



Wysiwyg Minimum and Optimum System Requirements

Introduction

The following requirements are separated according to the level of functionality that you wish to achieve (Minimum, Optimal, or High Performance and/or VR). The Minimum requirements are sufficient to run the software, but performance will likely be inadequate, visual quality may be (greatly) reduced, and advanced visualization functions may (or will) not be supported. Please note that basing your hardware choices on these specifications alone may not be sufficient to select the most appropriate system for your particular requirements. We recommend reading through our Hardware Guide in order to understand how Vivien utilizes hardware, and what else might be required in order to achieve adequate performance.

Using Wysiwyg on (Intel-based) Apple Mac Systems

Wysiwyg may run on Intel-based Mac systems, after installing Microsoft Windows 10 or 11, 64-bit, via either BootCamp or Parallels.

Visualization Requirements

For Wysiwyg and Vivien to be able to the Shaded and Virtual views, respectively, the computer must use a video card / graphics processor – whether this is a graphics processing unit (“GPU”) or an integrated graphics processor (“IGP”) – which fully-supports OpenGL version 2.1. If OpenGL 2.1 is not fully-supported, the Shaded/Virtual View will not be usable.

What does “full support” for OpenGL mean?

The following applies mostly to IGPs. While a GPU or IGP can claim support for a certain OpenGL version, its manufacturer may have only integrated the minimum set of features required to claim support for that version – which may not be sufficient for Wysiwyg/Vivien’s requirements. As a result of such practices, even if a graphics processor’s specification states that it supports OpenGL 2.1/3.0/3.3/4.3, it can still lack the necessary features to display Shaded/Virtual views. (To find out what versions of OpenGL your graphics processor supports, please consult the manufacturer’s specification; to find out if features of that version required by Wysiwyg or Vivien are supported, please consult the `wyg_graphics.log` file, accessible via the HELP menu, by clicking Support.) In all cases, Shaded/Virtual views will automatically adjust themselves to the best possible simulation option based on the video card and OpenGL features integrated by its manufacturer.

Simulation Options

Wysiwyg and Vivien offer two simulation options, selectable from the Shaded/Virtual View’s View Options dialog (accessible by right-clicking in the Shaded/Virtual View, clicking View Options and switching to the Performance tab).

Volumetric Beams: This is our default simulation option, which features high visual quality and fidelity. A GPU/IGP which fully-supports OpenGL 3.3 or higher is required for Shaded/Virtual Views to take advantage of this option. (If the graphics processor only fully-supports OpenGL 2.1 (rare) this option will not be available – only Enhanced Beams will be available.)

Enhanced Beams: This is our legacy simulation option, which features lower visual quality and fidelity. For Wysiwyg and Vivien to take advantage of this option, a GPU/IGP which fully-supports OpenGL 3.0 is required. (If graphics processor only fully-supports OpenGL 2.1 (rare) performance will be slower due to the lack of necessary features which were added in OpenGL 3.0.)

Note Regarding VR and Alpha Beam

Shadows

In order to experience VR and/or Alpha Beam Shadows a graphics processor which fully-supports OpenGL 4.3 or better is required. (Shaded Views will continue to simulate correctly without such hardware, but shadows from alpha textures will not appear, and VR mode will not be available.)

Minimum System Requirements

The following specification offers basic functionality:

- Processor (CPU): Intel Core i3 or AMD Ryzen 3 or better, quad-core, 3.0 GHz or higher, released in 2019 or later
- Memory (RAM): 8GB or more, configured for dual-channel operation
- Video Card: graphics processor with full support for OpenGL 2.1 (minimum) and 2GB or more video memory – see the Visualization Requirements above for information; discrete GPUs by NVIDIA or AMD preferred; IGP's may be used but are not recommended
- Resolution: 1280 x 800 or higher

- Storage: 2GB free disk space
- Operating System: Windows 10 64-bit or Windows 11 64-bit; may run on an Intel-based Mac as described above
- Other: one unused USB port for the dongle

Optimal System Requirements

The following specification offers enhanced visualization and performance:

- Processor (CPU): Intel Core i5 / i7 / i7 Extreme Edition / i9 (**Intel Comet Lake microarchitecture**, or later) or AMD Ryzen 5 / 7 / 9 / 9 Pro / Threadripper / Threadripper Pro (**AMD Zen 2 microarchitecture**, or later), quad-core or better, 3 GHz or higher, released in 2019 or later
- Memory (RAM): 16GB RAM, configured for dual-, or quad-channel operation (depending on the memory architecture supported by the processor)
- Video Card (GPU): NVIDIA GeForce GTX 1070 / GTX 1660 / RTX 2060 / RTX 3060 or better; or AMD Radeon RX 5600 XT / RX 6600 or better
- Resolution: 1920 x 1080 or higher
- Storage: 2GB free disk space
- Operating System: Windows 10 64-bit or Windows 11 64-bit; BootCamp with either version of Windows installed (on mid-range Intel-based Mac systems)
- Other: one unused USB port for the dongle

Recommended System Requirements for High Performance (and VR)

The following specification offers the best response when running Shaded View in VR mode.

- Processor (CPU): Intel Core i7 / i7 Extreme Edition / i9 (**Intel Comet Lake microarchitecture**, or later) or AMD Ryzen 7 / 9 / 9 Pro / Threadripper /

Threadripper Pro (AMD **Zen 2** or **Zen 3** microarchitecture, or later), quad-core or better, 4 GHz or higher, released in 2020 or later

- Memory (RAM): 16GB, configured for dual- or quad-channel operation (depending on the memory architecture supported by the system processor)
- Video Card (GPU): NVIDIA GeForce RTX 2070 / RTX 3070 or better; or AMD Radeon RX 5700 XT / RX 6700 XT or better
- Resolution: 1920 x 1080 or higher
- Storage: 2GB free disk space
- Operating System: Windows 10 64-bit or Windows 11 64-bit; BootCamp with either version Windows installed (on high-end Intel-based Mac systems)
- VR System: HTC Vive, Oculus Rift or Oculus Rift S
- Other: one unused USB port for the dongle; USB 3 ports (required by the VR system)