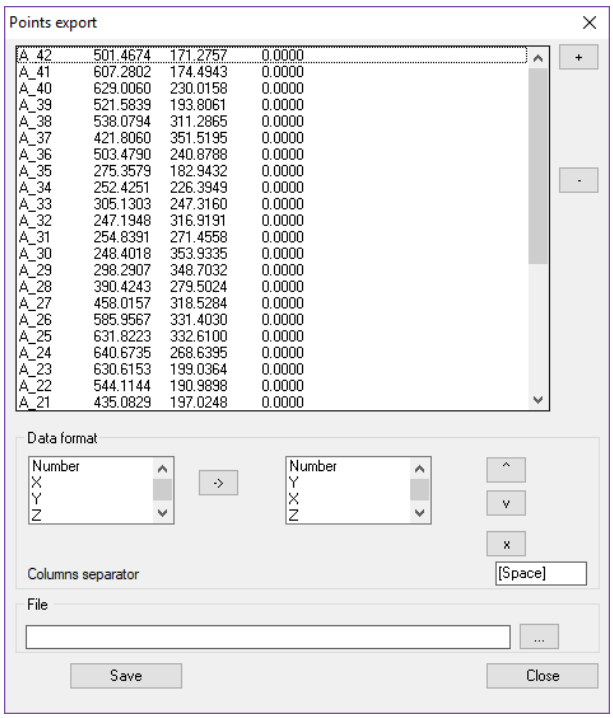
Command will export coordinates of points into text files.

After run command, application will display window:



In this window there is a list of points selected from drawing. If You want to select new points , click point [+] and application will ask You to select points. You can remove points from this list by [-].

In this window You can also define format of file, columns order and separator. And also You should write or select path to file where points will be stored. After click point [Save], points will be saved.

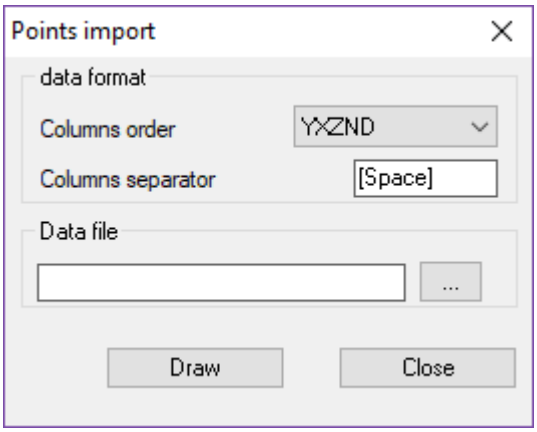


6.3 Load points from file

`Command: ZWGEO:IMPORT`

Command inserts into drawing points defined in text files.

After run command application will display window:

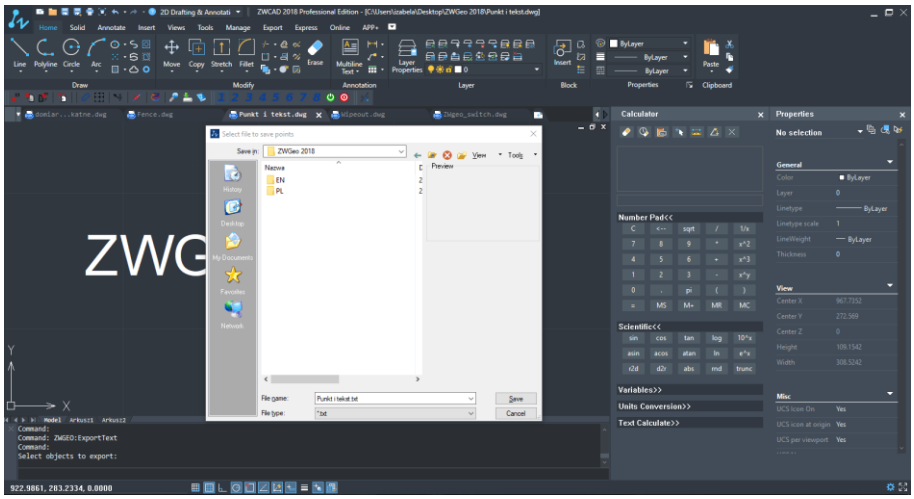


In this window User may select format of file with data, columns order and separator of columns, also User may select file with data. After click button [Draw], application will insert points , numbers and blocks symbols if contained on data file.

6.4 Save text to external file

`Command: ZWGEO:ExportText`

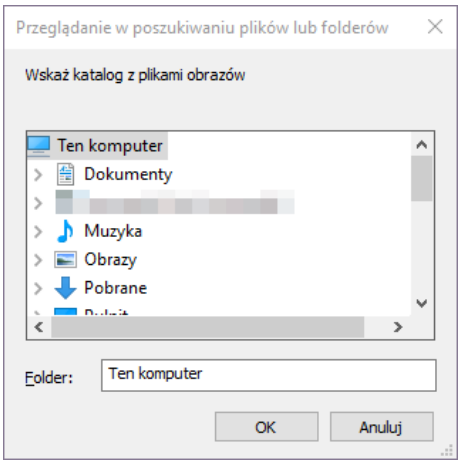
By this command You can export values of texts into external text file. After run command it's enough to select Texts or MTexts and path to text file where data will be stored.



6.5 Inserts all rasters images from folder

`Command: ZWGEO:RastersFromFolder`

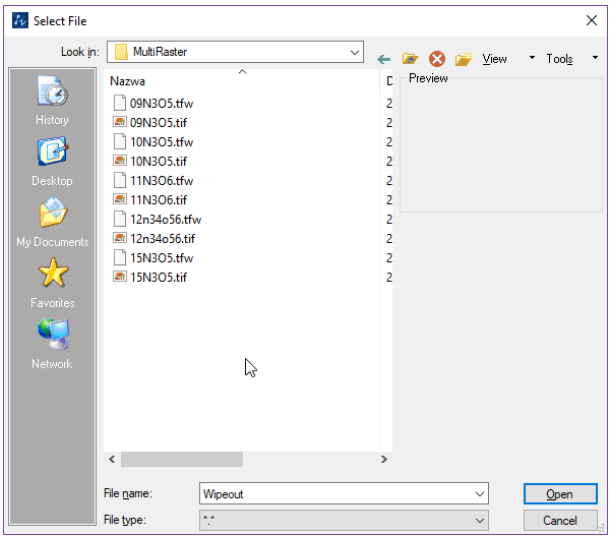
Insert all raster images from selected folder into project.



6.6 Inserts many selected raster images

`Command: ZWGEO:MultiRaster`

Function will let You select many raster images, and insert it automatically using positioning file.

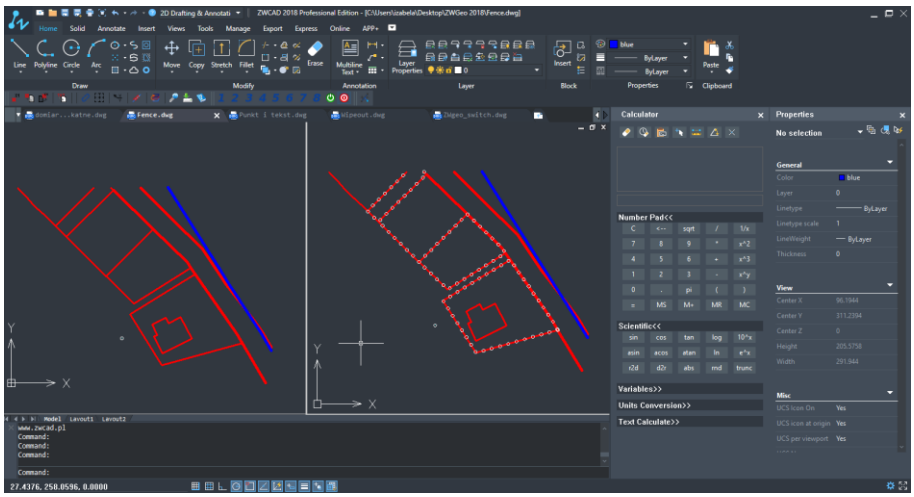


6.7 Insert fence markings

`Command: ZWGEO:Fence`

Draw fance by multiple copy of selected object along selected path. To draw such fence You should:

1. Draw symbol which should be copied
2. Draw axis of fence (lines or polylines)
3. Run command
4. Select symbol to copy
5. Pick base point
6. Write distance between symbols, by write numeric value or click two points
7. Select fence objects, the same drawn on point 2.



On picture above You can see project before and after run command.

6.8 Insert coordinates descriptor

`Command : ZWGEO:MarkCoordsWithLeader`

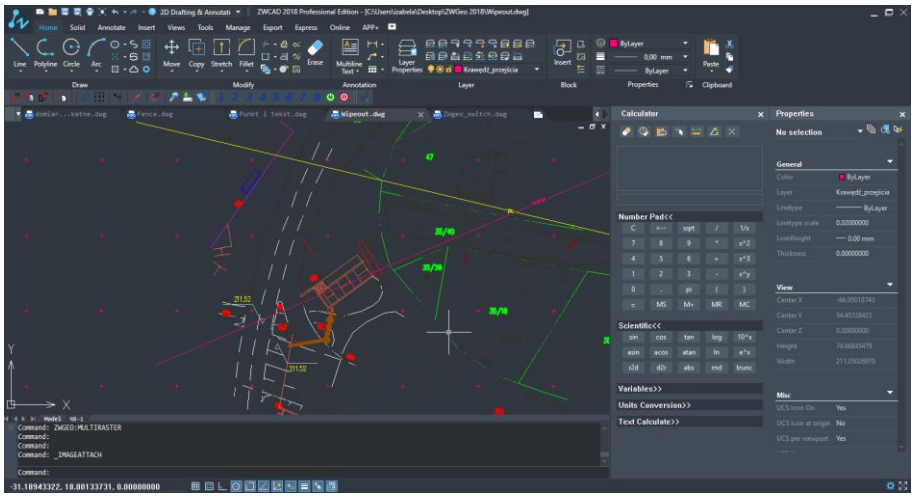
By this command You can mark points in project by descsribe coordinates X and Y.

Application will ask You to pick point and insert description block in picked point, If You click next points, there will be leader connecting first click point with the rest of points, and description block will be always on last picked point.

6.9 Insert array of crosses

`Command : ZWGEO:MarkCrosses`

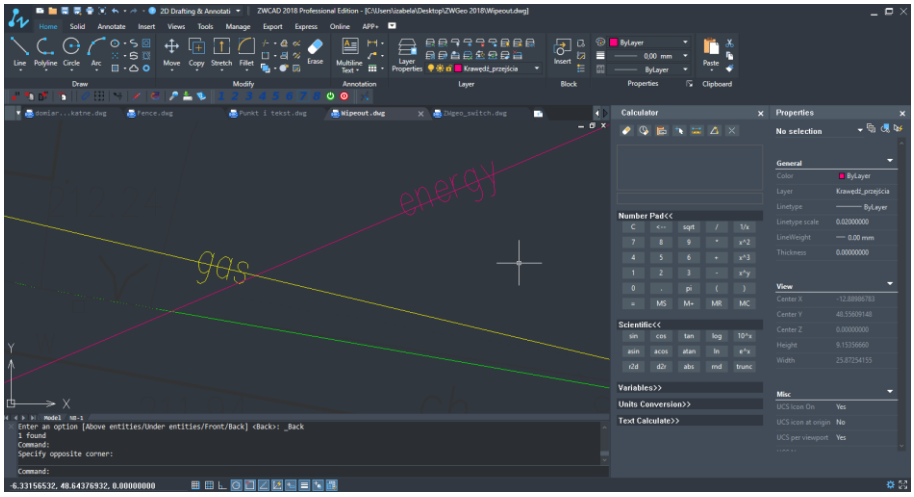
Command will draw array of crosses in range – windows selected by two oposite points.



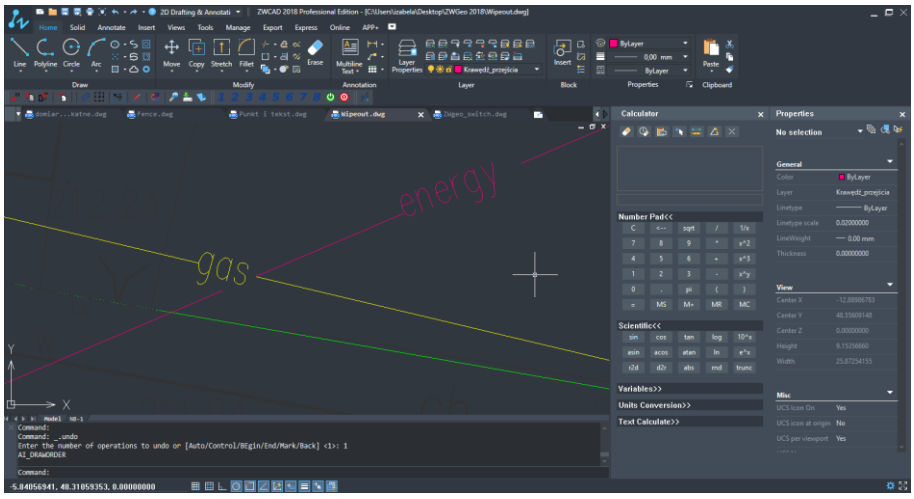
In the command bar You have to specify distanse between cross marks.

6.10 Mask entities lebow MText

`Command : ZWGEO:Wipeout`



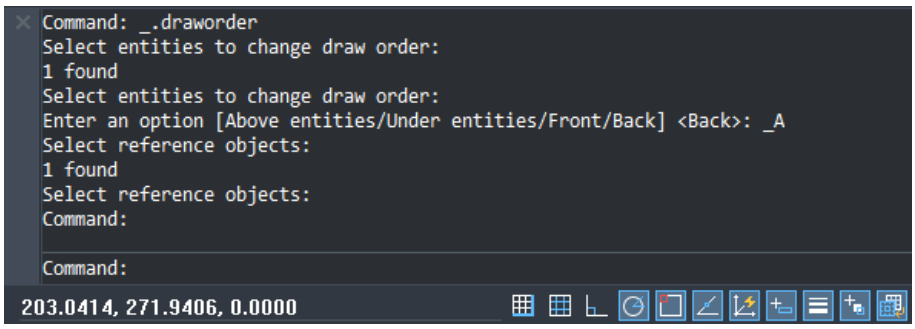
This command help You to make drawing more readable by covering objects under MText by wipeout. All You need to do is run command and select MText entity. Everything under this MText will not be visible, but it will there like line on picture above, will not be split into two separate lines but only not visible in rande under MText.



6.11 Move Above

`Command: ZWGEO:MoveAbove`

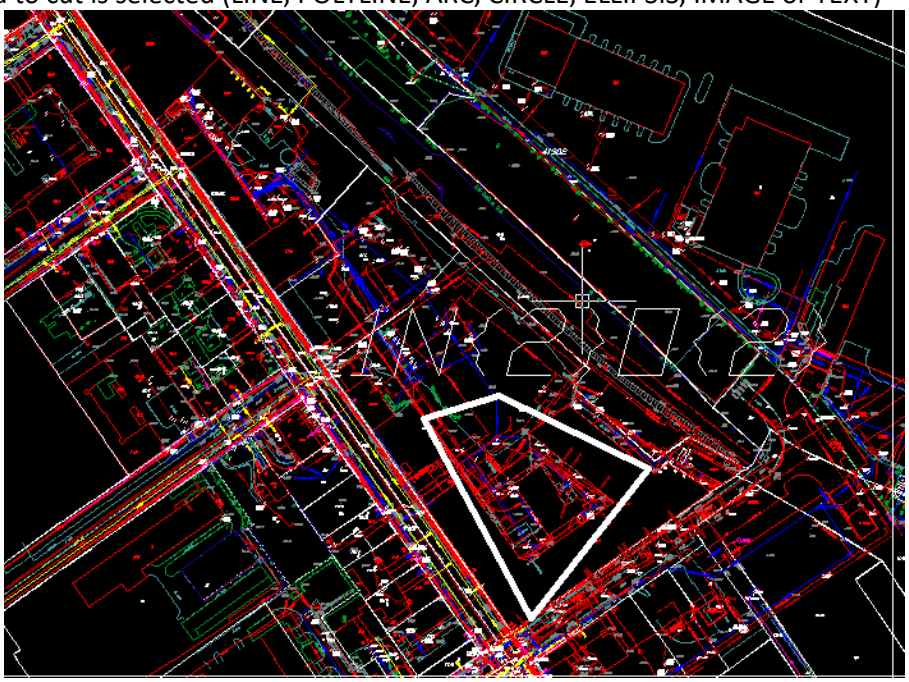
This command is very usefull with connection with previous one. In such example You should run command ZWGEO:MoveAbove and select those entities, which should be over the other ones, and then select one entity which should be at the bottom of draw order.



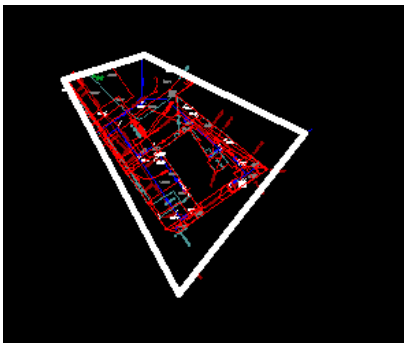
6.12 Map Cut

Command : ZWGEO:TrimMap

Maps can be cut by using a single button. Select an area outside of a closed polygon. Once an area to cut is selected (LINE, POLYLINE, ARC, CIRCLE, ELLIPSIS, IMAGE or TEXT)



And an area outside of the cut line, the effect will be similar to the one presented below:



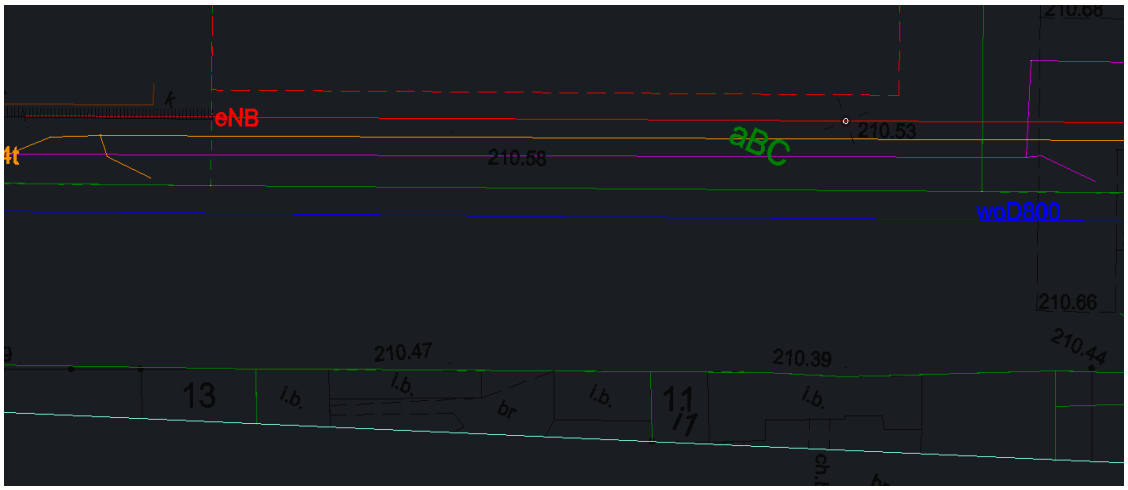
This functionality makes work much smoother and easier.

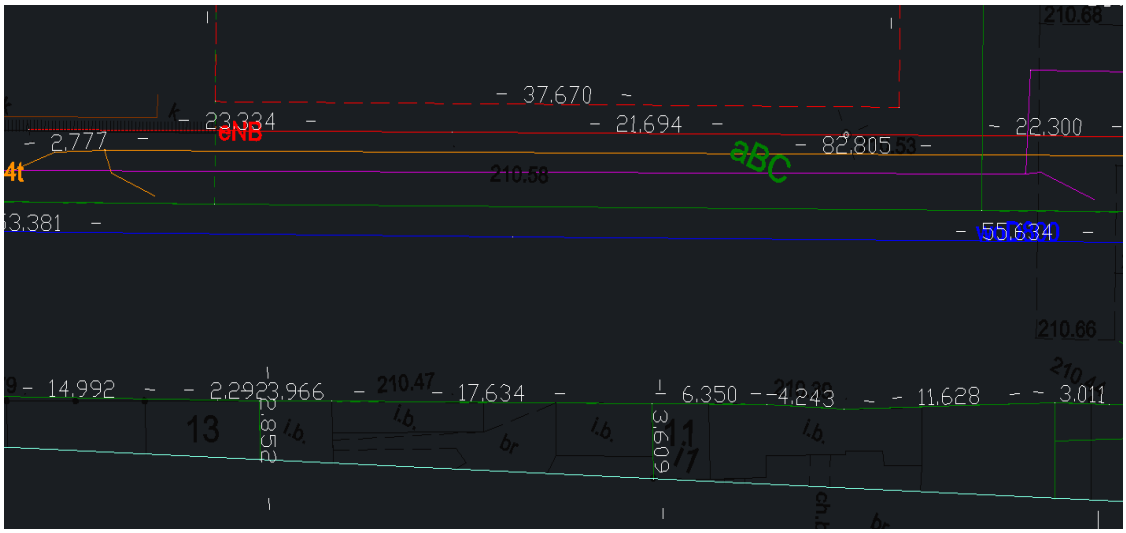
Cutting maps is considered as a work improvement since at the end of the design process, almost always maps require manual cutting, as the terrain is too large and as confirmed by many users, this part of work is the most time consuming one when working on maps.

6.13 Front Measure -250-

Command: ZWGEO:FrontMeasure

Front measure can be used to add lengths of certain segments such as cabling or pipes.



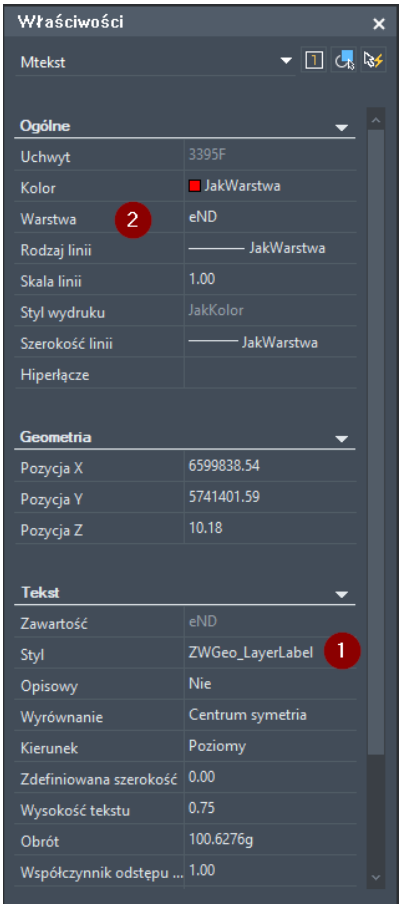


6.14 Layer label -x100-

Command: ZWGEO:LayerLabel

When we run the layer label command, we will have to select polylines and in the middle of (1), (2), (3), (4) eND (name of the layer) will be shown:

Layer label (1) adds a description to each segment of a selected polyline as well as the name of the layer (2)

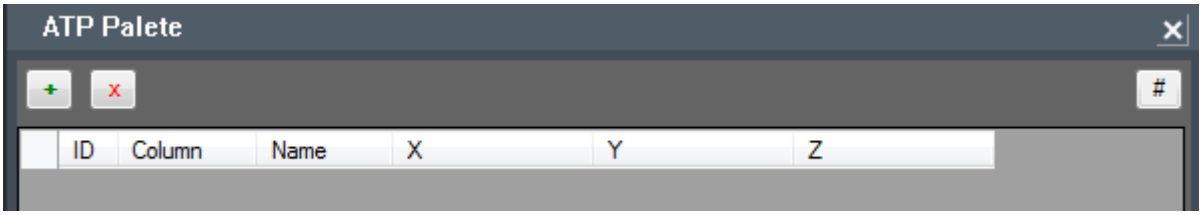


6.15 Active Points Table

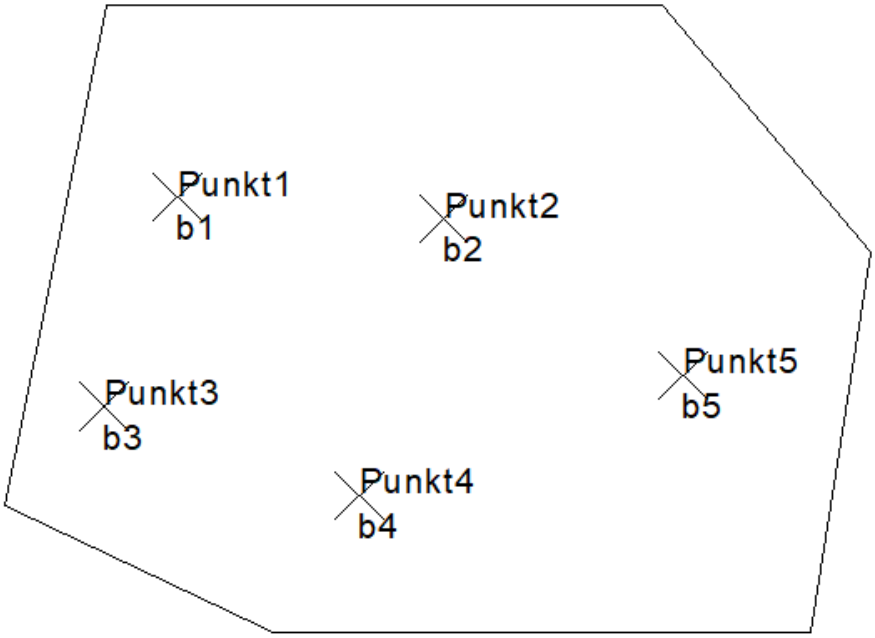
Command : ZWGEO:ATP_START

Function can be run by using the command ATP_START

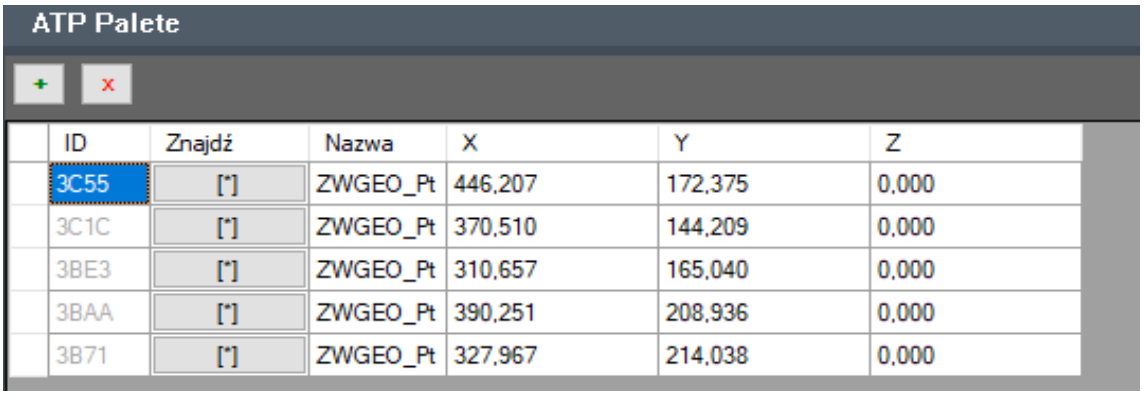
Once the function is started, the following table will appear:



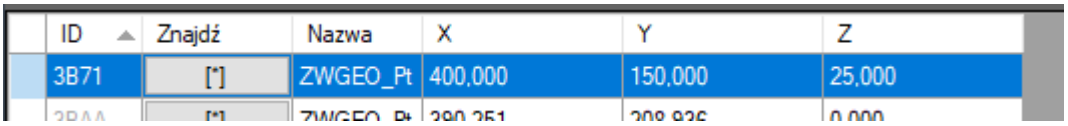
To which we can add points from drawing with this button or we can type in ATP_ADD into the command bar and select objects (points in this case), just as presented below:



We will get the following result:

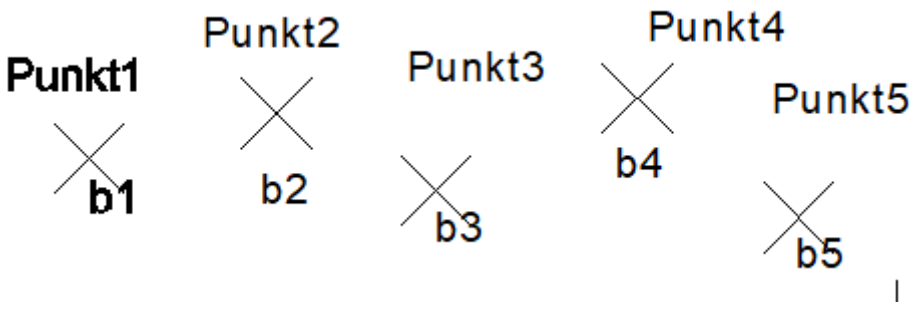


This is the way how points have been added to the table. When changing properties in the table, the changes in the drawing are applied automatically.



After changing coordinates of Point1, it will move to a different place.

It is also possible to move points in the model:

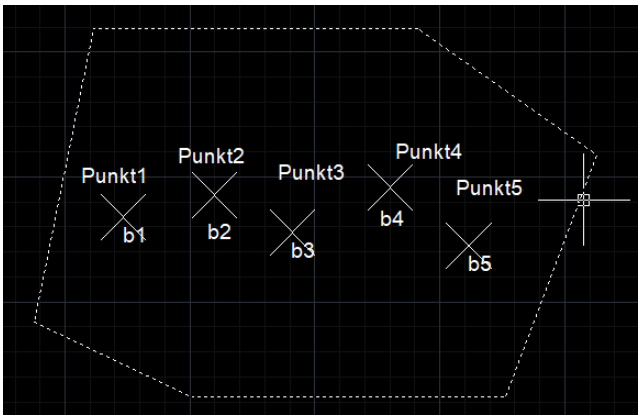


Active Poitns Table will adjust values accordingly to their new position:

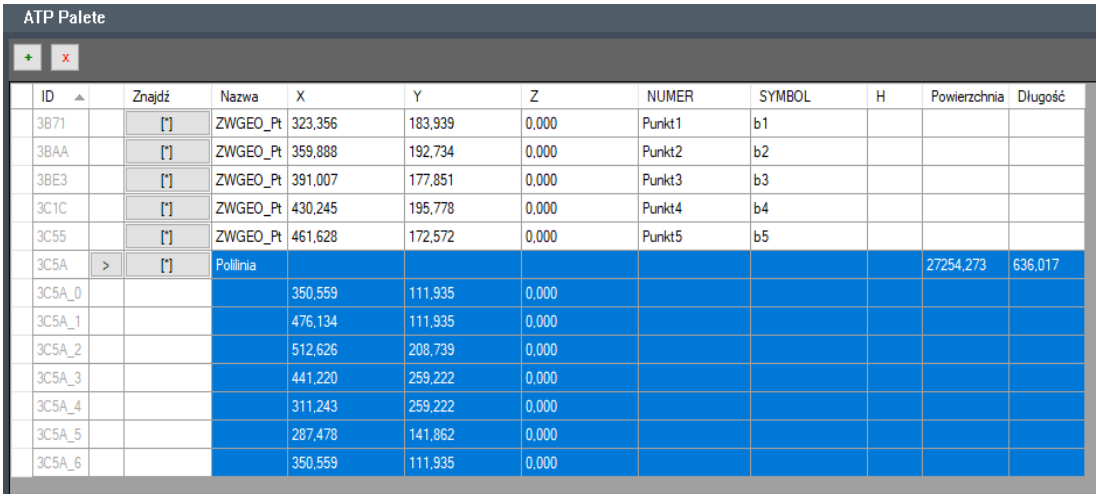
ATP Palete

ID	Znajdź	Nazwa	X	Y	Z	NUMER
3B71	[*]	ZWGEO_Pt	323,356	183,939	25,000	Punkt1
3BAA	[*]	ZWGEO_Pt	359,888	192,734	0,000	Punkt2
3BE3	[*]	ZWGEO_Pt	391,007	177,851	0,000	Punkt3
3C1C	[*]	ZWGEO_Pt	430,245	195,778	0,000	Punkt4
3C55	[*]	ZWGEO_Pt	461,628	172,572	0,000	Punkt5

Once a selected polyline is added into the table:



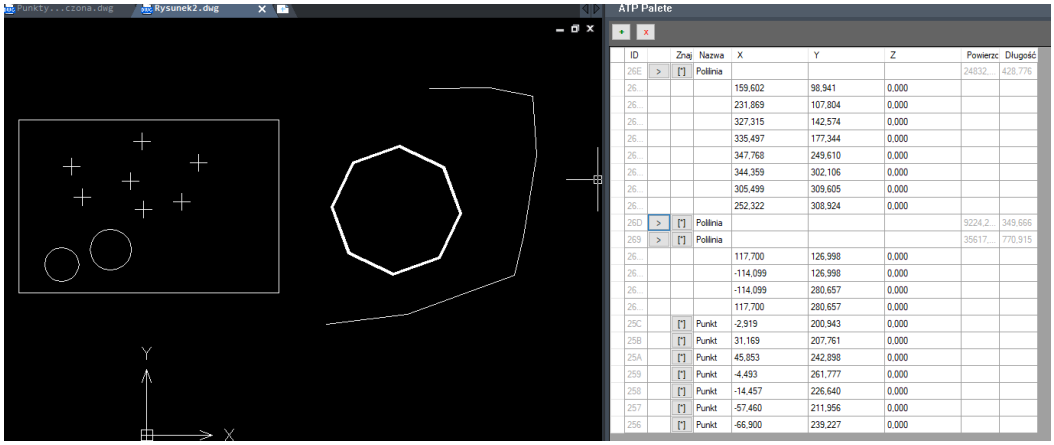
The table will display all information regarding coordinates of polyline vertexes, its area and peremiter.



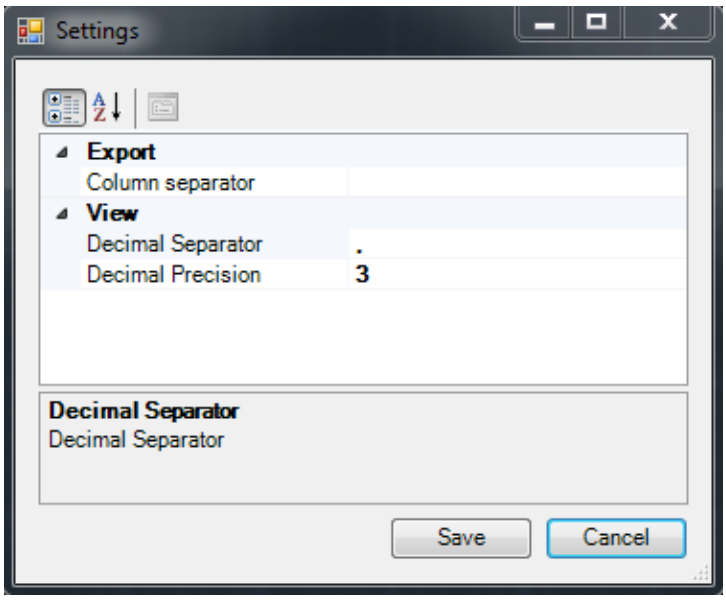
Any changes to polyline vertexes will be automatically applied within the table.

Active Points Table handles:

- Points,
- Group of objects,
- Attribute blocks
- Polylines.



To access settings, click on this icon or type in the command ATP_SETTINGS. Following parameters can be adjusted:



6.16 Activate ZWGeo 2021

Activation has been described in point 5 of the user manual.

6.17 Updating ZWGeo 2021

ZWGeo 2021 as well as other applications provided by UI SZANSA Get periodical updates to the applications. In order to check if an update is available, click on the corresponding icon.

6.18 ZWGeo 2021 User Manual

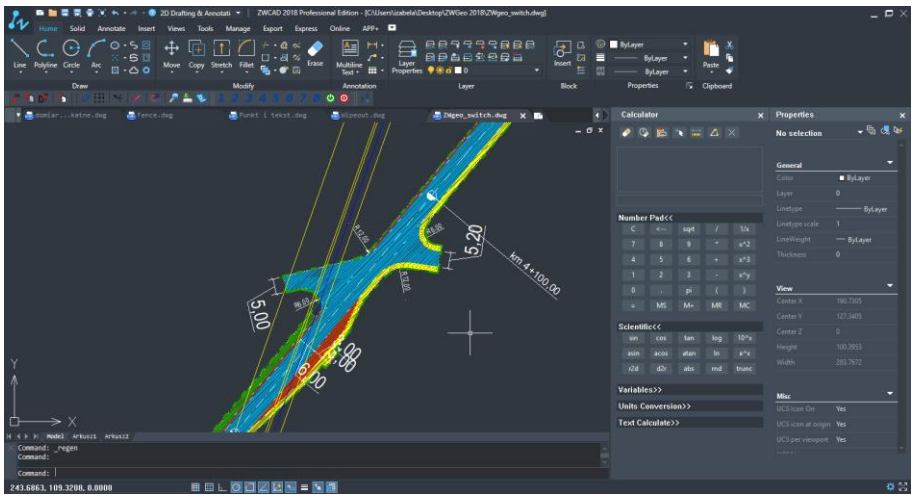
User manual is launched after clicking on the icon. The manual is opened in a PDF program.

7 ZWGEO Switch

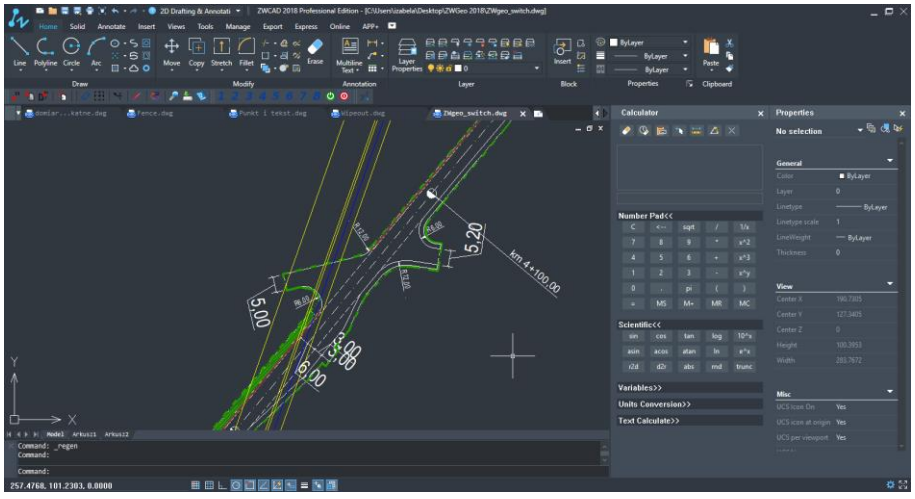
Function bar responsible for the creation of groups of objects by specifying their visibility.

7.1 Turn on\off group 12345678

After run the command, indicate the items that will be one of the first group of objects. After selecting the items and then approve the Enter, previously selected objects will not be visible. To enable it You have to run the command. In this way, the User can quickly turn on and off groups of elements in the drawing.



The User can made eight groups of objects in the drawing, they are formed in an analogous manner.



7.2 Turn on\off all groups ON OFF

Functions allow You to turn off or turn on all previously defined object groups 1-8.

8 Calculation module

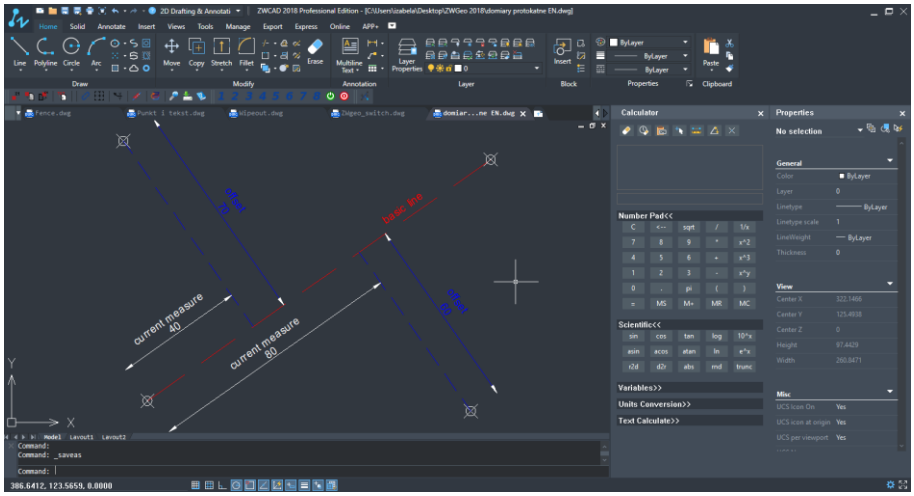
8.1 Rectangular offset

Offsets square is a function used to measure the details terrain.

After activating the function, indicate two points on the base line.

Then please specify the distance and offset

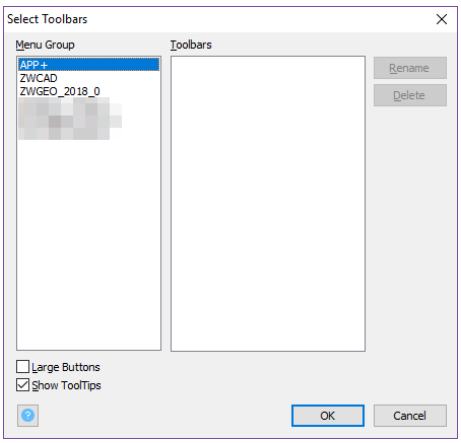
The location corresponding to the entered value will be inserted point.



9 Additional information

9.1 Icons are not visible after installation

After install ZWGEO and run ZWCAD, icons should be visible. If You use Ribbon interface, Icons may not be visible, in this case run command `_Toolbar`.

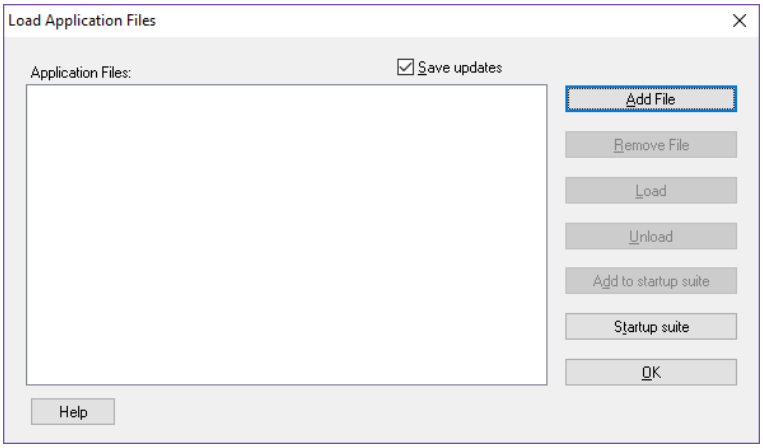


On displayed window please activate tab „Toolbars”. In list please select ZWGEO, and next please mark field ZWGEO 2021. After close window, Toolbar should be visible.

If on this window, there is no ZWGEO 2021, application is not loaded. In this case please follow steps from point:.

9.2 Manual application load

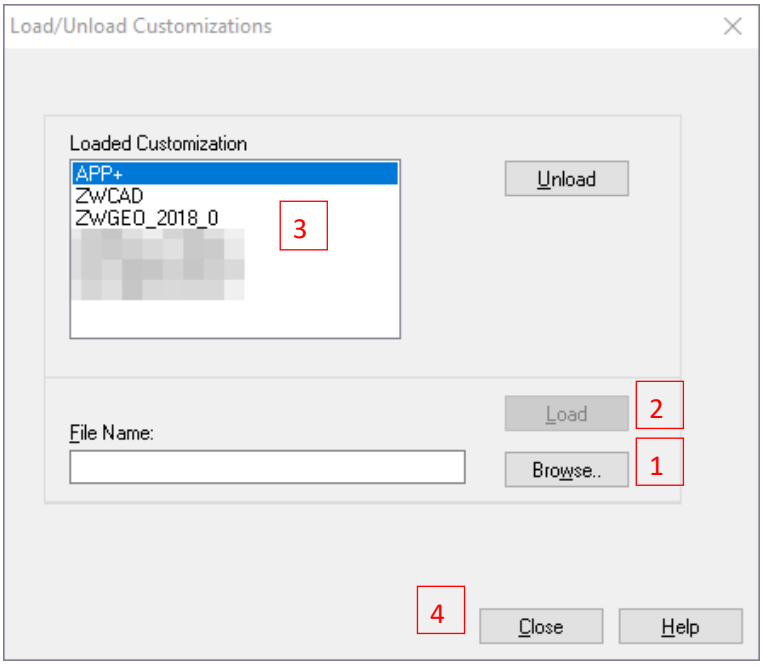
After installation of application, it should be automatically load to ZWCAD. Function should be available and toolbar with icons should be visible. If for some reasons it’s not load automatically, You should load in manually. To do it, You should follow steps:Run command _appload and You will see window:



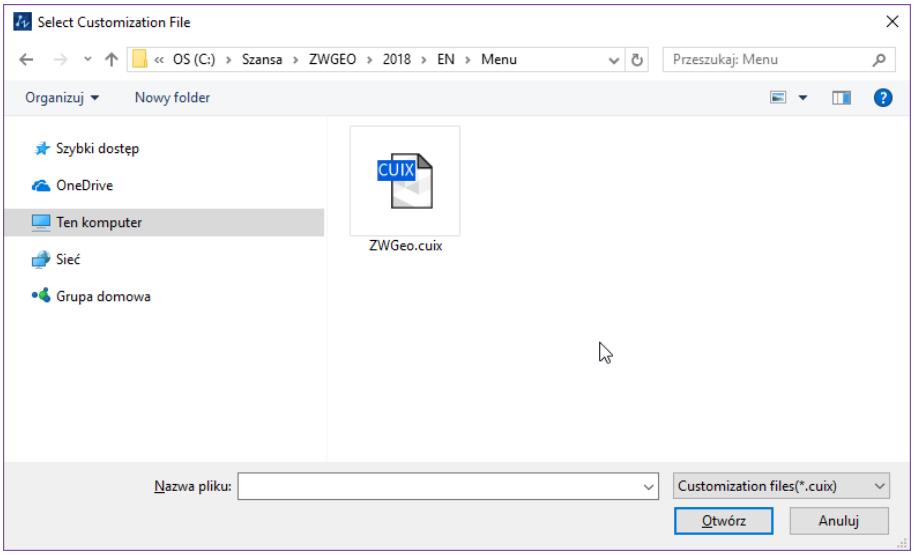
1. Click Add File.
2. In new open window change default extension to .zel. than find path where application have been installed. Default its C:\Szansa\ ZWGEO\2021\EN, select file ZWGEO.zelx and click Open.
3. On appload window click Load to load application,
4. If You want application to be loaded automatically each time You run ZWCAD, please select ZWGeo.zelx on list of files to load, and click button Add to startup suite.

9.3 Manual menu load

1. In command line please type „_menuload” ZWCAD will display window.



2. Please press button [Browse] [1]. In new window.



Please find file „ZWGEO.cuix”. Default location of this file is:

`C:\Szansa\ZWGEO\2021\EN\Menu\`, but You may change it in time of installation.

3. Select file and press [Open].
4. Load file by press „Load”[2].
5. On list [3] new item will be display, that confirms correct load of menu.
6. By button „Close”[4] You may close window. On main window of ZWCAD, new toolbar with icons will be display.