

# Release Notes for Nuke and Hiero 14.0v6

## Release Date

21 September 2023

## Qualified Operating Systems

- macOS Big Sur (11.x) or macOS Monterey (12.x). 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) and Windows 11 (64-bit)
- CentOS/RHEL 7.6 to 7.9 (64-bit)



**Note:** The currently supported version of VFX Reference Platform includes library versions that are only compatible with CentOS/RHEL 7.6 to 7.9.

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 3.5 (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 11.1, or above. On Windows and Linux, CUDA graphics drivers are bundled with the regular drivers for your NVIDIA GPU. Driver versions 456.81 (Windows) and 455.32 (Linux), or above are required. See <https://www.nvidia.com/Download/Find.aspx> for more information on compatible drivers.



**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

- BUG ID 232324 - Feature - Support for 4:4:4 RGB output from Blackmagic cards in MO

## Feature Enhancements

There are no new features in this maintenance release.

## Bug Fixes

- BUG ID 135776 - `nuke.removeFavoriteDir()` does not work if it's not given a type

- BUG ID 167870 - Font recognition is case sensitive so extension matching fails on uppercase open fonts such as .OFT
- BUG ID 197295 - Preferences: GPU device reverts back to CPU after hitting cancel then reopening
- BUG ID 235718 - Backslash error when writing to a relative path which uses '../' with Project Directory set up
- BUG ID 244831 - Crash when importing a .gif file type into Nuke and Nuke Studio
- BUG ID 380135 - A crash occurs when executing the WriteGeo node with an .ABC or .FBX file with multiple frames while the 3D Viewer is active
- BUG ID 473106 - Playback stops when adding/removing tracks from B buffer
- BUG ID 497642 - Scripts containing a Retime node, with its 'before' knob set to 'black', and a Kronos node downstream fail to render
- BUG ID 501544 - The frame server is unable to start when launching Nuke on case-sensitive file systems [macOS only]
- BUG ID 508476 - The "nearest frame" fails when expressions are used for the file knob when viewed outside a group/gizmo
- BUG ID 515323 - A crash occurs when using the CurveTool node to analyze a blinkscript in Nuke
- BUG ID 524347 - Disabling "Prioritize OCIO Roles" in the preferences then clicking on a Transcode Images or Write Node task in the Export dialog causes a crash
- BUG ID 525492 - [hDStorm] The options in the Render Settings dropdown in the Viewer Properties need tooltips
- BUG ID 527246 - kUnsetVersion definition missing DDImage\_API macro
- BUG ID 532207 - Cattery Gizmos don't load in Terminal mode from inside any /Cattery directory in the Nuke path
- BUG ID 533412 - 3D Arch: Scaling of Checkerboard texture in 2D view when connected to a Transform node
- BUG ID 533979 - Adding a keyframe to the Lens-in Focal value in a GeoCard node causes the card to enlarge.
- BUG ID 539124 - Hiero crashes after running hiero.ui.BinView().selection() in the Script Editor
- BUG ID 539454 - Subclassing from QtWidgets.QWidget results in an error
- BUG ID 539702 - 3D Arch: GeoPointsToMesh node not Re-topologising a mesh from Point clouds
- BUG ID 539711 - Setting a Tag's note via Python does not update expressions in the BurnIn soft effect
- BUG ID 539795 - The helpCommandRequestHandler function is loading the wrong path.
- BUG ID 539853 - 3D Arch: Nuke X Vertex selection not highlighting in blue as 'selected' on new 3D points in 14.0
- BUG ID 540017 - Selecting a Transcode Images export task, when Single Render Process is enabled, results in an error
- BUG ID 541124 - Incorrect values are imported in the Camera3 node when using a USD file with a Y axis value of 90

- BUG ID 541770 - [TH] Nukeclip: Unexpected nodes in export
- BUG ID 542168 - CopyCat Can change the parameters during training
- BUG ID 542254 - nuke\_ndk/14.0.x package is incomplete
- BUG ID 542695 - .hrox projects with lots of tags take a long time to load
- BUG ID 542802 - Zooming out the timeline makes clips disappear when there are lots of cuts
- BUG ID 543070 - Importing Nuke as module in an external Python install no longer works
- BUG ID 543102 - Nuke unable to find a valid license when returning from a hanging state
- BUG ID 544233 - Publishing Blinkscript wipes input names
- BUG ID 544578 - Scenegraph: Search will not cycle to results of payloads if payloads are loaded via overrides
- BUG ID 546263 - nuke.removeFavoriteDir() does not work in Hiero or Player
- BUG ID 547301 - CopyCat: Caching long clips
- BUG ID 547499 - [TH] Tags.TagsBasicAPI - MINIDUMP Application exited with non zero status
- BUG ID 547783 - Add a Method to Uninstall Silently Using the uninstall.bat file.
- BUG ID 548896 - MO SDI: BMD 12bit 4:4:4 Video Legal Range not working properly
- BUG ID 549669 - BlinkScript soft effects fail to compile when declaring custom functions
- BUG ID 549864 - Hiero crashes when there is no clip viewport
- BUG ID 550767 - ZDefocus nodes produce a DEBUG message when filter\_type is set to "image", legacy\_resize\_mode is disabled, and Nuke is in verbose mode
- BUG ID 551602 - MO SDI: Expected SDI Mappings Missing
- BUG ID 552184 - MO SDI: 10 bit 4:2:2 not rendering correctly for BMD devices
- BUG ID 552441 - [TH] Crash when reading/ importing in R3d files
- BUG ID 553131 - [TH] ALEXA LF ARRIRAW-HDE fails to read on Linux

## New Known Issues Specific to Nuke 14.0

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

- BUG ID 552509 - Timeline: Audio pop when playback is stopped
- BUG ID 552362 - MO SDI: BMD UHD 10 bit RGB 4:4:4 outputs YCbCr:422:10
- BUG ID 552108 - Scene Graph: Merge input scene in light nodes doesn't work if we connect other light node as input
- BUG ID 552039 - Memory Leak when loading too many alexa 35/mxf files
- BUG ID 549833 - Nuke Studio can display an incorrect OCIO config Version when the OCIO environment variable is used

- BUG ID 548936 - MO SDI: BMD - 10 bit 4:4:4 - No signal derived from UHD Dual Link TSI and Quad Link SqDv
- BUG ID 547368 - 3D Arch, Scenegraph: Search bar doesn't update results after loading or unloading payloads
- BUG ID 546715 - OCIOv2.1: Aliases within an OCIO config behave differently without Roles
- BUG ID 541715 - OCIO: Nuke does not load the saved view transform for some display devices - ACES 1.3
- BUG ID 541400 - A "Could not create reader" error occurs when loading ARRI Alexa 35 MXF footage in Terminal or Execute mode
- BUG ID 539902 - 3D Arch: Split view does not work for AxisOp 'File Path' knob
- BUG ID 538340 - CopyCat: Node fails on a machine without CUDA drivers installed
- BUG ID 537386 - A NoneType object is not subscriptable error occurs when using the Snap Menu on points in a Point Cloud
- BUG ID 536924 - Scene Graph: "Path" column UI breaks with a large scenegraph
- BUG ID 536529 - MO SDI: AJA T-Tap Pro - Is wrongly outputting HD dual link RGB
- BUG ID 532211 - Window shows "QEventDispatcher" from the terminal
- BUG ID 532078 - Bokeh: Bokeh doesn't work correctly in downres and proxy mode if it is using kernel input
- BUG ID 532049 - Nuke's MSI installer doesn't register Nuke as the default app for .nk files when installed on Windows
- BUG ID 528121 - The Cattery plug-ins appear with a .gizmo extension in Nuke
- BUG ID 526530 - CatFileCreator: Cat files created in Nuke 14 are not forward compatible
- BUG ID 525872 - 3D Arch: Authoring knobs: GeoDrawMode color does not animate
- BUG ID 525575 - CameraTrackerPointCloud continues to show data by default when it didn't before
- BUG ID 524963 - 3D Arch, SceneGraph: Background pattern changes when scrolling
- BUG ID 524835 - OCIONamedTransform: The Viewer error when no transform is selected contains a [.
- BUG ID 524626 - 3D Arch: Viewer hit-detect delay when moving mouse
- BUG ID 524412 - CopyCat: When training loss graph doesn't autoscale across x axis
- BUG ID 524284 - 3D Arch, 3D UX: Changing scale on GeoTransform affects upstream handle size
- BUG ID 524274 - Nuke Studio does not apply colour transforms correctly to ARRI Alexa 35 footage when changing the arri\_colorspace knob
- BUG ID 522999 - 3D Arch, 3D UX: CameraTrackerPointCloud node has wrong default colour
- BUG ID 521937 - 3D Arch, Scenegraph: Changing the active state of material scopes not working as expected
- BUG ID 521907 - 3D Arch: Default scale of the points generator to match old pointCloudGenerator
- BUG ID 521133 - 3D Arch: GeoCube is incorrectly rotated if it has a parent transform
- BUG ID 520821 - 3D Arch: GeoCameraTrackerPoints Point size knob stops scaling at a certain size
- BUG ID 520716 - 3D Arch: Materials checkbox for import nodes not working for some scenes

- BUG ID 520296 - 3D Arch: GeoRevolve tab in Properties menu for GeoCylinder and GeoSphere
- BUG ID 519987 - 3D Arch: Creating nodes through python create unexpected connections
- BUG ID 519482 - 3D Arch: geoCylinder not matching the projections from the cylinder in HydraViewer setup
- BUG ID 519068 - Installer: Installer doesn't create Nuke directory
- BUG ID 518874 - 3D Arch: Double-clicking geo in the viewport does not open last selected node in properties panel
- BUG ID 518593 - 3D Arch: GeoDrawMode doesn't work with path masking and node inbetween
- BUG ID 518581 - Metadata: CompareMetaData node reads incorrect frame metadata from Write section rendered EXR
- BUG ID 517980 - Installer screen momentarily appears again executing MSI installer
- BUG ID 516166 - 3D Arch, Scenegraph: Items can still be cycled to if there contributing node is removed upstream
- BUG ID 516052 - 3D Arch, ScanlineRender: projected textures in some ClientScripts are placed incorrectly rendered in 2D
- BUG ID 515379 - 3D Arch: GeoSphere height is twice the height knob
- BUG ID 515355 - 3D Arch, 3D UX: Scaling in world space after rotation skews transform and scale handles
- BUG ID 515353 - 3D Arch, 3D UX: Scaling in world space after rotation is causing rotation handles to wobble
- BUG ID 514854 - 3D Arch, 3D UX: Scale handles in world space doesn't work as expected if the pivot point of geometry was rotated
- BUG ID 514693 - 3D Arch, 3D UX: Rotations with handles at large scale become inconsistent and unstable
- BUG ID 514669 - 3D Arch, 3D UX: Z-Axis handle not working in screen-space
- BUG ID 513943 - 3D Arch: Localization knobs are missing from GeoImport
- BUG ID 513664 - "Matches" value and name highlights will not update if the node being viewed adds or removes Geo that's name matches the current search
- BUG ID 513286 - 3D Arch, Selection: Vertex selection erroneously throws away points
- BUG ID 511765 - 3D Transform Handles: Scaling camera on Axis doesn't work as expected
- BUG ID 511107 - 3D Arch, GeoCollection: exclusions not working
- BUG ID 510783 - 3D Arch, GeoSphere: Small u\_extent and v\_extent values of GeoSphere are causing texture to disappear in the viewer
- BUG ID 506930 - CopyCat: Changing preview during training breaks contactsheet UI
- BUG ID 505862 - 3D Pivot Point: Pivot point rotation stabilization doesn't work in XYZ and ZYX rotation orders

## 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	13.2v1 to 13.2v2	API and ABI		
Point	13.1v1 to 13.2v1	API	●	
Major	13.0v1 to 14.0v1	-	●	●

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 13 and Nuke 14, the Axis node **Class()** changed from Axis3 to Axis4. In the **toolbars.py** file for the two releases, the entries for the Axis node appear as follows:

```
m3Dclassic.addCommand("Axis", "nuke.createNode(\"Axis3\")", icon="Axis.png",
tag=MenuItemTag.Classic, node="Axis3", tagTarget=MenuItemTagTargetFlag.TabMenu)
```

```
m3D.addCommand("Axis", "nuke.createNode(\"Axis4\")", icon="Axis_3D.png",
tag=MenuItemTag.Beta, node="Axis4")
```