

Release Notes for CaraVR 1.0v1

Release Date

July 2016

Minimum System Requirements

- A version of Nuke 9.0v7, or above on:
 - Mac OS X 10.9 (Mavericks) or 10.10 (Yosemite)
 - Windows 7 or Windows 8 (64-bit only)
 - CentOS/RHEL 5 or CentOS/RHEL 6 (64-bit only)
- Foundry Licensing Tools (FLT 7.0v2 or later) for floating licenses.

Requirements for GPU Acceleration

To take advantage of GPU acceleration, you must have, either:

- An NVIDIA GPU with compute capability 2.0 (Fermi) or above. A list of the compute capabilities of NVIDIA GPUs is available at www.nvidia.co.uk/object/cuda_gpus_uk.html



NOTE: The compute capability is a property of the GPU hardware and can't be altered by a software update.

With graphics drivers capable of running CUDA 4.2 or above.

- On Windows and Linux, CUDA graphics drivers are bundled with the regular drivers for your NVIDIA GPU. Drivers from April 2012 onward support CUDA 4.2.
Go to <http://www.nvidia.com/Download/Find.aspx?lang=en-us> for more information.
- On Mac, the CUDA driver is separate from the NVIDIA graphics driver and must be installed, if you don't have it already. The minimum requirement for CUDA 4.2 is driver version 4.2.5 which can be downloaded from www.nvidia.com/drivers.



NOTE: If your computer enters sleep mode, the CUDA drivers cannot recover and you must restart Nuke to use GPU acceleration.



TIP: We recommend using the latest graphics drivers, where possible, regardless of operating system.

- An AMD FirePro GPU on late 2013 Mac Pro 6.1, running OS X 10.9.3 'Mavericks', or later (see the [Blink API](#) documentation for caveats on CPU/GPU result consistency on Mac Pros).

New Features

This section will describe new features in later versions.

Feature Enhancements

This section will describe feature enhancements in later versions.

Bug Fixes

This section will describe fixed bugs in later versions.

Known Issues and Workarounds

Stitching

Projections in Nuke's 3D system expect rectilinear footage, which is inherently limited to a 180° field of view. As a result, C_CameraSolver's manual 3D workflow, which relies on projections, only ever projects the central 180° from material shot on wider lenses, such as the Nokia OZO.

Preview

- Due to recent changes in the Nuke 10 Monitor Output API, VR headsets are only supported on Nuke 10.0v1 and 10.0v2. Headsets work as normal on all Nuke 9.0 builds.
- On Mac OS X, with the EoL official Oculus SDK installed, the monitor out plug-in can not open the device as the SDK locks it. Possible workarounds include uninstalling the SDK, or preventing the OVRServer being run at startup, using the launchctl load/unload commands (read up on the specifics and implications of working with the OS X launchd).

- On Windows, the monitor out plug-in routinely notifies about the health and safety implications of use of the Oculus headset. This is a function of the SDK, and in newer versions (such as the one we employ) cannot be suppressed or shortened.
- Many facilities lock down USB access for security, which impacts Oculus Rift support. Some customers found that authorising devices using a udev rule allowed them to use the DK2 on both Centos 6 and Centos 7, while still blocking USB storage devices. Thanks to Digital Domain for the following example:

```
ACTION!="add", GOTO="deauthorize_end"
SUBSYSTEM!="usb", GOTO="deauthorize_end"
TEST!="authorized", GOTO="deauthorize_end"
## make hubs deauthorize all devices by default
TEST=="authorized_default", ATTR{authorized_default}="0", GOTO="deauthorize_end"
## whitelist specific devices
ENV{ID_VENDOR_ID}=="2833", ATTR{authorized}="1", MODE="0777"
LABEL="deauthorize_end"
```

Miscellaneous

Nuke Write nodes, when writing multi-view **.exr** files, only write out the set of channels present in the first view for all the other views. For example, if you write out the C_Stitcher's output, because there's only rgba in the rendered **main** view, the individual camera views do not output their vector channels.

To work around this, insert a vector channelset in the first view, even if it contains no data, using the AddChannels node.