

Language / Sprache

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Examples as VO source code

KilletSoft has developed a very extensive program with examples demonstrating the wide variety of graphical capabilities included in the Graphics Development Kit Graphics4VO. The executable program and the complete VO source code can be downloaded from the URL <http://www.killetsoft.de/zip/graphdem.zip>. Use the examples to embed graphic elements by copy and paste in your own VO programs.

Graphics4VO

Graphics Development Kit for the programming language Visual-Objects

Graphics4VO is developed for use with Visual Objects (Version 2.0, 2.5, 2.6, 2.7 and 2.8). It is based on 32Bit-WINDOWS-API. The Graphics Development Kit allows development of graphics oriented Visual Objects applications for both 32Bit and 64Bit Windows operating systems.

Graphics4VO is an add-on library providing graphic capabilities for VO GUI classes. Existing programs can be enhanced to produce graphic images with very little extra code.

The Graphics Development Kit Graphics4VO includes classes, methods and functions for integration of graphic elements into Windows applications. It could be used to add graphics to existing applications with minimum labor, or for new development. Knowledge of Windows graphics handling or of Windows API-programming is not required.

With the Graphics Development Kit Graphics4VO various graphics output on the screen, to the printer, to the plotter, into the bitmap- and metafile and into the memory bitmap are possible. Beside elementary pixel graphics and graphic primitives a lot of business and presentation graphics is provided such as bar charts, pie charts or line charts, mathematical coordinate systems, function graphs and fractals in a simple way. Beyond that graphics from other programs or scanned pictures in files with different bitmap or vector graphics formats or ArcView shapes can be imported into the own application. Efficient coordinate transformations into world coordinate systems save the conversion work and guarantee the uniform representation on different devices. The GUI classes made available by Visual Objects receive ability to graphic representation by Graphics4VO. The implementation of graphics into existing programs is very simple therefore to accomplish.

The Graphics Development Kit is based upon a very fast graphics display mechanism that allows an exceptionally quick screen drawing. Repainting of an uncovered window is performed from an internal image-bitmap at a speed that makes it not noticeable to the eye. There is no need for the subsequent reconstruction of graphics.

Classes, methods and functions for producing graphic output in user applications are available with declarations in both English and German language in the source headers and in the documentation.

Graphics4VO is available as DLL for download from the internet address http://www.killetsoft.de/p_gvoa_e.htm as **shareware**. The application, into which Graphics4VO is linked, makes attentive on the shareware status by an occasionally faded in small reference display window. The shareware version may not be used in commercial programs.

Graphics4VO can be used also as **full version** in commercial programs, if the unlock parameter for the DLL or the documented source code from the manufacturer are acquired under the internet address specified above. Under that internet address are also a price list and the license conditions to be found. By unlocking or the use of the source code no more reference display windows are indicated.

Graphics4VOs functionality is demonstrated with a comprehensive fully functional sample program that can be downloaded from the same internet site. The source code of the sample program is in the graphtst.aef file. It contains multiple programming examples, which should be helpful for using and developing graphic routines in your own applications.

Operating systems

Applications developed with Graphics4VO should run under Microsoft **WINDOWS 95 / 98 / 2000 / NT / XP / VISTA / 7 / 8 / 10** and all operating systems compatible with Visual Objects development suite.

Installation

Graphics4VO is distributed on a CD-ROM or it can be downloaded from the internet.

Important: before starting installation close all running applications, except for the Windows Explorer. Running applications can use files needed by the installation program. Failure to close running applications can cause Windows to crash, which is more of inconvenience, rather than of any significant consequence. In case Windows crashes during installation restart the computer.

Installation from CD-ROM

Insert the CD-ROM into the CD-ROM drive. Start the Windows Explorer. Navigate to the CD-ROM icon to display the contents of the CD-ROM. Click on the program g4vodll_setup.exe in the Graphics4VO directory. The installation will start.

Installation from the Internet download file

After the download from the Internet use PkUnZip or WinZip decompression utility to uncompress the download file into a folder of your choice. In that folder locate the program g4vodll_setup.exe and click it. The installation will start.

Import into the Visual Objects Repository

After the installation some files are available for the import into the development system. Please use the files like described below.

Since some files are dependent on the used Visual Objects version, different DLLs and AEFs are put down in subdirectories of the installation directory:

Subdirectory **VO20**: for using with Visual Objects **version 2.0**

Subdirectory **VO25**: for using with Visual Objects **version 2.5**

Subdirectory **VO26**: for using with Visual Objects **version 2.6**

Subdirectory **VO27**: for using with Visual Objects **version 2.7**

Subdirectory **VO28**: for using with Visual Objects **version 2.8**

graphlib.dll

This file contains the Graphics Development Kit Graphics4VO as a DLL. It must be present in the calling directory of the application using the DLL and in the **BIN directory** of Visual Objects.

Since the graphlib.dll is dependent on the used Visual Objects version, different DLLs are put down in subdirectories of the installation directory like described above.

If there are no subdirectories with Visual Objects dependent versions of graphlib.dll these files are differentiated by their names. After the selection of the desired Visual Objects version the file must be renamed to the original file name:

Rename **gralib20.dll** to **graphlib.dll** for Visual Objects **version 2.0**

Rename **gralib25.dll** to **graphlib.dll** for Visual Objects **version 2.5**

Rename **gralib26.dll** to **graphlib.dll** for Visual Objects **version 2.6**

Rename **gralib27.dll** to **graphlib.dll** for Visual Objects **version 2.7**

Rename **gralib28.dll** to **graphlib.dll** for Visual Objects **version 2.8**

graphint.aef

This is the interface for the graphics library Graphics4VO. This file must be imported into the Visual Objects Repository. The application receives there from the classes, method and function calls on the graphics library contained in graphlib.dll.

Since the file graphint.aef is dependent on the used Visual Objects version, different AEFs are put down in subdirectories of the installation directory like described above.

If there are no subdirectories with Visual Objects dependent versions of graphint.aef these files are differentiated by their names. After the selection of the desired Visual Objects version the file must be renamed to the original file name:

Rename **graint20.aef** to **graphint.aef** for Visual Objects **version 2.0**

Rename **graint25.aef** to **graphint.aef** for Visual Objects **version 2.5**

Rename **graint26.aef** to **graphint.aef** for Visual Objects **version 2.6**

Rename **graint27.aef** to **graphint.aef** for Visual Objects **version 2.7**

Rename **graint28.aef** to **graphint.aef** for Visual Objects **version 2.8**

graphtst.aef

The file contains the source code of the examples program. The source text as composition of many examples can be used to develop own applications with graphic components. The file can be imported into the Visual Objects Repository.

Since the file graphtst.aef is dependent on the used Visual Objects version, different AEFs are put down in subdirectories of the installation directory like described above.

If there are no subdirectories with Visual Objects dependent versions of graphtst.aef these files are differentiated by their names. After the selection of the desired Visual Objects version the file must be renamed to the original file name:

Rename **gratst20.aef** to **graphtst.aef** for Visual Objects **version 2.0**

Rename **gratst25.aef** to **graphtst.aef** for Visual Objects **version 2.5**

Rename **gratst26.aef** to **graphtst.aef** for Visual Objects **version 2.6**

Rename **gratst27.aef** to **graphtst.aef** for Visual Objects **version 2.7**

Rename **gratst28.aef** to **graphtst.aef** for Visual Objects **version 2.8**

There are some conditions, which must be fulfilled for the enterprise of the samples program. After finishing the installation please let all files in the installation directory and the subdirectories. Import first the interface file graphint.aef into your CAVO Repository. Import thereafter the samples

program `graphtst.aef`. Load the entity "getPfad" from the module "_ Functions" into the editor. Change the indication of path in the line "`gcPfad: = ' C:\PROGRAMM\...`" with the path of the subdirectory "demo" of the installation directory.

Example: "`C:\Graphics4VOInst\demo`"

If you regard the few lines of source code in the editor notice that the file "KILSOFT.ICO" must be present in the "demo" directory, so that the samples program can find all necessary graphics, help and other files. Before compiling the program there must be changed some resources in the module "_ Resources" with the path of the "demo" directory. Please do not forget to link the graphics interface in the repository under Application / Properties / Libraries.

graphlib.aef

This file contains the complete source code of the Graphics Development Kit. This file is present only if acquired a license containing the source code.

Since the file `graphtst.aef` is dependent on the used Visual Objects version, different AEFs are put down in subdirectories of the installation directory like described above.

If there are no subdirectories with Visual Objects dependent versions of `graphtst.aef` these files are differentiated by their names. After the selection of the desired Visual Objects version the file must be renamed to the original file name:

Rename **gralib20.aef** to **graphlib.aef** for Visual Objects **version 2.0**

Rename **gralib25.aef** to **graphlib.aef** for Visual Objects **version 2.5**

Rename **gralib26.aef** to **graphlib.aef** for Visual Objects **version 2.6**

Rename **gralib27.aef** to **graphlib.aef** for Visual Objects **version 2.7**

Rename **gralib28.aef** to **graphlib.aef** for Visual Objects **version 2.8**

The file must be imported into the Visual Objects Repository and is used there as internal library. If the message "Library UNLOCK not found" is shown while import, you can ignore these without loss.

There is a DEFINE named `USE_UNLOCK` in the module `_readme`. You must set this DEFINE to FALSE. The DEFINE is used to add an unlock function to the DLL version of Graphics4VO.

There is a DEFINE named `USE_CAPAINT` in the module `_readme`. Set the DEFINE to TRUE if you wish to use CA-Paint for additional graphics file formats PCX, TIF, PNG, TGA, and PCT. Set it to FALSE if you wish to use the standard graphics file formats BMP, JPG, GIF, EMF, WMF, RLE, DIB, ICO and CUR only.

There are two DEFINES named `CURHAND` and `ICOKILSOFT` in the module `_resources`. You will need to change the paths for them to your development environment. The two resource files are contained in the supplied zip file.

To use graphics with your own applications please link the Library "Graphics4VO Library" under the menu option "Application / Properties / Libraries" to your application.

Additional notes in the source

Please consider also the notes in `_readme` modules of the AEF files!

Depending on the sub version and the settings in VO 2.8 it may come up some warnings while compiling. These warnings can be disabled with the menu option "Default_Settings / Compiler / CompileTimeChecks".

Unlocking the DLL version

With the acquisition of the full version of Graphics4VO you receive a license agreement from the selling company. The DLL version of the Graphics Development Kit Graphics4VO must be unlocked for the unrestricted use. In addition the function freeGraphics4VO() must be called with the unlock code and the name of the licensee, as they are registered in the license agreement, from the application using the graphics library. Unlocking prevents that inside the application no reference display windows with comments on shareware are opened.

Example:

```
freeGraphics4VO("453358629-182004616","MicroModia Inc. - New York")
```

Uninstallation

In the Graphics4VO start menu an icon is available for the uninstallation.

Help

The help files in English or German language contains global information about the Graphics Development Kit. The descriptions of parameters for all graphic classes, methods and functions can be found there. The help can be called from the Graphic4VO start menu or from the Operating System.

Price list

Prices and a purchase order form for the order of the professional version of the graphics library you will find in the Graphics4VO start menu.

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