

GISEYE GIS Development Kit

1. Software tasks.

GISEYE GIS Development Kit (GDK) is a set of ActiveX components that can be used when developing the applications in different environments based on different programming languages.

2. System requirements.

- Microsoft Windows 2000/XP/Vista or higher
- Intel Pentium-III processor or higher
- 128Mb of RAM
- Display mode 1024×768 TrueColor

3. Software graphic interface.

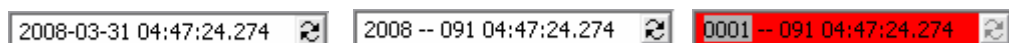
GISEYE GDK currently has 5 components, enabling to do the following:

- Time conversion;
- Geographic coordinates conversion;
- Distance conversion;
- Latitude\longitude conversion;
- Conversion of angles into different presentation and numerical systems;
- Handle a set of map projections presented as a list;
- Select directories or files with the possibility to check validity\presence of selected object on-the-fly.

Let's dwell on each of the Active X components.

4. MagicTime.

This ActiveX enables to do time/date conversion of «year-month-day hours:minutes:seconds» format into « year-GMT day hours:minutes:seconds» and vice versa.



Interface of this component has the data-entry field and the toggle button. Date/time values can be specified manually or via the clipboard using the context menu. Local time can also be set up by selecting the corresponding command from the context menu.

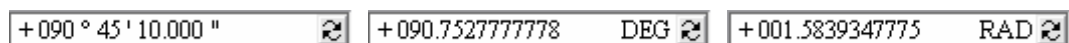
To do the conversion it is required to press the toggle button located to the right of the entry field. The date/time values will be displayed in other format as a result.

Conversion results can be copied to clipboard by selecting the «Copy» command from the context menu. If an incorrect value is entered, the field will be highlighted in red and the conversion button becomes unavailable.

5. MagicLatLong.

This ActiveX enables to do geographic coordinates conversion (latitudes/longitudes) into the following formats: fractional degrees – degrees-minutes-seconds – radians and vice versa.

This component interface contains the data-entry field and the toggle button.



Geographic coordinate values are specified manually or via the clipboard.

To convert latitudes/longitudes, press the toggle button located to the right of the data-entry field. Latitudes/longitudes will be displayed in other format as a result. Data-entry field contents can be copied into the clipboard using the «Copy» command from the context menu.

6. MagicPoint.

This ActiveX component enables to operate with a set of coordinates. This control represents a list of coordinates, containing three columns. The first column displays the ordinal number of coordinates, presented in the list. The second and third columns contain X and Y values of coordinates. More coordinates can be added using "Add" button, located below the list. Added coordinates can be edited after double clicking with left mouse button on the list element. The field being edited is outlined with a frame with a pointer. X and Y values of coordinates are edited independently. Editing can be completed by pressing "Enter" keys, by switching the focus to another coordinate or in case of losing focus of the entire control element.

Nº	X	Y	
1	1500.0000000000	300.0000000000	
2	1700.0000000000	500.0000000000	
3	1850.5700000000	653.1700000000	
4	2010.1222000000	768.5900000000	
5	2346.8960000000	863.5920000000	

Undo
Cut
Copy
Paste
Delete
Select All
Open IME
Reconversion

List of coordinates can be saved to a file using the "Save" button under the list. The "Load" button can be used to load the coordinates list into the control element.

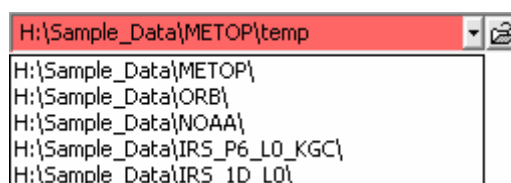
Loaded coordinates file should be in form of lines, each containing two numerical values of floating point type separated with space. The number of loaded coordinates should not exceed 100.

Coordinates can be deleted by selecting the required elements in the list and pressing the "Delete" key. They can also be deleted using the right-click menu.

7. MagicPath.

This ActiveX component enables to select directories or files (group of files, files masks) with the option to check validity/presence of the selected object on-the-fly.

This component has a data-entry field to put in the path to the file or folder and a directory or file selection button, located to the right of the data-entry field.



Path to the folder or to the file can be entered manually or via the clipboard by pressing the right mouse button and selecting the corresponding command from the context menu. This context menu also contains commands to copy and delete the text.

This ActiveX component can operate in different modes.

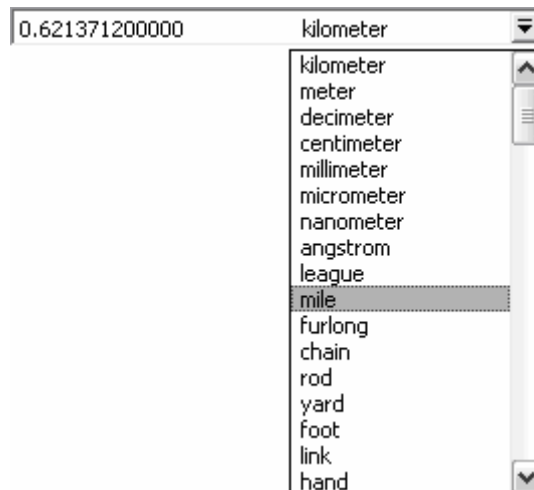
1) With directories without the list of previously selected directories (recent list). A path to the folder of interest is entered in the field, whereas the selection button opens a standard dialog with the folder tree on your PC.

- 2) With files without the list of previously selected directories (recent list). A path to the file of interest is entered in the field, whereas the selection button opens a standard file selection dialog.
- 3) Both abovementioned modes have similar functional, but with the option to work with the list of recently selected objects. In this case an additional button appears to the left of the selection button, opening recent list.
- 4) With a group of files. Names of several files, with double quotation marks and separated by space, are entered into data-entry field.
- 5) With file masks. Directory with the file extensions is entered into the field, specifying *. instead of the file name.

Application checks for the presence of the selected object(s) on-the-fly. In one of the selected files is missing, the data-entry field turns red.

8. Magic Distance

This ActiveX component enables to recalculate the distance into the user-defined measurement unit. Interface of ActiveX component consists of the distance-entry field and the list button. A drop-down list of available measurement units opens when the list button is pressed.



Numeric value of distance is entered manually or via the clipboard using the context menu. To recalculate the distance, select the corresponding measurement unit from the drop-down list. The "post-recalculation" distance will be displayed in the data-entry field as a result.