

# Release Notes for Nuke and Hiero

## 13.2v8

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### Release Date

08 June 2023

### Qualified Operating Systems

- macOS Big Sur (11.x) or macOS 12.x (Monterey). Nuke is currently supported under Rosetta emulation on Apple's new Apple Silicon hardware and M1 chips. Native support is not currently available and Foundry is planning to support the Nuke family natively on Apple's M1 and M2 hardware at a later date.



**Article:** For more information on Foundry products and supported macOS versions, see Foundry Knowledge Base article [Q100592](#).

- Windows 10 (64-bit)
- CentOS 7.4 to 7.6 (64-bit)



**Note:** The currently supported version of VFX Reference Platform includes library versions that are only compatible with CentOS 7.4, or later. Nuke is qualified on the Centos 7.4, 7.5, and 7.6 distributions.

Other operating systems may work, but have not been fully tested.

### Requirements for Nuke's GPU Acceleration

If you want to enable Nuke to calculate certain nodes using the GPU, there are some additional requirements.

## NVIDIA

An NVIDIA GPU with compute capability 3.0 (Kepler) or above. A list of the compute capabilities of NVIDIA GPUs is available at <https://developer.nvidia.com/cuda-gpus>



**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 10.1 or above. On Windows and Linux, CUDA graphics drivers are bundled with the regular drivers for your NVIDIA GPU. Driver versions 418.96 (Windows) and 418.39 (Linux), or above are required. See <https://www.nvidia.com/Download/Find.aspx> for more information.



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

## AMD



**Note:** Bit-wise equality between GPU and CPU holds in most cases, but for some operations there are limitations to the accuracy possible with this configuration.

- On Windows and Linux, an AMD GPU from the following list:



**Note:** Other AMD GPUs may work, but have not been fully tested.

- AMD Radeon PRO W6600
- AMD Radeon PRO W6800
- AMD Radeon Pro W5700
- AMD Radeon Pro WX 9100
- AMD Radeon RX 6800 XT



**Note:** For information on the recommended driver for each GPU, see <https://www.amd.com/en/support>

- On Mac, integrated AMD GPUs are supported on the following Intel CPU Macs:
  - Any late 2013 Mac Pro onward (including 2019 Mac Pro),
  - Mid-2015 MacBook Pros onward, and
  - Late 2017 iMac Pros onward.

All supported Mac Pros include a multi-GPU support option, where applicable. Bitwise equality between GPU and CPU holds in most cases, but for some operations, there are limitations to the accuracy possible with this configuration.



**Warning:** Although AMD GPUs are enabled on other Mac models, they are not officially supported and used at your own risk.

## Multi-GPU Processing

Nuke's GPU support includes an **Enable multi-GPU support** option. When enabled in the preferences, GPU processing is shared between the available GPUs for extra processing speed.



**Note:** Multi-GPU processing is only available for identical GPUs in the same machine. For example, two NVIDIA GeForce GTX 1080s or two AMD Radeon™ Pro WX 9100s.

## New Features

There are no new features in this release.

## Feature Enhancements

There are no feature enhancements in this release.

## Bug Fixes

- ID 235633 - VectorBlur: Copy/pasting or adding VectorBlur2 nodes to a new script incorrectly swapped the U and V channels or motionvector channels.
- ID 336204 - Running Nuke with more than 64 threads caused rendering to fail.
- ID 405867 - Versioning: Scanning for versions didn't work as expected with UNC file paths as path substitutions in the **Preferences**.
- ID 413798 - Closing or clearing certain scripts caused Nuke to crash.
- ID 420589 - C\_CameraSolver: Running out of memory produced different results when matching and solving rigs.
- ID 479601 - Project Bin: Moving items from one bin to another was occasionally sluggish.
- ID 496164 - Viewer: Wireframe textures only appeared on geometry in the 3D Viewer with **Hydra (Storm)** enabled in the Viewer node **Properties**.
- ID 512199 - Exporting a sequence containing comp containers and a BurnIn effect track caused Nuke Studio to crash on exit.
- ID 514323 - Cryptomatte: Setting the **Manifest Source** control to **Metadata** did not always persist after closing and reopening the **Properties** panel.
- ID 514325 - Cryptomatte: Nuke could not locate manifest files on disk when the Cryptomatte node's input contained merged image and metadata from multiple source files.
- ID 519080 - Read/Write: Nuke Studio projects containing Sony **.mxf** files did not display all Read node options as expected.
- ID 519425 - BlinkScript: Kernels that compare Booleans to a number did not work as expected in timeline soft effects.
- ID 520364 - Monitor Out: The bottom few code values (<5/1023) were not accessible in Nuke from Blackmagic Design cards outputting 10-bit values.
- ID 527095 - Documentation: The Hiero developer documentation for **custom\_guides.py** incorrectly specified **<HIERO\_PATH>/StartupUI** as the custom guide directory.
- ID 527103 - Python: Adding **custom\_guides.py** to the **~/.nuke/Python/Startup** or **~/.nuke/Python/StartupUI** directories did not work as expected.
- ID 537565 - Read/Write: The MXF Reader did not read pixel aspect ratio correctly.
- ID 537704 - Versioning: Loading a comp container referencing an incompatible Nuke script through the versioning system caused Nuke Studio to crash.
- ID 538721 - OCIO: The Write node's **Properties** > **OCIO** tab incorrectly included a **swap input/output** button.
- ID 539131 - The Bokeh node in the Node Graph was the wrong color.
- ID 539219 - CopyCat: The ABME model from the Cattery did not work as expected.

- ID 539795 - Documentation: The **helpCommandRequestHandler** function attempted to load example scripts from the wrong location.
- ID 541124 - Camera: Loading a USD file containing a Y-axis value of 90 or -90 did not accurately reproduce the values in Nuke.

## New Known Issues Specific to Nuke 13.2

This section covers new known issues and gives workarounds for them, where appropriate.

- ID 543807 - Export: Changing the **Export To** path in the timeline **Export** dialog displays an outdated **hiero.core.Project.projectRoot()** deprecation warning.
- ID 537358 - CopyCat: Training with large datasets of different sizes occasionally fails.
- ID 534260 - Monitor Out: Node Graph 10-bit 422 output from AJA devices with **legal ranges** enabled is incorrect.
- ID 524273 - CopyCat: Restarting training after encountering an error causes the contact sheet output to render black.
- ID 524096 - Monitor Out: Blackmagic Design cards do not output 1.5G signals to Phabrix test tools as expected.
- ID 522688 - Nuke Indie: Writing container **.mov** and **.mxf** files with **Render in background** enabled does not work as expected.
- ID 520410 - Inference: The kernel compilation progress bar does not display on machines with Ampere GPUs when Inference is the first node used.
- ID 519874 - 3D Transform Handles: Rotating the camera around a Card with different XYZ **scale** values causes the handles to distort.
- ID 519224 - NDI: The stream name is not always displayed when a project is opened.  
As a workaround, disable and re-enable Monitor Out.
- ID 519126 - CopyCat: The contact sheet created in the checkpoint directory is **rgba** and the **.png** files are premultiplied. Depending on the software used to view the images, they could appear blank.
- ID 518254 - CopyCat: Training with the **Preview** input connected to an image with shuffled A and B layers does not work as expected.  
As a workaround, leave the **Preview** disconnected and use the contact sheet to monitor training.
- ID 510063 - 3D Pivot Point: Snapping doesn't work as expected on very small or very large scale geometry.
- ID 509300 - CopyCat: Using crops with 8+ channel training causes corrupted contact sheet.
- ID 508661 - CopyCat: MacOS Having reads with environment variables as inputs causes Nuke to crash.
- ID 508116 - 3D Pivot Point: Drag-rotate on geometry with a large **scale** value doesn't work as expected.
- ID 507327 - CopyCat: Preview cannot be fetched if preview is connected to remove.
- ID 507325 - CopyCat: Channels set to none for input causes seg fault.
- ID 506965 - MO NDI: Long NDI sender names get truncated.

- ID 506918 - CopyCat: Resuming after changing crop size makes contact sheet wrong size.
- ID 506569 - MRQ Deferred Rendering: Result of "Use 32 Bit Post Process Materials" option still rendered when disabled.
- ID 506360 - CopyCat: Resuming with different model size throws wrong error.
- ID 506004 - Arriraw 7: When legacy mxr file is loaded with SDK7, some knob values do not match SDK 6.2 version.
- ID 505687 - 3D Pivot Point: Match Geo to selection ignores and overrides pivot point transformations.
- ID 504819 - 3D Transform Handles: The pivot point of the geometry is affected by the scale changes downstream.
- ID 504645 - IV & MO: NDI signals are seen twice by the NDI receiver app.
- ID 504542 - CopyCat: Epochs set to minus value crashes.
- ID 504406 - CopyCat: Error in the viewer stays on when training.
- ID 504191 - IV & MO: Crash when closing while playing back with NDI active.
- ID 504013 - 3D Transform Handles: Negative Scaling on TransformGeo affecting ParticalEmmitter: intermittent incorrect scales on other axes.
- ID 503829 - 3D Transform Handles: Rotating the camera on the Z-axis causes the Card3D node's screen space handles to change alignment in the 2D Viewer.
- ID 503687 - IV & MO: Not all of the knobs on the Monitor Out strip show their knob name in the tooltip.
- ID 503684 - IV & MO: Monitor Out strip shows stereo controls on launch.
- ID 503338 - 3D Pivot Point: Geometry position and orientation occasionally behave inconsistently.
- ID 502942 - IV & MO: User needs to expand the Viewer MO panel to reveal options.
- ID 502843 - IV & MO: Use Viewer Gamma/ Gain displays on in the MO strip when disabled in properties.
- ID 502793 - IV & MO: Loading an nk file doesn't open all floating windows.
- ID 502495 - CopyCat: Slow down when caching at the start.
- ID 502404 - IV & MO: MO viewer list does not update when a viewer node is copy/pasted.
- ID 502395 - IV & MO: Viewer list doesn't appear to be in a logical order.
- ID 502394 - IV & MO: Output is not sent to MO device unless the related viewer is visible.
- ID 502226 - IV & MO: Floating windows open in same position and size as the most recently closed floating window
- ID 501785 - BM RAW: Incorrect Color space and gamma in attached project.
- ID 501700 - 3D Pivot Point: Object jumps when drag rotating pivot in non-default transform order.
- ID 501525 - CopyCat: Error message is wrong when cancelling training.
- ID 501442 - 3D Pivot Point: Scale affects the pivot drag rotate algorithm.
- ID 501261 - macOS Monterey: Nuke Studio Qt windows slow to update upon resize.
- ID 500156 - OTIO: Warning status appear when different frame rate clips are detected in timeline.

- ID 500138 - 3D Transform Handles: Rotating in screen and world space after scaling in screen space doesn't work as expected.
- ID 499468 - 3D Transform Handles: Handles size is affected by scale change downstream.
- ID 499442 - 3D Transform Handles: Translating rotated pivot point if the geometry was scaled or rotated doesn't work as expected.
- ID 499383 - 3D Transform Handles: Rotate doesn't work as expected on small scale geometry.
- ID 498754 - PUBLIC: Nuke will sometimes fail to launch due to installed software or external hardware connected to the Windows machine.
- ID 498140 - 3D Pivot Point: The snap menu options in the EditGeo nodes don't work as expected.
- ID 498139 - 3D Pivot Point: Match selection doesn't work as expected when pivot control are not at their default values.
- ID 497459 - 3D Transform Handles: Changing values directly inside knobs does not respect pivot compensation.
- ID 497372 - MO NDI: Monitor Out metadata - frameIndex does not work.
- ID 496332 - Linux only: Changing toolbar/handles mode Pythonically doesn't update 3D handles in the Viewer as expected.
- ID 495515 - 3D Transform Handles: Scaling parent transforms negatively causes the orientation of handles to behave unexpectedly.
- ID 492637 - 3D Transform Handles: Free rotate shrinks/grows during rotation in 2D view.
- ID 491143 - MO NDI: - Horizontal flop in the MO Node DNW (Nuke).

## Developer Notes

As Nuke develops, we sometimes have to make changes to the API and ABI under the hood. We try to keep these changes to a minimum and only for certain releases, but from time to time API and ABI compatibility is not guaranteed. See the following table for the situations when you may have to recompile your plug-ins and/or make changes to the source code.

Release Type	Example	Compatibility	Recompile	Rewrite
Version	13.1v1 to 13.1v2	API and ABI		
Point	13.0v1 to 13.1v1	API	●	
Major	12.0v1 to 13.0v1	-	●	●

Additionally, node **Class()** names occasionally change between major releases. While these changes do not affect legacy scripts, you may not get the results you were expecting if a node class has been modified. The **toolbars.py** file, used to create Nuke's node toolbar, contains all the current node class names and is located in `<install_directory>/plugins/nukescripts/` for reference.

As an example, between Nuke 9 and Nuke 10, the CameraShake node **Class()** changed from CameraShake2 to CameraShake3. In the **toolbars.py** file for the two releases, the entries for the CameraShake node appear as follows:

```
m.addCommand("CameraShake", "nuke.createNode(\"CameraShake2\")",
icon="CameraShake.png")
m.addCommand("CameraShake", "nuke.createNode(\"CameraShake3\")",
icon="CameraShake.png")
```



# Release Notes for Nuke and Hiero 13.2v7

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## Release Date

30 March 2023

## Qualified Operating Systems

- macOS Big Sur (11.x) or macOS 12.x (Monterey). Nuke is currently supported under Rosetta emulation on Apple's new Apple Silicon hardware and M1 chips. Native support is not currently available and Foundry is planning to support the Nuke family natively on Apple's M1 and M2 hardware at a later date.



**Article:** For more information on Foundry products and supported macOS versions, see Foundry Knowledge Base article [Q100592](#).

- Windows 10 (64-bit)
- CentOS 7.4 (64-bit), or later



**Note:** The currently supported version of VFX Reference Platform includes library versions that are only compatible with CentOS 7.4, or later. Nuke is qualified on the Centos 7.4, 7.5, and 7.6 distributions.

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

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**Note:** Bit-wise equality between GPU and CPU holds in most cases, but for some operations there are limitations to the accuracy possible with this configuration.

- On Windows and Linux, an AMD GPU from the following list:



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- AMD Radeon Pro W5700
- AMD Radeon Pro WX 9100
- AMD Radeon RX 6800 XT



**Note:** For information on the recommended driver for each GPU, see <https://www.amd.com/en/support>

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**Note:** Multi-GPU processing is only available for identical GPUs in the same machine. For example, two NVIDIA GeForce GTX 1080s or two AMD Radeon™ Pro WX 9100s.

## New Features

There are no new features in this release.

## Feature Enhancements

There are no feature enhancements in this release.

## Bug Fixes

- ID 131049 - Timeline Editing: Exporting **Version token number** 00 from the **Export** dialog did not work as expected.
- ID 143546 - Timeline Viewer: Viewer masks were incorrect when the pixel aspect ratio was not 1.0 or anamorphic.
- ID 154613 - Read/Write: Sony **.mxf** HDR files with RGB values > 1 were clamped at 1 in the timeline Viewer.
- ID 278964 - Monitor Out: 8-bit and 10-bit output was slightly below 100% of the legal ranges with video safe level activated.
- ID 434757 - Annotations: Exporting annotations from Nuke Studio with OFlow retimes applied did not work as expected.
- ID 475288 - Stereoscopic: Setting the Viewer output to **Stereo Mode** > **Interlaced** renders black frames.
- ID 493421 - OCIODisplay: Copying an OCIODisplay node or effect between the timeline and comp environments did not retain gamma and gain values.
- ID 498123 - Linux and macOS only: Viewing certain **.abc** files displayed errors on the command line and occasionally caused Nuke to crash.
- ID 500103 - Stereoscopic: Rendering stereo images with the frame server enabled or disabled or from the terminal produced different results from RayRender.
- ID 500698 - MergeGeo: Connecting MergeGeo nodes downstream of TransformGeo nodes caused Nuke to crash.
- ID 501428 - Localization: Right-clicking a shot and selecting **Localize** > **Sequence/Track/Shot** did not work as expected when the **Preferences** > **Localization mode** control was set to **manual**.
- ID 503740 - Create Comp: Using Create Comp Special with multiple clips selected and the **HIERO\_DISABLE\_THUMBNAILS** environment variable set caused exports to fail with 'object is null' errors.
- ID 504611 - Stereo: Entering **%V** in a Write node's **file** control stopped metadata passing through when **read file** was enabled.
- ID 505412 - Transitions: Exporting shots using the **Process as Shots** export template incorrectly included fade transitions on the exported shots.
- ID 505570 - Read/Write: Importing an **.m4a** file after a **.mov** file displayed an error in the **Error Console**.
- ID 507113 - Python: Selecting **Edit knobs** in the **Properties** panel for custom knob caused Nuke to crash.
- ID 507841 - Cryptomatte: Stored matte ID created with a sidecar file did not work as expected if the sidecar was removed.
- ID 508773 - 3D Viewer: Enabling **cast shadows** in a Light node's **Properties** in a scene containing an Environment light and material caused Nuke to crash.
- ID 509491 - Viewing a ScanlineRender node downstream of an EdgeExtend node caused Nuke to crash.
- ID 511641 - Viewing a Transform node downstream of an InPaint node caused Nuke to crash.

- ID 511781 - Python: Using the Python API to remove a non-existent version caused Nuke Studio/Hiero to crash.
- ID 513044 - Python: Creating tags Pythonically in Nuke Studio/Hiero 13.1v2, and later, was significantly slower than previous releases
- ID 513148 - UI: The last three characters in the Versioning popup on the timeline were hidden behind a scrollbar.
- ID 513425 - Transitions: Reformatting a sequence caused fades to render incorrectly.
- ID 513480 - Gizmos: Updating certain gizmos with new knobs caused Nuke to crash.
- ID 519235 - Frame Server: Closing Nuke displayed an error on the command line.
- ID 520355 - OCIODisplay: The **gain** and **gamma** values could not be undone, redone, or reset in soft effects.
- ID 523488 - Python: Importing the **nuke** module in Python displayed a preferences warning.
- ID 524283 - Linux only: Loading projects with missing fonts caused Nuke Studio/Hiero to become unresponsive.
- ID 527773 - Cryptomatte: Viewing a Cryptomatte node connected to an **.exr** with certain metadata upstream caused Nuke to crash.
- ID 531812 - Transitions: Using fade in/fade out transitions with **mask blend by alpha** enabled on a blend track caused exports fail.
- ID 533567 - Monitor Out: AJA T-Tap Pro did not work as expected at 4K resolutions over HDMI.
- ID 535613 - The mask input was missing from the EdgeExtend and Inpaint nodes.

## New Known Issues Specific to Nuke 13.2

This section covers new known issues and gives workarounds for them, where appropriate.

- ID 537358 - CopyCat: Training with large datasets of different sizes occasionally fails.
- ID 534260 - Monitor Out: Node Graph 10-bit 422 output from AJA devices with **legal ranges** enabled is incorrect.
- ID 524273 - CopyCat: Restarting training after encountering an error causes the contact sheet output to render black.
- ID 524096 - Monitor Out: Blackmagic Design cards do not output 1.5G signals to Phabrix test tools as expected.
- ID 522688 - Nuke Indie: Writing container **.mov** and **.mxf** files with **Render in background** enabled does not work as expected.
- ID 520410 - Inference: The kernel compilation progress bar does not display on machines with Ampere GPUs when Inference is the first node used.
- ID 519874 - 3D Transform Handles: Rotating the camera around a Card with different XYZ **scale** values causes the handles to distort.

- ID 519224 - NDI: The stream name is not always displayed when a project is opened.  
As a workaround, disable and re-enable Monitor Out.
- ID 519126 - CopyCat: The contact sheet created in the checkpoint directory is **rgba** and the **.png** files are premultiplied. Depending on the software used to view the images, they could appear blank.
- ID 518254 - CopyCat: Training with the **Preview** input connected to an image with shuffled A and B layers does not work as expected.  
As a workaround, leave the **Preview** disconnected and use the contact sheet to monitor training.
- ID 510063 - 3D Pivot Point: Snapping doesn't work as expected on very small or very large scale geometry.
- ID 509300 - CopyCat: Using crops with 8+ channel training causes corrupted contactsheet.
- ID 508661 - CopyCat: MacOS Having reads with environment variables as inputs causes Nuke to crash.
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## Developer Notes

As Nuke develops, we sometimes have to make changes to the API and ABI under the hood. We try to keep these changes to a minimum and only for certain releases, but from time to time API and ABI compatibility is not guaranteed. See the following table for the situations when you may have to recompile your plug-ins and/or make changes to the source code.

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Additionally, node **Class()** names occasionally change between major releases. While these changes do not affect legacy scripts, you may not get the results you were expecting if a node class has been modified. The **toolbars.py** file, used to create Nuke's node toolbar, contains all the current node class names and is located in **<install\_directory>/plugins/nukescripts/** for reference.

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m.addCommand("CameraShake", "nuke.createNode(\"CameraShake3\")",
icon="CameraShake.png")
```



# Release Notes for Nuke and Hiero 13.2v6

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## Release Date

07 February 2023

## Qualified Operating Systems

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- Windows 10 (64-bit)
- CentOS 7.4 (64-bit), or later



**Note:** The currently supported version of VFX Reference Platform includes library versions that are only compatible with CentOS 7.4, or later. Nuke is qualified on the Centos 7.4, 7.5, and 7.6 distributions.

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

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

## AMD



**Note:** Bit-wise equality between GPU and CPU holds in most cases, but for some operations there are limitations to the accuracy possible with this configuration.

- On Windows and Linux, an AMD GPU from the following list:



**Note:** Other AMD GPUs may work, but have not been fully tested.

- AMD Radeon PRO W6600
- AMD Radeon PRO W6800
- AMD Radeon Pro W5700
- AMD Radeon Pro WX 9100
- AMD Radeon RX 6800 XT



**Note:** For information on the recommended driver for each GPU, see <https://www.amd.com/en/support>

- On Mac, integrated AMD GPUs are supported on the following Intel CPU Macs:
  - Any late 2013 Mac Pro onward (including 2019 Mac Pro),
  - Mid-2015 MacBook Pros onward, and
  - Late 2017 iMac Pros onward.

All supported Mac Pros include a multi-GPU support option, where applicable. Bitwise equality between GPU and CPU holds in most cases, but for some operations, there are limitations to the accuracy possible with this configuration.



**Warning:** Although AMD GPUs are enabled on other Mac models, they are not officially supported and used at your own risk.

## Multi-GPU Processing

Nuke's GPU support includes an **Enable multi-GPU support** option. When enabled in the preferences, GPU processing is shared between the available GPUs for extra processing speed.



**Note:** Multi-GPU processing is only available for identical GPUs in the same machine. For example, two NVIDIA GeForce GTX 1080s or two AMD Radeon™ Pro WX 9100s.

## New Features

### Simulate Physical Lens Behavior with Bokeh

Nuke now includes Bokeh, which is a native version of a plug-in originally developed by Peregrine Labs and acquired by Foundry in 2022. The native version of Bokeh in Nuke is backwards compatible with version 1.4.8 of the pgBokeh plug-in. Bokeh defocuses an image according to a Z depth map, Deep data, or Camera information and allows you to control where the focal plane lies so you can focus on specific elements in an image, and simulate real-world lenses. You can also control the shape of the defocus kernel using the **Kernel** input.

See the [Bokeh](#) reference documentation for more information.

## Feature Enhancements

- ID 505463 - Non-Commercial: BlinkScript is now supported in Nuke Non-Commercial.
- ID 523882 - Read/Write: Support for the ALEXA Mini LF **.mxf** ProRes codec has been improved.

## Bug Fixes

- ID 439456 - Read/Write: Reading DNxHD files that did not contain certain metadata displayed a **Mov64 Reader: Failed to create DNx decoder** error message.
- ID 475398 - Monitor Out: Blackmagic Design cards output incorrect 10-bit values.
- ID 486552 - Read/Write: Importing certain stereoscopic footage and then replacing views caused Nuke to crash.
- ID 503821 - UI: The **icon size** preference had no effect on handles in the timeline Viewer.
- ID 505439/516346/516353 - Disabling track items, versioning clips, or switching between tracks in the A/B input buffers caused the Viewer to temporarily turn black.
- ID 510025 - Python: Calling **nuke.layers()** returned the layers incorrectly.
- ID 518041 - Timeline Editing: Making edits to a track caused the Viewer to render black outside the in and out points.
- ID 518878 - Timeline Editing: Sequences with multiple tags and Burn-In effects decreased playback performance.
- ID 520255 - Soft Effects: The Burn-In effect did not work as expected.
- ID 520308 - Read/Write: Reading Sony Venice and Venice 2 files incorrectly loaded the **Rec.709** gamut.
- ID 520364 - Monitor Out: The bottom few code values (<5/1023) were not accessible in Nuke from Blackmagic Design cards outputting 10-bit values.
- ID 521294 - Sync Review: Enabling or disabling track blending or masking during a sync session affected other sessions' Viewer unexpectedly.
- ID 521310 - Soft Effects: Adjusting the controls in a Grade effect did not always update the Viewer as expected.
- ID 521593 - macOS only: Applying a soft effect to a shot upstream of in and out points applied the effect to the whole track.
- ID 521750 - Soft Effects: Adding certain effects caused the timeline Viewer to render black.
- ID 523609 - Read/Write: Certain **.mxf** files created using FFmpeg displayed at the wrong resolution.
- ID 524237 - CaraVR: C\_Stitcher did not produce consistent results on the CPU and GPU.
- ID 528596 - Python: Calling **nuke.clone()** in terminal mode caused Nuke to crash.

## New Known Issues Specific to Nuke 13.2

This section covers new known issues and gives workarounds for them, where appropriate.

- ID 524273 - CopyCat: Restarting training after encountering an error causes the contact sheet output to render black.
- ID 524096 - Monitor Out: Blackmagic Design cards do not output 1.5G signals to Phabrix test tools as expected.
- ID 520410 - Inference: The kernel compilation progress bar does not display on machines with Ampere GPUs when Inference is the first node used.
- ID 519874 - 3D Transform Handles: Rotating the camera around a Card with different XYZ **scale** values causes the handles to distort.
- ID 519224 - NDI: The stream name is not always displayed when a project is opened.  
As a workaround, disable and re-enable Monitor Out.
- ID 519126 - CopyCat: The contact sheet created in the checkpoint directory is **rgba** and the **.png** files are premultiplied. Depending on the software used to view the images, they could appear blank.
- ID 518254 - CopyCat: Training with the **Preview** input connected to an image with shuffled A and B layers does not work as expected.  
As a workaround, leave the **Preview** disconnected and use the contact sheet to monitor training.
- ID 510063 - 3D Pivot Point: Snapping doesn't work as expected on very small or very large scale geometry.
- ID 509300 - CopyCat: Using crops with 8+ channel training causes corrupted contactsheet.
- ID 508661 - CopyCat: MacOS Having reads with environment variables as inputs causes Nuke to crash.
- ID 508116 - 3D Pivot Point: Drag-rotate on geometry with a large **scale** value doesn't work as expected.
- ID 507327 - CopyCat: Preview cannot be fetched if preview is connected to remove.
- ID 507325 - CopyCat: Channels set to none for input causes seg fault.
- ID 506965 - MO NDI: Long NDI sender names get truncated.
- ID 506918 - CopyCat: Resuming after changing cropsize makes contact sheet wrong size.
- ID 506569 - MRQ Deferred Rendering: Result of "Use 32 Bit Post Process Materials" option still rendered when disabled.
- ID 506360 - CopyCat: Resuming with different model size throws wrong error.
- ID 506004 - Arriraw 7: When legacy mxl file is loaded with SDK7, some knob values do not match SDK 6.2 version.
- ID 505687 - 3D Pivot Point: Match Geo to selection ignores and overrides pivot point transformations.
- ID 504819 - 3D Transform Handles: The pivot point of the geometry is affected by the scale changes downstream.
- ID 504645 - IV & MO: NDI signals are seen twice by the NDI receiver app.
- ID 504542 - CopyCat: Epochs set to minus value crashes.

- ID 504406 - CopyCat: Error in the viewer stays on when training.
- ID 504191 - IV & MO: Crash when closing while playing back with NDI active.
- ID 504013 - 3D Transform Handles: Negative Scaling on TransformGeo affecting ParticalEmmitter: intermitant incorrect scales on other axes.
- ID 503829 - 3D Transform Handles: Rotating the camera on the Z-axis causes the Card3D node's screen space handles to change alignment in the 2D Viewer.
- ID 503687 - IV & MO: Not all of the knobs on the Monitor Out strip show their knob name in the tooltip.
- ID 503684 - IV & MO: Monitor Out strip shows stereo controls on launch.
- ID 503617 - UI: Moving the Nuke interface to a second monitor resets the color picker window size to the default dimensions.
- ID 503338 - 3D Pivot Point: Geometry position and orientation occasionally behave inconsistently.
- ID 502942 - IV & MO: User needs to expand the Viewer MO panel to reveal options.
- ID 502843 - IV & MO: Use Viewer Gamma/ Gain displays on in the MO strip when disabled in properties.
- ID 502793 - IV & MO: Loading an nk file doesn't open all floating windows.
- ID 502495 - CopyCat: Slow down when caching at the start.
- ID 502404 - IV & MO: MO viewer list does not update when a viewer node is copy/pasted.
- ID 502395 - IV & MO: Viewer list doesn't appear to be in a logical order.
- ID 502394 - IV & MO: Output is not sent to MO device unless the related viewer is visible.
- ID 502226 - IV & MO: Floating windows open in same position and size as the most recently closed floating window
- ID 501785 - BM RAW: Incorrect Color space and gamma in attached project.
- ID 501700 - 3D Pivot Point: Object jumps when drag rotating pivot in non-default transform order.
- ID 501525 - CopyCat: Error message is wrong when cancelling training.
- ID 501442 - 3D Pivot Point: Scale affects the pivot drag rotate algorithm.
- ID 501261 - macOS Monterey: Nuke Studio Qt windows slow to update upon resize.
- ID 500156 - OTIO: Warning status appear when different frame rate clips are detected in timeline.
- ID 500138 - 3D Transform Handles: Rotating in screen and world space after scaling in screen space doesn't work as expected.
- ID 499468 - 3D Transform Handles: Handles size is affected by scale change downstream.
- ID 499442 - 3D Transform Handles: Translating rotated pivot point if the geometry was scaled or rotated doesn't work as expected.
- ID 499383 - 3D Transform Handles: Rotate doesn't work as expected on small scale geometry.
- ID 498754 - PUBLIC: Nuke will sometimes fail to launch due to installed software or external hardware connected to the Windows machine.
- ID 498140 - 3D Pivot Point: The snap menu options in the EditGeo nodes don't work as expected.

- ID 498139 - 3D Pivot Point: Match selection doesn't work as expected when pivot control are not at their default values.
- ID 497459 - 3D Transform Handles: Changing values directly inside knobs does not respect pivot compensation.
- ID 497372 - MO NDI: Monitor Out metadata - frameIndex does not work.
- ID 496332 - Linux only: Changing toolbar/handles mode Pythonically doesn't update 3D handles in the Viewer as expected.
- ID 495515 - 3D Transform Handles: Scaling parent transforms negatively causes the orientation of handles to behave unexpectedly.
- ID 492637 - 3D Transform Handles: Free rotate shrinks/grows during rotation in 2D view.
- ID 491143 - MO NDI: - Horizontal flop in the MO Node DNW (Nuke).

## Developer Notes

As Nuke develops, we sometimes have to make changes to the API and ABI under the hood. We try to keep these changes to a minimum and only for certain releases, but from time to time API and ABI compatibility is not guaranteed. See the following table for the situations when you may have to recompile your plug-ins and/or make changes to the source code.

Release Type	Example	Compatibility	Recompile	Rewrite
Version	13.1v1 to 13.1v2	API and ABI		
Point	13.0v1 to 13.1v1	API	●	
Major	12.0v1 to 13.0v1	-	●	●

Additionally, node **Class()** names occasionally change between major releases. While these changes do not affect legacy scripts, you may not get the results you were expecting if a node class has been modified. The **toolbars.py** file, used to create Nuke's node toolbar, contains all the current node class names and is located in `<install_directory>/plugins/nukescripts/` for reference.

As an example, between Nuke 9 and Nuke 10, the CameraShake node **Class()** changed from CameraShake2 to CameraShake3. In the **toolbars.py** file for the two releases, the entries for the CameraShake node appear as follows:

```
m.addCommand("CameraShake", "nuke.createNode(\"CameraShake2\")",
icon="CameraShake.png")
m.addCommand("CameraShake", "nuke.createNode(\"CameraShake3\")",
icon="CameraShake.png")
```



# Release Notes for Nuke and Hiero 13.2v5

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## Release Date

27 October 2022

## Qualified Operating Systems

- macOS Big Sur (11.x) or macOS 12.x (Monterey). Nuke is currently supported under Rosetta emulation on Apple's new Apple Silicon hardware and M1 chips. Native support is not currently available and Foundry is planning to support the Nuke family natively on Apple's M1 and M2 hardware at a later date.



**Article:** For more information on Foundry products and supported macOS versions, see Foundry Knowledge Base article [Q100592](#).

- Windows 10 (64-bit)
- CentOS 7.4 (64-bit), or later



**Note:** The currently supported version of VFX Reference Platform includes library versions that are only compatible with CentOS 7.4, or later. Nuke is qualified on the Centos 7.4, 7.5, and 7.6 distributions.

Other operating systems may work, but have not been fully tested.

## Requirements for Nuke's GPU Acceleration

If you want to enable Nuke to calculate certain nodes using the GPU, there are some additional requirements.

## NVIDIA

An NVIDIA GPU with compute capability 3.0 (Kepler) or above. A list of the compute capabilities of NVIDIA GPUs is available at <https://developer.nvidia.com/cuda-gpus>



**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 10.1 or above. On Windows and Linux, CUDA graphics drivers are bundled with the regular drivers for your NVIDIA GPU. Driver versions 418.96 (Windows) and 418.39 (Linux), or above are required. See <https://www.nvidia.com/Download/Find.aspx> for more information.



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

## AMD



**Note:** Bit-wise equality between GPU and CPU holds in most cases, but for some operations there are limitations to the accuracy possible with this configuration.

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**Note:** Other AMD GPUs may work, but have not been fully tested.

- AMD Radeon PRO W6600
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Nuke's GPU support includes an **Enable multi-GPU support** option. When enabled in the preferences, GPU processing is shared between the available GPUs for extra processing speed.



**Note:** Multi-GPU processing is only available for identical GPUs in the same machine. For example, two NVIDIA GeForce GTX 1080s or two AMD Radeon™ Pro WX 9100s.

## New Features

There are no new features in this release.

## Feature Enhancements

There are no feature enhancements in this release.

## Bug Fixes

- ID 462011 - macOS Big Sur only: A persistent **QCocoaWindow** error was printed in the Terminal.

- ID 485272 - Documentation: Events were missing from the Hiero Python Developers Guide.
- ID 489318 - Timeline Editing: Setting reference media was not undoable if a reference track already existed.
- ID 502066 - Python: Calling **hiero.ui.getTimelineEditor** returned an object when the queried sequence was closed.
- ID 514390 - Soft Effects: Adding OCIO effects reduced playback speed.
- ID 517800 - mxfReader: Reading formats that could not be decoded caused Nuke to crash.
- ID 518660 - OCIO-Config: OCIO effects did not return the correct error code when textures were not available.
- ID 519163 - Read/Write: Viewing H.264 files frequently duplicated or dropped frames causing playback to become out of sync.
- ID 519863 - Python: Nuke could not load movWriter from any version of Python that did not ship with the Nuke build.
- ID 520682 - Timeline Editing: Creating a comp from a **.mov** and then rendering it to the timeline duplicated the first frame.

## New Known Issues Specific to Nuke 13.2

This section covers new known issues and gives workarounds for them, where appropriate.

- ID 520410 - Inference: The kernel compilation progress bar does not display on machines with Ampere GPUs when Inference is the first node used.
- ID 520364/475398 - Monitor Out: 10-bit output color range is mapped incorrectly to 69-936, instead of 64-940.
- ID 520355 - OCIODisplay: The **gain** and **gamma** values cannot be undone, redone, or reset in soft effects.
- ID 519874 - 3D Transform Handles: Rotating the camera around a Card with different XYZ **scale** values causes the handles to distort.
- ID 519224 - NDI: The stream name is not always displayed when a project is opened.  
As a workaround, disable and re-enable Monitor Out.
- ID 519126 - CopyCat: The contact sheet created in the checkpoint directory is **rgba** and the **.png** files are premultiplied. Depending on the software used to view the images, they could appear blank.
- ID 518843 - Transitions: Single-Frame transitions will cause Nuke to hang if extended.
- ID 518533 - CopyCat: Input with 0 channels causes crash.
- ID 509300 - CopyCat: Using crops with 8+ channel training causes corrupted contactsheet.
- ID 508661 - CopyCat: MacOS Having reads with environment variables as inputs causes Nuke to crash.
- ID 508116 - 3D Pivot Point: Drag-rotate on geometry with a large **scale** value doesn't work as expected.
- ID 507327 - CopyCat: Preview cannot be fetched if preview is connected to remove.
- ID 507325 - CopyCat: Channels set to none for input causes seg fault.

- ID 506965 - MO NDI: Long NDI sender names get truncated.
- ID 506918 - CopyCat: Resuming after changing cropsize makes contact sheet wrong size.
- ID 506569 - MRQ Deferred Rendering: Result of "Use 32 Bit Post Process Materials" option still rendered when disabled.
- ID 506360 - CopyCat: Resuming with different model size throws wrong error.
- ID 506004 - Arriraw 7: When legacy mxf file is loaded with SDK7, some knob values do not match SDK 6.2 version.
- ID 505687 - 3D Pivot Point: Match Geo to selection ignores and overrides pivot point transformations.
- ID 504819 - 3D Transform Handles: The pivot point of the geometry is affected by the scale changes downstream.
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- ID 502495 - CopyCat: Slow down when caching at the start.
- ID 502404 - IV & MO: MO viewer list does not update when a viewer node is copy/pasted.
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- ID 502394 - IV & MO: Output is not sent to MO device unless the related viewer is visible.
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- ID 501785 - BM RAW: Incorrect Color space and gamma in attached project.
- ID 501700 - 3D Pivot Point: Object jumps when drag rotating pivot in non-default transform order.
- ID 501525 - CopyCat: Error message is wrong when cancelling training.
- ID 501442 - 3D Pivot Point: Scale affects the pivot drag rotate algorithm.

- ID 501261 - macOS Monterey: Nuke Studio Qt windows slow to update upon resize.
- ID 500156 - OTIO: Warning status appear when different frame rate clips are detected in timeline.
- ID 500138 - 3D Transform Handles: Rotating in screen and world space after scaling in screen space doesn't work as expected.
- ID 499468 - 3D Transform Handles: Handles size is affected by scale change downstream.
- ID 499442 - 3D Transform Handles: Translating rotated pivot point if the geometry was scaled or rotated doesn't work as expected.
- ID 499383 - 3D Transform Handles: Rotate doesn't work as expected on small scale geometry.
- ID 498754 - PUBLIC: Nuke will sometimes fail to launch due to installed software or external hardware connected to the Windows machine.
- ID 498140 - 3D Pivot Point: The snap menu options in the EditGeo nodes don't work as expected.
- ID 498139 - 3D Pivot Point: Match selection doesn't work as expected when pivot control are not at their default values.
- ID 497459 - 3D Transform Handles: Changing values directly inside knobs does not respect pivot compensation.
- ID 497372 - MO NDI: Monitor Out metadata - frameIndex does not work.
- ID 496332 - Linux only: Changing toolbar/handles mode Pythonically doesn't update 3D handles in the Viewer as expected.
- ID 495515 - 3D Transform Handles: Scaling parent transforms negatively causes the orientation of handles to behave unexpectedly.
- ID 492637 - 3D Transform Handles: Free rotate shrinks/grows during rotation in 2D view.
- ID 491143 - MO NDI: - Horizontal flop in the MO Node DNW (Nuke).

## Developer Notes

As Nuke develops, we sometimes have to make changes to the API and ABI under the hood. We try to keep these changes to a minimum and only for certain releases, but from time to time API and ABI compatibility is not guaranteed. See the following table for the situations when you may have to recompile your plug-ins and/or make changes to the source code.

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Additionally, node **Class()** names occasionally change between major releases. While these changes do not affect legacy scripts, you may not get the results you were expecting if a node class has been modified. The **toolbars.py** file, used to create Nuke's node toolbar, contains all the current node class names and is located in **<install\_directory>/plugins/nukescripts/** for reference.

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```

# Release Notes for Nuke and Hiero 13.2v4

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## Release Date

08 September 2022

## Qualified Operating Systems

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**Article:** For more information on Foundry products and supported macOS versions, see Foundry Knowledge Base article [Q100592](#).

- Windows 10 (64-bit)
- CentOS 7.4 (64-bit), or later



**Note:** The currently supported version of VFX Reference Platform includes library versions that are only compatible with CentOS 7.4, or later. Nuke is qualified on the Centos 7.4, 7.5, and 7.6 distributions.

Other operating systems may work, but have not been fully tested.

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If you want to enable Nuke to calculate certain nodes using the GPU, there are some additional requirements.



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Nuke's GPU support includes an **Enable multi-GPU support** option. When enabled in the preferences, GPU processing is shared between the available GPUs for extra processing speed.



**Note:** Multi-GPU processing is only available for identical GPUs in the same machine. For example, two NVIDIA GeForce GTX 1080s or two AMD Radeon™ Pro WX 9100s.

## New Features

There are no new features in this release.

## Feature Enhancements

There are no feature enhancements in this release.

## Bug Fixes

- ID 158897 - Python API - 'log' and 'path' modules are not documented in the Python Dev Guide.

- ID 383985 - Update Hiero Python Dev Guide Environment Setup page to explain how to add multiple paths on Windows.
- ID 474428 - [PUBLIC] Conforming MXF files in Nuke Studio is slower than in previous releases.
- ID 484321 - [PUBLIC] Conforming MXF files in Nuke Studio outputs errors to the console.
- ID 488012 - Add support for ALEXA Mini LF .mxf PRORES codec for SUP 7.0 and later.
- ID 492888 - [PUBLIC] All pages with underscores as the beginning character are missing in the Python Reference.
- ID 497944 - [PUBLIC] The `hiero.core.events.postEvent()` function exists in Nuke Python documentation but not the Nuke Studio/Hiero software.
- ID 502092 - [PUBLIC] Shuffle [S] is missing from the Tab menu after running Update.
- ID 502131 - [PUBLIC] ShuffleCopy is missing from the Tab menu after running Update.
- ID 504360 - [PUBLIC] An error is displayed in the Viewer, when viewing the final frames of a ProRes 422 LT file.
- ID 510617 - [PUBLIC] C\_CameraSolver is worse at solving camera matches, no longer matching the first camera.
- ID 511000 - The `nuke.Root` page is missing.
- ID 512015 - Add Word-wrap to the Sphinx Template to Eliminate Scrollbars.
- ID 512541 - [PUBLIC] An error occurs when reading ProRes MXF files from the Arri ALEXA Mini LF.
- ID 512893 - [EDL] Unable to conform due to unsupported characters.
- ID 513097 - Backslashes need escaping.
- ID 513207 - Camera3 node crashes Nuke if the file knob is set to an invalid alembic/abc/fbx path.
- ID 513852 - MOV files with empty Four CC tags can crash Studio.
- ID 514149 - [Qt 5.15] macOS Only: Nuke - Render / Execute menu dropdowns not responding on 3D arch builds.
- ID 514217 - [PUBLIC] Importing clips via Python does not work in Sync client sessions and can sometimes crash Nuke Studio/Hiero.

## New Known Issues Specific to Nuke 13.2

This section covers new known issues and gives workarounds for them, where appropriate.

- ID 491143 - [MO NDI] - Horizontal flop in the MO Node DNW (Nuke).
- ID 492637 - [3D Transform Handles] Free rotate shrinks/grows during rotation in 2D view.
- ID 497372 - [MO NDI] Monitor Out metadata - `frameIndex` does not work.
- ID 498754 - [PUBLIC] Nuke will sometimes fail to launch due to installed software or external hardware connected to the Windows machine.

- ID 499442 - [3D Transform Handles] Translating rotated pivot point if the geometry was scaled or rotated doesn't work as expected.
- ID 499468 - [3D Transform Handles] Handles size is affected by scale change downstream.
- ID 500138 - [3D Transform Handles] Rotating in screen and world space after scaling in screen space doesn't work as expected.
- ID 500156 - [OTIO] Warning status appear when different frame rate clips are detected in timeline.
- ID 501261 - [macOS Monterey] Nuke Studio Qt windows slow to update upon resize.
- ID 501442 - [3D Pivot Point] Scale affects the pivot drag rotate algorithm.
- ID 501525 - [CopyCat] Error message is wrong when cancelling training.
- ID 501700 - [3D Pivot Point] Object jumps when drag rotating pivot in non-default transform order.
- ID 501785 - [BM RAW] Incorrect Color space and gamma in attached project.
- ID 502226 - [IV & MO] Floating windows open in same position and size as the most recently closed floating window
- ID 502394 - [IV & MO] Output is not sent to MO device unless the related viewer is visible.
- ID 502395 - [IV & MO] Viewer list doesn't appear to be in a logical order.
- ID 502404 - [IV & MO] MO viewer list does not update when a viewer node is copy/pasted.
- ID 502495 - [CopyCat] Slow down when caching at the start.
- ID 502793 - [IV & MO] Loading an nk file doesn't open all floating windows.
- ID 502843 - [IV & MO] Use Viewer Gamma/ Gain displays on in the MO strip when disabled in properties.
- ID 502942 - [IV & MO] User needs to expand the Viewer MO panel to reveal options.
- ID 503684 - [IV & MO] Monitor Out strip shows stereo controls on launch.
- ID 503687 - [IV & MO] Not all of the knobs on the Monitor Out strip show their knob name in the tooltip.
- ID 504013 - [3D Transform Handles] Negative Scaling on TransformGeo affecting ParticalEmmitter: intermitant incorrect scales on other axes.
- ID 504191 - [IV & MO] Crash when closing while playing back with NDI active.
- ID 504406 - [CopyCat] Error in the viewer stays on when training.
- ID 504542 - [CopyCat] Epochs set to minus value crashes.
- ID 504645 - [IV & MO] NDI signals are seen twice by the NDI receiver app.
- ID 504819 - [3D Transform Handles] The pivot point of the geometry is affected by the scale changes downstream.
- ID 506004 - [Arriraw 7] When legacy mxf file is loaded with SDK7, some knob values do not match SDK 6.2 version.
- ID 506360 - [CopyCat] Resuming with different model size throws wrong error.
- ID 506569 - [MRQ Deferred Rendering] Result of "Use 32 Bit Post Process Materials" option still rendered when disabled.
- ID 506918 - [CopyCat] Resuming after changing cropsize makes contact sheet wrong size.

- ID 506965 - [MO NDI] Long NDI sender names get truncated.
- ID 507325 - [CopyCat] Channels set to none for input causes seg fault.
- ID 507325 - [CopyCat] Channels set to none for input causes seg fault.
- ID 507327 - [CopyCat] Preview cannot be fetched if preview is connected to remove.
- ID 508661 - [CopyCat] MacOS Having reads with environment variables as inputs causes Nuke to crash.
- ID 509300 - [CopyCat] Using crops with 8+ channel training causes corrupted contactsheet.
- ID 518533 - [CopyCat] Input with 0 channels causes crash.
- ID 518843 - [Transitions] Single-Frame transitions will cause Nuke to hang if extended.

## Developer Notes

As Nuke develops, we sometimes have to make changes to the API and ABI under the hood. We try to keep these changes to a minimum and only for certain releases, but from time to time API and ABI compatibility is not guaranteed. See the following table for the situations when you may have to recompile your plug-ins and/or make changes to the source code.

Release Type	Example	Compatibility	Recompile	Rewrite
Version	13.1v1 to 13.1v2	API and ABI		
Point	13.0v1 to 13.1v1	API	●	
Major	12.0v1 to 13.0v1	-	●	●

Additionally, node **Class()** names occasionally change between major releases. While these changes do not affect legacy scripts, you may not get the results you were expecting if a node class has been modified. The **toolbars.py** file, used to create Nuke's node toolbar, contains all the current node class names and is located in `<install_directory>/plugins/nukescripts/` for reference.

As an example, between Nuke 9 and Nuke 10, the CameraShake node **Class()** changed from CameraShake2 to CameraShake3. In the **toolbars.py** file for the two releases, the entries for the CameraShake node appear as follows:

```
m.addCommand("CameraShake", "nuke.createNode(\"CameraShake2\")",
icon="CameraShake.png")
m.addCommand("CameraShake", "nuke.createNode(\"CameraShake3\")",
icon="CameraShake.png")
```

# Release Notes for Nuke and Hiero 13.2v3

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## Release Date

28 July 2022

## Qualified Operating Systems

- macOS Big Sur (11.x) or macOS 12.x (Monterey). Nuke is currently supported under Rosetta emulation on Apple's new Apple Silicon hardware and M1 chips. Native support is not currently available and Foundry is planning to support the Nuke family natively on Apple's M1 and M2 hardware at a later date.



**Article:** For more information on Foundry products and supported macOS versions, see Foundry Knowledge Base article [Q100592](#).

- Windows 10 (64-bit)
- CentOS 7.4 (64-bit), or later



**Note:** The currently supported version of VFX Reference Platform includes library versions that are only compatible with CentOS 7.4, or later. Nuke is qualified on the Centos 7.4, 7.5, and 7.6 distributions.

Other operating systems may work, but have not been fully tested.

## Requirements for Nuke's GPU Acceleration

If you want to enable Nuke to calculate certain nodes using the GPU, there are some additional requirements.

## NVIDIA

An NVIDIA GPU with compute capability 3.0 (Kepler) or above. A list of the compute capabilities of NVIDIA GPUs is available at <https://developer.nvidia.com/cuda-gpus>



**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 10.1 or above. On Windows and Linux, CUDA graphics drivers are bundled with the regular drivers for your NVIDIA GPU. Driver versions 418.96 (Windows) and 418.39 (Linux), or above are required. See <https://www.nvidia.com/Download/Find.aspx> for more information.



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

## AMD



**Note:** Bit-wise equality between GPU and CPU holds in most cases, but for some operations there are limitations to the accuracy possible with this configuration.

- On Windows and Linux, an AMD GPU from the following list:



**Note:** Other AMD GPUs may work, but have not been fully tested.

- AMD Radeon PRO W6600
- AMD Radeon PRO W6800
- AMD Radeon Pro W5700
- AMD Radeon Pro WX 9100
- AMD Radeon RX 6800 XT





**Note:** For information on the recommended driver for each GPU, see <https://www.amd.com/en/support>

- On Mac, integrated AMD GPUs are supported on the following Intel CPU Macs:
  - Any late 2013 Mac Pro onward (including 2019 Mac Pro),
  - Mid-2015 MacBook Pros onward, and
  - Late 2017 iMac Pros onward.

All supported Mac Pros include a multi-GPU support option, where applicable. Bitwise equality between GPU and CPU holds in most cases, but for some operations, there are limitations to the accuracy possible with this configuration.



**Warning:** Although AMD GPUs are enabled on other Mac models, they are not officially supported and used at your own risk.

## Multi-GPU Processing

Nuke's GPU support includes an **Enable multi-GPU support** option. When enabled in the preferences, GPU processing is shared between the available GPUs for extra processing speed.



**Note:** Multi-GPU processing is only available for identical GPUs in the same machine. For example, two NVIDIA GeForce GTX 1080s or two AMD Radeon™ Pro WX 9100s.

## New Features

There are no new features in this release.

## Feature Enhancements

There are no feature enhancements in this release.

## Bug Fixes

- ID 373092 - Monitor Out: After a gap in the timeline, the first frame of a shot during playback on the monitor was occasionally the last frame of the previous shot.
- ID 410015 - Windows only: Monitor output from AJA Kona 4 cards using HDMI was split incorrectly in to four images on the monitor.
- ID 489557 - Project Bin: Holding **Alt** and dragging more than three items from one bin to another bin caused the application to crash.
- ID 501884 - Timeline Editing: Blended shots that did not start at frame 0, incorrectly offset the last frame of the blend track by 1 frame.
- ID 502092 - Shuffle [S] was missing from the Tab menu after running Update.
- ID 503741 - OCIOv2: Loading certain ACES 1.2 OCIO config files displayed **OCIO LookTransform error: empty destination color space name** errors in the Viewer.
- ID 504131 - OCIOv2: Inverting LUTs with large input values occasionally produced NaN (Not a Number) RGB samples in the Viewer.
- ID 504266 - Export: Including additional frame handles occasionally caused misalignment of keyframes.
- ID 504386 - 3D Pivot Point: Pivot drag rotate did not work as expected.
- ID 505214/505672 - Monitor Out: The SDI legal range button's state was not always saved or loaded correctly.
- ID 507281 - Versioning: Changing the version of an unlinked track item occasionally selected the wrong version.
- ID 507284 - Monitor Out: The legal range checkbox in the Monitor Out strip was missing.
- ID 507829 - Monitor Out: Switching between the Timeline and Compositing environments with Monitor Out active in Nuke 13.2 was not as intuitive as in 13.1.
- ID 507925 - Topdown Rendering: Setting **file type** to **mov** and then changing the **FPS** in a Write node's **Properties** panel caused Nuke to crash.
- ID 508152 - Monitor Out: Closing the application with Monitor Out enabled occasionally caused a crash.
- ID 509243 - Read/Write: Embedding new channels into an **.exr** file with the Write node's **interleave** control set to **channels** caused Nuke to crash.
- ID 509997 - Export: Exporting a sequence to a **.mov** file displayed an error despite completing successfully.
- ID 510643 - Transitions: Adding fade out to a shot in a sequence and then extending the fade length displayed a **Missing file** error.
- ID 510673 - macOS only: Adjusting a fade out transition to the length of the shot locked the fade at that length.
- ID 510729 - CatFileCreator: Connecting a Viewer to a CatFileCreator node caused Nuke to crash.

- ID 510841 - AAF: Importing certain **.aaf** files from Avid or Resolve didn't align some shots in the timeline as expected.
- ID 511136 - UnrealReader: Connecting a Camera node to the UnrealReader **camera** input caused Nuke to crash.
- ID 511446 - Ocula Plug-ins: Disabling **Use GPU if available** in the node **Properties** panel with O\_DisparityGenerator connected to O\_DisparityViewer caused Nuke to crash.
- ID 512762 - Read/Write: Rendering stereo views from **.exr** files only rendered one view.

## New Known Issues Specific to Nuke 13.2

This section covers new known issues and gives workarounds for them, where appropriate.

- ID 509300 - CopyCat: Training with cropped images containing more than four channels renders corrupt contact sheet data.
- ID 508661 - macOS only: Using environment variables in CopyCat's **Data Directory** path causes Nuke to crash.
- ID 507327 - CopyCat: Training does not work as expected if a Remove node is inserted between the input node and the CopyCat **Preview** input.
- ID 507325 - CopyCat: Connecting an **Input** with no channels, displayed as **Channels: none** in the CopyCat **Properties** panel, and then clicking **Start Training** causes Nuke to crash.
- ID 506965 - Monitor out: Long Nuke script names create truncated NDI sender names, which can result in only one unique stream regardless of how many Viewers are sending a signal.  
As a workaround, avoid using long Nuke script names to allow multiple streams from the same script.
- ID 506918 - CopyCat: Changing the **Crop Size** and then resuming training creates contact sheets at the wrong size.
- ID 506569 - UnrealReader: The enabled/disabled state of the **Use 32 Bit Post Process Materials** checkbox is not always respected by the render output.  
If UnrealReader fails to respect the enabled/disabled state, restart the Unreal Editor project to reset the controls.
- ID 506360 - CopyCat: Resuming training after changing the **Model Size** displays a generic error message.
- ID 506004 - ARRIRAW: Reading legacy **.mxf** files with SDK 7.0 does not match all knob values when compared to SDK 6.2.
- ID 504819 - 3D Transform Handles: Geometry pivot points are affected incorrectly by downstream scale changes.
- ID 504645 - Monitor Out: NDI signals from Nuke Studio are listed twice in the NDI monitor.
- ID 504542 - CopyCat: Setting the **Epochs** control to a negative number and then starting training causes Nuke to crash.

- ID 504406 - CopyCat: Errors displayed in the Viewer do not disappear as expected during subsequent training runs.
- ID 504191 - Monitor Out: Closing Nuke Studio during playback while broadcasting the timeline Viewer over NDI causes the application to crash on exit.
- ID 504013 - 3D Transform Handles: Negative scaling values in TransformGeo nodes cause inconsistent scaling in upstream ParticleEmitter nodes.
- ID 503687 - Monitor Out: Some controls in the **Monitor Out** panel in Nuke Studio do not display the knob name in their tooltips.
- ID 503684 - Monitor Out: The **Monitor Out** panel in Nuke Studio always displays stereo controls, even if the project does not contain multiple views.
- ID 502942 - Monitor Out: The **Viewer Monitor Out** pane does not display all controls as expected. As a workaround, resize the pane to cause the controls to appear.
- ID 502843 - Monitor Out: The **Use Viewer Gamma / Gain** controls are not enabled and disabled consistently between the **Properties** and Monitor Out pane.
- ID 502793 - Monitor Out: Loading certain **.nk** scripts does not open all floating windows as expected.
- ID 502495 - CopyCat: Caching during training is slower when compared to earlier Nuke builds.
- ID 502404 - Monitor Out: The Viewer list does not update as expected when a Viewer node is copied and pasted in the Node Graph.
- ID 502395 - Monitor Out: The list of available Viewers is not ordered correctly.
- ID 502394 - Monitor Out: Output is not sent to monitor out devices unless the related Viewer is the active Viewer.
- ID 502226 - Monitor Out: The floating window size is used incorrectly for all panes undocked from the interface.
- ID 501785 - BM RAW: Certain files display with incorrect colorspace and gamma values.
- ID 501700 - 3D Pivot Point: Rotating the pivot point by dragging in a non-default **transform order** causes the object to jump unexpectedly.
- ID 501525 - CopyCat: Canceling training displays a misleading error message.
- ID 501442 - 3D Pivot Point: Object scale is not always maintained by the pivot rotate algorithm.
- ID 501261 - macOS Monterey only: Resizing UI elements is slow to update.
- ID 500156 - OTIO: Timelines containing shots with different frame rates displays a warning message incorrectly.
- ID 500138 - 3D Transform Handles: Scaling in Screen space and then rotating in Screen and World space doesn't work as expected.
- ID 499468 - 3D Transform Handles: Handle size is unexpectedly affected by scale changes downstream.
- ID 499442 - 3D Transform Handles: Translating a rotated pivot point on geometry that is scaled or rotated doesn't work as expected.

- ID 498754 - Windows only: Nuke occasionally fails to launch due to external hardware connected to the machine.  
As a workaround, disconnect any unnecessary hardware such as web cams or additional audio hardware before launching Nuke.
- ID 497372 - Monitor Out: **frameIndex** metadata does not work as expected.
- ID 492637 - 3D Transform Handles: Using the free rotate tool on certain objects causes them to scale during rotation in the 2D Viewer.
- ID 491143 - Monitor Out: Enabling **Horizontal Flop** in the ViewerMonitorOut **Properties** does not work as expected.

## Developer Notes

As Nuke develops, we sometimes have to make changes to the API and ABI under the hood. We try to keep these changes to a minimum and only for certain releases, but from time to time API and ABI compatibility is not guaranteed. See the following table for the situations when you may have to recompile your plug-ins and/or make changes to the source code.

Release Type	Example	Compatibility	Recompile	Rewrite
Version	13.1v1 to 13.1v2	API and ABI		
Point	13.0v1 to 13.1v1	API	●	
Major	12.0v1 to 13.0v1	-	●	●

Additionally, node **Class()** names occasionally change between major releases. While these changes do not affect legacy scripts, you may not get the results you were expecting if a node class has been modified. The **toolbars.py** file, used to create Nuke's node toolbar, contains all the current node class names and is located in **<install\_directory>/plugins/nukescripts/** for reference.

As an example, between Nuke 9 and Nuke 10, the CameraShake node **Class()** changed from CameraShake2 to CameraShake3. In the **toolbars.py** file for the two releases, the entries for the CameraShake node appear as follows:

```
m.addCommand("CameraShake", "nuke.createNode(\"CameraShake2\")",
icon="CameraShake.png")
m.addCommand("CameraShake", "nuke.createNode(\"CameraShake3\")",
icon="CameraShake.png")
```

# Release Notes for Nuke and Hiero 13.2v2

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## Release Date

31 May 2022

## Qualified Operating Systems

- macOS Big Sur (11.x) or macOS 12.x (Monterey). Nuke is currently supported under Rosetta emulation on Apple's new Apple Silicon hardware and M1 chips. Native support is not currently available and Foundry is planning to support the Nuke family natively on Apple's M1 and M2 hardware at a later date.



**Article:** For more information on Foundry products and supported macOS versions, see Foundry Knowledge Base article [Q100592](#).

- Windows 10 (64-bit)
- CentOS 7.4 (64-bit), or later



**Note:** The currently supported version of VFX Reference Platform includes library versions that are only compatible with CentOS 7.4, or later. Nuke is qualified on the Centos 7.4, 7.5, and 7.6 distributions.

Other operating systems may work, but have not been fully tested.

## Requirements for Nuke's GPU Acceleration

If you want to enable Nuke to calculate certain nodes using the GPU, there are some additional requirements.

## NVIDIA

An NVIDIA GPU with compute capability 3.0 (Kepler) or above. A list of the compute capabilities of NVIDIA GPUs is available at <https://developer.nvidia.com/cuda-gpus>



**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 10.1 or above. On Windows and Linux, CUDA graphics drivers are bundled with the regular drivers for your NVIDIA GPU. Driver versions 418.96 (Windows) and 418.39 (Linux), or above are required. See <https://www.nvidia.com/Download/Find.aspx> for more information.



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

## AMD



**Note:** Bit-wise equality between GPU and CPU holds in most cases, but for some operations there are limitations to the accuracy possible with this configuration.

- On Windows and Linux, an AMD GPU from the following list:



**Note:** Other AMD GPUs may work, but have not been fully tested.

- AMD Radeon PRO W6600
- AMD Radeon PRO W6800
- AMD Radeon Pro W5700
- AMD Radeon Pro WX 9100
- AMD Radeon RX 6800 XT





**Note:** For information on the recommended driver for each GPU, see <https://www.amd.com/en/support>

- On Mac, integrated AMD GPUs are supported on the following Intel CPU Macs:
  - Any late 2013 Mac Pro onward (including 2019 Mac Pro),
  - Mid-2015 MacBook Pros onward, and
  - Late 2017 iMac Pros onward.

All supported Mac Pros include a multi-GPU support option, where applicable. Bitwise equality between GPU and CPU holds in most cases, but for some operations, there are limitations to the accuracy possible with this configuration.



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## Multi-GPU Processing

Nuke's GPU support includes an **Enable multi-GPU support** option. When enabled in the preferences, GPU processing is shared between the available GPUs for extra processing speed.



**Note:** Multi-GPU processing is only available for identical GPUs in the same machine. For example, two NVIDIA GeForce GTX 1080s or two AMD Radeon™ Pro WX 9100s.

## New Features

There are no new features in this release.

## Feature Enhancements

- ID 161709/266123/506317 - Monitor Out: Support for HD 10-bit RGB 4:4:4 output from AJA cards has been added.

## Bug Fixes

- ID 134367 - Python: Calling **nuke.scriptClear()** on the Root node did not remove User knobs as expected.

- ID 202128 - macOS only: Setting monitor out to 12-bit 4:4:4 mode displayed incorrect output.
- ID 386719 - Monitor Out: AJA Kona 4 12-bit Dual Link 1080p50a, 1080p59.94a, and 1080p60a output was incorrect.
- ID 415797 - High DPI: Node name text was not vertically centered.
- ID 428360 - DeepMerge: Holdout did not work as expected on volumetric data samples.
- ID 469924 - Timeline Editing: Exporting clip length shots with **Apply Retimes** checked in the **Export** dialog applied the retime incorrectly.
- ID 469970 - Read/Write: Nuke Studio 13.0 did not load pre-Nuke Studio 11.1 **.hrox** projects as expected.
- ID 472443 - USD: The tooltip for the **suppress confirmation dialog** control on the Light and Axis nodes was incorrect.
- ID 484135 - Linux Only: Nuke 12.2 used more RAM than Nuke 12.1 builds and clearing the cache freed up less memory.
- ID 491697 - Cutting nested items in the **Project** bin to the clipboard using the **Ctrl/Cmd+X** keyboard shortcut caused Nuke Studio to crash.
- ID 494705 - Setting custom colors for clip types was slow in Hiero when compared to Nuke Studio.
- ID 496347 - BlinkScript: Setting values for **float4x4 mtx4** and **float3x3 mtx3** in inside **process()** calls did not work as expected.
- ID 497323 - Monitor Out: 12-bit 4:4:4 RGB outputs did not work as expected in UHD display mode.
- ID 499680 - Monitor Out: 1080p 12-bit 4:4:4 Single Link was output as 4:2:2 with certain AJA cards.
- ID 500390 - Timeline Editing: Toggling the track visibility of tracks that reference QuickTime files caused Nuke Studio to crash.
- ID 500498 - Monitor Out: Setting the output mode to 1080p 12-bit RGB 4:4:4 Dual Stereo on certain AJA cards caused Nuke Studio to crash.
- ID 501488 - Monitor Out: Setting the **Pixel Format** to RGB and then changing the **Output Transform** occasionally caused the monitor output to become unresponsive.
- ID 501901 - Read/Write: Using all uppercase letters for extension names, such as **.ABC** and **.FBX**, removed some **file type**-specific controls in the Camera, Axis, and Light nodes.
- ID 502179 - Group nodes using an expression to check for **nuke.dependencies** of the parent group were not saved as expected if there was a Write node downstream of the group.
- ID 502486 - Alembic: Loading certain **.abc** files caused Nuke to crash.
- ID 505212 - Monitor Out: SDI card display modes for **HD 1080p** output were listed in a random order.
- ID 505472 - GridWarp/GridWarpTracker: Rendering from the command line with the Frame Server or a third-party renderer did not produce the same results as interactive renders.
- ID 505617 - Read/Write: Rendering **.mov** files with the H264 codec with high resolution inputs caused Nuke to crash.
- ID 506622 - Licensing: The language selection dropdown in the **Licensing** dialog was empty.

- ID 506631/507379 - Linux only: Minimal CentOS installs that don't include CUDA libraries did not fall back to the CPU as expected or displayed **No such file or directory** errors with AIR nodes, such as Deblur and Inference.
- ID 507060 - Read/Write: Setting path substitutions between macOS and Windows did not load **Project** bin thumbnails as expected.
- ID 507494 - 3D Pivot Point: Dragging in the 3D Viewer to translate the pivot point on geometry with large **scale** values did not work as expected.
- ID 507756 - GridWarp/GridWarpTracker: Using **Insert Mode** or changing the number of divisions in the left-hand toolbar caused Nuke to crash.
- ID 508287 - Soft Effects: Making changes to certain soft effect controls in the **Properties** panel caused the Viewer to flicker.

## New Known Issues Specific to Nuke 13.2

This section covers new known issues and gives workarounds for them, where appropriate.

- ID 510729 - CatFileCreator: Connecting a Viewer to a CatFileCreator node causes Nuke to crash.
- ID 509300 - CopyCat: Training with cropped images containing more than four channels renders corrupt contact sheet data.
- ID 508661 - macOS only: Using environment variables in CopyCat's **Data Directory** path causes Nuke to crash.
- ID 507829 - Monitor Out: Switching between the Timeline and Compositing environments with Monitor Out active in Nuke 13.2 is not as intuitive as in 13.1.
- ID 507327 - CopyCat: Training does not work as expected if a Remove node is inserted between the input node and the CopyCat **Preview** input.
- ID 507325 - CopyCat: Connecting an **Input** with no channels, displayed as **Channels: none** in the CopyCat **Properties** panel, and then clicking **Start Training** causes Nuke to crash.
- ID 506965 - Monitor out: Long Nuke script names create truncated NDI sender names, which can result in only one unique stream regardless of how many Viewers are sending a signal.  
As a workaround, avoid using long Nuke script names to allow multiple streams from the same script.
- ID 506918 - CopyCat: Changing the **Crop Size** and then resuming training creates contact sheets at the wrong size.
- ID 506569 - UnrealReader: The enabled/disabled state of the **Use 32 Bit Post Process Materials** checkbox is not always respected by the render output.  
If UnrealReader fails to respect the enabled/disabled state, restart the Unreal Editor project to reset the controls.
- ID 506360 - CopyCat: Resuming training after changing the **Model Size** displays a generic error message.

- ID 506004 - ARRIRAW: Reading legacy **.mxf** files with SDK 7.0 does not match all knob values when compared to SDK 6.2.
- ID 504819 - 3D Transform Handles: Geometry pivot points are affected incorrectly by downstream scale changes.
- ID 504645 - Monitor Out: NDI signals from Nuke Studio are listed twice in the NDI monitor.
- ID 504542 - CopyCat: Setting the **Epochs** control to a negative number and then starting training causes Nuke to crash.
- ID 504533 - ARRIRAW: Lens squeeze is slightly different in Nuke compared to the same file in the ARRI reference tool.
- ID 504406 - CopyCat: Errors displayed in the Viewer do not disappear as expected during subsequent training runs.
- ID 504191 - Monitor Out: Closing Nuke Studio during playback while broadcasting the timeline Viewer over NDI causes the application to crash on exit.
- ID 504013 - 3D Transform Handles: Negative scaling values in TransformGeo nodes cause inconsistent scaling in upstream ParticleEmitter nodes.
- ID 503687 - Monitor Out: Some controls in the **Monitor Out** panel in Nuke Studio do not display the knob name in their tooltips.
- ID 503684 - Monitor Out: The **Monitor Out** panel in Nuke Studio always displays stereo controls, even if the project does not contain multiple views.
- ID 502942 - Monitor Out: The **Viewer Monitor Out** pane does not display all controls as expected. As a workaround, resize the pane to cause the controls to appear.
- ID 502843 - Monitor Out: The **Use Viewer Gamma / Gain** controls are not enabled and disabled consistently between the **Properties** and Monitor Out pane.
- ID 502793 - Monitor Out: Loading certain **.nk** scripts does not open all floating windows as expected.
- ID 502495 - CopyCat: Caching during training is slower when compared to earlier Nuke builds.
- ID 502404 - Monitor Out: The Viewer list does not update as expected when a Viewer node is copied and pasted in the Node Graph.
- ID 502395 - Monitor Out: The list of available Viewers is not ordered correctly.
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- ID 501442 - 3D Pivot Point: Object scale is not always maintained by the pivot rotate algorithm.

- ID 501261 - macOS Monterey only: Resizing UI elements is slow to update.
- ID 500156 - OTIO: Timelines containing shots with different frame rates displays a warning message incorrectly.
- ID 500138 - 3D Transform Handles: Scaling in Screen space and then rotating in Screen and World space doesn't work as expected.
- ID 499468 - 3D Transform Handles: Handle size is unexpectedly affected by scale changes downstream.
- ID 498754 - Windows only: Nuke occasionally fails to launch due to external hardware connected to the machine.  
As a workaround, disconnect any unnecessary hardware such as web cams or additional audio hardware before launching Nuke.
- ID 497372 - Monitor Out: **frameIndex** metadata does not work as expected.
- ID 494978 - ARRIRAW: Reading certain **.ari**, **.arx**, and **.mxf** files displays metadata errors on the command line.
- ID 492637 - 3D Transform Handles: Using the free rotate tool on certain objects causes them to scale during rotation in the 2D Viewer.
- ID 491143 -Monitor Out: Enabling **Horizontal Flop** in the ViewerMonitorOut **Properties** does not work as expected.

## Developer Notes

As Nuke develops, we sometimes have to make changes to the API and ABI under the hood. We try to keep these changes to a minimum and only for certain releases, but from time to time API and ABI compatibility is not guaranteed. See the following table for the situations when you may have to recompile your plug-ins and/or make changes to the source code.

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As an example, between Nuke 9 and Nuke 10, the CameraShake node **Class()** changed from CameraShake2 to CameraShake3. In the **toolbars.py** file for the two releases, the entries for the CameraShake node appear as follows:

```
m.addCommand("CameraShake", "nuke.createNode(\"CameraShake2\")",
icon="CameraShake.png")
m.addCommand("CameraShake", "nuke.createNode(\"CameraShake3\")",
icon="CameraShake.png")
```

# Release Notes for Nuke and Hiero 13.2v1

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## Release Date

14 April 2022

## Qualified Operating Systems

- macOS Big Sur (11.x) or macOS 12.x (Monterey). Nuke is currently supported under Rosetta emulation on Apple's new Apple Silicon hardware and M1 chips. Native support is not currently available and Foundry is planning to support the Nuke family natively on Apple's M1 and M2 hardware at a later date.



**Article:** For more information on Foundry products and supported macOS versions, see Foundry Knowledge Base article [Q100592](#).

- Windows 10 (64-bit)
- CentOS 7.4 (64-bit), or later



**Note:** The currently supported version of VFX Reference Platform includes library versions that are only compatible with CentOS 7.4, or later. Nuke is qualified on the Centos 7.4, 7.5, and 7.6 distributions.

Other operating systems may work, but have not been fully tested.

## Requirements for Nuke's GPU Acceleration

If you want to enable Nuke to calculate certain nodes using the GPU, there are some additional requirements.

## NVIDIA

An NVIDIA GPU with compute capability 3.0 (Kepler) or above. A list of the compute capabilities of NVIDIA GPUs is available at <https://developer.nvidia.com/cuda-gpus>



**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 10.1 or above. On Windows and Linux, CUDA graphics drivers are bundled with the regular drivers for your NVIDIA GPU. Driver versions 418.96 (Windows) and 418.39 (Linux), or above are required. See <https://www.nvidia.com/Download/Find.aspx> for more information.



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

## AMD



**Note:** Bit-wise equality between GPU and CPU holds in most cases, but for some operations there are limitations to the accuracy possible with this configuration.

- On Windows and Linux, an AMD GPU from the following list:



**Note:** Other AMD GPUs may work, but have not been fully tested.

- AMD Radeon PRO W6600
- AMD Radeon PRO W6800
- AMD Radeon Pro W5700
- AMD Radeon Pro WX 9100
- AMD Radeon RX 6800 XT





**Note:** For information on the recommended driver for each GPU, see <https://www.amd.com/en/support>

- On Mac, integrated AMD GPUs are supported on the following Intel CPU Macs:
  - Any late 2013 Mac Pro onward (including 2019 Mac Pro),
  - Mid-2015 MacBook Pros onward, and
  - Late 2017 iMac Pros onward.

All supported Mac Pros include a multi-GPU support option, where applicable. Bitwise equality between GPU and CPU holds in most cases, but for some operations, there are limitations to the accuracy possible with this configuration.



**Warning:** Although AMD GPUs are enabled on other Mac models, they are not officially supported and used at your own risk.

## Multi-GPU Processing

Nuke's GPU support includes an **Enable multi-GPU support** option. When enabled in the preferences, GPU processing is shared between the available GPUs for extra processing speed.



**Note:** Multi-GPU processing is only available for identical GPUs in the same machine. For example, two NVIDIA GeForce GTX 1080s or two AMD Radeon™ Pro WX 9100s.

## New Features

### UnrealReader

In this release we build on UnrealReader with a number of improvements in stability and usability, as well as enhancements for existing features. Unreal Engine 4.27.2 and 5.0 (Windows only) are the supported versions for the Nuke Server plug-in. Changes for this release include:

- Improved stability
- Various UI improvements
- Faster and more intuitive Stencil Layer picking workflow:

- The old table list of selectable items is replaced with a new visual picking workflow similar to Cryptomatte.
- The same wildcard selection syntax is available in the **Layer List** as in Cryptomatte.
- New Cryptomatte render pass ID grouping types.
- Environment variable support in Write section File knob / Nuke Server
  - This helps with cross-operating system support when writing to shared network drives.
  - The familiar [getenv <your\_environment\_variable>] syntax is now supported.
- Extended EXR **Compression** options
  - The UnrealReader **Write** properties section **Compression** options have been extended to include all of the standard **.exr** options found in Nuke.
- UnrealReader is now available for Nuke Indie license holders.

## Nuke Server Download

Download the Nuke Server for your operating system from here:

<https://www.foundry.com/products/nuke/download/unreal-nuke-server>

A development build of the Nuke Server for Linux is available for testing upon request through [Support](#).

## A.I. Research

In this release, we have continued to improve our Machine Learning tools, enhancing the CopyCat node with faster training, support for multiple GPUs and multi-channel training. We have also removed any limitation on the number of training images and enabled the ability to train on headless Nuke with the **-X** flag.

With this update not only is single GPU training up to 30% faster, but you can also take advantage of setups with multiple GPUs. You can either speed up training by running CopyCat on all your GPUs simultaneously or run different training sessions on each GPU, allowing you to do more experiments at the same time.

CopyCat can now support more than four channels, as many as your GPU and Nuke can handle, allowing you to train networks for a variety of more advanced use cases.

Finally, we have streamlined the ability to kick off training on remote machines. You can now run CopyCat from the command line using the **-X** flag without any need to write additional Python scripts.

## Top-down Rendering

In this beta, we have introduced a new way for Nuke to render its node graph. Top-down rendering provides significant performance improvements to Nuke's 2D graph processing. Performance in Nuke is variable,

depending on the script you are rendering, but in our internal testing scripts render 20% faster on average and some scripts render as much as 1.5x faster.

Top-down rendering inverts Nuke's classic rendering method, rendering the graph node-by-node from the top of the graph down, rather than scanline-by-scanline on demand. This allows Nuke to cache its data more efficiently, and to reduce thread-synchronization issues, resulting in overall faster rendering. Because top-down renders the script node-by-node, from the top of the graph down, Nuke's scanline-by-scanline progressive update to the viewer is replaced by the whole image updating at once.

There are three ways to enable top-down rendering within your scripts in this beta:

- Set the environment variable `NUKE_TOPDOWN=1`.
- Use the **--topdown** flag when launching Nuke from the command line.
- Change the new **render mode** setting to **top-down** in the Project Settings.

If none of the above is set to use top-down, Nuke uses the default behavior and renders in **classic** mode.



**Note:** The render mode is only saved as part of the script if you set **render mode** to **top-down** in the **Project Settings**. This ensures that the chosen render method is used the next time the script is opened. Using the **NUKE\_TOPDOWN** environment variable or **--topdown** command line argument does not save the render mode in the script.

## 3D UX Improvements

We have added the ability to rotate the pivot point in the **Properties** panel and directly in the Viewer, including an internal orientation indication for the pivot point.

We've also implemented a long-standing feature request and added a new free rotate algorithm, making free-rotation of 3D objects in the viewer much easier and more intuitive.

## Timeline Project Loading

Continuing with the improvements made in 13.1, where we reduced the time it takes to load **.hrox** projects by 25%-30%, we are drastically reducing the time projects take to load, including the larger and complex projects and making connecting or joining to Sync Sessions a lot faster.

To see these improvements, you must load a project that has been saved in 13.2. Any new projects created in Nuke 13.2 will automatically get these benefits, but older projects need to be saved in Nuke 13.2 and reopened in order to see the loading time improvements. These changes maintain backwards compatibility, however, these improvements are only maintained in 13.2 builds.

## OpenTimelineIO (Beta)

In 13.2 we are introducing OpenTimelineIO (OTIO). In combination with the previous work done in metadata management, we expect OTIO to be the future of editorial workflows when manipulating editorial data.

OTIO is an API and interchange format for editorial cut information. Similar to an Edit Decision List (EDL) it also includes an API for reading, writing and manipulating data. In this release OTIO supports the import and export of clips, tracks, transitions and linear retimes in OTIO edits. OTIO is labeled as a beta because OTIO v1.0 has not been released yet.

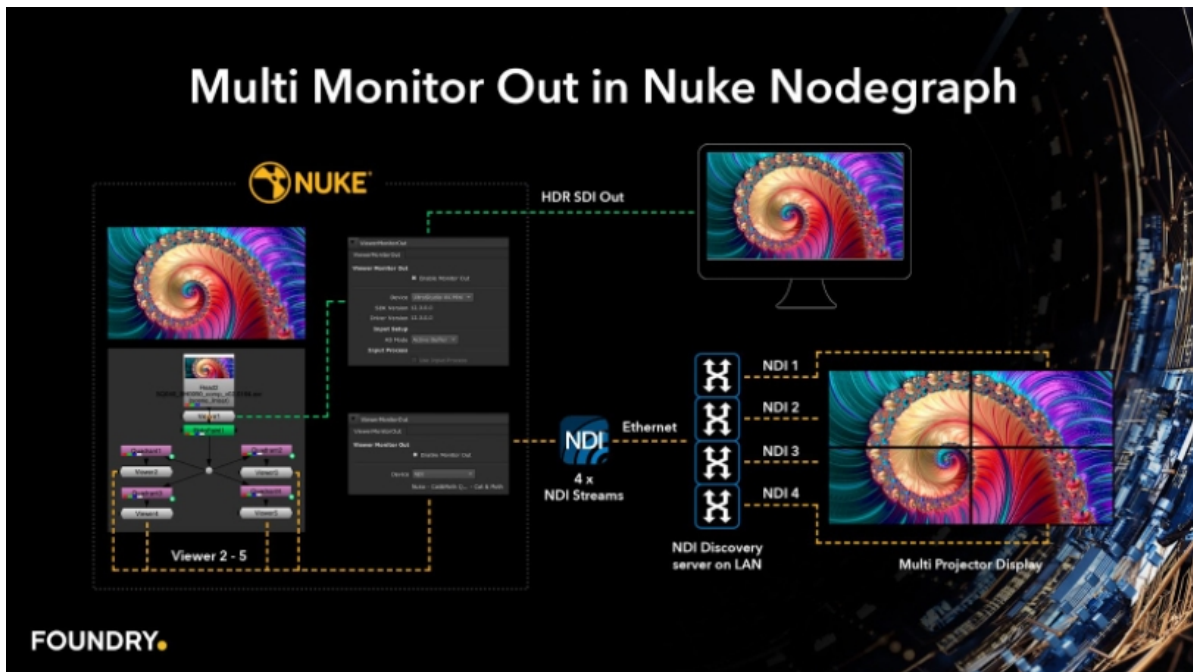
## Non-Linear Dissolves on the Timeline

We are bringing users better workflows in the timeline when working with transitions by supporting non-linear dissolves. You can now see transitions in the **Properties** panels, create keys to the transitions, and edit dissolves, fade ins and fade outs in the Curve Editor and Dope Sheet.

To use non-linear dissolves, double-click a transition in the timeline, and then edit the transition from the **Properties** panel or create and adjust frames in the Curve Editor or Dope Sheet. Transitions are also applied properly to clips with soft effects.

## Monitor Out for Nuke

Continuing the work that we have done in the Nuke 13.x series, we have added an exciting new feature to the Monitor Out. With these ongoing updates to Monitor Out we are continuing to provide ever more powerful options with greater workflow efficiencies.



- We have now added the Monitor Out as a Tab in the Viewer control panel.
  - You can access the Viewer **Properties** by pressing **S** whilst the mouse is in the Viewer.
  - Double-clicking the Viewer node also opens the **Properties**. When a Viewer node is selected, pressing Return also opens the **Properties**.
  - You can access the Monitor Out controls in the Viewer **Properties** directly by pressing the cog icon in the Monitor Out strip.
  - Using the workspace **Viewer Monitor Out** adds the Monitor Out strip below the player controls.
- Each Viewer node now has its own independent Monitor Out functionality.
  - Multiple floating windows can be used simultaneously.
  - Multiple NDI streams can be sent simultaneously.
  - SDI functionality sent from a single hardware device is limited to only being used by a single Monitor Out.

## Monitor Out - NDI

Continuing the work to improve our monitor out functionality and make review sessions more productive and ensure that everyone in the team is always on the same page, this beta introduces a new workflow with the support for NDI in the Nuke Family. Network Device Interface, or NDI, is a network protocol that enables you to send video and metadata signals over standard IP networks in real-time. NDI allows you to easily share a Nuke Viewer's output with anyone else on the same network.

To view an NDI stream, you need the NDI Studio Monitor application installed on your local machine. NDI Studio Monitor is available for download on macOS and Windows [here](#):

- [NDI Tools for macOS](#)
- [NDI Tools for Windows](#)

For more information on the NDI Tools and network configuration best practice, see:  
<https://ndi.tv/tools/education/networking/best-practices/networking-best-practice/>

## Monitor Out - AJA and Blackmagic Design

In addition to the new features in the Viewer Monitor Out we have also updated the functionality when using an AJA and BMD video out device. This work was done to make it easier to understand what output options are available when using AJA and BMD cards in Nuke and Nuke Studio. These changes greatly benefit artists working with SDI outputs at different resolutions.

Testing SDI out across a broad range of hardware remains challenging and we appreciate any feedback on these features.

### AJA T-Tap Pro Support

Support for the AJA T-Tap Pro has been added to the Viewer Monitor Out node. If the device is installed on your system it appears in the **Device** drop down list.

## ARRI Image SDK 7.0.0 (Beta)

To support their new S35 4K camera ARRI have created a new SDK (7.0) to decode and debayer the images from this camera.

This has been added to Nuke and Nuke Studio as a beta feature because the camera and the SDK are not yet finalized. We encourage users of the new camera to use Nuke to test and provide feedback to both us and ARRI so that we can fully release this feature in the coming months.

In this release, we are using Arri SDK 7.0.0-RC6. Legacy ARRI files including **.ari**, **.arx** and **.mxf** files continue to load but will use the older ARRI RAW 6.2 SDK.

## Blackmagic RAW 2.2

We have updated Blackmagic RAW to support the 2.2 SDK which includes the following updates:

- Added support for Fujifilm GFX100 and GFX100S Blackmagic RAW clips captured by Blackmagic Video Assist.
- Added support for Panasonic Lumix GH5S, BS1H and BGH1 Blackmagic RAW clips captured by Blackmagic Video Assist.

## Feature Enhancements

- ID 132776/490781 - Viewer: You can now double-click Viewer nodes to open the **Properties** panel.
- ID 144149 - 3D Transform Handles: You can now rotate the pivot point in the 3D Viewer.
- ID 428475 - Monitor Out: Nuke, Nuke Studio and Hiero now support the Blackmagic Design Decklink 8K Pro.
- ID 424014 - Third-Party Libraries: OpenSSL has been updated to version 1.0.2u.

## Bug Fixes

- ID 152798 - Read/Write: If the pixel aspect ratio (anamorphic squeeze) could not be found in a file, its default format was set to the first format in the list that matched the format's width and height.
- ID 241348 - Monitor Out: Nuke Studio did not use the recommended AJA output options.
- ID 434387 - Windows only: Setting the UI scale to 150% or higher and moving Nuke to a second monitor stopped the floating color pickers working as expected.
- ID 471681 - CopyCat: Training a network from the command prompt with the **-X** argument occasionally failed.
- ID 472519 - CopyCat: Training a model with multi-channel files did not work as expected.
- ID 474950 - AIR Tools: Rendering from the command line always used the GPU, whether the **--gpu** argument was added or not.
- ID 482780 - 3D Transform Handles: Setting the **transform order** to **RTS** at small **scale** values did not work as expected.
- ID 485263 - Developer Documentation: The formatting of the **nuke.memory()** documentation made it difficult to read.
- ID 488973 - CopyCat: Starting training with the Viewer **proxy mode** enabled did not display a warning message.
- ID 489286 - 3D transform handles: The transform toolbar was active for **.fbx** files even when transforms were disabled.
- ID 491076 - 3D Transform Handles: The effect of dragging a scale transform handle was influenced incorrectly by geometry transforms downstream.
- ID 493869 - 3D Transform Handles: Object parenting lines did not appear as expected in relation to the world axes.
- ID 494124 - 3D Transform Handles: Translating geometry on the Z-axis and then dragging the pivot point did not work as expected.
- ID 497654 - Transitions: Adding a Burn-In soft effect to a shot with a dissolve transition didn't work as expected.

- ID 498939 - BM RAW: Selecting **Decode Using > Clip Custom** displayed an **Internal memory error** when reading some locally stored files.
- ID 499540 - Monitor Out: Blackmagic Design card HD outputs at 10-bit 4:4:4 were actually output at 4:2:2.
- ID 500198 - Windows only: The SymLink Generator exporter in Nuke Studio did not work as expected.
- ID 500964 - Upscale: Setting the **Tile Size** control to anything other than a multiple of 16 did not work as expected.
- ID 501628 - Timeline Viewer: Changing the Viewer color channel output during playback did not work as expected.
- ID 501920 - Linux only: Playing back certain **.mov** files displayed an **unknown color curve** error and caused Nuke Studio to crash.
- ID 503346 - Create Comp: Rendering comp updates occasionally caused Nuke Studio to crash.
- ID 503501 - Linux only: Rendering certain comps in Nuke Studio's timeline displayed a **ReaderMessage Unknown** error on the **.nk** thumbnails in the **Project** bin.
- ID 410055 - Linux only: Rendering Nuke scripts that contain a Spherical Transform node, can take significantly longer to render compared to Windows machines that use the same specifications.

## New Known Issues Specific to Nuke 13.2

This section covers new known issues and gives workarounds for them, where appropriate.

- ID 506569 - UnrealReader: The enabled/disabled state of the **Use 32 Bit Post Process Materials** checkbox is not always respected by the render output.  
If UnrealReader fails to respect the enabled/disabled state, restart the Unreal Editor project to reset the controls.
- ID 506360 - CopyCat: Resuming training after changing the **Model Size** displays a generic error message.
- ID 506004 - ARRIRAW: Reading legacy **.mxf** files with SDK 7.0 does not match all knob values when compared to SDK 6.2.
- ID 505214 - Monitor Out: The SDI legal range button's state is not always saved or loaded correctly.
- ID 504819 - 3D Transform Handles: Geometry pivot points are affected incorrectly by downstream scale changes.
- ID 504645 - Monitor Out: NDI signals from Nuke Studio are listed twice in the NDI monitor.
- ID 504542 - CopyCat: Setting the **Epochs** control to a negative number and then starting training causes Nuke to crash.
- ID 504533 - ARRIRAW: Lens squeeze is slightly different in Nuke compared to the same file in the ARRI reference tool.
- ID 504406 - CopyCat: Errors displayed in the Viewer do not disappear as expected during subsequent training runs.



- ID 504191 - Monitor Out: Closing Nuke Studio during playback while broadcasting the timeline Viewer over NDI causes the application to crash on exit.
- ID 504013 - 3D Transform Handles: Negative scaling values in TransformGeo nodes cause inconsistent scaling in upstream ParticleEmitter nodes.
- ID 503687 - Monitor Out: Some controls in the **Monitor Out** panel in Nuke Studio do not display the knob name in their tooltips.
- ID 503684 - Monitor Out: The **Monitor Out** panel in Nuke Studio always displays stereo controls, even if the project does not contain multiple views.
- ID 503013 - ARRIRAW: Enabling **Use GPU if available** only displays half the image with S35 files.
- ID 502942 - Monitor Out: The **Viewer Monitor Out** pane does not display all controls as expected. As a workaround, resize the pane to cause the controls to appear.
- ID 502843 - Monitor Out: The **Use Viewer Gamma / Gain** controls are not enabled and disabled consistently between the **Properties** and Monitor Out pane.
- ID 502793 - Monitor Out: Loading certain **.nk** scripts does not open all floating windows as expected.
- ID 502495 - CopyCat: Caching during training is slower when compared to earlier Nuke builds.
- ID 502404 - Monitor Out: The Viewer list does not update as expected when a Viewer node is copied and pasted in the Node Graph.
- ID 502395 - Monitor Out: The list of available Viewers is not ordered correctly.
- ID 502394 - Monitor Out: Output is not sent to monitor out devices unless the related Viewer is the active Viewer.
- ID 502226 - Monitor Out: The floating window size is used incorrectly for all panes undocked from the interface.
- ID 501785 - BM RAW: Certain files display with incorrect colorspace and gamma values.
- ID 501700 - 3D Pivot Point: Rotating the pivot point by dragging in a non-default **transform order** causes the object to jump unexpectedly.
- ID 501683 - 3D Pivot Point: Rotation doesn't work as expected in Screen space and World space.
- ID 501525 - CopyCat: Canceling training displays a misleading error message.
- ID 501442 - 3D Pivot Point: Object scale is not always maintained by the pivot rotate algorithm.
- ID 501261 - macOS Monterey only: Resizing UI elements is slow to update.
- ID 500156 - OTIO: Timelines containing shots with different frame rates displays a warning message incorrectly.
- ID 500138 - 3D Transform Handles: Scaling in Screen space and then rotating in Screen and World space doesn't work as expected.
- ID 499468 - 3D Transform Handles: Handle size is unexpectedly affected by scale changes downstream.
- ID 497372 - Monitor Out: **frameIndex** metadata does not work as expected.
- ID 494978 - ARRIRAW: Reading certain **.ari**, **.arx**, and **.mxf** files displays metadata errors on the command line.

- ID 492637 - 3D Transform Handles: Using the free rotate tool on certain objects causes them to scale during rotation in the 2D Viewer.
- ID 491143 -Monitor Out: Enabling **Horizontal Flop** in the ViewerMonitorOut **Properties** does not work as expected.
- ID 488611 - Monitor Out: Certain formats, such as **2K DCI PsF** and **4K DCI p**, are not output as expected from Blackmagic Design Decklink 8K Pro cards.

## Developer Notes

As Nuke develops, we sometimes have to make changes to the API and ABI under the hood. We try to keep these changes to a minimum and only for certain releases, but from time to time API and ABI compatibility is not guaranteed. See the following table for the situations when you may have to recompile your plug-ins and/or make changes to the source code.

Release Type	Example	Compatibility	Recompile	Rewrite
Version	13.1v1 to 13.1v2	API and ABI		
Point	13.0v1 to 13.1v1	API	●	
Major	12.0v1 to 13.0v1	-	●	●

Additionally, node **Class()** names occasionally change between major releases. While these changes do not affect legacy scripts, you may not get the results you were expecting if a node class has been modified. The **toolbars.py** file, used to create Nuke's node toolbar, contains all the current node class names and is located in `<install_directory>/plugins/nukescripts/` for reference.

As an example, between Nuke 9 and Nuke 10, the CameraShake node **Class()** changed from CameraShake2 to CameraShake3. In the **toolbars.py** file for the two releases, the entries for the CameraShake node appear as follows:

```
m.addCommand("CameraShake", "nuke.createNode(\"CameraShake2\")",
icon="CameraShake.png")
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icon="CameraShake.png")
```