

Vortex Studio 2017a System Requirements

1 SUPPORTED PLATFORMS

Vortex Studio runs on the following platforms:

- Microsoft Windows 10 (x64)
- Ubuntu 14 LTS (x64)
- CentOS 7 (x64)

Note: the Vortex Studio Editor and Player are only supported on Windows 10 in 64bits.

2 HARDWARE REQUIREMENTS

Vortex Studio requires the following at a minimum:

- CPU 4GHz (Recommended Intel i7-47xx or better)
- RAM 8GB (Recommended 16GB) for runtime and Vortex Studio Player
16GB (Recommended 32GB or more) for Vortex Studio Editor
- GPU NVIDIA GeForce GTX 7xx, 9xx or 10xx series (GTX770 or higher recommended),
NVIDIA 400 series (~2010), ATI Radeon HD 5000 series (~2009),
Intel HD Graphics in Intel Haswell processor (~2011), and newer

3 SUPPORTED COMPILER

Vortex Studio 2017a supports the following C++ compiler:

- For Microsoft Windows Platform, Microsoft Visual Studio Version 2010 (VC10)
- For Linux Platform, GCC 4.8.5

4 SUPPORTED GRAPHICS

Vortex Studio supports NVIDIA GTX and Quadro video cards, as well as AMD and Intel video cards that fit the requirements (OpenGL 4.3 compliance in the driver).

The following cards have been tested at CM Labs:

- NVIDIA GTX 570 and above are tested regularly at CM Labs with driver series 364 and above.
- NVIDIA Quadro 4000 and M4000 were tested at CM Labs with driver series 372.
- AMD HD 7770 and RX 480 were tested at CM Labs with driver version 16.11.2.

- Intel HD 4400 and HD Graphics 530 were tested at CM Labs with driver version 15.40.

Depth Range

- AMD and Intel video cards have restrictions on depth range, so their view-space is clipped in Vortex Studio to [1m, 1000m].
- NVIDIA video cards support the inverted floating-point depth range, so we offer a deeper ViewSpace with less Z-fighting, [0.01m, 100,000m].

Ocean Surface

- AMD and Intel video cards use the CPU to compute the ocean surface.
- NVIDIA video cards use CUDA to compute the ocean surface. This should provide better performance for similar ocean surface quality.

Terrain Capture (required for Earthwork Zones)

- Intel video cards are sometimes not able to produce proper terrain capture textures when used with invisible windows only. It works normally when tested in the Vortex Studio Player or Editor.

*Note: on computers that have multiple graphics cards (e.g., laptops with integrated Intel card and dedicated NVIDIA graphics card), the default configuration of these systems is to auto-select the card to run the application, which might prevent Vortex from running. Using the NVIDIA Control Panel, select **Manage 3D Settings** and change the **Preferred** graphics processor to **High-performance NVIDIA processor**.*

5 3D ASSET FILE TYPES

The following 3D model file types can be imported into Vortex Studio 2017a:

Supported 3D Model File Types

- .cive
- .dae
- .flt
- .ive
- .obj
- .osg.cgr¹, .CATProduct¹, .CATPart¹
- .osg2
- .osga
- .osgb
- .osgs
- .osgt
- .osgx
- .shp

The following CAD file types can be imported into Vortex Studio 2017a with the purchase of the CAD Optimizer add-on¹.

Supported 3D CAD File Types (Requires CAD Optimizer Add-on)

- .3dxml
- .fbx
- .vrmf, .wrf
- .dxf²
- .stl
- .sat¹
- .model, .session¹
- .cgr¹, .CATProduct¹, .CATPart¹
- .dwg¹
- .igs, .iges
- .jt
- .x_t¹, .x_b¹
- .prt¹, .prt.1¹, ..., .asm¹, .asm.1¹, ..., .neu¹
- .SLDASM, .SLDPRT
- .step, .stp
- .gpure

¹ The CAD Optimizer add-on is a paid add-on available for Vortex Studio Solo, Team and Academic editions. It is not available for Vortex Studio Essentials edition.

² Additional license required beyond purchase of Vortex Studio CAD Optimizer add-on. Contact your CM Labs representative for more information.