

SYSTEM REQUIREMENTS MYVGL 2.2

Processor

- Minimum:
The processor must support at least SSE2.
 - Intel CPU Pentium 4 and newer
 - AMD CPU Athlon 64 and newer
- Recommended:
Latest Intel or AMD multi-core processors, e.g. Multi Core Intel Core i7 with 2.9 GHz or higher.

RAM

myVGL requires a minimum of 2 GB memory. However, the actual main memory needed to load a complete project depends on the size of the data set and on the analyses performed and will usually be significantly higher. To allow viewing a large project on a system with minimal memory, *myVGL* offers options to load a subset of analyses and objects and/or loading the data set with a lower resolution.

Graphics board

- Minimum:
 - Support for OpenGL 2.x and at least 256 MB (Windows XP) or 512 MB (Windows Vista/Windows 7) graphics memory
 - All dedicated NVIDIA or ATI cards should work
- Recommended:
 - NVIDIA Quadro 2000 or higher
 - NVIDIA GeForce GTX 650 or later with at least 512 MB of graphics memory
 - ATI FirePro 3D V5900
 - ATI FirePro 3D V7900
 - AMD Radeon HD 7950
 - AMD Radeon HD 7970
- Drivers tested by Volume Graphics:
 - NVIDIA Quadro: driver version 276.52 (for Windows 7)
 - NVIDIA GeForce: driver version 185.85 (for Windows XP and Windows Vista)
 - NVIDIA GeForce: driver version 301.10 (for Windows 7)
 - NVIDIA GeForce GTX 680: driver version 301.10
 - NVIDIA GeForce GTX Titan: driver version 313.93
 - ATI FirePro V8700: driver version 8.702 (for Windows XP)
 - ATI Radeon: driver version 9.12 (for Windows XP)
 - ATI Radeon HD 7970: driver version 12.3 (for Windows 7)
 - AMD Radeon: driver version 12.3 (for Windows 7)
 - AMD Radeon FirePro 3D: driver version 8.911.3.3 (for Windows 7)

Onboard graphics chips are generally not recommended and should be thoroughly evaluated if no dedicated graphics board is available. If your computer has more than one graphics board, make sure to switch off the SLI mode.

Display

myVGL is not operable with a resolution below 1024 x 768. With lower resolution, user dialogs will not be displayed properly.

- Minimum recommended: A resolution of 1280 x 1024

Swap space

The available swap space should have the same order of magnitude as the RAM.

User rights

Make sure that every user who wants to work with the software either has user or administrator rights. The software might not work when using guest accounts.

Operating systems tested and supported by Volume Graphics

- Minimum:

- Windows XP Professional 32 bit
- Windows Vista Business 32 bit
- Windows 7 Professional 32 bit

Please note: Depending on the size of your data set, a 32 bit operating system will NOT be sufficient. Cross-check with the minimum requirements for RAM.

- Recommended:

- Windows 7 Professional 64 bit
- Windows Vista Business or higher with 64 bit
- Windows XP Professional 64 bit
- Linux Ubuntu 12.04 LTS 64 bit

Optimum for industrial usage is a PC with 2 current Intel Xeon processors, 16 GB RAM or more and Windows 64 bit.

- Virtual machines are NOT SUPPORTED. *myVGL* should be executed on your local machine.

TIPS, TRICKS AND WARNINGS

General

myVGL is a software application with high requirements on the computer system. This is why this application will run a number of checks when the program is started.

System resources such as main memory, number of processors and GDI objects are checked since these may be insufficient, especially if several applications are run at the same time. If your system resources are not sufficient, a warning message will be displayed. Under certain conditions, starting of the application may be prevented.

You need a 3-button mouse with a scroll wheel to use the software. 3D mouse functionality is supported for the 3D window for Logitech 3D mouse devices.

Problems may arise, when running more than one instance of the application. Typical effects are, for example, problems with the user interface such as incomplete or misplaced interface elements or errors in the display of images. User settings like presets or workspace layout may inadvertently be overwritten. Processor capacity and main memory will be shared between instances of the application and may prove insufficient. This may result in a dramatically low system performance or even application crashes, especially if parts of the information need to be swapped to disk due to high memory consumption.

- Using a language different from the system language may cause compatibility problems. English is the default language and is fully supported on all systems. To avoid the risk of compatibility problems, please use ASCII characters only, and stay within the first 128 characters of the system character map when naming files, folders, and objects (i. e. avoid umlauts and special characters). This also applies to projects transferred to a computer with another system language.

Graphics board

- Make sure to have the recommended driver for your graphics board installed.
- Graphics board drivers for laptops available from the laptop manufacturer may be out of date. Please check the graphics board manufacturer's website for the latest graphics board drivers.
- Onboard graphics chips are not recommended.
- At the moment, Tesla and CUDA graphics boards are not supported.

RAM

- Please note that for the calculation of the required RAM, only the size of the data set when loaded into the RAM is relevant. If the data is saved in compressed files, e. g., in the JPEG 2000 format (.jp2), the size of the data set on the hard disk may be significantly smaller than the size of the data set when loaded into the RAM.
- Do not deactivate the swap space. If more RAM is needed than available and there is no swap space, this may cause the system to crash.

Remote access

Remote access to our software is not supported, i.e. you should run the software locally on your own computer. If you use remote access to run *myVGL*, you may encounter problems such as a corrupted display of the user interface, low performance, application crashes and more.

GRAPHICS BOARDS

Please refer to the following table for suitable combinations of graphics board, graphics board driver and operating system.

Please note: This table is not complete. It is compiled according to our current knowledge and will be updated as necessary.

PRODUCER	GRAPHICS BOARD	DRIVER	OPERATING SYSTEM	COMMENTS
NVIDIA	GeForce GTX 680	301.10	Windows 7 64 bit	No known problems, recommended for CT reconstruction
NVIDIA	Geforce GTX 580	262.99 285.62 301.42	Windows 7 64 bit	No known problems
NVIDIA	Geforce GTX 480	257.21	Windows 7 64 bit	Good performance when using Windows 7 basic theme
NVIDIA	GeForce GTX 285	185.85	Windows XP 64 bit	No known problems
NVIDIA	GeForce GTX 285	196.21	Windows XP 64 bit	No known problems
NVIDIA	GeForce GTX 285	196.21	Windows 7	Problems with graphics display, not recommended
NVIDIA	GeForce GTX 280	182.50	Windows Vista 64 bit SP2	No known problems
NVIDIA	GeForce GT 120	179.36	Vista Business 64 bit SP1	Slow performance with dual screens, low performance for CT reconstruction, recommended with limitations
NVIDIA	GeForce 9800 GT	185.85	Windows XP 64 bit	No known problems
NVIDIA	GeForce 9800 GT	196.21	Windows XP 64 bit	No known problems
NVIDIA	Quadro FX 3700M	190.62	Vista Business 64 bit SP1	No known problems
NVIDIA	Quadro FX 3700M	179.76	Windows Vista 64 bit	No known problems
NVIDIA	Quadro FX 3700	190.38	Windows 7 Ultimate 64 bit	No known problems
NVIDIA	Quadro FX 3500	169.96	Windows XP 64 bit	Problems with graphics display, not recommended
NVIDIA	Quadro FX 3400	182.65	Windows XP 64 bit SP2	No known problems
NVIDIA	Quadro FX 1600M	197.16	Windows Vista 64 bit	Application crashes, not recommended
NVIDIA	Quadro FX 1600M	186.81	Windows Vista 64 bit	No known problems
NVIDIA	Quadro FX 3800M	188.43	Windows 7 64 bit	Problems with Porosity/Inclusion Analysis Module, application crashes, not recommended
NVIDIA	Quadro FX 3800	296.70 420.12	Windows XP	Highly increasing memory consumption when rendering STL models
NVIDIA	Quadro FX 3800	275.65	Windows XP	No known problems
NVIDIA	Quadro FX 4600	162.62	Windows XP, Windows Vista	Problems with graphics display, not recommended
NVIDIA	Quadro FX 5800	296.70 420.12	Windows XP	Highly increasing memory consumption when rendering STL models
NVIDIA	Quadro FX 5800	275.65	Windows XP	No known problems
NVIDIA	Quadro 4000	265.70 259.81	Windows 7, Windows Vista 64 bit	Problems with graphics display, not recommended
NVIDIA	Quadro 4000	275.65	Windows 7	Application crashes due to recurrent driver crashes, not recommended
NVIDIA	Quadro 6000	275.65	Windows 7	No known problems, recommended for CT reconstruction Other drivers may cause problems

PRODUCER	GRAPHICS BOARD	DRIVER	OPERATING SYSTEM	COMMENTS
ATI	FirePro V8700	8.603 8.563 8.702	Windows XP 64 bit	No known problems
ATI	FirePro V7750	8.633	Windows XP 64 bit SP2	Problems with graphics display, not recommended
ATI	FireGL V7700	8.634 8.633	Windows Vista 64 bit SP2	Problems with graphics display, not recommended
ATI	Radeon HD 4870	9.5	Windows XP 64 bit	Problems with CT reconstruction, recommended with limitations
ATI	Radeon HD 5870 (1 GB)	9.12	Windows XP 64 bit	No known problems
INTEL	Intel HD Graphics	15.21.5.2266	Windows 7 Ultimate 32 bit	No known problems

TROUBLESHOOTING FOR VG PRODUCTS*

Some common problems and their solutions are listed in the table below.

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTIONS
Rendering problems occur, e. g. 3D window not (correctly) displayed, saved images are faulty.	An out-of-date graphics board driver is installed.	Download and install the current graphics board driver for your graphics board.
	An onboard graphics board is installed.	Onboard graphics board might be insufficient to run your VG product. Please refer to Graphics board on page 1.
	The installed graphics board is not recognized correctly.	In Edit > Preferences > General > Expert, go to the <i>Hardware renderer</i> , activate the option <i>Memory override</i> and manually set the correct memory of your graphics board.
On Windows 7: Only part of the 3D window is updated when moving an object.	No Aero theme is selected in Windows.	In the <i>Personalization</i> window of the Windows control panel, switch to an Aero theme.
The performance is low.	There's not enough RAM available due to other applications running at the same time.	Close all other applications when running your VG product.
The performance is extremely low with large data sets (64 bit system).	The size of the data sets exceeds the installed RAM, data will be swapped on harddisk.	<ul style="list-style-type: none"> - Install more RAM (if possible). - Reduce the size of the data set, e. g. using suitable Import settings.
The performance is extremely low with large data sets (32 bit system) and/or the application crashes.	The size of the data sets exceeds the installed RAM, data will be swapped on harddisk.	<ul style="list-style-type: none"> - Install more RAM (if possible). - Switch to a 64 bit system (upgrade required). - Reduce the size of the data set, e. g. using suitable Import settings.
The application crashes when working with large data sets (64 bit systems).	The size of the data sets exceeds the installed RAM, the swap space is not activated or too small.	<ul style="list-style-type: none"> - Activate the swap space. - Enlarge the size of the swap space to about the order of magnitude of the RAM. - Install more RAM. - Reduce the size of the data set, e. g. using suitable Import settings.
The application crashes when saving large image stacks (NVIDIA graphics board).	There's an incorrect implementation of OpenGL in the graphics board driver.	<ul style="list-style-type: none"> - In Edit > Preferences > General > Expert, go to the <i>Offscreen renderer settings</i> and deactivate the option <i>Use framebufferobject extension</i>. - Download and install a more current graphics card driver for your graphics board.
An installed codec is not visible in the codec selection when saving an .avi file (64 or 32 bit system).	The codec is not compatible with the selected settings of the avi.	<ul style="list-style-type: none"> - Change the settings for the .avi file, e.g. frame size, frame rate (fps). In many codecs the width and height of the image must be a multiple of 2. - Select another codec.
An installed codec is not visible in the codec selection when saving an .avi file (64 bit system).	A 32 bit version instead of a 64 bit version of the codec is installed.	<ul style="list-style-type: none"> - Install the 64 bit version of this codec. - Select another codec.
The GUI is corrupted, windows are not displayed correctly.	Two or more instances of your VG product are running, or other graphics intensive software is running at the same time, therefore exceeding the GDI/Use-objects limit.	<ul style="list-style-type: none"> - Close all other applications when running your VG product. - Only run one instance of your VG product at the same time.
On Windows 7: performance during reconstruction is slow.	An Aero theme is selected in Windows.	In the <i>Personalization</i> window of the Windows control panel, switch to a basic theme.

*This includes **VGStudio MAX**, **VGStudio** and **myVGL**. Please note that some entries might be applicable only to selected products and/or configurations (e. g. license for add-on modules).

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTIONS
The application crashes when trying to save an animation to an .avi file using the MPEG-4 encoding of ffdshow (K-Lite codec pack).	There are bugs in the MPEG-4 encoding of ffdshow.	<ul style="list-style-type: none"> - Select another codec of this codec package to save the animation to an .avi file. - Use another codec package. - Render the animation as an uncompressed .avi file or an image stack and convert it to a compressed .avi file using a third-party software (e. g. VirtualDub).
On Windows XP (64 bit system): When trying to render an animation as .wmv file, a critical error occurs ("The plug-in module 'vgexportasf' can't be loaded ...").	The codec needed to create the .wmv file is not installed.	Download the Windows Media Format 9.5 Runtime (or higher) from the Microsoft website and install it.
The PDF Creator print monitor stays open or pops up during macro processing.	Known problem of version 1.3.0 of PDF Creator when working together with VGStudio MAX.	Use the current version of the PDF Creator.
RCS doesn't work after installing VGStudio (MAX) over an existing version.	Installing a 32 bit version of VGStudio (MAX) over a 64 bit version or vice versa might cause problems, and also installing 2.2 version over 2.1 version or vice versa.	Manually deinstall the complete existing installation of VGStudio or VGStudio MAX and afterwards install the new version.
The dongle manager doesn't resume working after the operating system returns from sleep mode.	Known problem of the dongle manager.	Remove the dongle and reboot the computer.
ATI graphics card driver doesn't resume working after the operating system returns from sleep mode.	Known problem of the graphics card driver.	Reboot the computer.
When double-clicking a .vgl file in the Windows explorer, it is not opened by VGStudio (MAX).	.vgl files are not linked to the executable of VGStudio (MAX), e. g. vgstudiomax22.exe.	Change the link via file explorer context menu entry "Open with ..." and reboot the computer.
VGStudio MAX macro does not work with PDF Creator.	Old version of PDF Creator.	Install PDF Creator 1.3.1 or higher version.
VGStudio (MAX) cannot be started under Mac OS 10.8. Error message: "To open 'vgstudiomax22', you need to install X11."	Missing installation of X11/XQuartz under Mac OS 10.8.	Install X11/XQuartz. Refer to http://support.apple.com/kb/HT5293
The scene tree entries of a loaded project are named in different languages.	The project was created with VGStudio (MAX) 2.1 in one language and was loaded into VGStudio (MAX) 2.2 in another language.	It cannot be changed for projects created with VGStudio (MAX) 2.1. When you create projects with VGStudio (MAX) 2.2, automatically created parts of scene tree entry names will be translated into the selected language.



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