Release Notes for Nuke and Hiero 11.2v7

Release Date

19 September 2019

Qualified Operating Systems

• macOS Sierra (10.12) or macOS High Sierra (10.13)

• Windows 7 or Windows 10 (64-bit)

• CentOS 6 or CentOS 7 (64-bit)

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

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

With graphics drivers capable of running CUDA 8.0 & 6.5 or above.

• On Windows and Linux, CUDA graphics drivers are bundled with the regular drivers for your NVIDIA GPU. Driver version r361 or above is required.

Go to http://www.nvidia.com/Download/Find.aspx?lang=en-us for more information.

• On Mac, the CUDA driver is separate from the NVIDIA graphics driver and must be installed, if you don't have it already. The minimum requirement is driver version r361 which can be downloaded from www.nvidia.com/drivers.

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

AMD

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

Windows GPU	Driver	Linux GPU	Driver
AMD FirePro W8100	17.Q2.1	AMD FirePro W8100	17.Q2.1
AMD FirePro W9100	17.Q2.1	AMD FirePro W9100	17.Q2.1
AMD Radeon R9 Fury X	17.4.3 - 17.6.2	AMD Radeon R9 Fury X	17.10
AMD Radeon RX 480	17.Q2.1	AMD Radeon RX 480	17.Q2.1
AMD Radeon Pro WX 7100	17.4.3 - 17.6.2	AMD Radeon Pro WX 7100	17.10

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

• On Mac an AMD FirePro GPU on late 2013 Mac Pro 6,1, mid 2015 MacBook Pro 11,5, and late 2016 MacBook Pro 13,3, running OS X 10.9.3 'Mavericks', or later.

Mac GPUs

Nuke supports GPU-enabled nodes on the late 2013 Mac Pro 6,1, mid 2015 MacBook Pro 11,5, and late 2016 MacBook Pro 13,3, (running OS X 10.9.3 'Mavericks', or later), including a new **Enable multi-GPU support** option. When enabled in the preferences, GPU processing is shared between the available GPUs for extra processing speed.

> **Note:** To ensure you get the best performance from OpenCL GPUs, we recommend

> updating Mavericks to 10.9.5, or above for full functionality. However:
> If you're running an earlier version of Mac OS X than 10.9.5 and processing images greater than 4 mega pixels resolution, VectorGenerator, Kronos, and MotionBlur do not support GPU acceleration.
> If you're running an earlier version of Mac OS X than 10.9.4, Kronos and MotionBlur do not support GPU acceleration.

New Features

There are no new features in this release.

Feature Enhancements

There are no feature enhancements in this release.

Bug Fixes

- ID 158765 - DeepRecolor: Enabling **target input alpha** flattened Deep channels that should not be affected.
- ID 242922 - Timeline Editing: Using the Slip tool in sequences with multiple tracks in the Viewer occasionally caused Nuke Studio to become unresponsive.
- ID 347416 - Deep: Writing output containing Deep data using the standard Write node caused Nuke to crash.
- ID 349303 - Text: Changing the **opacity** of text shifted the output to the left and created artifacts in the Viewer.
- ID 350840 - Linux only: Labels in the Node Graph became unreadable at certain zoom levels.
- ID 352422 - Read/Write: Importing a previously exported **.mov** clip displayed a PAL format warning.
- ID 362521 - Roto/Rotopaint: The tooltip for adjusting B-spline tension in the **Properties** panel **?** button was incorrect.
- ID 378932 - Running stereo scripts containing nodes in an error state in terminal mode with the **continueOnError=False** argument rendered frames incorrectly.
- ID 381706 - Documentation: The description of the keyboard shortcut for adding custom tags (**Ctrl/Cmd**+**Y**) was ambiguous.
- ID 387321 - Read/Write: The Write node's **first part** control did not work expected when **write full layer names** was enabled.
- ID 388199 - macOS only: Launching Nuke Assist enabled the Frame Server incorrectly.

• ID 390486 - Read/Write: Opening multiple projects while elements were still loading caused Nuke Studio to crash.

• ID 392348 - Text: Expressions resulting in Unicode characters were not displayed correctly.

• ID 393519 - Deep: Using DeepHoldout operations on multi-sample deep images produced artifacts.

• ID 399956 - ARRIRRAW: Interaction with ARRIRAW footage in Nuke was sluggish.

• ID 402361 - OCIO: All LUTs from config files were loaded, even if they were not used, causing Nuke to start up more slowly.

New Known Issues Specific to Nuke 11.2

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

• ID 400857 - Card3D: The 3D Viewer rotation handles do not work as expected.
As a workaround, adjust the rotation using the **Properties** panel **rotate** controls to activate the handles.

• ID 394503 - Localization: The priority list for localization is not always honored when localization begins.

• ID 370989 - Windows only: Adding soft effects or retimes to shots with certain aspect ratios causes renders to timeout.

• ID 356283 - ARRIRAW: The Read node's **aspect ratio** control displays the ratio incorrectly.

• ID 355719 - ARRIRAW: Deprecated resolution modes are not labeled in Nuke.

Developer Notes

Here are the changes relevant to developers. See **Help** > **Documentation** from the Nuke menu bar or https://learn.foundry.com/nuke/developers/112/ndkdevguide/appendixc/index.html for more information.

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	10.0v1 to 10.0v2	API and ABI		
Point	10.0v1 to 10.5v1	API	●	
Major	10.0v1 to 11.0v1	-	●	●

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")
```

New Features

There are no new features in this release.

Feature Enhancements

There are no feature enhancements in this release.

Bug Fixes

There are no bug fixes in this release.

Release Notes for Nuke and Hiero 11.2v6

Release Date

07 May 2019

Qualified Operating Systems

• macOS Sierra (10.12) or macOS High Sierra (10.13)

• Windows 7 or Windows 10 (64-bit)

• CentOS 6 or CentOS 7 (64-bit)

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Requirements for Nuke's GPU Acceleration

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

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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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• On Windows and Linux, CUDA graphics drivers are bundled with the regular drivers for your NVIDIA GPU. Driver version r361 or above is required.

Go to http://www.nvidia.com/Download/Find.aspx?lang=en-us for more information.

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

AMD

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

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AMD Radeon RX 480	17.Q2.1	AMD Radeon RX 480	17.Q2.1
AMD Radeon Pro WX 7100	17.4.3 - 17.6.2	AMD Radeon Pro WX 7100	17.10

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

- On Mac an AMD FirePro GPU on late 2013 Mac Pro 6,1, mid 2015 MacBook Pro 11,5, and late 2016 MacBook Pro 13,3, running OS X 10.9.3 'Mavericks', or later.

Mac GPUs

Nuke supports GPU-enabled nodes on the late 2013 Mac Pro 6,1, mid 2015 MacBook Pro 11,5, and late 2016 MacBook Pro 13,3, (running OS X 10.9.3 'Mavericks', or later), including a new **Enable multi-GPU support** option. When enabled in the preferences, GPU processing is shared between the available GPUs for extra processing speed.

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New Features

There are no new features in this release.

Feature Enhancements

Deep

The DeepHoldout and DeepMerge nodes now include a **compute occluded samples** control. When enabled, the values of samples from **main** are affected by the occlusion values of the **holdout** samples in front of them. When disabled, holdout occlusion is ignored.

For example:

Depth 0						Depth INF
M0	H0	H1	H2	M2	H3	M4

M = main sample

H = holdout sample

M0 remains unchanged since there are no holdout samples before it. **M2** is affected by the combined **H0**, **H1**, and **H2** holdout samples and **M4** is affected by all holdout samples.

Additionally, the DeepMerge **drop zero threshold** control is now included in DeepHoldout, allowing you to filter out samples whose alpha value falls below this threshold, such as those caused by floating point inaccuracy.

Bug Fixes

- ID 155998 - UI: Layouts spanning two monitors were not display correctly on reload.
- ID 182027 - Export: Manually typing values into float sliders inserted **.0** into the value.
- ID 304664 - Timeline Disk Caching: The sequence **Properties** > **Clip Reformat** options did not work as expected when Timeline Disk Caching was enabled.
- ID 320261 - Linux only: GPU accelerated Convolve2 nodes in some customer scripts printed **Error: filter input is missing rgba** in the Viewer.
- ID 322910 - Deep: DeepMerge nodes set to **holdout** produced a less accurate result when compared to DeepHoldout nodes.
- ID 324076 - DeepHoldout: Alpha occlusions did not holdout correctly.
- ID 330903 - Deep: The DeepHoldout and DeepMerge in **holdout** mode produced difference results.
- ID 357615 - Linux only: Dragging and dropping URL-based data into the Node Graph caused a double callback of the function.
- ID 376388 - Soft Effects: Using certain expressions in a Text effect caused flickering in the Viewer.
- ID 376623 - Soft Effects: Setting a Timewarp effect to **Predefined** > **Reverse** in the Curve Editor's right-click menu displayed an error.
- ID 376892 - DeepMerge: Setting **operation** to **holdout** combined alpha values if the B input was semi-transparent and behind the A input.
- ID 390303 - Deep: The knob names and tooltips for the DeepHoldout and DeepMerge nodes were misleading.

New Known Issues Specific to Nuke 11.2

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

- ID 370989 - Windows only: Adding soft effects or retimes to shots with certain aspect ratios causes renders to timeout.
- ID 356283 - ARRIRAW: The Read node's **aspect ratio** control displayes the ratio incorrectly.
- ID 355719 - ARRIRAW: Deprecated resolution modes are not labeled in Nuke.
- ID 347416 - Rendering a standard Write node that has deep data in its stream causes Nuke to crash.

Developer Notes

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icon="CameraShake.png")
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icon="CameraShake.png")
```

New Features

There are no new features in this release.

Feature Enhancements

There are no feature enhancements in this release.

Bug Fixes

- ID 235679 - NDK Documentation: The documentation stated incorrectly that the **GeoInfo::copy()** function copies primitive data.
- ID 372904 - Qt: The QT_PLUGIN_PATH environment variable did not append custom libraries to Nuke's library list.

Release Notes for Nuke and Hiero 11.2v5

Release Date

22 November 2018

Qualified Operating Systems

• macOS Sierra (10.12) or macOS High Sierra (10.13)

• Windows 7 or Windows 10 (64-bit)

• CentOS 6 or CentOS 7 (64-bit)

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Requirements for Nuke's GPU Acceleration

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AMD Radeon RX 480	17.Q2.1	AMD Radeon RX 480	17.Q2.1
AMD Radeon Pro WX 7100	17.4.3 - 17.6.2	AMD Radeon Pro WX 7100	17.10

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

• On Mac an AMD FirePro GPU on late 2013 Mac Pro 6,1, mid 2015 MacBook Pro 11,5, and late 2016 MacBook Pro 13,3, running OS X 10.9.3 'Mavericks', or later.

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 FirePro W9100s.

New Features

There are no new features in this release.

Feature Enhancements

• ID 353412/371565 - Documentation: **DeepRead.cpp** and **DeepRead.h** are now included in the NDK example plug-ins.

Bug Fixes

• ID 132747 - Node Graph: Connection pipes in the Node Graph disappeared at certain zoom levels.

• ID 356593/350991 - RED SDK: Localizing certain **.r3d** files rendered the clips upside down in the Viewer.

• ID 358722 - Deep: DeepHoldout and DeepMerge in **holdout** mode did not produce the same output.

• ID 364998 - Transform: Node concatenation behavior was different to legacy Nuke concatenation.

• ID 366252 - Timeline Editing: Scrubbing the timeline during comp renders caused Nuke Studio to crash.

• ID 366363 - exrWriter: Rendering footage containing chromaticities metadata using the **first part** control in the Write node did not work as expected.

• ID 367444 - macOS only: Playback was occasionally too fast and did not update the external monitor under High Sierra (10.13).

• ID 368911 - Project Panel: Sorting bins in detail view occasionally caused Nuke Studio to crash.

• ID 372224 - The NUKE_EXR_TEMP_NAME environment variable did not follow the **.dpx** naming convention for temporary files.

• ID 372480 - EDL: Importing multiple **.edl** files simultaneously as new tracks reset the start timecode to 00:00:00:00.

New Known Issues Specific to this Release

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

New Known Issues Specific to Nuke

• ID 355719 - ARRIRAW: Deprecated resolution modes are not labeled in Nuke.

• ID 347416 - Rendering a standard Write node that has deep data in its stream causes Nuke to crash.

• ID 340749 - Mac OS X/macOS only: Reading **.r3d** files and changing the **color version** to **v1** produces a corrupt image.

   This is a known issue in the RED SDK, and will be addressed in a future release.

Other Known Issues

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

Known Issues Specific to Nuke

AudioRead

• ID 143557 - Changes to the **rate** control value are not honored when **ratesource** is toggled between **file** and **custom**.
• ID 142880 - Changing the sample rate has no effect on playback in a Flipbook.
• ID 142354 - The **time range** control doesn't limit the range when an **endtime** is specified.
• ID 142326 - Flipbooking doesn't honor the time range knob.
• ID 141682 - Redo keyframe generation doesn't replace the keys.
• ID 141651 - Changing **Draw Style** in the Curve Editor or Dope Sheet doesn't redraw the curves correctly.

BlinkScript/CUDA

• ID 142618 - CUDA: Scripts containing GPU accelerated nodes, such as ZDefocus, display a CUDA error when the OS wakes up from sleep mode.

   As a workaround, close and reopen Nuke to reactivate the CUDA drivers.

CameraTracker

• ID 162354 - Sequences containing alpha channels display the alpha premultiplied by the image in reference thumbnails, rather than just the RGB values.
• ID 135414 - Centering a track in the Viewer does not work as expected in proxy or downrez modes.

Deep

• ID 133832 - Nuke occasionally reads and writes Deep **.exr** files with a pixel aspect ratio of 1.

   As a workaround, preview the **.exr** in the file browser before reading it into Nuke.

Dope Sheet

• ID 164685 - Keys from Viewer buffers not currently being viewed are still visible.

• ID 164320 - Read and TimeClip representations disappear in the Dope Sheet if they are set to have a non-empty frame expression.

• ID 163157 - The Dope Sheet is not updated correctly when a Retime's **speed** control is animated.

• ID 163082 - Multiple instances of the same clip within one AppendClip are only represented once in the Dope Sheet.

• ID 143058 - Scripts containing Ocula's O_VerticalAligner plug-in cause Nuke to crash when you execute **Analyze Sequence** with the Dope Sheet open.

• ID 133920 - Adding a curve to the Dope Sheet and then deleting it causes Nuke to crash.

• ID 131730 - Undoing individually animated text characters removes their keys completely from the Dope Sheet.

• ID 130830 - Keys remapped with descending TimeWarp lookup curves don't snap to frames when **frame snap** is enabled.

EditGeo

• ID 164414 - Changing the visibility of objects within an Alembic Scene Graph causes geometry to ignore the EditGeo node.

• ID 164377 - Setting a keyframe can be slow to update the Viewer with the appropriate keyframe marker.

• ID 158840 - Setting **axis alignment** to **average normal** displays the axis incorrectly on edge and corner vertices.

• ID 130155 - The transform handle of selections in the Viewer is not updated between frames on geometry with animation baked into its vertices.

To update the transform handle, toggle the axis alignment control between **object** and **average normal**.

Flipbook

• ID 271435 - Flipbook: Using the flipbook with nuBridge installed causes Nuke to crash.

• ID 201156 - Nuke's flipbook defaults to the Write node's colorspace, which can result in different output when compared to the Viewer.

As a workaround, either flipbook the node upstream of the Write node, or enable **Burn in the LUT** in the **Flipbook** dialog.

- ID 153988 - In the Flipbook Viewer, clicking the **Go to start** button always goes to frame 0, even if the clip doesn't start at 0.
- ID 153981 - Enabling **Burn in the LUT** in the Flipbook dialog uses the **rec709** LUT for both **rec709** and **rec1886**.

Frame Server

- ID 273472 - Canceling or pausing a comp render in the **Background Renders** panel displays errors in the terminal.
- ID 272523 - Non-contiguous frame ranges cannot currently be flipbooked.

GPU

- ID 147911 - R3D: Only half float linear gamma space works with GPU debayering.

Import Nuke

- ID 133803 - Importing Nuke in a Python script destroys **sys.argv**, making command-line arguments unavailable.

  As a workaround, preserve **sys.argv** in another variable before you import Nuke.
- ID 133022 - Importing Nuke hangs when there are Qt conflicts between Nuke and other applications.
- ID 130192 - Calling **import nuke** terminates the Python session if no applicable license is available.

Linux Only

- ID 271807 - Linux only: Adjusting pane or window borders left and right causes redraw lag.
- ID 159347 - Scrubbing in the timeline in large projects can force memory use to hit 100%, causing Nuke to become unresponsive.
- ID 143955 - Calling **uuid.uuid4()** causes Nuke to crash due to a bug in **libc**.

  As a workaround, launch Nuke from the command-line using:

  ```
  LD_PRELOAD=/lib64/libuuid.so.1 ./Nuke8.0
  ```
- ID 140391 - Keyboard Shortcuts: Using **Ctrl**+**C** to quit Nuke from the command-line when a dialog box is open displays an error.
- ID 132196 - Using a Blackmagic Decklink Extreme 2 card causes Nuke to become unresponsive.

LiveGroups

- ID 274174 - Reloading a LiveGroup currently resets all edited User knobs.

• ID 272281 - Adding a user knob and then undoing the action sets expression links to nodes with matching names in main Node Graph.

Mac OS X/macOS Only

• ID 316577 - macOS only: Current localization progress does not update if the pointer focus is on Nuke's menu bar.

• ID 165346 - Nuke crashes if you activate screen sharing when there is no screen plugged in.

• ID 165156 - Node text appears aliased, unclear, or garbled at certain zoom levels.

• ID 161399 - Nuke cannot be launched from the Finder if it has already been launched from the Terminal.

• ID 156343 - PrmanRender: If you're using Mac OS X 10.8 (Mountain Lion) or above, make sure X11 is installed on your system. Unlike previous versions of OS X, 10.8 and above do not have X11 installed by default.

  For more information, see http://support.apple.com/kb/HT5293.

• ID 155326 - Launching Nuke from a network shared drive causes Nuke to crash on launch.

  As a workaround, either:
  • tarball the installation from Mac OS X and unzip it on the alternate file system (using NFS or Samba, depending on source), or
  • using the command-line, copy the installation from Mac OS X to the network location using the same file system as the destination.

• ID 153783 - Using a node, such as Grade, as a custom viewer process outputs a blank Viewer.

  As a workaround, adjust the Viewer **gain** control to refresh the Viewer.

• ID 151176 - Nuke doesn't currently give the option to restore the autosave of an unsaved script, except when Nuke is run from the command-line.

• ID 142709 - Modifying the label of a Python user knob causes Nuke to crash.

• ID 131747 - Crash Reporting: The 'save to' dialog is hidden behind the crash report dialog when you click **Save Report**.

• ID 131262 - The following graphics cards are not currently supported for Mac:
  • ATI Radeon X1600
  • ATI Radeon X1900

Users with these cards are able to render from the command-line, but in GUI sessions, the Node Graph renders incorrectly due to a requirement of OpenGL 2 drivers.

ModelBuilder

• ID 136758 - Setting the **segments** control to a negative number causes Nuke to crash.
• ID 136261 - Editing geometry UVs and then switching the Viewer to look at the geometry through a ScanlineRender node causes Nuke to crash.

Monitor Out

• ID 162912 - AJA Kona LHe+ 2k formats are not displayed correctly.
• ID 135783 - AJA Io Express: Enabling monitor output causes Nuke to crash.

Particles

• ID 162059 - The progress bar does not cancel if you scrub to a frame that has already been calculated within the particle system.
• ID 141819 - Enabling **color from texture** always renders a solid white alpha for the texture.
• ID 139835 - Geometry representation textures are displayed even when **display** is set to **off**.
• ID 139080 - Using sprites instead of geometry representations causes particles to render behind the 3D grid lines.
• ID 136508 - ParticleCache: Setting **emit from** > **points** and connecting the **emit** input to geometry, does not render all frames to the **.nkpc** file.
• ID 132899 - ParticleCache nodes upstream of ScanlineRender nodes display **ParticleCache is out-of-date** errors for negative frame numbers.
• ID 130976 - ParticleCache: Error messages displayed when **read from file** is toggled on and off are not reliably cleared when rendering through ScanlineRender.

Pixel Analyzer and Scopes

• ID 159998 - Scopes do not currently update when zooming into the Viewer.
• ID 159932 - Scopes clip color values between 0 and 1 when **Preferences** > **Scopes** > **Include viewer color transforms** is enabled.
• ID 145223 - PixelAnalyzer: The **full frame** sampling **mode** doesn't work immediately in the timeline Viewer when the analyzer is initially added to the layout.
• ID 130887 - Scopes: Switching to a layout with a scope window, while rendering, forces the Viewer bounding box to 1x1 for that frame.

PrmanRender

• ID 135242 - After a security update for Mac OS X, Nuke is unable to load the PrmanRender plug-in the environment.plist file when in GUI mode.

    See http://support.apple.com/kb/TS4267 for more information.

Python

• ID 145540 - Running **nuke.scriptOpen()** at the same time as creating a Python panel causes Nuke to crash.
• ID 135911 - Rendering an Alembic camera using a Python script produces incorrect values when run from the command-line.

    Run the script from Nuke's **Script Editor** to avoid this issue.
• ID 135027 - Using **setInput()** within an **onCreateCallback** doesn't work as expected.
• ID 134781 - Using Python to set metadata in ModifyMetadata nodes does not work from the command-line.

    To work around this issue, run the Python script from Nuke's Script Editor.
• ID 131286 - Accessing a node's x and y positions using the **xpos** and **ypos** controls reports incorrect values.

    As a workaround, either call **nuke.Node.xpos()** or **nuke.Node.ypos()** first, or ensure no nodes are currently selected in the Node Graph.
• ID 130348 - **nuke.Node.screenWidth()** and **screenHeight()** are incorrect when a node is first created if it has an autolabel.
• Nuke sometimes reports errors in Groups and Gizmos, appearing similar to the following:

    groupName.NodeName.knobname: unexpected 'k' in '0.knobname'

    The problem is most likely that there is an expression using the input TCL command and doesn't validate that there is an input connected. An example expression:

    [input parent 0].translate.x

    The input command returns 0 when it can't find the requested input, which generates an expression of '**0.knobname**' that doesn't refer to anything. The fix is to restructure the expression to use the value TCL command and specify a default value to return in the case that the expression is invalid. It takes the form:

    [value [input parent inputnumber].knob defaultValue]

Here is the modified example:

[value [input parent 0].translate.x 0]

The modified example returns 0 in the event that there is no input 0, and no longer results in an error message.

• There is a Python syntax conflict when assigning knob names on the fly with **nuke.nodes.<node>()** if the knob is called 'in'.

For example, this gives a syntax error:

nuke.nodes.Shuffle(in = 'depth')

while this works because 'in' is a string here and not a keyword:

sh = nuke.nodes.Shuffle()

sh['in'].setValue('depth')

RayRender

• ID 230256 - Soft Shadows are not currently supported.
• ID 197294 - Reflection occlusion is not currently supported.
• ID 196980 - Clipped alpha shadows are not currently supported.
• ID 196776 - Multiple bounce reflecton is not currently supported.
• ID 196124 - RayRender does not currently support refraction.
• ID 195051 - The Wireframe shader node, located in **3D** > **Shader** > **Wireframe**, is not supported by RayRender.
• ID 195004 - Custom lens shaders/projection modes are not currently supported.
• ID 194819 - RayRender does not currently support Deep workflows.
• ID 191108 - Particle sprites are not currently supported.
• ID 174849 - The Displacement shader node, located in **3D** > **Shader**, is not currently supported by RayRender.

Read and Write

• ID 161132 - The default colorspace values when writing using **.mov** codecs differ in command-line and GUI modes.
• ID 157771 - Writing .**exr**s with the Write node's **interleave** control set to **channels** adds a superfluous **main** view.
• ID 154613 - MXF: Super whites are currently displayed as white in the Timeline Viewer.

- ID 154598 - MXF: Setting **debayer quality** to **High Quality** on some Sony RAW files displays an **error decoding frame** message in the Comp Viewer.
- ID 153522 - FBX geometry: Faces on geometry read in from **.fbx** files are not connected to neighboring faces, leaving gaps in certain circumstances.

  This issue is particularly visible when using the EditGeo node, which should not allow you to remove faces from the geometry.
- ID 150327 - Read: After reading in a stereo/multiview **.exr** file and choosing not to add new views to the project, subsequent reads of any stereo/multiview **.exr** files won't give the option to add new views.
- ID 147122 - Sub-sampling in **.exr** files is not currently supported.
- ID 140818 - Certain **.exr** files rendered from Modo display the **alpha** channel rather than the **rgba** channels by default.
- ID 135929 - The last audio frame of a QuickTime encoded with AAC compression is muted.
- ID 135119 - Rendering certain **h264** encoded **.mp4** files using the **mov32** encoder results in color shifts using QuickTime 10.3 codecs.
- ID 134777 - There are slight differences in color and sharpness when rendering Alexa footage to ProRes 4444.
- ID 133959 - Alembic: The state of the Viewer **Lock Frame** control is not always honored for **.abc** files.

  As a workaround, ensure that **ReadGeo** > **read on each frame** is enabled.
- ID 133633 - Writing out stereo **.sxr** files with additional channels does not write out both eyes correctly.
- ID 130846 - ReadGeo: When reading in **.fbx** files, the transform/scale state can become incorrect while toggling the **read transform from file** in combination with **all objects** and/or **read on each frame**.
- If you have trouble with FBX files, it may be because they were written with an older version of FBX. If they load very slowly, it is also possible that they are ASCII rather than binary. To get around these problems, you can use the FBX converter on the Autodesk website. It converts between various different formats, including older FBX versions, ASCII, and binary, and is available on Windows, Mac OS X, and Linux.

  To download the FBX converter:

  1. Go to http://usa.autodesk.com/adsk/servlet/pc/item?siteID=123112&id=10775855.

  2. Scroll down to FBX Converter and click on one of the links to start the download.

Render codecs

Rendering with certain codecs occasionally causes Nuke to crash. Due to this, we recommend the following:

- If you're using the Sorensen Video codec, it's recommended you use the Sorensen Video 3 codec instead. If you're unable to switch to Sorensen Video 3, try using a format smaller than 2K for better performance.
- If you're experiencing crashes with Cineform HD, try updating your Cineform codec to version 5 or above. You may need to download the Neoplayer at http://estore.cineform.com/neoplayer.aspx.
- If you're using Avid Meridien, you should only write out in NTSC and PAL.

Roto/RotoPaint Open Splines

- ID 159145 - The **Select Feather Points** tool does not work consistently between the **Open Spline** and **Bezier** tools.
- ID 141680 - Rendering artifacts can occur if the **feather** control is used in conjunction with the feather handles in the Viewer.
- ID 141674 - Stereo: Adding an open spline creates the spline in the left view only by default.

  As a workaround, select the shape and then manually change the Properties **view** control to include both views.
- ID 141664 - Python API: Moving points on an open spline using Python causes Nuke to crash.
- ID 141496 - Rendering artifacts can appear where the spline hull crosses over itself with negative **feather** values.
- ID 139942 - Rotating the tangent of an end point occasionally causes the hull to behave erratically.
- ID 139905 - Holding **Ctrl/Cmd** to move a point's tangent handles independently causes defects in the hull or feather.
- ID 139901 - Changing the Viewer overlay visibility, such as from **always** to **never**, occasionally produces artifacts in the spline's hull.
- ID 139844 - It is not possible to increase the **width** for individual points if the overall **width** is set to **0**.
- ID 139815/139549 - Cusped points occasionally cause hull rendering artifacts.
- ID 135851 - Animated splines with **varying** width and **feather** occasionally contain slight rendering glitches inside the hull.
- ID 134508 - Roto Open Splines - Shape of hull/feather curve can look incorrect when width changes greatly from one point to the next.

Other Roto/RotoPaint Bugs

• ID 165001 - Adding strokes/shapes in RotoPaint is slow when there is another RotoPaint after it.
• ID 150448 - RotoPaint: Undoing a point move that created a keyframe doesn't currently undo the keyframe creation.
• ID 149556 - Artifacts are produced until mouse up when painting over a stroke on another frame.
• ID 147533 - Point handles for paint strokes, whose lifetime doesn't extend to the current frame, disappear when drag-selected.

    As a workaround, select the shape in the **curves** list to re-display the points.
• ID 145600 - Expression linking extra matrices in the **Transform** tab doesn't work as expected.

> **Note:** This also applies to SplineWarp matrices.

• ID 144520 - Several levels of smoothing applied to one shape are carried over to subsequent shapes for a single smooth operation.
• ID 140009 - The cut, copy, and paste keyboard shortcuts don't work for entries in the **curves** list.
• ID 138250 - RotoPaint shape colors don't change when expression linked to another RotoPaint color.
• ID 132798 - The **undo** and **redo** buttons in the Properties panel didn't work as expected and have been disabled.

    The workaround is to use the undo (**Ctrl/Cmd**+**Z**) and redo (**Ctrl/Cmd**+**Y**) keyboard shortcuts or the **Edit** menu instead.
• ID 160681 - Painting on Mac OS X and Linux is slower when the paint cursor is near the edges of the screen.
• The foreground onion skin overlay updates as you paint, rather than only updating with the new stroke on pen up.
• It is not currently possible to clone RotoPaint nodes.
• Interactivity of laying down strokes/shapes in the Viewer may be faster when motion blur is disabled on the layer you are working in.

ScanlineRender

• ID 163312 - Deep: Geometry with alpha 0 renders black when the deep output is converted to an image.

SmartVector Toolset

- ID 196455 - Rendering vectors after correcting the **file** control in the SmartVector node occasionally displays a spurious **No such file or directory** error.

  As a workaround, scrub to a different frame to remove the message.

Text

- ID 164538 - Viewer toolbar controls steal cursor focus.
- ID 164026 - The undo history becomes unreliable when the panel focus changes.
- ID 159594 - Selecting a Tcl expression in the **message** field doesn't always select the result in the Viewer.
- ID 157398 - Different operating systems handle the **Shadows** tab **shrink/expand** control differently, producing inconsistent output.
- ID 132254 - In **text edit** mode, it is not currently possible to edit text attributes when the Viewer overlay is disabled.
- ID 132244 - Transforming animation groups using an expression-linked Transform node does not work as expected.

  As a workaround, expression link the **translate x** and **y** controls separately.
- ID 131239 - Splitting the **transform** control on the **Group** tab splits all controls.
- ID 131077 - Transforming a character generated from an expression, and then going to a frame where the character no longer exists, results in the transformation being lost.
- ID 130732 - Splitting the **message** field does not work as expected.

Tracker

- ID 163941 - The zoom window occasionally doesn't update correctly when scrubbing between frames.
- ID 150225/150212 - Right-clicking on a point in the Viewer doesn't always update the available **Link to** > **Tracker linkingdialog** or **Tracker** options.

  As a workaround, close and re-open the Roto/RotoPaint properties panel to update the **Link to** menu.
- ID 140735 - Tracking keyframes with different sized patterns doesn't work as expected.

  As a workaround, keyframe patterns should, where possible, be of comparable sizes.
- ID 134806 - After tracking and centering a track, the Viewer no longer caches when playing back the tracked frames.

As a workaround, you can enable full frame processing, though this may increase render times.

- ID 133571 - **Ctrl/Cmd** clicking in the Viewer to select a pixel and then adding a track, sets the tracking anchor coordinates to 0,0.
- ID 131023 - Moving tracking anchors is occasionally unresponsive and jerky.
- ID 130935 - Holding **Shift** and clicking tracks in the Viewer doesn't add to the current selection.

VFX Platform

- You may experience issues when importing PySide modules into their Python scripts due to the migration from PySide 1.2.2 to PySide 2.0.

  In some cases, you can just change calls to:

  ```
  import Pyside.some_module
  ```

  to:

  ```
  try:

      import Pyside.some_module

  except:

      import Pyside2.some_module
  ```

  However, the definition of some classes has moved between modules in PySide 2.0. This particularly affects any Widget related classes, which have been moved from QtGui to QtWidgets, however there are other cases where this may be experienced.

  If you experience any problems with this, please refer to the Qt 5.6.1 documentation, or contact support.foundry.com.
- ID 282593 - Switching to a fullscreen workspace on the primary monitor occasionally causes the secondary monitor to turn black.
- ID 280371 - Mac OS X/macOS only: OpenGL errors are printed on the command line when using an ATI Radeon 5770 GPU.
- ID 277875 - VFX Platform: Switching workspace occasionally draws the new workspace incorrectly.
- ID 277548 - A **QComboBox** with a custom **QCompleter** currently emits incorrect signals.
- ID 275719 - Mac OS X/macOS only: The **Help** > **About Nuke** pop-up is positioned incorrectly on some machines.
- ID 275251 - Mac OS X/macOS only: Hovering over clip instances in the timeline does not change the pointer icon.
- ID 275246/270914 - The terminal or command line displays **libpng warning: iCCP: cHRM chunk does not match sRGB** on start-up.

- ID 274301 - Node toolbar menu items do not always deselect correctly.
- ID 272767 - Launching Nuke from the terminal with the **-b** argument has been deprecated as a result of library upgrades to comply with the VFX Platform 2017 requirements. There are two workarounds available on Mac and Linux :
  - Run Nuke from the Terminal with **&** added to the launch command. This allows Nuke to run in the background and returns the command prompt, but closing the Terminal still causes Nuke to close. For example:

    ```
    ./Nuke11.2v3 --studio &
    ```
  - Run Nuke from the Terminal using the **nohup** command. This allows Nuke to run in the background and returns the command prompt, but closing the Terminal does not cause Nuke to close. For example:

    ```
    nohup ./Nuke11.2v3 --studio &
    ```

> Tip: The **nohup** command prints output to **/Users/<username>/nohup.out** or **/home/<username>/nohup.out** by default, but you can specify a different file by appending **> /filepath/filename** to the command. For example:

```
nohup ./Nuke12.1v3 --studio & > /Users/<username>/nuke.out
```

- ID 272750 - The remove all panels button in the node **Properties** panel is displayed inconsistently.
- ID 272504 - The timeline Viewer in and out point previews are not working as expected when scrubbing.
- ID 272338 - The Windows command prompt displays **QWidget::paintEngine: Should no longer be called** on launch.
- ID 272274 - Closing Nuke Studio does not remove the application icon from the task bar.
- ID 271632 - Nuke prints a **libDeckLinkAPI.so** error in the terminal on launch.

Warpers

- ID 150160 - SplineWarp: Using **Ctrl/Cmd**+drag to create rectangles and ellipses doesn't display an overlay until pen-up.
- ID 149291 - SplineWarp: Deleting all but one point on a curve resets its correspondence points to 0,0, which cannot be undone.
- ID 149286 - SplineWarp: Correspondence points are too sensitive when control points are removed.
- ID 149277 - SplineWarp: Moving correspondence points on curves with no keyframes cannot currently be undone.
- ID 146819 - SplineWarp/GridWarp: Preview doesn't handle upstream transforms correctly.

- ID 146134 - GridWarp: When using cropped input, moving control points causes the Viewer to display the cropped image and the black area between the crop box and the format when merged over a background.
- ID 146100 - GridWarp: Locked source and destination grids still allow adding and removing grid lines.
- ID 145673 - SplineWarp/GridWarp: The Viewer LUT is incorrect in **morph** mode, when **mix** is set at an intermediate value.
- ID 145505 - SplineWarp: Placing correspondence points at each end of an open spline causes rendering problems.
- ID 145093 - GridWarp: The Viewer does not show the correct mix amount when in **morph** mode with **mix** set at an intermediate value.
- ID 144643 - GridWarp: All keyframes are removed from the Dope Sheet after undoing, rather than just the latest, and the keyframes remain on the timeline and in the properties.
- ID 144090 - SplineWarp: Transform links are not maintained when the source curve is moved to a new layer.
- ID 144054 - SplineWarp: Rendering fails if a curve is reduced to a single point.
- ID 143939 - SplineWarp: The **C** keyboard shortcut does not currently select the **Add Correspondence Point** tool.
- ID 142984 - GridWarp: The timeline currently shows both source and destination keyframes, even if a grid is not visible in the Viewer.
- ID 142977 - GridWarp: Rotating the transform jack with both grids selected, but in different positions, does not undo as expected.
- ID 142064 - SplineWarp: The spline keyframe + button does not add keys to the Curve Editor or Dope Sheet.
- ID 141945 - GridWarp: Existing control point keyframes are not cleared when you draw a new grid using the **Draw Boundary** Viewer button.
- ID 141105 - GridWarp: You cannot select all grid points in the Curve Editor using **Ctrl/Cmd**+**A** shortcut.
- ID 141090 - GridWarp: The grid can flicker between white and gray when zooming in and out of the Viewer, particularly when the grid is subdivided.
- ID 140222 - GridWarp: In stereo mode, the right view is labeled as **default** when you split controls into separate views.

Windows Only

- ID 198430 - Nuke cannot read DNxHD **.mxf** files that have spaces in the file name.
- ID 158163 - Scopes: The alpha channel doesn't update correctly when modified through a node, such as Primatte or Shuffle, even after the node is removed from the Node Graph.

- ID 153332 - File Browser: Location defaults (such as Home, Root, etc.) may not display if you have a previously saved **FileChooser_Favorites.pref** file in your **~/.nuke** directory.

  As a workaround, move or rename the **FileChooser_Favorites.pref** file, and re-launch Nuke.
- ID 139158 - Changing the 3D selection mode does not update until you click in the Viewer.
- ID 134457 - When using a tablet, Nuke does not automatically switch to **Eraser** mode when you use the erase end of the pen.
- ID 132461 - QuickTime: The **Blackmagic 10 bit (v210)** codec defaults to the **YCbCr 8-bit 422 (2vuy) pixel format** due to a bug in the codec, resulting in solid green frames.

  As a workaround, manually set the pixel format to **b64a RGB** to preserve image fidelity.

Miscellaneous

- ID 339241 - MatchGrade: Clicking **Analyze Reference Frames** with a Read node with no valid **file** path displays an **Uncaught C++ exception occurred during the execution of python script!** error.
- ID 312350 - Visual Diagnostics: The **Profile** tab occasionally flickers when the application window is maximized.
- ID 273462 - Licensing: Nuke cannot retrieve a license from the license server when the hostname contains **.local**.
- ID 272296 - Adding a user knob and then undoing the action doesn't remove the added knob.
- ID 271456 - UI: Some interface elements appear larger than usual when compared to previous versions of Nuke.
- ID 271074 - PointCloudGenerator: **Track Points** does not work as expected when creating a point cloud from CameraTracker data.
- ID 169458 - Compositing Viewer: Setting the **gamma** control to **0** with **Panels** > **Viewer (Comp)** > **use GPU for Viewer when possible** enabled in the preferences, renders the alpha channel black.
- ID 165589 - Motion Vector output has been improved, but still doesn't work properly because some large polygons are clipped by the front camera plane.

  You can minimize this effect by increasing the geometry **tessellation max** parameter.
- ID 165543 - Ultimatte: Overlays are not updating correctly or reverting when panning or zooming.
- ID 165040 - In the 3D Viewer, there is currently a conflict between 3D geometry selection and points drawn with RotoPaint. This only occurs if you have two Viewers open, one in 2D mode and the other in 3D mode, and you have the panel for the RotoPaint visible.
- ID 164430 - Capture: Roto opacity and feather settings are not included in captured images.
- ID 161757 - Currently, the Nuke Viewer cannot cache very large plate sequences in float. The limit per frame is 50MB. If your frames are larger than this, you may need to switch to proxy mode for the caching to work.

- ID 160605 - AJA Monitor Output: Setting the NUKE_AJA_CHANNEL environment variable to 4 when the NUKE_AJA_DUALOUTPUT environment variable is set, streams the output to SDI3, rather than SDI4.

- ID 159107 - ColorCorrect: Adding an expression to the curves on the **Ranges** tab and then changing a value, such as **Gain**, causes Nuke to crash.

- ID 157899 - Capture: Capturing the Viewer with a custom file path saves the file path in the script, resulting in error when the path doesn't exist:

```
Flipbook render failed: viewerCaptureOp: Cannot write to specified path
```

- ID 157894 - Capture: Capturing a 3D scene containing lights produces Viewer flashes in the captured images.

- ID 152639 - Switching between certain workspaces displays black in the Viewer until the frame is changed.

- ID 152508 - ParticleBounce: Using custom geometry as the bounce object in a particle system occasionally allows particles to pass through the bounce surface.

- ID 151422 - PositionToPoints: Textures occasionally disappear during playback or when mousing over the Viewer.

- ID 150892- DeepToPoints: Command-line rendering appears to calculate renders even when render is set to **off**.

- ID 150544 - The R3D parameter labels in Nuke aren't entirely consistent with REDCINE-X and Hiero.

- ID 149787 - DepthToPosition: Reading depth information from the same layer as the **output** layer produces corrupt output.

  As a workaround, shuffle the depth information to an alternate layer.

- ID 149379 - Card3D: When **motionblur** is enabled in the properties, FrameHold and TimeOffset nodes are ignored when connected to the **cam** or **axis** inputs.

- ID 149185 - Cloning does not work properly with all OFX nodes. This affects, but is not restricted to, any nodes that have an analysis pass.

- ID 148358 - Windows run-time libraries are not packaged properly with Nuke.

  Nuke runs correctly from a network install on Windows without specifically installing the run-time libraries, though we still recommend that you do so as there are still some minor problems without them.

- ID 148079 - In the Viewer settings, enabling **3D** > **show_prim_bbox** does not display individual bounding boxes for polymesh primitives.

- ID 147173 - CameraTracker: It's not possible to pick colors in the Viewer with the control panel open.

- ID 146773 - TimeOffset: Checking **reverse input** doesn't affect cameras, lights, or axes.

- ID 146598 - Multitexturing: When **Preferences** > **Viewers** > **Multiframe** is enabled, increasing **downrez** in the Viewer toolbar can cause textures to flicker in the 3D Viewer.

You can switch back to **Classic** mode or avoid using proxy in 3D to workaround this issue.

- ID 146234 - Flipbooking the output of the Anaglyph node asks which view you want to render. This question is unnecessary as the result is an anaglyph image. Irrespective of what view you choose, the flipbook output is the same.

- ID 145936 - ReadGeo: Geometry occasionally doesn't display as a solid until you click in the Viewer.

- ID 144337 - Copying and pasting spline keys does not work as expected in the Dope Sheet.

> **Note:** This known issue only applies to Roto and SplineWarp keys.

- ID 143292 - Manipulating 3D handles in the 2D Viewer is unreliable.

- ID 142834 - The transform jack is currently scaling incorrectly from the corner pivot point.

- ID 141719 - Connecting a FrameHold node to an animated Camera and connecting both to a Scene node only displays the animated Camera in the Viewer. There should be two cameras: one static and one animated.

- ID 139684 - The **Modo** Viewer control scheme (**Preferences** > **Panels** > **Viewer Handles** > **3D control type**) does not work as expected.

- ID 139655 - Using **Create Camera** in the 3D Viewer only sets position and rotation. The **focal length** of the new camera does not match that of the Viewer camera.

- ID 139363 - Setting a channel with a non-standard name to use as the Viewer's **alpha** channel doesn't work as expected.

- ID 139086 - Nodes that use the **Iop::sample()** call to get input pixels, such as LensDistortion, perform poorly when they are downstream of nodes using PlanarIop, such as Denoise.

- ID 137121 - Nuke crashes on start up if the **disk cache** location set in the **Preferences** is no longer available.

- ID 136984 - AppendClip forces upstream nodes to re-evaluate on every frame.

- ID 136896 - Loading a script from a disconnected network drive creates an empty script with the same name as the file path to the original.

> ⚠️ **Warning:** If you save this empty script when the network drive is reconnected, the original is overwritten.

- ID 136224 - MatchGrade: **Match Different Clip** mode does not allow you to set keyframes on the **Target** for **.mov** clips with a frame range offset.

- ID 134953 - Some filter nodes, such as Erode (fast), are caching more slowly than in previous versions.

- ID 131882 - Virtual Sliders: Clicking the left-mouse button, while holding down the middle-mouse button, pastes values into the control.
- ID 131633 - Project3D: The node class name has changed to **Project3D2**. As a result, the Nuke<>Mari bridge won't work unless all instances of Project3D are renamed appropriately in the **mari_ bridge.py** file.
- ID 131439 - The Viewer **headlamp** control can not currently be managed using expression links.
- ID 131221 - Plug-ins: Loading scripts with plug-ins compiled against older versions removes the nodes from the Node Graph.
- ID 131147 - Custom knobs on Groups and NoOp nodes cannot be retimed.
- ID 130713 - Switching the Viewer to **wipe** mode and wiping between inputs with different format sizes causes corruption and constant refreshing in the Viewer.
- File types in Windows and Mac OS X are associated with the standard version of Nuke by default, so if you save a script on NukeX using features that are only included in NukeX (such as CameraTracker or FurnaceCore) and then double-click on the script icon to open it, it opens in standard Nuke instead of NukeX.
- CameraTracker: Canceling lens distortion initialization results in corrupt tracks.
- 3D Camera: If you want to navigate through the 3D point cloud created by the CameraTracker node when using **Create Scene**:
    - Select the Camera that was created in the 3D view when using the **Create Scene** button.
    - Press **F** to focus on the selected Camera. You can now navigate around the cloud. Do not try to focus (using **F**) on the point cloud. The resulting tumble camera movement is likely to be jumpy.
- Plug-ins installed using the Nuke Plug-in Installer may not work correctly as they were compiled against an earlier version of Nuke.

Known Issues Specific to Nuke Studio and Hiero

AAF

- ID 274824 - Elastic keyframes imported from Avid do not translate correctly into Nuke Studio.

Create Comp

- Multi-view, such as stereoscopic, is not supported for clip instances created using right-click **Effects** > **Create Comp**.
- ID 154076 - Inserting scripts into comps containing Text nodes using unsupported fonts causes Nuke Studio to crash when the Text nodes are disabled.
- ID 152580 - Create Comp: Enabling **Collate Shot Name** in the comp export preset offsets the comp frame range compared to the annotations precomp frame range.

• ID 137533 - There are currently no options to load or overwrite an existing script when you select **Create Comp**.

Linux Only

• Reading files from NTFS disks/partitions can be extremely slow, particularly for large files. This is a limitation of Linux NTFS file systems, rather than Foundry products.

We recommend avoiding timeline playback that relies on source footage from NTFS disks/partitions.

• ID 282599 - Linux only: Input and timecode metadata is currently incorrect in the timeline Viewer if the framerate is changed.

• ID 235327 - CPU usage can reach 100% on a single thread during flipbooking, causing Nuke to become unresponsive.

• ID 167058 - PulseAudio (ALSA) can cause Nuke Studio to crash or impair playback.

As a workaround, you can stop the **pulseaudio** daemon:

1. Open **/etc/pulse/client.conf**

2. Set **autospawn = no** and **daemon-binary** to **/bin/true**. Ensure these lines are not commented out.

3. Call **ps -e | grep pulse** to check the process is still running.

4. Call **pulseaudio --kill**

5. Call **ps -e | grep pulse** again to check the process has stopped.

• ID 150847 - Dragging clips to the timeline with certain older NVIDIA drivers occasionally causes Nuke Studio to crash.

As a workaround, ensure that you have the latest NVIDIA drivers installed, available from:

www.nvidia.com/Download/index.aspx?lang=en-us

Mac OS X/macOS Only

• ID 130695 - QuickTime ProApps Codecs v1.0.3 break HDV and XDCAM on Mac OS X 10.7.5, and earlier.

This is a codec issue rather than an application issue.

• ID 155493 - The shortcut for **Clear In/Out Points** (**Alt**+**U**) is not always triggered correctly due to a conflict with the combination for the umlaut symbol.

To work around this, press **U** momentarily before **Alt**+**U**.

Preferences

• The **Preferences** > **Path substitution** table for cross platform compatibility currently only comes into effect at project load, not EDL/XML import.

  As a workaround, import your sequence and set the **Path substitution** rule, then save the project and reload to force the conversion.

Python API

• ID 161275 - QActions are not added to the **Edit** menu in the menu bar when finding the menu action by name.

  As a workaround, use the **objectName** (**foundry.menu.edit**), where possible.
• ID 145836 - Calling **hiero.core.addPathRemap()** does not work for soft effect file paths.

Read and Write

• ID 160682 - Executing **Clip** > **Rescan Clip Range** displays frame read errors if the rescan adds frames to the clip.
• ID 156245 - QuickTime: Certain files read into Nuke Studio with a different start timecode to other applications, such as Premiere or Resolve.
• ID 151722 - XML: Shot names are occasionally not imported correctly from Adobe Premiere **.xml** files.
• ID 151491 - Exporting: Export speeds may be slower than expected for **.mov** files. This may be due to the **Rendering** preference set to **limit renderer**.
  As a workaround, you can change the preference **Performance** > **Threads/Processes** > **Rendering** > **export renders** to **no renderer limits** to improve rendering speeds. You can also experiment with the custom renderer limits to adjust performance on your machine.
• ID 147522 - Single layer exports from multi-pass clips fail if the selected layer is not a default Nuke layer, such as **depth** or **motion**.
• ID 143435 - R3D: The aspect ratio of anamorphic **.r3d** footage is not displayed correctly when added to the timeline.
• ID 133185 - Importing and playing back very large format **.tif** files causes Nuke Studio to crash.
• ID 132257 - Writing **.exr**s with 200+ layers, when **interleave** is set to **channels**, can be sluggish.

Soft Effects

• ID 280413 - Soft Effects: The Text effect cursor placement shifts incorrectly after typing first character.

- ID 278275 - Soft Effects: Closing a Timewarp effect's **Properties** panel disrupts the interface briefly.
- ID 275314 - Soft Effects: Additional keyframes are added incorrectly when animating Text effects.
- ID 230536 - The Burn-in effect does not maintain a constant text baseline for all characters when the format is changed.
- ID 175574 - Undo and redo of **Properties** panel changes can be unreliable if a soft effect delete is in the same undo stack.
- ID 161854 - TimeWarp: Applying a TimeWarp to a clip instance occasionally causes the associated sequence bin item to display an error.
- ID 161851 - TimeWarp: Applying a TimeWarp to clip instances retimed to values other than 100% does not work as expected.
- ID 160544 - Text/Burn-in: Nuke Studio doesn't warn you if the font used in an effect could not be found.
- ID 159441 - Burn-in: The Burn-in effect does not auto-update when switching between sequences until the playhead is moved.
- ID 158885 - Dissolve transitions do not work as expected in Custom soft effects, based on the examples provided here:

```
<install_directory>/pythonextensions/site-packages/hiero/examples/custom_
soft_effect.py
```

- ID 158601 - Burn-in: Burn-in elements are not updated automatically when the underlying metadata is updated.

  As a workaround, either change the frame displayed in the Viewer or choose an alternate element from the dropdown controls.
- ID 158366 - Burn-in: The Burn-in effect is currently a gizmo and cannot be cloned on the timeline.
- ID 156713 - Adding a transition when a Text effect containing an expression is on a track above, causes text rendering to fail during the transition.
- ID 156709 - Adding a transition when a Text effect containing an expression is on a track above, causes the text size to reset.
- ID 154180 - Exporting sequences containing clip-level Text effects using the **[frame]** expression writes incorrect frame numbers.
- ID 150688 - Expression links are incorrectly allowed between node and soft effect controls in the Properties panel, if the node and effect names are identical.
- ID 139981 - Effects are only visible in the Viewer if there is a clip instance below them in the timeline.
- ID 139873 - Renaming a soft effect does not update the clip instance until you click in the timeline.
- ID 139528 - Adding soft effects at clip level, using **Open In** > **Timeline View**, is only available using the toolbar button on the timeline panel. The right-click **Effects** menu is currently disabled.

Timeline

• ID 144420 - Locking a track currently prevents adding clip instances from the locked track to the Viewer input buffers. You can still open clip instances in the various right-click **Open In** options and access clip instance metadata.

• ID 137790 - It is not currently possible to drag-and-drop a clip to a new track between or below existing tracks.

  As a workaround, drag the clip to a new top-level track and then manually move the track to the required position.

• ID 134754 - It is not currently possible to alter the **Output Resolution** of clips opened using the right-click **Open in Timeline** option.

Timeline Disk Caching

• ID 280256 - Opening a Text effect's **Properties** panel directly after project load causes the cache bar to disappear.

• ID 272897 - Caching continues after closing the project associated with the frames being cached.

• ID 270934 - The caching logic does not currently account for gaps in sequences, resulting in the caching state icon remaining gray for fully cached sequences.

Timeline Read Nodes

• ID 313013 - Opening the Node Graph from the Project bin and then returning to the timeline environment behaves as if the left mouse button is held down.

  As a workaround, left-click in the timeline to cancel the mouse press.

• ID 310067 - Loading large projects is currently slower than expected.

Windows Only

• ID 314088 - Localization: The first frame of localized files in the outdated state, colored red, do not always update correctly.

• ID 159581 - Soft Effects: The background on Burn-in effects, when enabled, alters size depending on the timecode displayed.

• ID 138430 - Nuke Studio cannot currently parse Unicode characters during export.

Miscellaneous

• ID 313849 - Localization: Reading certain multiview **.exr** files causes Nuke to crash.

As a workaround, rename or move your **.nuke** folder and re-launch Nuke to refresh the **uistate.ini** file.

- ID 272723 - Closing Nuke Studio when it was launched from the command line does not end all Nuke processes.
- ID 200015 - Selecting multiple bin clips can cause the right-click menu to respond slowly.
- ID 167919 - Localization: Re-importing clips into the Node Graph or project bin multiple times retains the original localization policies settings.
- ID 161906 - Audio: Zooming in on a waveform displays a **Failed to decode audio** error in the timeline.
- ID 161240 - Adding a custom Hiero window to a workspace and then saving it as the Nuke default workspace causes Nuke to crash on start up.
- ID 151862 - Comps with relative paths are not currently working when imported into the project.
- ID 140048 - Cache pausing stops working if any change is made to the timeline.

Developer Notes

Here are the changes relevant to developers. See **Help** > **Documentation** from the Nuke menu bar or https://learn.foundry.com/nuke/developers/112/ndkdevguide/appendixc/index.html for more information.

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	10.0v1 to 10.0v2	API and ABI		
Point	10.0v1 to 10.5v1	API	●	
Major	10.0v1 to 11.0v1	-	●	●

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")
```

New Features

There are no new features in this release.

Feature Enhancements

There are no feature enhancements in this release.

Bug Fixes

- ID 362953 - Python: Running scripts in the Script Editor was significantly slower that in Nuke 10.5 releases.
- ID 362295 - Python: Creating a greater number of nodes than the maximum **Properties** panel value caused Nuke to crash.

Release Notes for Nuke and Hiero 11.2v4

Release Date

11 October 2018

Qualified Operating Systems

- macOS Sierra (10.12) or macOS High Sierra (10.13)
- Windows 7 or Windows 10 (64-bit)
- CentOS 6 or CentOS 7 (64-bit)

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

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

With graphics drivers capable of running CUDA 8.0 & 6.5 or above.
- On Windows and Linux, CUDA graphics drivers are bundled with the regular drivers for your NVIDIA GPU. Driver version r361 or above is required.

Go to http://www.nvidia.com/Download/Find.aspx?lang=en-us for more information.

• On Mac, the CUDA driver is separate from the NVIDIA graphics driver and must be installed, if you don't have it already. The minimum requirement is driver version r361 which can be downloaded from www.nvidia.com/drivers.

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

AMD

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

Windows GPU	Driver	Linux GPU	Driver
AMD FirePro W8100	17.Q2.1	AMD FirePro W8100	17.Q2.1
AMD FirePro W9100	17.Q2.1	AMD FirePro W9100	17.Q2.1
AMD Radeon R9 Fury X	17.4.3 - 17.6.2	AMD Radeon R9 Fury X	17.10
AMD Radeon RX 480	17.Q2.1	AMD Radeon RX 480	17.Q2.1
AMD Radeon Pro WX 7100	17.4.3 - 17.6.2	AMD Radeon Pro WX 7100	17.10

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

• On Mac an AMD FirePro GPU on late 2013 Mac Pro 6,1, mid 2015 MacBook Pro 11,5, and late 2016 MacBook Pro 13,3, running OS X 10.9.3 'Mavericks', or later.

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 FirePro W9100s.

New Features

There are no new features in this release.

Feature Enhancements

- ID 148257 - DeepExpression: Expression syntax is now consistent between the DeepExpression and standard Expression nodes.

- ID 153498/355712 - ARRIRAW: Nuke now supports Native ProRes 2K output, including 2K and 2K Cropped resolution.

- ID 315456 - DeepExpression: You can now reference User knobs in the DeepExpression **Properties** panel in the same way as the standard Expression node.

- ID 326656 - Write: A new environment variable, NUKE_EXR_TEMP_NAME, has been added to change the naming convention of **.exr** temporary files during rendering.

  Setting the variable to **1** writes temporary **.exr** files as **<filename>.exr.tmp**, rather than **<filehash>.tmp** as in previous releases.

Bug Fixes

- ID 150277 - Monitor Output: Closing and reopening a Nuke Studio project discarded **Monitor Output** panel settings.

- ID 155746 - Write: SLog2 colorspace conversion produced a slight color shift when read back into Nuke.

- ID 156253 - Node Graph: Node connection arrows occasionally disappeared or changed color at certain zoom levels.

- ID 161940 - DeepExpression: Changing layers in a DeepExpression node's **Properties** panel evaluated expressions and replaced them with static values.

- ID 262566 - Timeline Editing: Playing back sequences containing **.wav** files at 29.97 or 59.94 fps muted the audio output.

- ID 270782 - Timeline Editing: Using the **Slip** tool on the shot under the playhead caused Nuke Studio to crash.

- ID 323572 - Linux only: The timeline volume control pop-up displayed incorrectly.

- ID 329543 - Create Comp: Splitting a shot using the **Razor** tool and then creating separate comps from the individual parts did not work as expected.

- ID 331451 - Colorspace: Clicking **swap in/out** did not always update the **Properties** panel correctly.

- ID 334610 - Linux only: Calling **import nuke** caused the Python interpreter shipped with Nuke to hang on exit.
- ID 350887/359162 - VectorDistort: The error message displayed when the input only contained a single frame was misleading.
- ID 353418 - Export: The **Transcode Images** and **Copy Exporter** did not set custom colorspaces correctly.
- ID 353546 - Denoise: Setting **Source** to **Digital** did not work as expected for all input resolutions.
- ID 353555 - Closing or clearing certain scripts using **File** > **Close Comp** or **Clear Comp** caused Nuke to crash.
- ID 354257 - Enabling **use GPU for Viewer when possible** with a Viewer input process selected caused the **gamma** and **gain** controls to affect the Viewer differently.
- ID 355078 - DeepExpression: The **width** and **height** variables were not recognized in Deep expressions.
- ID 355212 - Export: The **Symlink Generator** exported a single symlink for split **.r3d** files.
- ID 355491 - Localizations: Deleting a localized Read node referencing **.r3d** footage and then re-reading the same footage did not retain the localized state.
- ID 356090 - OCIO: Some **.mov** thumbnails displayed colorspaces errors, even though the Viewer displayed correctly.
- ID 356283 - ARRIRAW: The Read node's **aspect ratio** control displayed the ratio incorrectly.
- ID 359684 - Conform: Timelines built from **.xml** files occasionally caused Nuke Studio to crash during normal operation.
- ID 359908 - Node Graph: The documentation did not mention capitalization filtering in the Tab menu.
- ID 362247 - UI: The **Properties** panel **curves** list did not expand correctly for Roto, RotoPaint, and SplineWarp nodes.
- ID 362456 - Export: Sequences containing **.wav** files at 29.97 or 59.94 fps did not export audio correctly.
- ID 363964 - UI: The **Properties** panel occasionally scrolled when hovering over the interface.
- ID 364571 - Deep: Rendering heavy scripts containing DeepRecolor nodes from the command-line occasionally caused Nuke to crash.
- ID 365238 - Preferences: Autosaved projects did not save **Project Item** color preferences.
- ID 365896 - Timeline Editing: Right-clicking in the timeline panel occasionally caused Nuke Studio to crash.

New Known Issues Specific to this Release

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

New Known Issues Specific to Nuke

• ID 355719 - ARRIRAW: Deprecated resolution modes are not labeled in Nuke.

• ID 347416 - Rendering a standard Write node that has deep data in its stream causes Nuke to crash.

• ID 340749 - Mac OS X/macOS only: Reading **.r3d** files and changing the **color version** to **v1** produces a corrupt image.

   This is a known issue in the RED SDK, and will be addressed in a future release.

Other Known Issues

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

Known Issues Specific to Nuke

AudioRead

• ID 143557 - Changes to the **rate** control value are not honored when **ratesource** is toggled between **file** and **custom**.

• ID 142880 - Changing the sample rate has no effect on playback in a Flipbook.

• ID 142354 - The **time range** control doesn't limit the range when an **endtime** is specified.

• ID 142326 - Flipbooking doesn't honor the time range knob.

• ID 141682 - Redo keyframe generation doesn't replace the keys.

• ID 141651 - Changing **Draw Style** in the Curve Editor or Dope Sheet doesn't redraw the curves correctly.

BlinkScript/CUDA

• ID 142618 - CUDA: Scripts containing GPU accelerated nodes, such as ZDefocus, display a CUDA error when the OS wakes up from sleep mode.

   As a workaround, close and reopen Nuke to reactivate the CUDA drivers.

CameraTracker

• ID 162354 - Sequences containing alpha channels display the alpha premultiplied by the image in reference thumbnails, rather than just the RGB values.

• ID 135414 - Centering a track in the Viewer does not work as expected in proxy or downrez modes.

Deep

• ID 133832 - Nuke occasionally reads and writes Deep **.exr** files with a pixel aspect ratio of 1.

  As a workaround, preview the **.exr** in the file browser before reading it into Nuke.

Dope Sheet

• ID 164685 - Keys from Viewer buffers not currently being viewed are still visible.
• ID 164320 - Read and TimeClip representations disappear in the Dope Sheet if they are set to have a non-empty frame expression.
• ID 163157 - The Dope Sheet is not updated correctly when a Retime's **speed** control is animated.
• ID 163082 - Multiple instances of the same clip within one AppendClip are only represented once in the Dope Sheet.
• ID 143058 - Scripts containing Ocula's O_VerticalAligner plug-in cause Nuke to crash when you execute **Analyze Sequence** with the Dope Sheet open.
• ID 133920 - Adding a curve to the Dope Sheet and then deleting it causes Nuke to crash.
• ID 131730 - Undoing individually animated text characters removes their keys completely from the Dope Sheet.
• ID 130830 - Keys remapped with descending TimeWarp lookup curves don't snap to frames when **frame snap** is enabled.

EditGeo

• ID 164414 - Changing the visibility of objects within an Alembic Scene Graph causes geometry to ignore the EditGeo node.
• ID 164377 - Setting a keyframe can be slow to update the Viewer with the appropriate keyframe marker.
• ID 158840 - Setting **axis alignment** to **average normal** displays the axis incorrectly on edge and corner vertices.
• ID 130155 - The transform handle of selections in the Viewer is not updated between frames on geometry with animation baked into its vertices.

  To update the transform handle, toggle the axis alignment control between **object** and **average normal**.

Flipbook

• ID 271435 - Flipbook: Using the flipbook with nuBridge installed causes Nuke to crash.

- ID 201156 - Nuke's flipbook defaults to the Write node's colorspace, which can result in different output when compared to the Viewer.

  As a workaround, either flipbook the node upstream of the Write node, or enable **Burn in the LUT** in the **Flipbook** dialog.
- ID 153988 - In the Flipbook Viewer, clicking the **Go to start** button always goes to frame 0, even if the clip doesn't start at 0.
- ID 153981 - Enabling **Burn in the LUT** in the Flipbook dialog uses the **rec709** LUT for both **rec709** and **rec1886**.

Frame Server

- ID 273472 - Canceling or pausing a comp render in the **Background Renders** panel displays errors in the terminal.
- ID 272523 - Non-contiguous frame ranges cannot currently be flipbooked.

GPU

- ID 147911 - R3D: Only half float linear gamma space works with GPU debayering.

Import Nuke

- ID 133803 - Importing Nuke in a Python script destroys **sys.argv**, making command-line arguments unavailable.

  As a workaround, preserve **sys.argv** in another variable before you import Nuke.
- ID 133022 - Importing Nuke hangs when there are Qt conflicts between Nuke and other applications.
- ID 130192 - Calling **import nuke** terminates the Python session if no applicable license is available.

Linux Only

- ID 271807 - Linux only: Adjusting pane or window borders left and right causes redraw lag.
- ID 159347 - Scrubbing in the timeline in large projects can force memory use to hit 100%, causing Nuke to become unresponsive.
- ID 143955 - Calling **uuid.uuid4()** causes Nuke to crash due to a bug in **libc**.

  As a workaround, launch Nuke from the command-line using:

  ```
  LD_PRELOAD=/lib64/libuuid.so.1 ./Nuke8.0
  ```
- ID 140391 - Keyboard Shortcuts: Using **Ctrl**+**C** to quit Nuke from the command-line when a dialog box is open displays an error.

• ID 132196 - Using a Blackmagic Decklink Extreme 2 card causes Nuke to become unresponsive.

LiveGroups

• ID 274174 - Reloading a LiveGroup currently resets all edited User knobs.

• ID 272281 - Adding a user knob and then undoing the action sets expression links to nodes with matching names in main Node Graph.

Mac OS X/macOS Only

• ID 316577 - macOS only: Current localization progress does not update if the pointer focus is on Nuke's menu bar.

• ID 165346 - Nuke crashes if you activate screen sharing when there is no screen plugged in.

• ID 165156 - Node text appears aliased, unclear, or garbled at certain zoom levels.

• ID 161399 - Nuke cannot be launched from the Finder if it has already been launched from the Terminal.

• ID 156343 - PrmanRender: If you're using Mac OS X 10.8 (Mountain Lion) or above, make sure X11 is installed on your system. Unlike previous versions of OS X, 10.8 and above do not have X11 installed by default.

For more information, see http://support.apple.com/kb/HT5293.

• ID 155326 - Launching Nuke from a network shared drive causes Nuke to crash on launch.

As a workaround, either:
  • tarball the installation from Mac OS X and unzip it on the alternate file system (using NFS or Samba, depending on source), or
  • using the command-line, copy the installation from Mac OS X to the network location using the same file system as the destination.

• ID 153783 - Using a node, such as Grade, as a custom viewer process outputs a blank Viewer.

As a workaround, adjust the Viewer **gain** control to refresh the Viewer.

• ID 151176 - Nuke doesn't currently give the option to restore the autosave of an unsaved script, except when Nuke is run from the command-line.

• ID 142709 - Modifying the label of a Python user knob causes Nuke to crash.

• ID 131747 - Crash Reporting: The 'save to' dialog is hidden behind the crash report dialog when you click **Save Report**.

• ID 131262 - The following graphics cards are not currently supported for Mac:
  • ATI Radeon X1600
  • ATI Radeon X1900

Users with these cards are able to render from the command-line, but in GUI sessions, the Node Graph renders incorrectly due to a requirement of OpenGL 2 drivers.

ModelBuilder

• ID 136758 - Setting the **segments** control to a negative number causes Nuke to crash.
• ID 136261 - Editing geometry UVs and then switching the Viewer to look at the geometry through a ScanlineRender node causes Nuke to crash.

Monitor Out

• ID 162912 - AJA Kona LHe+ 2k formats are not displayed correctly.
• ID 135783 - AJA Io Express: Enabling monitor output causes Nuke to crash.

Particles

• ID 162059 - The progress bar does not cancel if you scrub to a frame that has already been calculated within the particle system.
• ID 141819 - Enabling **color from texture** always renders a solid white alpha for the texture.
• ID 139835 - Geometry representation textures are displayed even when **display** is set to **off**.
• ID 139080 - Using sprites instead of geometry representations causes particles to render behind the 3D grid lines.
• ID 136508 - ParticleCache: Setting **emit from** > **points** and connecting the **emit** input to geometry, does not render all frames to the **.nkpc** file.
• ID 132899 - ParticleCache nodes upstream of ScanlineRender nodes display **ParticleCache is out-of-date** errors for negative frame numbers.
• ID 130976 - ParticleCache: Error messages displayed when **read from file** is toggled on and off are not reliably cleared when rendering through ScanlineRender.

Pixel Analyzer and Scopes

• ID 159998 - Scopes do not currently update when zooming into the Viewer.
• ID 159932 - Scopes clip color values between 0 and 1 when **Preferences** > **Scopes** > **Include viewer color transforms** is enabled.
• ID 145223 - PixelAnalyzer: The **full frame** sampling **mode** doesn't work immediately in the timeline Viewer when the analyzer is initially added to the layout.
• ID 130887 - Scopes: Switching to a layout with a scope window, while rendering, forces the Viewer bounding box to 1x1 for that frame.

PrmanRender

- ID 135242 - After a security update for Mac OS X, Nuke is unable to load the PrmanRender plug-in the environment.plist file when in GUI mode.

  See http://support.apple.com/kb/TS4267 for more information.

Python

- ID 145540 - Running **nuke.scriptOpen()** at the same time as creating a Python panel causes Nuke to crash.
- ID 135911 - Rendering an Alembic camera using a Python script produces incorrect values when run from the command-line.

  Run the script from Nuke's **Script Editor** to avoid this issue.
- ID 135027 - Using **setInput()** within an **onCreateCallback** doesn't work as expected.
- ID 134781 - Using Python to set metadata in ModifyMetadata nodes does not work from the command-line.

  To work around this issue, run the Python script from Nuke's Script Editor.
- ID 131286 - Accessing a node's x and y positions using the **xpos** and **ypos** controls reports incorrect values.

  As a workaround, either call **nuke.Node.xpos()** or **nuke.Node.ypos()** first, or ensure no nodes are currently selected in the Node Graph.
- ID 130348 - **nuke.Node.screenWidth()** and **screenHeight()** are incorrect when a node is first created if it has an autolabel.
- Nuke sometimes reports errors in Groups and Gizmos, appearing similar to the following:

  groupName.NodeName.knobname: unexpected 'k' in '0.knobname'

  The problem is most likely that there is an expression using the input TCL command and doesn't validate that there is an input connected. An example expression:

  [input parent 0].translate.x

  The input command returns 0 when it can't find the requested input, which generates an expression of '**0.knobname**' that doesn't refer to anything. The fix is to restructure the expression to use the value TCL command and specify a default value to return in the case that the expression is invalid. It takes the form:

  [value [input parent inputnumber].knob defaultValue]

Here is the modified example:

[value [input parent 0].translate.x 0]

The modified example returns 0 in the event that there is no input 0, and no longer results in an error message.

- There is a Python syntax conflict when assigning knob names on the fly with **nuke.nodes.<node>()** if the knob is called 'in'.

  For example, this gives a syntax error:

  nuke.nodes.Shuffle(in = 'depth')

  while this works because 'in' is a string here and not a keyword:

  sh = nuke.nodes.Shuffle()

  sh['in'].setValue('depth')

RayRender

- ID 230256 - Soft Shadows are not currently supported.
- ID 197294 - Reflection occlusion is not currently supported.
- ID 196980 - Clipped alpha shadows are not currently supported.
- ID 196776 - Multiple bounce reflecton is not currently supported.
- ID 196124 - RayRender does not currently support refraction.
- ID 195051 - The Wireframe shader node, located in **3D** > **Shader** > **Wireframe**, is not supported by RayRender.
- ID 195004 - Custom lens shaders/projection modes are not currently supported.
- ID 194819 - RayRender does not currently support Deep workflows.
- ID 191108 - Particle sprites are not currently supported.
- ID 174849 - The Displacement shader node, located in **3D** > **Shader**, is not currently supported by RayRender.

Read and Write

- ID 161132 - The default colorspace values when writing using **.mov** codecs differ in command-line and GUI modes.
- ID 157771 - Writing .**exr**s with the Write node's **interleave** control set to **channels** adds a superfluous **main** view.
- ID 154613 - MXF: Super whites are currently displayed as white in the Timeline Viewer.

- ID 154598 - MXF: Setting **debayer quality** to **High Quality** on some Sony RAW files displays an **error decoding frame** message in the Comp Viewer.
- ID 153522 - FBX geometry: Faces on geometry read in from **.fbx** files are not connected to neighboring faces, leaving gaps in certain circumstances.

  This issue is particularly visible when using the EditGeo node, which should not allow you to remove faces from the geometry.
- ID 150327 - Read: After reading in a stereo/multiview **.exr** file and choosing not to add new views to the project, subsequent reads of any stereo/multiview **.exr** files won't give the option to add new views.
- ID 147122 - Sub-sampling in **.exr** files is not currently supported.
- ID 140818 - Certain **.exr** files rendered from Modo display the **alpha** channel rather than the **rgba** channels by default.
- ID 135929 - The last audio frame of a QuickTime encoded with AAC compression is muted.
- ID 135119 - Rendering certain **h264** encoded **.mp4** files using the **mov32** encoder results in color shifts using QuickTime 10.3 codecs.
- ID 134777 - There are slight differences in color and sharpness when rendering Alexa footage to ProRes 4444.
- ID 133959 - Alembic: The state of the Viewer **Lock Frame** control is not always honored for **.abc** files.

  As a workaround, ensure that **ReadGeo** > **read on each frame** is enabled.
- ID 133633 - Writing out stereo **.sxr** files with additional channels does not write out both eyes correctly.
- ID 130846 - ReadGeo: When reading in **.fbx** files, the transform/scale state can become incorrect while toggling the **read transform from file** in combination with **all objects** and/or **read on each frame**.
- If you have trouble with FBX files, it may be because they were written with an older version of FBX. If they load very slowly, it is also possible that they are ASCII rather than binary. To get around these problems, you can use the FBX converter on the Autodesk website. It converts between various different formats, including older FBX versions, ASCII, and binary, and is available on Windows, Mac OS X, and Linux.

  To download the FBX converter:

  1. Go to http://usa.autodesk.com/adsk/servlet/pc/item?siteID=123112&id=10775855.

  2. Scroll down to FBX Converter and click on one of the links to start the download.

Render codecs

Rendering with certain codecs occasionally causes Nuke to crash. Due to this, we recommend the following:

• If you're using the Sorensen Video codec, it's recommended you use the Sorensen Video 3 codec instead. If you're unable to switch to Sorensen Video 3, try using a format smaller than 2K for better performance.

• If you're experiencing crashes with Cineform HD, try updating your Cineform codec to version 5 or above. You may need to download the Neoplayer at http://estore.cineform.com/neoplayer.aspx.

• If you're using Avid Meridien, you should only write out in NTSC and PAL.

Roto/RotoPaint Open Splines

• ID 159145 - The **Select Feather Points** tool does not work consistently between the **Open Spline** and **Bezier** tools.

• ID 141680 - Rendering artifacts can occur if the **feather** control is used in conjunction with the feather handles in the Viewer.

• ID 141674 - Stereo: Adding an open spline creates the spline in the left view only by default.

  As a workaround, select the shape and then manually change the Properties **view** control to include both views.

• ID 141664 - Python API: Moving points on an open spline using Python causes Nuke to crash.

• ID 141496 - Rendering artifacts can appear where the spline hull crosses over itself with negative **feather** values.

• ID 139942 - Rotating the tangent of an end point occasionally causes the hull to behave erratically.

• ID 139905 - Holding **Ctrl/Cmd** to move a point's tangent handles independently causes defects in the hull or feather.

• ID 139901 - Changing the Viewer overlay visibility, such as from **always** to **never**, occasionally produces artifacts in the spline's hull.

• ID 139844 - It is not possible to increase the **width** for individual points if the overall **width** is set to **0**.

• ID 139815/139549 - Cusped points occasionally cause hull rendering artifacts.

• ID 135851 - Animated splines with **varying** width and **feather** occasionally contain slight rendering glitches inside the hull.

• ID 134508 - Roto Open Splines - Shape of hull/feather curve can look incorrect when width changes greatly from one point to the next.

Other Roto/RotoPaint Bugs

• ID 165001 - Adding strokes/shapes in RotoPaint is slow when there is another RotoPaint after it.
• ID 150448 - RotoPaint: Undoing a point move that created a keyframe doesn't currently undo the keyframe creation.
• ID 149556 - Artifacts are produced until mouse up when painting over a stroke on another frame.
• ID 147533 - Point handles for paint strokes, whose lifetime doesn't extend to the current frame, disappear when drag-selected.

  As a workaround, select the shape in the **curves** list to re-display the points.
• ID 145600 - Expression linking extra matrices in the **Transform** tab doesn't work as expected.

> **Note:** This also applies to SplineWarp matrices.

• ID 144520 - Several levels of smoothing applied to one shape are carried over to subsequent shapes for a single smooth operation.
• ID 140009 - The cut, copy, and paste keyboard shortcuts don't work for entries in the **curves** list.
• ID 138250 - RotoPaint shape colors don't change when expression linked to another RotoPaint color.
• ID 132798 - The **undo** and **redo** buttons in the Properties panel didn't work as expected and have been disabled.

  The workaround is to use the undo (**Ctrl/Cmd**+**Z**) and redo (**Ctrl/Cmd**+**Y**) keyboard shortcuts or the **Edit** menu instead.
• ID 160681 - Painting on Mac OS X and Linux is slower when the paint cursor is near the edges of the screen.
• The foreground onion skin overlay updates as you paint, rather than only updating with the new stroke on pen up.
• It is not currently possible to clone RotoPaint nodes.
• Interactivity of laying down strokes/shapes in the Viewer may be faster when motion blur is disabled on the layer you are working in.

ScanlineRender

• ID 163312 - Deep: Geometry with alpha 0 renders black when the deep output is converted to an image.

SmartVector Toolset

• ID 196455 - Rendering vectors after correcting the **file** control in the SmartVector node occasionally displays a spurious **No such file or directory** error.

  As a workaround, scrub to a different frame to remove the message.

Text

• ID 164538 - Viewer toolbar controls steal cursor focus.
• ID 164026 - The undo history becomes unreliable when the panel focus changes.
• ID 159594 - Selecting a Tcl expression in the **message** field doesn't always select the result in the Viewer.
• ID 157398 - Different operating systems handle the **Shadows** tab **shrink/expand** control differently, producing inconsistent output.
• ID 132254 - In **text edit** mode, it is not currently possible to edit text attributes when the Viewer overlay is disabled.
• ID 132244 - Transforming animation groups using an expression-linked Transform node does not work as expected.

  As a workaround, expression link the **translate x** and **y** controls separately.
• ID 131239 - Splitting the **transform** control on the **Group** tab splits all controls.
• ID 131077 - Transforming a character generated from an expression, and then going to a frame where the character no longer exists, results in the transformation being lost.
• ID 130732 - Splitting the **message** field does not work as expected.

Tracker

• ID 163941 - The zoom window occasionally doesn't update correctly when scrubbing between frames.
• ID 150225/150212 - Right-clicking on a point in the Viewer doesn't always update the available **Link to** > **Tracker linkingdialog** or **Tracker** options.

  As a workaround, close and re-open the Roto/RotoPaint properties panel to update the **Link to** menu.
• ID 140735 - Tracking keyframes with different sized patterns doesn't work as expected.

  As a workaround, keyframe patterns should, where possible, be of comparable sizes.
• ID 134806 - After tracking and centering a track, the Viewer no longer caches when playing back the tracked frames.

As a workaround, you can enable full frame processing, though this may increase render times.

- ID 133571 - **Ctrl/Cmd** clicking in the Viewer to select a pixel and then adding a track, sets the tracking anchor coordinates to 0,0.
- ID 131023 - Moving tracking anchors is occasionally unresponsive and jerky.
- ID 130935 - Holding **Shift** and clicking tracks in the Viewer doesn't add to the current selection.

VFX Platform

- You may experience issues when importing PySide modules into their Python scripts due to the migration from PySide 1.2.2 to PySide 2.0.

  In some cases, you can just change calls to:

  ```
  import Pyside.some_module
  ```

  to:

  ```
  try:

      import Pyside.some_module

  except:

      import Pyside2.some_module
  ```

  However, the definition of some classes has moved between modules in PySide 2.0. This particularly affects any Widget related classes, which have been moved from QtGui to QtWidgets, however there are other cases where this may be experienced.

  If you experience any problems with this, please refer to the Qt 5.6.1 documentation, or contact support.foundry.com.

- ID 282593 - Switching to a fullscreen workspace on the primary monitor occasionally causes the secondary monitor to turn black.
- ID 280371 - Mac OS X/macOS only: OpenGL errors are printed on the command line when using an ATI Radeon 5770 GPU.
- ID 277875 - VFX Platform: Switching workspace occasionally draws the new workspace incorrectly.
- ID 277548 - A **QComboBox** with a custom **QCompleter** currently emits incorrect signals.
- ID 275719 - Mac OS X/macOS only: The **Help** > **About Nuke** pop-up is positioned incorrectly on some machines.
- ID 275251 - Mac OS X/macOS only: Hovering over clip instances in the timeline does not change the pointer icon.
- ID 275246/270914 - The terminal or command line displays **libpng warning: iCCP: cHRM chunk does not match sRGB** on start-up.

- ID 274301 - Node toolbar menu items do not always deselect correctly.
- ID 272767 - Launching Nuke from the terminal with the **-b** argument has been deprecated as a result of library upgrades to comply with the VFX Platform 2017 requirements. There are two workarounds available on Mac and Linux :
  - Run Nuke from the Terminal with **&** added to the launch command. This allows Nuke to run in the background and returns the command prompt, but closing the Terminal still causes Nuke to close. For example:

    ```
    ./Nuke11.2v3 --studio &
    ```

  - Run Nuke from the Terminal using the **nohup** command. This allows Nuke to run in the background and returns the command prompt, but closing the Terminal does not cause Nuke to close. For example:

    ```
    nohup ./Nuke11.2v3 --studio &
    ```

> **Tip:** The **nohup** command prints output to **/Users/<username>/nohup.out** or **/home/<username>/nohup.out** by default, but you can specify a different file by appending **> /filepath/filename** to the command. For example:

```
nohup ./Nuke12.1v3 --studio & > /Users/<username>/nuke.out
```

- ID 272750 - The remove all panels button in the node **Properties** panel is displayed inconsistently.
- ID 272504 - The timeline Viewer in and out point previews are not working as expected when scrubbing.
- ID 272338 - The Windows command prompt displays **QWidget::paintEngine: Should no longer be called** on launch.
- ID 272274 - Closing Nuke Studio does not remove the application icon from the task bar.
- ID 271632 - Nuke prints a **libDeckLinkAPI.so** error in the terminal on launch.

Warpers

- ID 150160 - SplineWarp: Using **Ctrl**/**Cmd**+drag to create rectangles and ellipses doesn't display an overlay until pen-up.
- ID 149291 - SplineWarp: Deleting all but one point on a curve resets its correspondence points to 0,0, which cannot be undone.
- ID 149286 - SplineWarp: Correspondence points are too sensitive when control points are removed.
- ID 149277 - SplineWarp: Moving correspondence points on curves with no keyframes cannot currently be undone.
- ID 146819 - SplineWarp/GridWarp: Preview doesn't handle upstream transforms correctly.

- ID 146134 - GridWarp: When using cropped input, moving control points causes the Viewer to display the cropped image and the black area between the crop box and the format when merged over a background.
- ID 146100 - GridWarp: Locked source and destination grids still allow adding and removing grid lines.
- ID 145673 - SplineWarp/GridWarp: The Viewer LUT is incorrect in **morph** mode, when **mix** is set at an intermediate value.
- ID 145505 - SplineWarp: Placing correspondence points at each end of an open spline causes rendering problems.
- ID 145093 - GridWarp: The Viewer does not show the correct mix amount when in **morph** mode with **mix** set at an intermediate value.
- ID 144643 - GridWarp: All keyframes are removed from the Dope Sheet after undoing, rather than just the latest, and the keyframes remain on the timeline and in the properties.
- ID 144090 - SplineWarp: Transform links are not maintained when the source curve is moved to a new layer.
- ID 144054 - SplineWarp: Rendering fails if a curve is reduced to a single point.
- ID 143939 - SplineWarp: The **C** keyboard shortcut does not currently select the **Add Correspondence Point** tool.
- ID 142984 - GridWarp: The timeline currently shows both source and destination keyframes, even if a grid is not visible in the Viewer.
- ID 142977 - GridWarp: Rotating the transform jack with both grids selected, but in different positions, does not undo as expected.
- ID 142064 - SplineWarp: The spline keyframe + button does not add keys to the Curve Editor or Dope Sheet.
- ID 141945 - GridWarp: Existing control point keyframes are not cleared when you draw a new grid using the **Draw Boundary** Viewer button.
- ID 141105 - GridWarp: You cannot select all grid points in the Curve Editor using **Ctrl/Cmd**+**A** shortcut.
- ID 141090 - GridWarp: The grid can flicker between white and gray when zooming in and out of the Viewer, particularly when the grid is subdivided.
- ID 140222 - GridWarp: In stereo mode, the right view is labeled as **default** when you split controls into separate views.

Windows Only

- ID 198430 - Nuke cannot read DNxHD **.mxf** files that have spaces in the file name.
- ID 158163 - Scopes: The alpha channel doesn't update correctly when modified through a node, such as Primatte or Shuffle, even after the node is removed from the Node Graph.

- ID 153332 - File Browser: Location defaults (such as Home, Root, etc.) may not display if you have a previously saved **FileChooser_Favorites.pref** file in your **~/.nuke** directory.

  As a workaround, move or rename the **FileChooser_Favorites.pref** file, and re-launch Nuke.
- ID 139158 - Changing the 3D selection mode does not update until you click in the Viewer.
- ID 134457 - When using a tablet, Nuke does not automatically switch to **Eraser** mode when you use the erase end of the pen.
- ID 132461 - QuickTime: The **Blackmagic 10 bit (v210)** codec defaults to the **YCbCr 8-bit 422 (2vuy) pixel format** due to a bug in the codec, resulting in solid green frames.

  As a workaround, manually set the pixel format to **b64a RGB** to preserve image fidelity.

Miscellaneous

- ID 339241 - MatchGrade: Clicking **Analyze Reference Frames** with a Read node with no valid **file** path displays an **Uncaught C++ exception occurred during the execution of python script!** error.
- ID 312350 - Visual Diagnostics: The **Profile** tab occasionally flickers when the application window is maximized.
- ID 273462 - Licensing: Nuke cannot retrieve a license from the license server when the hostname contains **.local**.
- ID 272296 - Adding a user knob and then undoing the action doesn't remove the added knob.
- ID 271456 - UI: Some interface elements appear larger than usual when compared to previous versions of Nuke.
- ID 271074 - PointCloudGenerator: **Track Points** does not work as expected when creating a point cloud from CameraTracker data.
- ID 169458 - Compositing Viewer: Setting the **gamma** control to **0** with **Panels** > **Viewer (Comp)** > **use GPU for Viewer when possible** enabled in the preferences, renders the alpha channel black.
- ID 165589 - Motion Vector output has been improved, but still doesn't work properly because some large polygons are clipped by the front camera plane.

  You can minimize this effect by increasing the geometry **tessellation max** parameter.
- ID 165543 - Ultimatte: Overlays are not updating correctly or reverting when panning or zooming.
- ID 165040 - In the 3D Viewer, there is currently a conflict between 3D geometry selection and points drawn with RotoPaint. This only occurs if you have two Viewers open, one in 2D mode and the other in 3D mode, and you have the panel for the RotoPaint visible.
- ID 164430 - Capture: Roto opacity and feather settings are not included in captured images.
- ID 161757 - Currently, the Nuke Viewer cannot cache very large plate sequences in float. The limit per frame is 50MB. If your frames are larger than this, you may need to switch to proxy mode for the caching to work.

- ID 160605 - AJA Monitor Output: Setting the NUKE_AJA_CHANNEL environment variable to 4 when the NUKE_AJA_DUALOUTPUT environment variable is set, streams the output to SDI3, rather than SDI4.

- ID 159107 - ColorCorrect: Adding an expression to the curves on the **Ranges** tab and then changing a value, such as **Gain**, causes Nuke to crash.

- ID 157899 - Capture: Capturing the Viewer with a custom file path saves the file path in the script, resulting in error when the path doesn't exist:

```
Flipbook render failed: viewerCaptureOp: Cannot write to specified path
```

- ID 157894 - Capture: Capturing a 3D scene containing lights produces Viewer flashes in the captured images.

- ID 152639 - Switching between certain workspaces displays black in the Viewer until the frame is changed.

- ID 152508 - ParticleBounce: Using custom geometry as the bounce object in a particle system occasionally allows particles to pass through the bounce surface.

- ID 151422 - PositionToPoints: Textures occasionally disappear during playback or when mousing over the Viewer.

- ID 150892- DeepToPoints: Command-line rendering appears to calculate renders even when render is set to **off**.

- ID 150544 - The R3D parameter labels in Nuke aren't entirely consistent with REDCINE-X and Hiero.

- ID 149787 - DepthToPosition: Reading depth information from the same layer as the **output** layer produces corrupt output.

  As a workaround, shuffle the depth information to an alternate layer.

- ID 149379 - Card3D: When **motionblur** is enabled in the properties, FrameHold and TimeOffset nodes are ignored when connected to the **cam** or **axis** inputs.

- ID 149185 - Cloning does not work properly with all OFX nodes. This affects, but is not restricted to, any nodes that have an analysis pass.

- ID 148358 - Windows run-time libraries are not packaged properly with Nuke.

  Nuke runs correctly from a network install on Windows without specifically installing the run-time libraries, though we still recommend that you do so as there are still some minor problems without them.

- ID 148079 - In the Viewer settings, enabling **3D** > **show_prim_bbox** does not display individual bounding boxes for polymesh primitives.

- ID 147173 - CameraTracker: It's not possible to pick colors in the Viewer with the control panel open.

- ID 146773 - TimeOffset: Checking **reverse input** doesn't affect cameras, lights, or axes.

- ID 146598 - Multitexturing: When **Preferences** > **Viewers** > **Multiframe** is enabled, increasing **downrez** in the Viewer toolbar can cause textures to flicker in the 3D Viewer.

You can switch back to **Classic** mode or avoid using proxy in 3D to workaround this issue.

- ID 146234 - Flipbooking the output of the Anaglyph node asks which view you want to render. This question is unnecessary as the result is an anaglyph image. Irrespective of what view you choose, the flipbook output is the same.
- ID 145936 - ReadGeo: Geometry occasionally doesn't display as a solid until you click in the Viewer.
- ID 144337 - Copying and pasting spline keys does not work as expected in the Dope Sheet.

> **Note:** This known issue only applies to Roto and SplineWarp keys.

- ID 143292 - Manipulating 3D handles in the 2D Viewer is unreliable.
- ID 142834 - The transform jack is currently scaling incorrectly from the corner pivot point.
- ID 141719 - Connecting a FrameHold node to an animated Camera and connecting both to a Scene node only displays the animated Camera in the Viewer. There should be two cameras: one static and one animated.
- ID 139684 - The **Modo** Viewer control scheme (**Preferences** > **Panels** > **Viewer Handles** > **3D control type**) does not work as expected.
- ID 139655 - Using **Create Camera** in the 3D Viewer only sets position and rotation. The **focal length** of the new camera does not match that of the Viewer camera.
- ID 139363 - Setting a channel with a non-standard name to use as the Viewer's **alpha** channel doesn't work as expected.
- ID 139086 - Nodes that use the **Iop::sample()** call to get input pixels, such as LensDistortion, perform poorly when they are downstream of nodes using PlanarIop, such as Denoise.
- ID 137121 - Nuke crashes on start up if the **disk cache** location set in the **Preferences** is no longer available.
- ID 136984 - AppendClip forces upstream nodes to re-evaluate on every frame.
- ID 136896 - Loading a script from a disconnected network drive creates an empty script with the same name as the file path to the original.

> **Warning:** If you save this empty script when the network drive is reconnected, the original is overwritten.

- ID 136224 - MatchGrade: **Match Different Clip** mode does not allow you to set keyframes on the **Target** for **.mov** clips with a frame range offset.
- ID 134953 - Some filter nodes, such as Erode (fast), are caching more slowly than in previous versions.

- ID 131882 - Virtual Sliders: Clicking the left-mouse button, while holding down the middle-mouse button, pastes values into the control.
- ID 131633 - Project3D: The node class name has changed to **Project3D2**. As a result, the Nuke<>Mari bridge won't work unless all instances of Project3D are renamed appropriately in the **mari_ bridge.py** file.
- ID 131439 - The Viewer **headlamp** control can not currently be managed using expression links.
- ID 131221 - Plug-ins: Loading scripts with plug-ins compiled against older versions removes the nodes from the Node Graph.
- ID 131147 - Custom knobs on Groups and NoOp nodes cannot be retimed.
- ID 130713 - Switching the Viewer to **wipe** mode and wiping between inputs with different format sizes causes corruption and constant refreshing in the Viewer.
- File types in Windows and Mac OS X are associated with the standard version of Nuke by default, so if you save a script on NukeX using features that are only included in NukeX (such as CameraTracker or FurnaceCore) and then double-click on the script icon to open it, it opens in standard Nuke instead of NukeX.
- CameraTracker: Canceling lens distortion initialization results in corrupt tracks.
- 3D Camera: If you want to navigate through the 3D point cloud created by the CameraTracker node when using **Create Scene**:
    - Select the Camera that was created in the 3D view when using the **Create Scene** button.
    - Press **F** to focus on the selected Camera. You can now navigate around the cloud. Do not try to focus (using **F**) on the point cloud. The resulting tumble camera movement is likely to be jumpy.
- Plug-ins installed using the Nuke Plug-in Installer may not work correctly as they were compiled against an earlier version of Nuke.

Known Issues Specific to Nuke Studio and Hiero

AAF

- ID 274824 - Elastic keyframes imported from Avid do not translate correctly into Nuke Studio.

Create Comp

- Multi-view, such as stereoscopic, is not supported for clip instances created using right-click **Effects** > **Create Comp**.
- ID 154076 - Inserting scripts into comps containing Text nodes using unsupported fonts causes Nuke Studio to crash when the Text nodes are disabled.
- ID 152580 - Create Comp: Enabling **Collate Shot Name** in the comp export preset offsets the comp frame range compared to the annotations precomp frame range.

• ID 137533 - There are currently no options to load or overwrite an existing script when you select **Create Comp**.

Linux Only

• Reading files from NTFS disks/partitions can be extremely slow, particularly for large files. This is a limitation of Linux NTFS file systems, rather than Foundry products.

We recommend avoiding timeline playback that relies on source footage from NTFS disks/partitions.

• ID 282599 - Linux only: Input and timecode metadata is currently incorrect in the timeline Viewer if the framerate is changed.

• ID 235327 - CPU usage can reach 100% on a single thread during flipbooking, causing Nuke to become unresponsive.

• ID 167058 - PulseAudio (ALSA) can cause Nuke Studio to crash or impair playback.

As a workaround, you can stop the **pulseaudio** daemon:

1. Open **/etc/pulse/client.conf**

2. Set **autospawn = no** and **daemon-binary** to **/bin/true**. Ensure these lines are not commented out.

3. Call **ps -e | grep pulse** to check the process is still running.

4. Call **pulseaudio --kill**

5. Call **ps -e | grep pulse** again to check the process has stopped.

• ID 150847 - Dragging clips to the timeline with certain older NVIDIA drivers occasionally causes Nuke Studio to crash.

As a workaround, ensure that you have the latest NVIDIA drivers installed, available from:

www.nvidia.com/Download/index.aspx?lang=en-us

Mac OS X/macOS Only

• ID 130695 - QuickTime ProApps Codecs v1.0.3 break HDV and XDCAM on Mac OS X 10.7.5, and earlier.

This is a codec issue rather than an application issue.

• ID 155493 - The shortcut for **Clear In/Out Points** (**Alt**+**U**) is not always triggered correctly due to a conflict with the combination for the umlaut symbol.

To work around this, press **U** momentarily before **Alt**+**U**.

Preferences

• The **Preferences** > **Path substitution** table for cross platform compatibility currently only comes into effect at project load, not EDL/XML import.

  As a workaround, import your sequence and set the **Path substitution** rule, then save the project and reload to force the conversion.

Python API

• ID 161275 - QActions are not added to the **Edit** menu in the menu bar when finding the menu action by name.

  As a workaround, use the **objectName** (**foundry.menu.edit**), where possible.
• ID 145836 - Calling **hiero.core.addPathRemap()** does not work for soft effect file paths.

Read and Write

• ID 160682 - Executing **Clip** > **Rescan Clip Range** displays frame read errors if the rescan adds frames to the clip.
• ID 156245 - QuickTime: Certain files read into Nuke Studio with a different start timecode to other applications, such as Premiere or Resolve.
• ID 151722 - XML: Shot names are occasionally not imported correctly from Adobe Premiere **.xml** files.
• ID 151491 - Exporting: Export speeds may be slower than expected for **.mov** files. This may be due to the **Rendering** preference set to **limit renderer**.
As a workaround, you can change the preference **Performance** > **Threads/Processes** > **Rendering** > **export renders** to **no renderer limits** to improve rendering speeds. You can also experiment with the custom renderer limits to adjust performance on your machine.
• ID 147522 - Single layer exports from multi-pass clips fail if the selected layer is not a default Nuke layer, such as **depth** or **motion**.
• ID 143435 - R3D: The aspect ratio of anamorphic **.r3d** footage is not displayed correctly when added to the timeline.
• ID 133185 - Importing and playing back very large format **.tif** files causes Nuke Studio to crash.
• ID 132257 - Writing **.exr**s with 200+ layers, when **interleave** is set to **channels**, can be sluggish.

Soft Effects

• ID 280413 - Soft Effects: The Text effect cursor placement shifts incorrectly after typing first character.

- ID 278275 - Soft Effects: Closing a Timewarp effect's **Properties** panel disrupts the interface briefly.
- ID 275314 - Soft Effects: Additional keyframes are added incorrectly when animating Text effects.
- ID 230536 - The Burn-in effect does not maintain a constant text baseline for all characters when the format is changed.
- ID 175574 - Undo and redo of **Properties** panel changes can be unreliable if a soft effect delete is in the same undo stack.
- ID 161854 - TimeWarp: Applying a TimeWarp to a clip instance occasionally causes the associated sequence bin item to display an error.
- ID 161851 - TimeWarp: Applying a TimeWarp to clip instances retimed to values other than 100% does not work as expected.
- ID 160544 - Text/Burn-in: Nuke Studio doesn't warn you if the font used in an effect could not be found.
- ID 159441 - Burn-in: The Burn-in effect does not auto-update when switching between sequences until the playhead is moved.
- ID 158885 - Dissolve transitions do not work as expected in Custom soft effects, based on the examples provided here:

```
<install_directory>/pythonextensions/site-packages/hiero/examples/custom_
soft_effect.py
```

- ID 158601 - Burn-in: Burn-in elements are not updated automatically when the underlying metadata is updated.

  As a workaround, either change the frame displayed in the Viewer or choose an alternate element from the dropdown controls.
- ID 158366 - Burn-in: The Burn-in effect is currently a gizmo and cannot be cloned on the timeline.
- ID 156713 - Adding a transition when a Text effect containing an expression is on a track above, causes text rendering to fail during the transition.
- ID 156709 - Adding a transition when a Text effect containing an expression is on a track above, causes the text size to reset.
- ID 154180 - Exporting sequences containing clip-level Text effects using the **[frame]** expression writes incorrect frame numbers.
- ID 150688 - Expression links are incorrectly allowed between node and soft effect controls in the Properties panel, if the node and effect names are identical.
- ID 139981 - Effects are only visible in the Viewer if there is a clip instance below them in the timeline.
- ID 139873 - Renaming a soft effect does not update the clip instance until you click in the timeline.
- ID 139528 - Adding soft effects at clip level, using **Open In** > **Timeline View**, is only available using the toolbar button on the timeline panel. The right-click **Effects** menu is currently disabled.

Timeline

• ID 144420 - Locking a track currently prevents adding clip instances from the locked track to the Viewer input buffers. You can still open clip instances in the various right-click **Open In** options and access clip instance metadata.

• ID 137790 - It is not currently possible to drag-and-drop a clip to a new track between or below existing tracks.

  As a workaround, drag the clip to a new top-level track and then manually move the track to the required position.

• ID 134754 - It is not currently possible to alter the **Output Resolution** of clips opened using the right-click **Open in Timeline** option.

Timeline Disk Caching

• ID 280256 - Opening a Text effect's **Properties** panel directly after project load causes the cache bar to disappear.

• ID 272897 - Caching continues after closing the project associated with the frames being cached.

• ID 270934 - The caching logic does not currently account for gaps in sequences, resulting in the caching state icon remaining gray for fully cached sequences.

Timeline Read Nodes

• ID 313013 - Opening the Node Graph from the Project bin and then returning to the timeline environment behaves as if the left mouse button is held down.

  As a workaround, left-click in the timeline to cancel the mouse press.

• ID 310067 - Loading large projects is currently slower than expected.

Windows Only

• ID 314088 - Localization: The first frame of localized files in the outdated state, colored red, do not always update correctly.

• ID 159581 - Soft Effects: The background on Burn-in effects, when enabled, alters size depending on the timecode displayed.

• ID 138430 - Nuke Studio cannot currently parse Unicode characters during export.

Miscellaneous

• ID 313849 - Localization: Reading certain multiview **.exr** files causes Nuke to crash.

As a workaround, rename or move your **.nuke** folder and re-launch Nuke to refresh the **uistate.ini** file.

• ID 272723 - Closing Nuke Studio when it was launched from the command line does not end all Nuke processes.

• ID 200015 - Selecting multiple bin clips can cause the right-click menu to respond slowly.

• ID 167919 - Localization: Re-importing clips into the Node Graph or project bin multiple times retains the original localization policies settings.

• ID 161906 - Audio: Zooming in on a waveform displays a **Failed to decode audio** error in the timeline.

• ID 161240 - Adding a custom Hiero window to a workspace and then saving it as the Nuke default workspace causes Nuke to crash on start up.

• ID 151862 - Comps with relative paths are not currently working when imported into the project.

• ID 140048 - Cache pausing stops working if any change is made to the timeline.

Developer Notes

Here are the changes relevant to developers. See **Help** > **Documentation** from the Nuke menu bar or https://learn.foundry.com/nuke/developers/112/ndkdevguide/appendixc/index.html for more information.

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	10.0v1 to 10.0v2	API and ABI		
Point	10.0v1 to 10.5v1	API	●	
Major	10.0v1 to 11.0v1	-	●	●

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")
```

New Features

There are no new features in this release.

Feature Enhancements

There are no feature enhancements in this release.

Bug Fixes

There are no bug fixes in this release.

Release Notes for Nuke and Hiero 11.2v3

Release Date

16 August 2018

Qualified Operating Systems

• macOS Sierra (10.12) or macOS High Sierra (10.13)

• Windows 7 or Windows 10 (64-bit)

• CentOS 6 or CentOS 7 (64-bit)

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

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

With graphics drivers capable of running CUDA 8.0 & 6.5 or above.

• On Windows and Linux, CUDA graphics drivers are bundled with the regular drivers for your NVIDIA GPU. Driver version r361 or above is required.

Go to http://www.nvidia.com/Download/Find.aspx?lang=en-us for more information.

• On Mac, the CUDA driver is separate from the NVIDIA graphics driver and must be installed, if you don't have it already. The minimum requirement is driver version r361 which can be downloaded from www.nvidia.com/drivers.

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

AMD

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

Windows GPU	Driver	Linux GPU	Driver
AMD FirePro W8100	17.Q2.1	AMD FirePro W8100	17.Q2.1
AMD FirePro W9100	17.Q2.1	AMD FirePro W9100	17.Q2.1
AMD Radeon R9 Fury X	17.4.3 - 17.6.2	AMD Radeon R9 Fury X	17.10
AMD Radeon RX 480	17.Q2.1	AMD Radeon RX 480	17.Q2.1
AMD Radeon Pro WX 7100	17.4.3 - 17.6.2	AMD Radeon Pro WX 7100	17.10

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

• On Mac an AMD FirePro GPU on late 2013 Mac Pro 6,1, mid 2015 MacBook Pro 11,5, and late 2016 MacBook Pro 13,3, running OS X 10.9.3 'Mavericks', or later.

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 FirePro W9100s.

New Features

There are no new features in this release.

Feature Enhancements

• ID 352907 - Write: You can now specify which channel is written first in multi-channel **.exr** files using the **first part** dropdown in the Write node's **Properties** panel. All subsequent channels are written in alphanumeric order.

Bug Fixes

• ID 133297 - Project Settings: The right-click **Edit** > **Edit Expression** option on the **Color** tab was not grayed-out when no LUT curve was selected.

• ID 156605 - Write: Codec options were not consistent between interactive and command-line renders.

• ID 281553 - Linux only: The **Project Settings** > **Color Management** > **Default Color Transforms** were not populated with LUTs if an OCIO config was specified using and environment variable.

• ID 331524 - ARRIRAW: Changing the **color space** control and then clicking the **Revert all changes** option in the **Properties** panel displayed an Invalid LUT error in the Viewer.

• ID 337765 - R3D: Clicking **Load Settings from RMD** did not populate the **Color Space** and **Gamma Curve** controls correctly.

• ID 351195 - R3D: Loading certain CDL files displayed **unhandled exception** errors.

• ID 351446 - OCIO: Default values were saved incorrectly to the **preferences.nk** file.

• ID 353294 - OCIO: Nuke Studio and Hiero used the **uistate.ini** for colorspace defaults even when the OCIO environment variable was set.

• ID 355262 - ARRIRAW: The thumbnails for Read nodes referencing **.mxf** files displayed incorrectly.

• ID 357315 - The right-click context menu in the Nuke 11.2 **Properties** panel was inconsistent with legacy versions of Nuke.

• ID 357725/359571 - OCIO: Changing the OpenColorIO settings in the **Preferences** caused errors in the **Project Settings** after saving and reloading the project.

• ID 357825 - OCIO: Setting the OCIO environment variable did not affect the **Project Settings**.

• ID 358470 - Timeline: Setting a color for a shot disabled the timeline keyboard shortcuts.

• ID 360365 - The **Project Settings** panel was resized incorrectly.

New Known Issues Specific to this Release

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

New Known Issues Specific to Nuke

• ID 355719 - ARRIRAW: Deprecated resolution modes are not labeled in Nuke.

• ID 355712 - ARRIRAW: The 2668 resolution output mode, necessary for ProRes output, is currently not available.

• ID 347416 - Rendering a standard Write node that has deep data in its stream causes Nuke to crash.

• ID 340749 - Mac OS X/macOS only: Reading **.r3d** files and changing the **color version** to **v1** produces a corrupt image.

  This is a known issue in the RED SDK, and will be addressed in a future release.

Other Known Issues

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

Known Issues Specific to Nuke

AudioRead

• ID 18924 - Changes to the **rate** control value are not honored when **ratesource** is toggled between **file** and **custom**.

• ID 18666 - Changing the sample rate has no effect on playback in a Flipbook.

• ID 18465 - The **time range** control doesn't limit the range when an **endtime** is specified.

• ID 18451 - Flipbooking doesn't honor the time range knob.

• ID 18217 - Redo keyframe generation doesn't replace the keys.

• ID 18213 - Changing **Draw Style** in the Curve Editor or Dope Sheet doesn't redraw the curves correctly.

BlinkScript/CUDA

• ID 43319 - CUDA: Scripts containing GPU accelerated nodes, such as ZDefocus, display a CUDA error when the OS wakes up from sleep mode.

  As a workaround, close and reopen Nuke to reactivate the CUDA drivers.

CameraTracker

- ID 40798 - Centering a track in the Viewer does not work as expected in proxy or downrez modes.
- ID 37411 - Sequences containing alpha channels display the alpha premultiplied by the image in reference thumbnails, rather than just the RGB values.

Deep

- ID 43383 - Executing a script in command-line mode that reads in a deep image and then writes it to disk, causes Nuke to crash.

  As a workaround, run the script from the Script Editor inside Nuke.
- ID 40145 - Nuke occasionally reads and writes Deep **.exr** files with a pixel aspect ratio of 1.

  As a workaround, preview the **.exr** in the file browser before reading it into Nuke.

Dope Sheet

- ID 43463 - Scripts containing Ocula's O_VerticalAligner plug-in cause Nuke to crash when you execute **Analyze Sequence** with the Dope Sheet open.
- ID 40206 - Adding a curve to the Dope Sheet and then deleting it causes Nuke to crash.
- ID 39426 - Undoing individually animated text characters removes their keys completely from the Dope Sheet.
- ID 39156 - Keys remapped with descending TimeWarp lookup curves don't snap to frames when **frame snap** is enabled.
- ID 38910 - Keys from Viewer buffers not currently being viewed are still visible.
- ID 38630 - Read and TimeClip representations disappear in the Dope Sheet if they are set to have a non-empty frame expression.
- ID 37869 - The Dope Sheet is not updated correctly when a Retime's **speed** control is animated.
- ID 37815 - Multiple instances of the same clip within one AppendClip are only represented once in the Dope Sheet.

EditGeo

- ID 38954 - The transform handle of selections in the Viewer is not updated between frames on geometry with animation baked into its vertices.

  To update the transform handle, toggle the axis alignment control between **object** and **average normal**.

- ID 38699 - Changing the visibility of objects within an Alembic Scene Graph causes geometry to ignore the EditGeo node.
- ID 38670 - Setting a keyframe can be slow to update the Viewer with the appropriate keyframe marker.
- ID 36094 - Setting **axis alignment** to **average normal** displays the axis incorrectly on edge and corner vertices.

Flipbook

- ID 271435 - Flipbook: Using the flipbook with nuBridge installed causes Nuke to crash.
- ID 201156 - Nuke's flipbook defaults to the Write node's colorspace, which can result in different output when compared to the Viewer.

  As a workaround, either flipbook the node upstream of the Write node, or enable **Burn in the LUT** in the **Flipbook** dialog.
- ID 47005 - In the Flipbook Viewer, clicking the **Go to start** button always goes to frame 0, even if the clip doesn't start at 0.
- ID 47005 - Enabling **Burn in the LUT** in the Flipbook dialog uses the **rec709** LUT for both **rec709** and **rec1886**.

Frame Server

- ID 273472 - Canceling or pausing a comp render in the **Background Renders** panel displays errors in the terminal.
- ID 272523 - Non-contiguous frame ranges cannot currently be flipbooked.

GPU

- ID 45018 - R3D: Only half float linear gamma space works with GPU debayering.

Import Nuke

- ID 40131 - Importing Nuke in a Python script destroys **sys.argv**, making command-line arguments unavailable.

  As a workaround, preserve **sys.argv** in another variable before you import Nuke.
- ID 39836 - Importing Nuke hangs when there are Qt conflicts between Nuke and other applications.
- ID 38963 - Calling **import nuke** terminates the Python session if no applicable license is available.

Linux Only

• ID 271807 - Linux only: Adjusting pane or window borders left and right causes redraw lag.

• ID 199990 - In some situations NVIDIA Quadro Linux drivers 319.23 can cause Nuke to hang during start up.

   As a workaround, update your drivers to 361.42.

• ID 49262 - Scrubbing in the timeline in large projects can force memory use to hit 100%, causing Nuke to become unresponsive.

• ID 43766 - Calling **uuid.uuid4()** causes Nuke to crash due to a bug in **libc**.

   As a workaround, launch Nuke from the command-line using:

```
LD_PRELOAD=/lib64/libuuid.so.1 ./Nuke8.0
```

• ID 42581 - Keyboard Shortcuts: Using **Ctrl**+**C** to quit Nuke from the command-line when a dialog box is open displays an error.

• ID 39537 - Using a Blackmagic Decklink Extreme 2 card causes Nuke to become unresponsive.

LiveGroups

• ID 274174 - Reloading a LiveGroup currently resets all edited User knobs.

• ID 272281 - Adding a user knob and then undoing the action sets expression links to nodes with matching names in main Node Graph.

Mac OS X/macOS Only

• Installation - If you're running Mac OS X 10.10 "Yosemite", you may need to install alternative NVIDIA CUDA drivers so that Nuke can detect your GPU correctly. You can obtain the required drivers directly from NVIDIA here:

   http://www.nvidia.com/object/macosx-cuda-6.5.18-driver.html.

• ID 316577 - macOS only: Current localization progress does not update if the pointer focus is on Nuke's menu bar.

• ID 228076 - The PySide QtUiTools library is currently missing from the Nuke build.

• ID 163543 - Mac OS X 10.11 only: Dragging handles in the 3D Comp Viewer can be slow to respond.

• ID 50371 - Script corruption can occasionally occur on Mac OS X 10.9 (Mavericks), and above, when writing to SMB 2.1 and SMB 3 Sharepoint locations.

• ID 50182 - Nuke cannot be launched from the Finder if it has already been launched from the Terminal.

• ID 43343 - Modifying the label of a Python user knob causes Nuke to crash.

- ID 39429 - Crash Reporting: The 'save to' dialog is hidden behind the crash report dialog when you click **Save Report**.
- ID 38686 - Enabling **Use GPU if available** on supported nodes, such as Kronos, in more than one instance of Nuke at the same time, can cause display corruption and/or entire system freezes. This seems particularly likely to occur on GPUs with low amounts of RAM, such as the GeForce GT 650M.

  As a workaround, upgrade your NVIDIA drivers, or if this is not possible, only enable GPU acceleration in one instance of Nuke at a time.
- ID 35123 - PrmanRender: If you're using Mac OS X 10.8 (Mountain Lion) or above, make sure X11 is installed on your system. Unlike previous versions of OS X, 10.8 and above do not have X11 installed by default.

  For more information, see http://support.apple.com/kb/HT5293.
- ID 34697 - Launching Nuke from a network shared drive causes Nuke to crash on launch.

  As a workaround, either:
    - tarball the installation from Mac OS X and unzip it on the alternate file system (using NFS or Samba, depending on source), or
    - using the command-line, copy the installation from Mac OS X to the network location using the same file system as the destination.
- ID 33970 - Using a node, such as Grade, as a custom viewer process outputs a blank Viewer.

  As a workaround, adjust the Viewer **gain** control to refresh the Viewer.
- ID 22062 - Nuke doesn't currently give the option to restore the autosave of an unsaved script, except when Nuke is run from the command-line.
- ID 13638 - The following graphics cards are not currently supported for Mac:
    - ATI Radeon X1600
    - ATI Radeon X1900

  Users with these cards are able to render from the command-line, but in GUI sessions, the Node Graph renders incorrectly due to a requirement of OpenGL 2 drivers.
- ID 12048 - Nuke crashes if you activate screen sharing when there is no screen plugged in.
- ID 11776 - Node text appears aliased, unclear, or garbled at certain zoom levels.

ModelBuilder

- ID 41352 - Setting the **segments** control to a negative number causes Nuke to crash.
- ID 41148 - Editing geometry UVs and then switching the Viewer to look at the geometry through a ScanlineRender node causes Nuke to crash.

Monitor Out

• ID 250107 - Monitor Output: 10-bit output from Blackmagic DeckLink HD Extreme 3D+ cards at the extents of color ranges is incorrect.

  As a workaround, using the **Desktop Video Setup** utility, ensure that the **SDI Settings 4:4:4 RGB** checkbox is enabled and the **SDI Configuration** is set to **Single Link**.

• ID 40942 - AJA Io Express: Enabling monitor output causes Nuke to crash.

• ID 37700 - AJA Kona LHe+ 2k formats are not displayed correctly.

OCIO

• ID 201193 - Read node **Metadata** tabs occasionally include irrelevant **in** and **out** colorspace controls.

Particles

• ID 41259 - ParticleCache: Setting **emit from** > **points** and connecting the **emit** input to geometry, does not render all frames to the **.nkpc** file.

• ID 39796 - ParticleCache nodes upstream of ScanlineRender nodes display **ParticleCache is out-of-date** errors for negative frame numbers.

• ID 39210 - ParticleCache: Error messages displayed when **read from file** is toggled on and off are not reliably cleared when rendering through ScanlineRender.

• ID 37254 - The progress bar does not cancel if you scrub to a frame that has already been calculated within the particle system.

• ID 18268 - Enabling **color from texture** always renders a solid white alpha for the texture.

• ID 17520 - Geometry representation textures are displayed even when **display** is set to **off**.

• ID 17243 - Using sprites instead of geometry representations causes particles to render behind the 3D grid lines.

Pixel Analyzer and Scopes

• ID 44176 - PixelAnalyzer: The **full frame** sampling **mode** doesn't work immediately in the timeline Viewer when the analyzer is initially added to the layout.

• ID 39180 - Scopes: Switching to a layout with a scope window, while rendering, forces the Viewer bounding box to 1x1 for that frame.

• ID 36508 - Scopes do not currently update when zooming into the Viewer.

• ID 36491 - Scopes clip color values between 0 and 1 when **Preferences** > **Scopes** > **Include viewer color transforms** is enabled.

PrmanRender

• In the Nuke camera, the **window roll** control is not yet mapped to RenderMan.

• ID 27648 - After a security update for Mac OS X, Nuke is unable to load the PrmanRender plug-in the environment.plist file when in GUI mode.

See http://support.apple.com/kb/TS4267 for more information.

Python

• ID 44296 - Running **nuke.scriptOpen()** at the same time as creating a Python panel causes Nuke to crash.

• ID 40994 - Rendering an Alembic camera using a Python script produces incorrect values when run from the command-line.

Run the script from Nuke's **Script Editor** to avoid this issue.

• ID 40645 - Using **setInput()** within an **onCreateCallback** doesn't work as expected.

• ID 40534 - Using Python to set metadata in ModifyMetadata nodes does not work from the command-line.

To work around this issue, run the Python script from Nuke's Script Editor.

• ID 39308 - Accessing a node's x and y positions using the **xpos** and **ypos** controls reports incorrect values.

As a workaround, either call **nuke.Node.xpos()** or **nuke.Node.ypos()** first, or ensure no nodes are currently selected in the Node Graph.

• ID 38994 - **nuke.Node.screenWidth()** and **screenHeight()** are incorrect when a node is first created if it has an autolabel.

• ID 8063 - Creating many new nodes with **nuke.createNode()** and the in-panel argument at default **(True)** may crash when too many node control panels are created too quickly. The workaround is to pass the in-panel argument as **False** or else use **nuke.nodes.NodeClass()** (where NodeClass is the type of node to create) to create the node and then connect it to the currently selected node manually.

• ID 6455 - You should not call the Python command **nuke.restoreWindowLayout()** from the Script Editor as that can cause Nuke to crash. Instead, you can use the same command from your **menu.py**, restore layouts by selecting **Layout** > **Restore Layout**, or use a custom menu or toolbar item.

• Nuke sometimes reports errors in Groups and Gizmos, appearing similar to the following:

groupName.NodeName.knobname: unexpected 'k' in '0.knobname'

The problem is most likely that there is an expression using the input TCL command and doesn't validate that there is an input connected. An example expression:

[input parent 0].translate.x

The input command returns 0 when it can't find the requested input, which generates an expression of '**0.knobname**' that doesn't refer to anything. The fix is to restructure the expression to use the value TCL command and specify a default value to return in the case that the expression is invalid. It takes the form:

[value [input parent inputnumber].knob defaultValue]

Here is the modified example:

[value [input parent 0].translate.x 0]

The modified example returns 0 in the event that there is no input 0, and no longer results in an error message.

- There is a Python syntax conflict when assigning knob names on the fly with **nuke.nodes.<node>()** if the knob is called 'in'.

For example, this gives a syntax error:

nuke.nodes.Shuffle(in = 'depth')

while this works because 'in' is a string here and not a keyword:

sh = nuke.nodes.Shuffle()

sh['in'].setValue('depth')

RayRender

- ID 230256 - Soft Shadows are not currently supported.
- ID 197294 - Reflection occlusion is not currently supported.
- ID 196980 - Clipped alpha shadows are not currently supported.
- ID 196776 - Multiple bounce reflecton is not currently supported.
- ID 196124 - RayRender does not currently support refraction.
- ID 195051 - The Wireframe shader node, located in **3D** > **Shader** > **Wireframe**, is not supported by RayRender.
- ID 195004 - Custom lens shaders/projection modes are not currently supported.
- ID 194819 - RayRender does not currently support Deep workflows.
- ID 191108 - Particle sprites are not currently supported.

- ID 174849 - The Displacement shader node, located in **3D** > **Shader**, is not currently supported by RayRender.

Read and Write

- ID 50046 - The default colorspace values when writing using **.mov** codecs differ in command-line and GUI modes.
- ID 48935 - MXF: Importing a certain JPEG2000 file causes Nuke to crash or display the file incorrectly.
- ID 47256 - MXF: Super whites are currently displayed as white in the Timeline Viewer.
- ID 47248 - MXF: Setting **debayer quality** to **High Quality** on some Sony RAW files displays an **error decoding frame** message in the Comp Viewer.
- ID 42717 - Certain **.exr** files rendered from Modo display the **alpha** channel rather than the **rgba** channels by default.
- ID 41006 - The last audio frame of a QuickTime encoded with AAC compression is muted.
- ID 40684 - Rendering certain **h264** encoded **.mp4** files using the **mov32** encoder results in color shifts using QuickTime 10.3 codecs.
- ID 40533 - There are slight differences in color and sharpness when rendering Alexa footage to ProRes 4444.
- ID 40074 - Writing out stereo **.sxr** files with additional channels does not write out both eyes correctly.
- ID 39165 - ReadGeo: When reading in **.fbx** files, the transform/scale state can become incorrect while toggling the **read transform from file** in combination with **all objects** and/or **read on each frame**.
- ID 35611 - Writing .**exr**s with the Write node's **interleave** control set to **channels** adds a superfluous **main** view.
- ID 33863 - FBX geometry: Faces on geometry read in from **.fbx** files are not connected to neighboring faces, leaving gaps in certain circumstances.

  This issue is particularly visible when using the EditGeo node, which should not allow you to remove faces from the geometry.
- ID 31424 - Sub-sampling in **.exr** files is not currently supported.
- ID 27211 - Alembic: The state of the Viewer **Lock Frame** control is not always honored for **.abc** files.

  As a workaround, ensure that **ReadGeo** > **read on each frame** is enabled.
- ID 21663 - Read: After reading in a stereo/multiview **.exr** file and choosing not to add new views to the project, subsequent reads of any stereo/multiview **.exr** files won't give the option to add new views.
- If you have trouble with FBX files, it may be because they were written with an older version of FBX. If they load very slowly, it is also possible that they are ASCII rather than binary. To get around these

problems, you can use the FBX converter on the Autodesk website. It converts between various different formats, including older FBX versions, ASCII, and binary, and is available on Windows, Mac OS X, and Linux.

To download the FBX converter:

1. Go to http://usa.autodesk.com/adsk/servlet/pc/item?siteID=123112&id=10775855.

2. Scroll down to FBX Converter and click on one of the links to start the download.

Render codecs

Rendering with certain codecs occasionally causes Nuke to crash. Due to this, we recommend the following:

• If you're using the Sorensen Video codec, it's recommended you use the Sorensen Video 3 codec instead. If you're unable to switch to Sorensen Video 3, try using a format smaller than 2K for better performance.

• If you're experiencing crashes with Cineform HD, try updating your Cineform codec to version 5 or above. You may need to download the Neoplayer at http://estore.cineform.com/neoplayer.aspx.

• If you're using Avid Meridien, you should only write out in NTSC and PAL.

Roto/RotoPaint Open Splines

• ID 42997 - Rendering artifacts can occur if the **feather** control is used in conjunction with the feather handles in the Viewer.

• ID 42995 - Stereo: Adding an open spline creates the spline in the left view only by default.

  As a workaround, select the shape and then manually change the Properties **view** control to include both views.

• ID 42991 - Python API: Moving points on an open spline using Python causes Nuke to crash.

• ID 42932 - Rendering artifacts can appear where the spline hull crosses over itself with negative **feather** values.

• ID 42422 - Rotating the tangent of an end point occasionally causes the hull to behave erratically.

• ID 42413 - Holding **Ctrl/Cmd** to move a point's tangent handles independently causes defects in the hull or feather.

• ID 42412 - Changing the Viewer overlay visibility, such as from **always** to **never**, occasionally produces artifacts in the spline's hull.

• ID 42390 - It is not possible to increase the **width** for individual points if the overall **width** is set to **0**.

• ID 42387/42310 - Cusped points occasionally cause hull rendering artifacts.

- ID 40962 - Animated splines with **varying** width and **feather** occasionally contain slight rendering glitches inside the hull.
- ID 40433 - Roto Open Splines - Shape of hull/feather curve can look incorrect when width changes greatly from one point to the next
- ID 36219 - The **Select Feather Points** tool does not work consistently between the **Open Spline** and **Bezier** tools.

Other Roto/RotoPaint Bugs

- ID 41917 - RotoPaint shape colors don't change when expression linked to another RotoPaint color.
- ID 32459 - RotoPaint: Undoing a point move that created a keyframe doesn't currently undo the keyframe creation.
- ID 32450 - RotoPaint Stereo: Attempting to undo multiple split-control transforms on the same shape reverts the shape to its original position.
- ID 31552 - Point handles for paint strokes, whose lifetime doesn't extend to the current frame, disappear when drag-selected.

  As a workaround, select the shape in the **curves** list to re-display the points.
- ID 30920 - Expression linking extra matrices in the **Transform** tab doesn't work as expected.

> **Note:** This also applies to SplineWarp matrices.

- ID 30551 - Several levels of smoothing applied to one shape are carried over to subsequent shapes for a single smooth operation.
- ID 29170 - The cut, copy, and paste keyboard shortcuts don't work for entries in the **curves** list.
- ID 28838 - Gizmos from Nuke 6 containing Roto/RotoPaint nodes should be recreated in Nuke 8, but bear in mind that they won't be backwards compatible with Nuke 6 once converted, unless you follow the instructions below:

Nuke 6 scripts containing Roto display a conversion prompt when you open them in Nuke 8:
  - Click **Save As** to convert the script to the Nuke 8 Roto format, or
  - Click **Ignore** to load the Nuke 6 format into Nuke 8. You might select this option if:
    - You don't intend to make any changes, or
    - You want to overwrite the file with a Nuke 7 and 8 only Roto format when saving.

If you want Nuke 8 scripts to load in Nuke 6, use the **convertToNuke6** or **convertDirectoryToNuke6** Python functions when running Nuke 8 in command-line only mode:

> **Note:** The conversion functions cannot convert stereo-split curves as they are not supported by Nuke 6.

- To convert individual **.nk** scripts:
  ```
  convertToNuke6(fromScript, toScript, overwrite = False)
  ```
- To convert all **.nk** scripts in a given directory:
  ```
  convertDirectoryToNuke6(fromDir, toDir, matchPattern =.*\.nk, overwrite = False)
  ```

> **Note:** The pattern is a regular expression.

An example single script conversion and rename to the same directory, from the command-line (or Terminal):
```
$ <NukeInstallDir>/Nuke8.0v1 -t
>>> import nuke.rotopaint
>>> nuke.rotopaint.convertToNuke6(/tmp/myRoto8.nk, /tmp/myRoto6.nk)
```

- ID 26855 - The **undo** and **redo** buttons in the Properties panel didn't work as expected and have been disabled.

  The workaround is to use the undo (**Ctrl/Cmd+Z**) and redo (**Ctrl/Cmd+Y**) keyboard shortcuts or the **Edit** menu instead.

- ID 21361 - Artifacts are produced until mouse up when painting over a stroke on another frame.
- ID 11524 - Adding strokes/shapes in RotoPaint is slow when there is another RotoPaint after it.
- ID 9238 - Painting on Mac OS X and Linux is slower when the paint cursor is near the edges of the screen.
- The foreground onion skin overlay updates as you paint, rather than only updating with the new stroke on pen up.
- It is not currently possible to clone RotoPaint nodes.
- Interactivity of laying down strokes/shapes in the Viewer may be faster when motion blur is disabled on the layer you are working in.

ScanlineRender

- ID 38329 - Deep renders from ScanlineRender currently ignore the ScanlineRender's **bg** input.
- ID 38205 - Deep: Depth, motion, position, and normals information is occasionally incorrect in semi transparent areas.
- ID 37967 - Deep: Geometry with alpha 0 renders black when the deep output is converted to an image.

SmartVector Toolset

• ID 275683 - SmartVector: Due to VFX Platform library changes, vectors generated by the Nuke 11 SmartVector toolset do not match legacy versions. For example, vectors generated by Nuke 11.0v1 do not match those generated by Nuke 10.5v4.

• ID 196455 - Rendering vectors after correcting the **file** control in the SmartVector node occasionally displays a spurious **No such file or directory** error.

  As a workaround, scrub to a different frame to remove the message.

• ID 175605 - Entering a partial file path in the SmartVector **file** control and then clicking the file browser icon does not open the file browser.

  As a workaround, click **OK** on the error message and then click the file browser icon again.

Text

• ID 48418 - Different operating systems handle the **Shadows** tab **shrink/expand** control differently, producing inconsistent output.

• ID 39556 - In **text edit** mode, it is not currently possible to edit text attributes when the Viewer overlay is disabled.

• ID 39552 - Transforming animation groups using an expression-linked Transform node does not work as expected.

  As a workaround, expression link the **translate x** and **y** controls separately.

• ID 39291 - Splitting the **transform** control on the **Group** tab splits all controls.

• ID 39239 - Transforming a character generated from an expression, and then going to a frame where the character no longer exists, results in the transformation being lost.

• ID 39130 - Splitting the **message** field does not work as expected.

• ID 38789 - Viewer toolbar controls steal cursor focus.

• ID 38425 - The undo history becomes unreliable when the panel focus changes.

• ID 36372 - Selecting a TCL expression in the **message** field doesn't always select the result in the Viewer.

Tracker

• ID 40542 - After tracking and centering a track, the Viewer no longer caches when playing back the tracked frames.

  As a workaround, you can enable full frame processing, though this may increase render times.

- ID 40038 - **Ctrl/Cmd** clicking in the Viewer to select a pixel and then adding a track, sets the tracking anchor coordinates to 0,0.
- ID 39225 - Moving tracking anchors is occasionally unresponsive and jerky.
- ID 39200 - Holding **Shift** and clicking tracks in the Viewer doesn't add to the current selection.
- ID 38356 - The zoom window occasionally doesn't update correctly when scrubbing between frames.
- ID 32359/32353 - Right-clicking on a point in the Viewer doesn't always update the available **Link to** > **Tracker linkingdialog** or **Tracker** options.

  As a workaround, close and re-open the Roto/RotoPaint properties panel to update the **Link to** menu.

- ID 29382 - Tracking keyframes with different sized patterns doesn't work as expected.

  As a workaround, keyframe patterns should, where possible, be of comparable sizes.

VFX Platform

- You may experience issues when importing PySide modules into their Python scripts due to the migration from PySide 1.2.2 to PySide 2.0.

  In some cases, you can just change calls to:

  ```
  import Pyside.some_module
  ```

  to:

  ```
  try:

      import Pyside.some_module

  except:

      import Pyside2.some_module
  ```

  However, the definition of some classes has moved between modules in PySide 2.0. This particularly affects any Widget related classes, which have been moved from QtGui to QtWidgets, however there are other cases where this may be experienced.

  If you experience any problems with this, please refer to the Qt 5.6.1 documentation, or contact support.foundry.com.

- ID 282593 - Switching to a fullscreen workspace on the primary monitor occasionally causes the secondary monitor to turn black.
- ID 280371 - Mac OS X/macOS only: OpenGL errors are printed on the command line when using an ATI Radeon 5770 GPU.
- ID 277875 - VFX Platform: Switching workspace occasionally draws the new workspace incorrectly.

- ID 277548 - A **QComboBox** with a custom **QCompleter** currently emits incorrect signals.
- ID 275719 - Mac OS X/macOS only: The **Help** > **About Nuke** pop-up is positioned incorrectly on some machines.
- ID 275251 - Mac OS X/macOS only: Hovering over clip instances in the timeline does not change the pointer icon.
- ID 275246/270914 - The terminal or command line displays **libpng warning: iCCP: cHRM chunk does not match sRGB** on start-up.
- ID 274301 - Node toolbar menu items do not always deselect correctly.
- ID 274264 - CameraTracker results from Nuke 11.1 are not identical to previous versions of Nuke, though the differences are negligible.
- ID 272767 - Launching Nuke from the terminal with the **-b** argument has been deprecated as a result of library upgrades to comply with the VFX Platform 2017 requirements. There are two workarounds available on Mac and Linux :
    - Run Nuke from the Terminal with **&** added to the launch command. This allows Nuke to run in the background and returns the command prompt, but closing the Terminal still causes Nuke to close. For example:

        ```
        ./Nuke11.1v1 --studio &
        ```
    - Run Nuke from the Terminal using the **nohup** command. This allows Nuke to run in the background and returns the command prompt, but closing the Terminal does not cause Nuke to close. For example:

        ```
        nohup ./Nuke11.1v1 --studio &
        ```

> **Tip:** The **nohup** command prints output to **/Users/<username>/nohup.out** or **/home/<username>/nohup.out** by default, but you can specify a different file by appending **> /filepath/filename** to the command. For example:

```
nohup ./Nuke11.1v1 --studio & > /Users/<username>/nuke.out
```

- ID 272750 - The remove all panels button in the node **Properties** panel is displayed inconsistently.
- ID 272504 - The timeline Viewer in and out point previews are not working as expected when scrubbing.
- ID 272442/281108 - The **Licensing** dialog jitters when moved around the screen.
- ID 272338 - The Windows command prompt displays **QWidget::paintEngine: Should no longer be called** on launch.
- ID 272274 - Closing Nuke Studio does not remove the application icon from the task bar.
- ID 271632 - Nuke prints a **libDeckLinkAPI.so** error in the terminal on launch.

Warpers

• ID 32340 - SplineWarp: Using **Ctrl/Cmd**+drag to create rectangles and ellipses doesn't display an overlay until pen-up.

• ID 32083 - SplineWarp: Deleting all but one point on a curve resets its correspondence points to 0,0, which cannot be undone.

• ID 32082 - SplineWarp: Correspondence points are too sensitive when control points are removed.

• ID 32079 - SplineWarp: Moving correspondence points on curves with no keyframes cannot currently be undone.

• ID 30429 - SplineWarp: Transform links are not maintained when the source curve is moved to a new layer.

• ID 31322 - SplineWarp/GridWarp: Preview doesn't handle upstream transforms correctly.

• ID 20000 - GridWarp: When using cropped input, moving control points causes the Viewer to display the cropped image and the black area between the crop box and the format when merged over a background.

• ID 19995 - GridWarp: Locked source and destination grids still allow adding and removing grid lines.

• ID 19835 - SplineWarp/GridWarp: The Viewer LUT is incorrect in **morph** mode, when **mix** is set at an intermediate value.

• ID 19755 - SplineWarp: Placing correspondence points at each end of an open spline causes rendering problems.

• ID 19565 - GridWarp: The Viewer does not show the correct mix amount when in **morph** mode with **mix** set at an intermediate value.

• ID 19386 - GridWarp: All keyframes are removed from the Dope Sheet after undoing, rather than just the latest, and the keyframes remain on the timeline and in the properties.

• ID 19148 - SplineWarp: Rendering fails if a curve is reduced to a single point.

• ID 19079 - SplineWarp: The **C** keyboard shortcut does not currently select the **Add Correspondence Point** tool.

• ID 18712 - GridWarp: The timeline currently shows both source and destination keyframes, even if a grid is not visible in the Viewer.

• ID 18709 - GridWarp: Rotating the transform jack with both grids selected, but in different positions, does not undo as expected.

• ID 18342 - SplineWarp: The spline keyframe + button does not add keys to the Curve Editor or Dope Sheet.

• ID 18304 - GridWarp: Existing control point keyframes are not cleared when you draw a new grid using the **Draw Boundary** Viewer button.

• ID 18019 - GridWarp: You cannot select all grid points in the Curve Editor using **Ctrl/Cmd**+**A** shortcut.

• ID 18012 - GridWarp: The grid can flicker between white and gray when zooming in and out of the Viewer, particularly when the grid is subdivided.

• ID 17697 - GridWarp: In stereo mode, the right view is labeled as **default** when you split controls into separate views.

Windows Only

• Nuke Non-commercial: Navigating to **Help** > **License**, clicking **Deactivate** or **Deauthorize**, and then clicking **Quit**, causes Nuke Non-commercial to crash on exit.

  As a workaround, change the **mode** a few times until it work as expected.

• ID 198430 - Nuke cannot read DNxHD **.mxf** files that have spaces in the file name.

• ID 46759 - File Browser: Location defaults (such as Home, Root, etc.) may not display if you have a previously saved **FileChooser_Favorites.pref** file in your **~/.nuke** directory.

  As a workaround, move or rename the **FileChooser_Favorites.pref** file, and re-launch Nuke.

• ID 40407 - When using a tablet, Nuke does not automatically switch to **Eraser** mode when you use the erase end of the pen.

• ID 39636 - QuickTime: The **Blackmagic 10 bit (v210)** codec defaults to the **YCbCr 8-bit 422 (2vuy) pixel format** due to a bug in the codec, resulting in solid green frames.

  As a workaround, manually set the pixel format to **b64a RGB** to preserve image fidelity.

• ID 35800 - Scopes: The alpha channel doesn't update correctly when modified through a node, such as Primatte or Shuffle, even after the node is removed from the Node Graph.

• ID 28921 - Changing the 3D selection mode does not update until you click in the Viewer.

Miscellaneous

• ID 339241 - MatchGrade: Clicking **Analyze Reference Frames** with a Read node with no valid **file** path displays an **Uncaught C++ exception occurred during the execution of python script!** error.

• ID 312350 - Visual Diagnostics: The **Profile** tab occasionally flickers when the application window is maximized.

• ID 309259 - Documentation: The Python Developers Guide incorrectly references Qt 4.8.5 source code.

  For links to the correct source files, see the Nuke Developers page under **Nuke Qt binaries and source files**: https://www.foundry.com/products/nuke/developers

• ID 273462 - Licensing: Nuke cannot retrieve a license from the license server when the hostname contains **.local**.

• ID 272296 - Adding a user knob and then undoing the action doesn't remove the added knob.

- ID 271804 - Documentation: The node **Properties** panel **?** link to the reference documentation doesn't work as expected.
- ID 271456 - UI: Some interface elements appear larger than usual when compared to previous versions of Nuke.
- ID 271256 - Denoise: Rendering frames to disk with a **Temporal Frame Offset** greater than 1 causes Nuke to crash.
- ID 271074 - PointCloudGenerator: **Track Points** does not work as expected when creating a point cloud from CameraTracker data.
- ID 228258 - Calling **fromScript()** on a knob that has not been added causes Nuke to crash.
- ID 226394 - Preferences: There are currently duplicate **Script Editor** controls under **Other** in the **Preferences** dialog.
- ID 169458 - Compositing Viewer: Setting the **gamma** control to **0** with **Panels** > **Viewer (Comp)** > **use GPU for Viewer when possible** enabled in the preferences, renders the alpha channel black.
- ID 168350 - AMD GPUs are reported as ATI GPUs in the node properties and **--gpulist** on the command line.
- ID 50715 - ZDefocus: Switching the **filter type** to **image** causes Nuke to crash in a customer script.
- ID 49803 - AJA Monitor Output: Setting the NUKE_AJA_CHANNEL environment variable to 4 when the NUKE_AJA_DUALOUTPUT environment variable is set, streams the output to SDI3, rather than SDI4.
- ID 49186 - ColorCorrect: Adding an expression to the curves on the **Ranges** tab and then changing a value, such as **Gain**, causes Nuke to crash.
- ID 46488 - Switching between certain workspaces displays black in the Viewer until the frame is changed.
- ID 46441 - ParticleBounce: Using custom geometry as the bounce object in a particle system occasionally allows particles to pass through the bounce surface.
- ID 42339 - The **Modo** Viewer control scheme (**Preferences** > **Panels** > **Viewer Handles** > **3D control type**) does not work as expected.
- ID 42240 - Setting a channel with a non-standard name to use as the Viewer's **alpha** channel doesn't work as expected.
- ID 42159 - Nodes that use the **Iop::sample()** call to get input pixels, such as LensDistortion, perform poorly when they are downstream of nodes using PlanarIop, such as Denoise.
- ID 41450 - AppendClip forces upstream nodes to re-evaluate on every frame.
- ID 41411 - Loading a script from a disconnected network drive creates an empty script with the same name as the file path to the original.

> ⚠ **Warning:** If you save this empty script when the network drive is reconnected, the original is overwritten.

- ID 41122 - MatchGrade: **Match Different Clip** mode does not allow you to set keyframes on the **Target** for **.mov** clips with a frame range offset.
- ID 40617 - Some filter nodes, such as Erode (fast), are caching more slowly than in previous versions.
- ID 39459 - Virtual Sliders: Clicking the left-mouse button, while holding down the middle-mouse button, pastes values into the control.
- ID 39407 - Project3D: The node class name has changed to **Project3D2**. As a result, the Nuke<>Mari bridge won't work unless all instances of Project3D are renamed appropriately in the **mari_bridge.py** file.
- ID 39365 - The Viewer **headlamp** control can not currently be managed using expression links.
- ID 39287 - Plug-ins: Loading scripts with plug-ins compiled against older versions removes the nodes from the Node Graph.
- ID 39260 - Custom knobs on Groups and NoOp nodes cannot be retimed.
- ID 39122 - Switching the Viewer to **wipe** mode and wiping between inputs with different format sizes causes corruption and constant refreshing in the Viewer.
- ID 38713 - Capture: Roto opacity and feather settings are not included in captured images.
- ID 35661 - Capture: Capturing the Viewer with a custom file path saves the file path in the script, resulting in error when the path doesn't exist:

```
Flipbook render failed: viewerCaptureOp: Cannot write to specified path
```
- ID 35659 - Capture: Capturing a 3D scene containing lights produces Viewer flashes in the captured images.
- ID 32856 - PositionToPoints: Textures occasionally disappear during playback or when mousing over the Viewer.
- ID 32666 - FrameHold nodes have no effect on Deep nodes.
- ID 32628 - DeepToPoints: Command-line rendering appears to calculate renders even when render is set to **off**.
- ID 32497 - The R3D parameter labels in Nuke aren't entirely consistent with REDCINE-X and Hiero.
- ID 32219 - DepthToPosition: Reading depth information from the same layer as the **output** layer produces corrupt output.

  As a workaround, shuffle the depth information to an alternate layer.
- ID 32118 - Card3D: When **motionblur** is enabled in the properties, FrameHold and TimeOffset nodes are ignored when connected to the **cam** or **axis** inputs.
- ID 31803 - Using **Shift**+drag on a control's animation icon only copies the value for the current frame, not the entire expression.
- ID 31714 - In the Viewer settings, enabling **3D** > **show_prim_bbox** does not display individual bounding boxes for polymesh primitives.
- ID 31310 - TimeOffset: Checking **reverse input** doesn't affect cameras, lights, or axes.

- ID 31238 - RAM cache: Any action that changes a frame's hash value, it's unique identifier, causes the cache to release. Actions such as adjusting the Viewer **Gamma**, **Gain**, or **channels** dropdown affect the frame hash.
- ID 30502 - Copying and pasting spline keys does not work as expected in the Dope Sheet.

> **Note:** This known issue only applies to Roto and SplineWarp keys.

- ID 30256 - Script Editor: Flagging a control as invisible using **setFlag()** is not honored when the node is copy/pasted in the Node Graph.
- ID 30173 - Manipulating 3D handles in the 2D Viewer is unreliable.
- ID 29677 - Connecting a FrameHold node to an animated Camera and connecting both to a Scene node only displays the animated Camera in the Viewer. There should be two cameras: one static and one animated.
- ID 29083 - Using **Create Camera** in the 3D Viewer only sets position and rotation. The **focal length** of the new camera does not match that of the Viewer camera.
- ID 28291 - Nuke crashes on start up if the **disk cache** location set in the **Preferences** is no longer available.
- ID 20431 - CameraTracker: It's not possible to pick colors in the Viewer with the control panel open.
- ID 20204 - Multitexturing: When **Preferences** > **Viewers** > **Multiframe** is enabled, increasing **downrez** in the Viewer toolbar can cause textures to flicker in the 3D Viewer.

  You can switch back to **Classic** mode or avoid using proxy in 3D to workaround this issue.
- ID 19933 - ReadGeo: Geometry occasionally doesn't display as a solid until you click in the Viewer.
- ID 19185 - Attaching an FBX ReadGeo to the Viewer occasionally causes a slight graphical glitch in the **Properties** panel.
- ID 18649 - The transform jack is currently scaling incorrectly from the corner pivot point.
- ID 12505 - Motion Vector output has been improved, but still doesn't work properly because some large polygons are clipped by the front camera plane.

  You can minimize this effect by increasing the geometry **tessellation max** parameter.
- ID 12424 - Ultimatte: Overlays are not updating correctly or reverting when panning or zooming.
- ID 11620 - In the 3D Viewer, there is currently a conflict between 3D geometry selection and points drawn with RotoPaint. This only occurs if you have two Viewers open, one in 2D mode and the other in 3D mode, and you have the panel for the RotoPaint visible.
- ID 9521 - Currently, the Nuke Viewer cannot cache very large plate sequences in float. The limit per frame is 50MB. If your frames are larger than this, you may need to switch to proxy mode for the caching to work.

- ID 5922 - At the moment, cloning does not work properly with all OFX nodes. This affects, but is not restricted to, any nodes that have an analysis pass.
- ID 5690 - Windows run-time libraries are not packaged properly with Nuke.

  Nuke runs correctly from a network install on Windows without specifically installing the run-time libraries, though we still recommend that you do so as there are still some minor problems without them.
- ID 5083 - Flipbooking the output of the Anaglyph node asks which view you want to render. This question is unnecessary as the result is an anaglyph image. Irrespective of what view you choose, the flipbook output is the same.
- File types in Windows and Mac OS X are associated with the standard version of Nuke by default, so if you save a script on NukeX using features that are only included in NukeX (such as CameraTracker or FurnaceCore) and then double-click on the script icon to open it, it opens in standard Nuke instead of NukeX.
- CameraTracker: Canceling lens distortion initialization results in corrupt tracks.
- 3D Camera: If you want to navigate through the 3D point cloud created by the CameraTracker node when using **Create Scene**:
    - Select the Camera that was created in the 3D view when using the **Create Scene** button.
    - Press **F** to focus on the selected Camera. You can now navigate around the cloud. Do not try to focus (using **F**) on the point cloud. The resulting tumble camera movement is likely to be jumpy.
- Plug-ins installed using the Nuke Plug-in Installer may not work correctly as they were compiled against an earlier version of Nuke.

Known Issues Specific to Nuke Studio and Hiero

AAF

- ID 274824 - Elastic keyframes imported from Avid do not translate correctly into Nuke Studio.

Create Comp

- Multi-view, such as stereoscopic, is not supported for clip instances created using right-click **Effects** > **Create Comp**.
- ID 47044 - Inserting scripts into comps containing Text nodes using unsupported fonts causes Nuke Studio to crash when the Text nodes are disabled.
- ID 46470 - Create Comp: Enabling **Collate Shot Name** in the comp export preset offsets the comp frame range compared to the annotations precomp frame range.
- ID 41665 - There are currently no options to load or overwrite an existing script when you select **Create Comp**.

Exporting

- ID 49024 - Enabling the **Collate...** options in the **Export** dialog when exporting ignores the **Media** tab **Output Resolution** setting for the track above, and produces output with incorrect formatting.
- ID 47828 - Exporting retimed or reversed clips as **.xml** does not work as expected when imported into Final Cut Pro.
- ID 46403 - Controls set in the **Export** dialog **Content** tab occasionally default to the values from the **Nuke Write Node** Content preset.

Linux Only

- ID 282599 - Linux only: Input and timecode metadata is currently incorrect in the timeline Viewer if the framerate is changed.
- ID 239672 - Reading files from NTFS disks/partitions can be extremely slow, particularly for large files. This is a limitation of Linux NTFS file systems, rather than Foundry products.

  We recommend avoiding timeline playback that relies on source footage from NTFS disks/partitions.
- ID 235327 - CPU usage can reach 100% on a single thread during flipbooking, causing Nuke to become unresponsive.
- ID 167058 - PulseAudio (ALSA) can cause Nuke Studio to crash or impair playback.

  As a workaround, you can stop the **pulseaudio** daemon:
  1. Open **/etc/pulse/client.conf**
  2. Set **autospawn = no** and **daemon-binary** to **/bin/true**. Ensure these lines are not commented out.
  3. Call **ps -e | grep pulse** to check the process is still running.
  4. Call **pulseaudio --kill**
  5. Call **ps -e | grep pulse** again to check the process has stopped.
- Linux only: Nuke Studio does not currently support any QuickTime audio reading. Support for audio on Linux is scheduled for a later release.
- ID 32613 - Dragging clips to the timeline with certain older NVIDIA drivers occasionally causes Nuke Studio to crash.

  As a workaround, ensure that you have the latest NVIDIA drivers installed, available from:

  www.nvidia.com/Download/index.aspx?lang=en-us

Mac OS X/macOS Only

• ID 39113 - QuickTime ProApps Codecs v1.0.3 break HDV and XDCAM on Mac OS X 10.7.5, and earlier.

   This is a codec issue rather than an application issue.

• ID 34779 - The shortcut for **Clear In/Out Points** (**Alt**+**U**) is not always triggered correctly due to a conflict with the combination for the umlaut symbol.

   To work around this, press **U** momentarily before **Alt**+**U**.

OCIO

• ID 198348 - Saving and closing a project that uses an OCIO config, and then relocating the Nuke install path, causes a **Could not load OpenColorIO config** error on reload.

Preferences

• The **Preferences** > **Path substitution** table for cross platform compatibility currently only comes into effect at project load, not EDL/XML import.

   As a workaround, import your sequence and set the **Path substitution** rule, then save the project and reload to force the conversion.

Python API

• ID 50113 - QActions are not added to the **Edit** menu in the menu bar when finding the menu action by name.

   As a workaround, use the **objectName** (**foundry.menu.edit**), where possible.

• ID 44394 - Calling **hiero.core.addPathRemap()** does not work for soft effect file paths.

Read and Write

• ID 278312 - Read/Write: The import progress bar occasionally persists after the import is complete, and cannot be closed.

   As a workaround, save and close the project, then restart Nuke Studio and reload the project.

• ID 49912 - HieroPlayer: Projects created in version 1.9, or earlier, are not editable in HieroPlayer 9.0.

• ID 46174 - XML: Shot names are occasionally not imported correctly from Adobe Premiere **.xml** files.

• ID 46100 - Exporting: Export speeds may be slower than expected. This may be due to the **Rendering** preference set to **limit renderer**.
   As a workaround, you can change the preference **Performance** > **Threads/Processes** > **Rendering**

> **export renders** to **no renderer limits** to improve rendering speeds. You can also experiment with the custom renderer limits to adjust performance on your machine.

- ID 39897 - Importing and playing back very large format **.tif** files causes Nuke Studio to crash.
- ID 39557 - Writing **.exr**s with 200+ layers, when **interleave** is set to **channels**, can be sluggish.
- ID 36726 - Executing **Clip** > **Rescan Clip Range** displays frame read errors if the rescan adds frames to the clip.
- ID 35080 - QuickTime: Certain files read into Nuke Studio with a different start timecode to other applications, such as Premiere or Resolve.
- ID 31549 - Single layer exports from multi-pass clips fail if the selected layer is not a default Nuke layer, such as **depth** or **motion**.
- ID 28067 - Certain formats produce no monitor output, such as 2K 23.98 and 720P 25.
- ID 18880 - R3D: The aspect ratio of anamorphic **.r3d** footage is not displayed correctly when added to the timeline.

Soft Effects

- ID 280413 - Soft Effects: The Text effect cursor placement shifts incorrectly after typing first character.
- ID 278275 - Soft Effects: Closing a Timewarp effect's **Properties** panel disrupts the interface briefly.
- ID 275314 - Soft Effects: Additional keyframes are added incorrectly when animating Text effects.
- ID 230536 - The Burn-in effect does not maintain a constant text baseline for all characters when the format is changed.
- ID 175574 - Undo and redo of **Properties** panel changes can be unreliable if a soft effect delete is in the same undo stack.
- ID 50442 - TimeWarp: Applying a TimeWarp to a clip instance occasionally causes the associated sequence bin item to display an error.
- ID 50441 - TimeWarp: Applying a TimeWarp to clip instances retimed to values other than 100% does not work as expected.
- ID 49771 - Text/Burn-in: Nuke Studio doesn't warn you if the font used in an effect could not be found.
- ID 49298 - Burn-in: The Burn-in effect does not auto-update when switching between sequences until the playhead is moved.
- ID 49112 - Dissolve transitions do not work as expected in Custom soft effects, based on the examples provided here:

```
<install_directory>/pythonextensions/site-packages/hiero/examples/custom_
soft_effect.py
```
- ID 48970 - Burn-in: Burn-in elements are not updated automatically when the underlying metadata is updated.

As a workaround, either change the frame displayed in the Viewer or choose an alternate element from the dropdown controls.

• ID 48878 - Burn-in: The Burn-in effect is currently a gizmo and cannot be cloned on the timeline.

• ID 48098 - Adding a transition when a Text effect containing an expression is on a track above, causes text rendering to fail during the transition.

• ID 48097 - Adding a transition when a Text effect containing an expression is on a track above, causes the text size to reset.

• ID 47075 - Exporting sequences containing clip-level Text effects using the **[frame]** expression writes incorrect frame numbers.

• ID 45835 - Expression links are incorrectly allowed between node and soft effect controls in the Properties panel, if the node and effect names are identical.

• ID 42438 - Effects are only visible in the Viewer if there is a clip instance below them in the timeline.

• ID 42401 - Renaming a soft effect does not update the clip instance until you click in the timeline.

• ID 42307 - Adding soft effects at clip level, using **Open In** > **Timeline View**, is only available using the toolbar button on the timeline panel. The right-click **Effects** menu is currently disabled.

Timeline

• ID 43913 - Locking a track currently prevents adding clip instances from the locked track to the Viewer input buffers. You can still open clip instances in the various right-click **Open In** options and access clip instance metadata.

• ID 41745 - It is not currently possible to drag-and-drop a clip to a new track between or below existing tracks.

As a workaround, drag the clip to a new top-level track and then manually move the track to the required position.

• ID 27484 - It is not currently possible to alter the **Output Resolution** of clips opened using the right-click **Open in Timeline** option.

Timeline Disk Caching

• ID 280256 - Opening a Text effect's **Properties** panel directly after project load causes the cache bar to disappear.

• ID 272897 - Caching continues after closing the project associated with the frames being cached.

• ID 270934 - The caching logic does not currently account for gaps in sequences, resulting in the caching state icon remaining gray for fully cached sequences.

Timeline Read Nodes

• ID 313013 - Opening the Node Graph from the Project bin and then returning to the timeline environment behaves as if the left mouse button is held down.

   As a workaround, left-click in the timeline to cancel the mouse press.
• ID 310067 - Loading large projects is currently slower than expected.

Windows Only

• ID 314088 - Localization: The first frame of localized files in the outdated state, colored red, do not always update correctly.
• ID 49339 - Soft Effects: The background on Burn-in effects, when enabled, alters size depending on the timecode displayed.
• ID 28701 - Nuke Studio cannot currently parse Unicode characters during export.

Miscellaneous

• ID 313849 - Localization: Reading certain multiview **.exr** files causes Nuke to crash.

   As a workaround, rename or move your **.nuke** folder and re-launch Nuke to refresh the **uistate.ini** file.
• ID 272723 - Closing Nuke Studio when it was launched from the command line does not end all Nuke processes.
• ID 200015 - Selecting multiple bin clips can cause the right-click menu to respond slowly.
• ID 167919 - Localization: Re-importing clips into the Node Graph or project bin multiple times retains the original localization policies settings.
• ID 50490 - Audio: Zooming in on a waveform displays a **Failed to decode audio** error in the timeline.
• ID 50102 - Adding a custom Hiero window to a workspace and then saving it as the Nuke default workspace causes Nuke to crash on start up.
• ID 46235 - Comps with relative paths are not currently working when imported into the project.
• ID 42462 - Cache pausing stops working if any change is made to the timeline.

Developer Notes

Here are the changes relevant to developers. See **Help** > **Documentation** from the Nuke menu bar or https://learn.foundry.com/nuke/developers/112/ndkdevguide/appendixc/index.html for more information.

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 plugins and/or make changes to the source code.

Release Type	Example	Compatibility	Recompile	Rewrite
Version	10.0v1 to 10.0v2	API and ABI		
Point	10.0v1 to 10.5v1	API	●	
Major	10.0v1 to 11.0v1	-	●	●

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")
```

New Features

There are no new features in this release.

Feature Enhancements

There are no feature enhancements in this release.

Bug Fixes

• ID 358937 - Python: Creating a **Tab_Knob** in the Script Editor caused Nuke to crash.

Release Notes for Nuke and Hiero 11.2v2

Release Date

23 July 2018

Qualified Operating Systems

• macOS Sierra (10.12) or macOS High Sierra (10.13)

• Windows 7 or Windows 10 (64-bit)

• CentOS 6 or CentOS 7 (64-bit)

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

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

With graphics drivers capable of running CUDA 8.0 & 6.5 or above.

• On Windows and Linux, CUDA graphics drivers are bundled with the regular drivers for your NVIDIA GPU. Driver version r361 or above is required.

Go to http://www.nvidia.com/Download/Find.aspx?lang=en-us for more information.

• On Mac, the CUDA driver is separate from the NVIDIA graphics driver and must be installed, if you don't have it already. The minimum requirement is driver version r361 which can be downloaded from www.nvidia.com/drivers.

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

AMD

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

Windows GPU	Driver	Linux GPU	Driver
AMD FirePro W8100	17.Q2.1	AMD FirePro W8100	17.Q2.1
AMD FirePro W9100	17.Q2.1	AMD FirePro W9100	17.Q2.1
AMD Radeon R9 Fury X	17.4.3 - 17.6.2	AMD Radeon R9 Fury X	17.10
AMD Radeon RX 480	17.Q2.1	AMD Radeon RX 480	17.Q2.1
AMD Radeon Pro WX 7100	17.4.3 - 17.6.2	AMD Radeon Pro WX 7100	17.10

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

• On Mac an AMD FirePro GPU on late 2013 Mac Pro 6,1, mid 2015 MacBook Pro 11,5, and late 2016 MacBook Pro 13,3, running OS X 10.9.3 'Mavericks', or later.

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 FirePro W9100s.

New Features

Improved Tab Menu

The Node Graph's tab menu has been improved, including a new search algorithm, allowing you to search for and add nodes more easily using partial names. Commonly used nodes are weighted so that they appear higher up the list of choices and you can also favorite nodes, pinning them to the top of the list with the star icon. Weights and favorites can be enabled, disabled and cleared in **Preferences** > **Behaviors** > **Nodes**. The **J** Bookmarked nodes menu also supports the updated search functionality.

New Interface for User Knob Creation

Also known as Drag-and-drop knobs (DnD), this update significantly reduces the time spent exposing user knobs and adding custom knobs to node properties panels within Nuke. As a result, you can create and modify gizmos and Live Groups more easily, stream-lining collaborative workflows.

Instead of right-clicking and selecting **Manage User Knobs**, simply click the edit button at the top of the **Properties** panel to get started. You can drag-and-drop knobs between open node panels or add your own using the knob icons listed at the top of the panel. You can also order, hide, customize, and delete knobs within the **Properties** panel. If you work with floating panels, you can float the **User Knob Editor** too. Click the edit button again to finish customization.

Nuke Studio Project Panel Improvements

These are a number of enhancements to the way you can organize, manage and, navigate through your projects in Nuke Studio. These enhancements also apply to the spreadsheet and the timeline.
- **New Sorting** - a new way to arrange your project bin alphabetically or by custom order. This is accessible through the new buttons at the top of the **Project** panel and it has controls for the hierarchy view and on the bin view independently.
- **Improved Searching** - improved search functionality on the **Project** panel and on the spreadsheet with new options to search all metadata or not, and to use all or any of the input string.
- **Poster Frame** - a new poster frame functionality allows you to set the poster frame for your source clips and shots. You can set it for single or multiple source clips using absolute or relative frames, which is useful when you have shots with slates or black handles.
- **Color Assignments** - you can now assign colors to your source clips, shots, and spreadsheet events. You can also set colors based on file types.

Smart Vector Toolset Improvements

The Smart Vector Toolset in NukeX has several improvements that speed up the generation of vectors and extend the use cases where the toolset can be used.

• **GPU Acceleration** - the SmartVector and VectorDistort nodes have been rewritten to make the best use of the GPU, dramatically reducing the time it takes to both create the smart motion vectors and use them to warp images.

• **Mask Input to SmartVector** - you can now supply a mask to the SmartVector node to specify regions containing unwanted objects or motion to help with handling occlusions and image boundaries.

• **Background Vector Rendering** - you can now render vectors in the background using the **Export Write** button.

File Localization API Extension

Building on the updates to the localization system in Nuke 11.1, the system has been further extended to provide greater control over customization through new callbacks. We have also added a new environment variable, NUKE_LOCALIZATION_NUMWATCHERS, to improve performance when checking the validity of localized files, especially when working with scripts with a high number of Read nodes or a high number of frames.

Additional Python callbacks:

The following Python callbacks have been added, giving further control over files and Read nodes as they are added to the queue to be localized and transition between being out-of-date and localized.

Callback functions executed on each file's localization event:

• localization.FileEvent.ADDED
• localization.FileEvent.REMOVED
• localization.FileEvent.OUT_OF_DATE
• localization.FileEvent.CACHE_FULL
• localization.FileEvent.DISK_FULL

Callback functions executed on each Read nodes localization event:

• localization.ReadStatus.NOT_LOCALIZED
• localization.ReadStatus.LOCALIZING

• localization.ReadStatus.PARTIALLY_LOCALIZED

• localization.ReadStatus.LOCALIZED

• localization.ReadStatus.OUT_OF_DATE

• localization.ReadStatus.LOCALIZATION_DISABLED

Auto switch from localized to network files:

A new preference, **read source files when localized files are out of date**, has been added. When enabled, Nuke checks the localized files against the source files and switches to their source files if the local files become out of date.

Control over the number of simultaneous file checks:

A new environment variable NUKE_LOCALIZATION_NUMWATCHERS controls the number of simultaneous file checks, improving performance when working with large scripts over a high capacity network. We have found that checking the status or force-updating a large number of reads or large sequences could create a bottleneck as Nuke evaluated the files. To improve this we have added an option to increase the number of file checks that can occur at once to expedite this process with an appropriate network configuration.

ARRI SDK Update

ARRIRAW has been updated to version 5.4.3.5, adding the following features:

• Alexa LF formats and color tables

• Rec2100/PQ and Rec2100/HLG HDR colorspaces

• Extended white balance CC values from -16 to +16

The full ARRI SDK release notes are publicly available from:
http://www.arri.com/support/downloads/searchable_downloads/

R3D SDK Update

R3D SDK has been updated to version 7.0.6, adding the following features:

• R3D Weapon Monstro 8K VV and Helium 8K S35 Sensors

• ImageColorDCIP3, ImageColorProPhotoRGB, ImageColorDCIP3D65 colorspaces

• ImageGammaHybridLogGamma, ImageGamma2_2, ImageGamma2_6 Gamma Curves

> **Note:** Support for IPP2 will be available in a future release.

The full R3D SDK release notes are publicly available in the SDK download from:
https://www.red.com/developers/

New Deep Compositing API

Nuke has a new API for Deep Compositing, which manages memory more efficiently resulting in improved performance for some nodes. Nuke's native deep compositing nodes have been converted to this new API and in our tests, scripts are processed up to 1.6x faster compared to Nuke 11.1. Performance improvements vary by node and set up; for example, DeepRecolor and DeepTransform show the best gains, while DeepColorCorrect has little improvement.

To take advantage of these performance improvements, custom deep nodes need to be converted to the new API. Existing custom nodes still work in Nuke 11.2, defaulting to the pre-existing API, but will not have any improvement to performance.

Details on the API changes and converting custom nodes are available in the NDK Developer Guide.

Deep Compositing Improvements

In addition to the new API, Nuke 11.2v1 includes a number bug fixes and improvements to the deep compositing tools including the DeepExpression node having functional parity with Nuke's standard Expression node.

Workflows using metadata have also been added to Nuke's Deep nodes. Metadata nodes (ModifyMetadata, ViewMetadata, CopyMetadata, and so on) can now be used in a tree with Deep nodes.

The DeepMerge node has been updated to allow you to use metadata from either the A input, the B input, or both.

> **Note:** 2D nodes should not be inserted in between Metadata nodes within a deep stream. The Viewer must be connected to a Deep node rather than a Metadata node in order to view the output of deep streams.

End User License Agreement

This release of Nuke includes a new version of the End User License Agreement (EULA), available here.

Feature Enhancements

• ID 134441 - Deep: The functionality of the DeepExpression node has been expanded to match the standard Expression node.

• ID 139582 - Deep: The **Preferences** dialog now includes a control to choose the connector color between Deep nodes under **Panels** > **Node Graph** > **Arrow**.

• ID 151165 - DeepWrite: Only **Zip1** compression is supported for **.exr** output. The other options have been removed.

• ID 158323 - Deep: A new control, **target input alpha**, has been added to the DeepRecolor node. When enabled, the **color** input's alpha is distributed among the samples so that the final resulting alpha after flattening of the deep data matches the **color** input's alpha.

• ID 163251 - Deep: The nodes listed under MetaData in the nodes toolbar now work in Deep node trees.

• ID 196909/196912/196941/197559 - SmartVector: Render progress bars and error reporting has been improved.

• ID 196839 - Deep: A new **deep** option has been added to the DeepRecolor node's **set bbox to** control, allowing you manage bounding boxes between deep and standard nodes.

• ID 219397 - SmartVector: A new control, **Flicker Compensation**, has been added to the **Properties** panel. When enabled, SmartVector compensates for luminance changes in the source image when calculating vectors.

• ID 278255 - Localization: You can now use **Cache** > **Localization** > **Force Update** > **Selected** on nodes when Localization is paused.

• ID 333431 - Mac OS X/macOS only: Nuke now supports AMD Radeon Vega GPUs.

• ID 345759 OCIO: The Log3G10 LUT has been added to Nuke's standard LUTs list.

Bug Fixes

• ID 136654 - R3D: Certain single frame **.r3d** files beginning on frame 0 were interpreted incorrectly as starting on frame 1.

• ID 142813 - Deep: Executing a script in terminal mode that read in a Deep image then wrote it to disk caused Nuke to crash.

• ID 145272 - Node Graph: The Tab menu included a **@;&<node>Branch** entry incorrectly.

• ID 145308 - DeepSample: Particles employing sprites caused the **deep.front** and **deep.back** channels to display **Inf** values in a customer script.

• ID 148823 - Nuke Assist: Nuke scripts containing Keylight or FurnaceCore nodes checked out a nuke_i license.

- ID 150961 - Deep: It was possible to connect Framehold nodes to Deep nodes, even though they did not function.
- ID 154977 - Deep: The DeepColorCorrect node culled samples incorrectly.
- ID 161956 - Deep: The DeepExpression node did not clamp output in the same way as the standard Expression node.
- ID 161979/328288 - Deep: The DeepRead node set the **width** and **height** controls to 1 under the correct value.
- ID 168261 - Deep: Copying and pasting DeepExpression nodes discarded control values.
- ID 174062 - Documentation: It was not clear in the documentation that Nuke scales non-HD DNxHD output to 1080p.
- ID 196487 - Documentation: The port range of local Frame Server processes was missing from the documentation.
- ID 196940 - ARRIRAW: The **uuid** metadata for **media.arri.camera** displayed incorrectly.
- ID 201586 - Mac OS X/macOS: The **Restore Snapshot** function did not work as expected.
- ID 202223 - Deep: DeepWrite nodes included several unusable EXR **compression** options.
- ID 221568 - Deep: Enabling **specify z** in the DeepFromImage **Properties** panel caused DeepWrite nodes to output corrupt data.
- ID 251544 - Monitor Output: Switching from **Active** to **A/B** mode with **Full Resolution Stereo** selected caused the monitor to display multiple images incorrectly.
- ID 253572 - Calling **Array_Knob.valueAt()** ignored the **view** argument and returned incorrect values.
- ID 271373 - A **QOpenGLContext::swapBuffers() called with non-exposed window, behavior is undefined** error was occasionally printed to the command line.
- ID 272541 - Linux only: Changing the root directory for cached files occasionally caused the timeline disk cache state to become inconsistent.
- ID 273650 - OCIO: Looks were not applied correctly in the timeline Viewer.
- ID 280273 - Monitor Output: 10-bit monitor output signals were different from Nuke and Nuke Studio.
- ID 281553 - Linux only: Setting the OCIO environment variable did not load LUTs correctly.
- ID 286434 - Soft Effects: Cloning effects occasionally caused the clone to misbehave.
- ID 305193 - Frame Server: Background renders did not support container formats, such as **.mov** files.
- ID 306607 - Timeline Disk Caching: Enabling or disabling **See Through Missing Media** in the timeline Viewer controls did not clear the cache.
- ID 308402 - Python Developers Guide: The **Extending Nuke with PySide** section was out-of-date.
- ID 310306 - VectorDistort: The **mask_channel** and **premult** controls did not work as expected and have been removed.

- ID 328914 - DnD: Swapping tabs did not deselect knobs.
- ID 329006 - Timeline Disk Caching: Duplicating a sequence stopped the **Clear Sequence Range** function working on the original sequence.
- ID 329014 - Timeline Disk Caching: Clearing the cache deleted files that were in use in duplicate sequences without warning the artist.
- ID 329029 - Timeline Disk Caching: Enabling or disabling **See Through Missing Media** in the timeline Viewer controls did not clear the cache.
- ID 329113 - Clearing or closing large scripts occasionally caused Nuke to crash.
- ID 330219 - DnD: Edit mode selection boxes were occasionally visible after actions were completed.
- ID 331325 - Node Graph: HTML tags were occasionally included in Bookmark names in the Tab menu.
- ID 332248/332276/337288/348013 - DnD: Colorwheels and user knob controls with no labels were not marquee selectable and the highlight or placement was inconsistent.
- ID 332312 - ARRIRAW: Certain colorspace options displayed **Arriraw Decoder Settings** errors.
- ID 333372 - Timeline Disk Caching: Changing the values in a cached soft effect and then reverting the change did not re-instate the cache.
- ID 333381 - Timeline Disk Caching: Canceling a disk cache render did not list the render task as canceled in the **Timeline disk cache render** panel.
- ID 335607 - DnD: Colorwheel knobs with no label could be hidden by other knobs.
- ID 336052 - Denoise: Rendering a script from the command line with **Temporal Processing** enabled took a long time to process and included a blank first frame.
- ID 336903 - Windows only: Opening a comp referencing a certain **.r3d** file caused Nuke Studio to crash.
- ID 337293 - DnD: Knob selection highlights did not scale with panel size adjustments.
- ID 337666 - DnD: Text input knobs did not allow other knobs to be added to the same properties line.
- ID 338425 - Localization: Manually setting the localization mode to the current setting displayed an error.
- ID 338746 - Deep: Comparing DeepColorCorrect nodes using the DeepCompare node (available from the **X** menu or by using **Update**) produced inconsistent results.
- ID 338755 - Deep: The DeepCompare node (available from the **X** menu or by using **Update**) ignored the bounding box.
- ID 338764 - Deep: The DeepCompare node (available from the **X** menu or by using **Update**) did not work as expected with DeepCrop nodes.
- ID 338777 - Deep: The DeepCompare node (available from the **X** menu or by using **Update**) **multiplier** control behaved differently to the same control in the standard Compare node.
- ID 339768 - Localization: Pausing localization occasionally didn't work as expected.

- ID 339978 - Deep: The DeepCompare node (available from the **X** menu or by using **Update**) occasionally produced channel mismatch errors.
- ID 339987 - Deep: Viewing a DeepFromImage node's output caused Nuke to crash.
- ID 340112 - Denoise: Resizing and moving the analysis box displayed CUDA errors in the Viewer.
- ID 340282 - Python: Dragging a link from a browser into Nuke did not trigger a drop event.
- ID 340300/340559 - The desktop shortcuts linked to the wrong binary.
- ID 340791 - Context-sensitive controls, such as those exposed when reading **.exr** files, failed to copy and paste correctly when the control was driven by an expression.
- ID 341283 - Project Panel: Right-clicking a source clip and selecting **Clip** > **Reconnecting Media** caused Nuke Studio to crash.
- ID 342109 - RED SDK: Loading legacy scripts into Nuke 11.2 displayed rounding errors.
- ID 342324 - OCIO: Multiple **createLutAndShader** error messages were printed to the command line at start-up.
- ID 342580 - Deep: Disabling a DeepRead node upstream of a DeepMerge node caused Nuke to crash.
- ID 342627 - Soft Effects: Retiming **.r3d** clips with the TimeWarp effect displayed an error message.
- ID 342740 - RED SDK: Copying and pasting **.r3d** files enabled certain knobs incorrectly.
- ID 342973 - Deep: Connecting a Viewer to a DeepToPoints node while rendering a script in the Viewer caused Nuke to crash.
- ID 342983 - Deep: Output from Deep scripts containing DeepRecolor nodes was not consistent with legacy Nuke releases.
- ID 343390 - Linux only: The Viewer right-click **Stereo Modes** > **OpenGL Stereo** option was missing.
- ID 343510 - Linux only: Rendering an **.nk** script containing **.jpeg** files Pythonically returned an error.
- ID 343568 - CameraTracker: Exporting distortion from CameraTracker used the LensDistortion1 node, rather than the improved LensDistortion2 node.
- ID 343643 - Windows only: Denoise/VectorBlur nodes displayed CUDA errors in the Viewer during normal operation.
- ID 343699 - RED SDK: Several RED colorspace settings were missing from Nuke.
- ID 343943 - DnD: Some text knobs could not be exposed using drag-and-drop.
- ID 344083 - R3D: Project panel thumbnails were blank for certain **.r3d** files.
- ID 344303 - Deep: DeepHoldout caused Nuke to crash in certain scripts.
- ID 344552 - VectorDistort: Disabling **Use GPU if available** caused Nuke to crash.
- ID 344947 - Windows only: Executing **basicReadCallback.py** caused Nuke to crash on exit.
- ID 344971 - SmartVector: Connecting a Denoise node downstream of a SmartVector node displayed an error.
- ID 345702 - Linux only: Minimizing Nuke caused RAM caching to stop, even with **pause caching when the application goes to the background** disabled.

- ID 346215 - Hiero: Opening a project containing a large number of files displayed a **Too Many Open Files** error message and caused the application to crash.
- ID 346766 - Deep: Adjusting the controls in a DeepReformat node caused Nuke to crash.
- ID 346935 - Write: The **yuv** option was missing from the **file type** control.
- ID 347085 - Kronos: Single GPU command line renders were faster than Multi-GPU renders.
- ID 347426 - Deep: Connecting Deep nodes to a ScanlineRender node and Metadata node produced odd results.
- ID 347672 - SmartVector: Rendering certain images with **premult** enabled created blurred output.
- ID 347745 - Python: Custom panels were limited to simple layouts.
- ID 347798 - DnD: Enabling and disabling editing mode caused floating panels to resize incorrectly.
- ID 347828 - DnD: The tooltips for the drag-and-drop interface were not OS-specific.
- ID 347835 - R3D: The TimeWarp soft effect altered color output in the Viewer incorrectly.
- ID 347840 - Monitor Output: Video output applied colorspaces and ViewerProcesses incorrectly, resulting in artificially dark images.
- ID 348032 - Windows only: Rendering a comp that referenced a certain **.r3d** clip displayed background render errors for some **Gamma Curve** settings.
- ID 348351 - R3D: Certain **.r3d** files had blank **color space** and **gamma space** controls.
- ID 348354 - DnD: Marquee-selecting knobs did not automatically scroll inside the **Properties** panel.
- ID 348552 - DnD: Pop-up widgets were occasionally hidden behind floating **Properties** panels.
- ID 348746 - Creating a clip with an empty **MediaSource()** path caused Nuke to crash.
- ID 348957 - DnD: Selecting a knob inside a selection of knobs did not update the selection correctly.
- ID 349217 - DnD: Holding **Ctrl/Cmd** to select knobs only allowed you to drag-and-drop the knob under the pointer.
- ID 349317 - Read: Selecting an **.r3d** file in the file browser with the preview active and then opening the selected file caused Nuke to crash.
- ID 349457 - DnD: Resizing panels containing tables did not resize the table knob.
- ID 349475 - DnD: Certain Roto knob labels were grayed-out after saving and reloading a script.
- ID 349679 - R3D SDK: Reading certain 8K footage displayed a **Reader did not set bounding box** error.
- ID 349735 - Project Settings: The **Frame Offset** control extended for the entire length of the panel.
- ID 349739 - DnD: Deleting the first knob on a line shifted the remaining knobs to the line above.
- ID 349744 - DnD: Reordering the knobs on a line shifted all knobs to the line above.
- ID 349746/352272 - DnD: The knob placement guide lines did not work as expected.
- ID 349905 - Preferences: The color of the Edit mode button could not be changed.
- ID 350166 - RED SDK: CDL files were not applied in the Nuke Viewer.
- ID 350353 - RED SDK: The **REDWideGamutRGB** and **Rec2020** colorspaces were incorrect.

- ID 350393 - RED SDK: The **Sharpness**, **Denoise**, and **Detail** controls could not be changed in a legacy script.
- ID 350655 - RED SDK: The **SimpleBlend** and **MagicMotion** HDRx controls did not retain their values in a legacy script.
- ID 350661/350896 - RED SDK: Copying and pasting a Read node that did not use the default **CC ID** from the **CDL** file did not work as expected.
- ID 350665 - RED SDK: The **MagicMotion** blend bias **HDRx** control did not work as expected in legacy script.
- ID 350683 - RED SDK: Labels and knob names were capitalized inconsistently.
- ID 350844 - DnD: The preference controlling the color for linked knobs was labeled incorrectly.
- ID 350888 - RED SDK: The colorwheel controls for **Lift**, **Gamma**, and **Gain** did not work as expected.
- ID 350897 - DnD: The **profile** tab controls in the Denoise node's properties were placed on the **Denoise** tab.
- ID 350900 - RED SDK: Selecting certain **CDL** presets displayed an error.
- ID 350903 - DnD: The LensDistortion node's properties incorrectly included three new, empty groups.
- ID 350907/351860 - RED SDK: Collapsing a colorwheel icon for the **Lift**, **Gamma**, and **Gain** controls did not work as expected.
- ID 350915 - DnD: Using the scroll bar in the **Properties** panel discarded knob selections in Edit mode.
- ID 350990 - Linux only: Publishing a LiveGroup Pythonically occasionally truncated the file name.
- ID 350991 - RED SDK: Localizing a particular **.r3d** file rendered the clip upside down in the Viewer.
- ID 350997/352398 - RED SDK: The **Look** > **Color Version** control included **v3** incorrectly.
- ID 351334 - RED SDK: Right-clicking an **.r3d** file in the **Project** panel caused Nuke Studio to crash.
- ID 351585 - RED SDK: The **HDRx** settings did not convert **Low exposure** to **X frame** in legacy scripts.
- ID 351591 - RED SDK: Activating controls, such as **Blend Bias**, did not activate the knob label.
- ID 351895 - RED SDK: The **D.E.B** control was not available for **.r3d** clips created using the DRAGON sensor, or later.
- ID 352383 - DnD: Dragging knobs from one tab to another in the same node **Properties** panel did not work as expected.
- ID 352399 - RED SDK: Reading files written with IPP2 support did not convert them to Nuke's legacy color pipeline and displayed an error.
- ID 352403 - RED SDK: Clicking **Load Settings from RMD** multiple times caused Nuke to crash.
- ID 352406/352989 - RED SDK: Clicking **Load Settings from RMD** did not always display an error message if the **.r3d** was written with IPP2 support.
- ID 352423 - RED SDK: Zooming and changing control values caused the Viewer cache to behave erratically.

- ID 352432 - Project Panel: Clicking the color picker button in the **Project** panel turned clip shading on, even when it was disabled in the **Preferences**.
- ID 352474 - RED SDK: Changing the **Color Version** to **v1** in an **.r3d** file's **Properties** caused Nuke to crash.
- ID 352477 - RED SDK: Certain Read node thumbnails in legacy scripts displayed a **ReaderMessageUnknown** error.
- ID 352564 - RED SDK: Adjusting the **Gamma Curve** control caused Nuke Studio to crash.
- ID 352710 - RED SDK: Importing certain **mov64** clips displayed an error in the Viewer and created black shots on the timeline.
- ID 352725/352746 - RED SDK: Right-clicking in an **.r3d** file's **Properties** panel and selecting **Set knobs to default** or **Set Key on all knobs** caused Nuke Studio to crash.
- ID 352902 - DnD: The CameraTracker node's **Properties** panel was rearranged incorrectly.
- ID 352939 - Project Panel: Exporting a sequence or clip or using the color picker reset the sorting mode in the **Project** panel.
- ID 353051 - RED SDK: Certain **Gamma Curve** settings displayed an invalid LUT error in the Viewer.
- ID 353071 - DeepRecolor: Enabling **target input alpha** did not process AOV passes through the color input.
- ID 353210 - RED SDK: The **HDR Mode** and **Decode Resolution** controls did not work as expected when used together and occasionally caused Nuke to crash.
- ID 353237/353253 - RED SDK: Setting the **Gamma Curve** to **Half Float Linear** did not disable unnecessary controls in the **Properties** panel.
- ID 353248 - Windows only: The EULA in the installer was not formatted correctly.
- ID 353310 - Localization: Certain **.r3d** files were not localized as expected when **Localization Policy** was set to **On Demand** in the clip's Read **Properties** panel.
- ID 353405 - DnD: Marquee selecting knobs and then dragging the selection did not work as expected.
- ID 353660 - Create Comp: Undoing a Create Comp operation and then executing Create Comp again caused Nuke Studio to crash.
- ID 353670 - ARRIRAW: The **color space** and **color processing** controls did not work as expected when used together and displayed an error in the Viewer.
- ID 353693 - Windows only: Nuke could not read **.mxf** files from the Alexa Mini.
- ID 353838 - RED SDK: Create Comp and Export operations produced different output for files containing HDRx **X-Frame** blend information.
- ID 353895 - RED SDK: The tooltip for the **HDRx** > **Blend Bias** control was out-of-date.
- ID 353903 - RED SDK: The tooltip for the **Look** > **Contrast** control was out-of-date.
- ID 353910 - RED SDK: The **Look** > **RGB** control had incorrect range parameters.
- ID 353911 - RED SDK: The **Gamma** and **Gain** control had incorrect range parameters.

- ID 353952 - RED SDK: HDRx **X-Frame** blend information was not applied to exported files from the Frame Server.
- ID 353981 - RED SDK: Cloning a Read node referencing an **.r3d** file and then changing a control caused Nuke to crash.
- ID 354159 - DnD: The unnamed channel matrix in ShuffleCopy nodes was selectable, even though it was not applicable in DnD edit mode.
- ID 354251 - RED SDK: The **Gamma Curve** tooltip did not specify all the controls that are disabled when **Half Float Linear** is selected.
- ID 354398 - VectorGenerator: Enabling **Flicker Compensation** altered the motion vectors produced.
- ID 354515 - RED SDK: The **Look** > **DRX** control did not work as expected for certain non-DRAGON sensor **.r3d** files.
- ID 354531 - Project Load: Loading a project from a different operating system that referenced **.r3d** files caused Nuke Studio to become unresponsive.
- ID 354537 - DnD: Dropping a knob on the **Node** tab in the **Project Settings** caused Nuke to crash.
- ID 354900 - DeepHoldout: Connecting a Viewer to a DeepHoldOut node with only the **main** input connected caused Nuke to crash.
- ID 355069 - Alexa LF Open Gate Material (4448 x 3096): UHD-1 was missing from the **resolution** dropdown.
- ID 355070 - Alexa LF Open Gate Material (4448 x 3096) - Selecting an **aspect ratio** other than 1.0 limited the available **resolution** options incorrectly.
- ID 355116 - Alexa LF UHD-1 material (3840 x 2160) - Selecting an **aspect ratio** other than 1.0 limited the available **resolution** options incorrectly.
- ID 355121 - Alexa material (2880 x 1620) 16by9: 1.25 **lens squeeze** could not be selected.
- ID 355138/355139/355143/355144 - Alexa 4:3 (2880 x 2160) - 4by3: It was not possible to select 1.25/1.3/1.33/1.5 lens squeeze when **unsqueeze anamorphic** was enabled.
- ID 355146/355147/355149/355150 - Alexa "Clean Open Gate" (3414 x 2198): It was not possible to select 1.25/1.3/1.33/1.5 lens squeeze when **unsqueeze anamorphic** was enabled.
- ID 355151 - Alexa "Clean Open Gate" (3414 x 2198): Support for 1.55 **aspect ratio** with 2.0 **lens squeeze** was unavailable
- ID 355152/355153 - SXT/Mini "Open Gate" (3424 x 2202): It was not possible to select 1.33/1.5 lens squeeze when **unsqueeze anamorphic** was enabled.
- ID 355154/355155/355156 - 6:5 Alexa SXT (2578 x 2160): It was not possible to select 1.33/1.5/2.0 lens squeeze when **unsqueeze anamorphic** was enabled.
- ID 355157/355158 - 16:9 3.2K Alexa SXT (3168 x 1782): It was not possible to select 1.33/1.5 lens squeeze when **unsqueeze anamorphic** was enabled.
- ID 355259 - ARRIRAW: The mxfReader failed to decompress large **.mxf** files.

• ID 355294 - RED SDK: The tooltips for the **Shadow**, **Saturation**, **Contrast**, **Brightness**, and **RGB** controls contained incorrect information.

• ID 355421 - ARRIRAW: ARRI - ALEXA_LF_Sensor footage displayed an error in the Viewer.

• ID 355544 - ARRIRAW: Loading a legacy **.hrox** project containing certain **.r3d** files caused Nuke to crash.

• ID 355717 - Calling **getLinkedKnob()** incorrectly on an a unlinked Knob caused Nuke to crash.

• ID 355812 - ARRIRAW: Loading legacy scripts did not load knob settings from the project file.

• ID 356167 - ARRIRAW: Opening a legacy script containing unsupported ARRI footage caused Nuke to crash.

New Known Issues Specific to this Release

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

New Known Issues Specific to Nuke

• ID 355719 - ARRIRAW: Deprecated resolution modes are not labeled in Nuke.

• ID 355712 - ARRIRAW: The 2668 resolution output mode, necessary for ProRes output, is currently not available.

• ID 347416 - Rendering a standard Write node that has deep data in its stream causes Nuke to crash.

• ID 340749 - Mac OS X/macOS only: Reading **.r3d** files and changing the **color version** to **v1** produces a corrupt image.

   This is a known issue in the RED SDK, and will be addressed in a future release.

Other Known Issues

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

Known Issues Specific to Nuke

AudioRead

• ID 18924 - Changes to the **rate** control value are not honored when **ratesource** is toggled between **file** and **custom**.

• ID 18666 - Changing the sample rate has no effect on playback in a Flipbook.

• ID 18465 - The **time range** control doesn't limit the range when an **endtime** is specified.

• ID 18451 - Flipbooking doesn't honor the time range knob.

- ID 18217 - Redo keyframe generation doesn't replace the keys.
- ID 18213 - Changing **Draw Style** in the Curve Editor or Dope Sheet doesn't redraw the curves correctly.

BlinkScript/CUDA

- ID 43319 - CUDA: Scripts containing GPU accelerated nodes, such as ZDefocus, display a CUDA error when the OS wakes up from sleep mode.

  As a workaround, close and reopen Nuke to reactivate the CUDA drivers.

CameraTracker

- ID 40798 - Centering a track in the Viewer does not work as expected in proxy or downrez modes.
- ID 37411 - Sequences containing alpha channels display the alpha premultiplied by the image in reference thumbnails, rather than just the RGB values.

Deep

- ID 43383 - Executing a script in command-line mode that reads in a deep image and then writes it to disk, causes Nuke to crash.

  As a workaround, run the script from the Script Editor inside Nuke.
- ID 40145 - Nuke occasionally reads and writes Deep **.exr** files with a pixel aspect ratio of 1.

  As a workaround, preview the **.exr** in the file browser before reading it into Nuke.

Dope Sheet

- ID 43463 - Scripts containing Ocula's O_VerticalAligner plug-in cause Nuke to crash when you execute **Analyze Sequence** with the Dope Sheet open.
- ID 40206 - Adding a curve to the Dope Sheet and then deleting it causes Nuke to crash.
- ID 39426 - Undoing individually animated text characters removes their keys completely from the Dope Sheet.
- ID 39156 - Keys remapped with descending TimeWarp lookup curves don't snap to frames when **frame snap** is enabled.
- ID 38910 - Keys from Viewer buffers not currently being viewed are still visible.
- ID 38630 - Read and TimeClip representations disappear in the Dope Sheet if they are set to have a non-empty frame expression.
- ID 37869 - The Dope Sheet is not updated correctly when a Retime's **speed** control is animated.

• ID 37815 - Multiple instances of the same clip within one AppendClip are only represented once in the Dope Sheet.

EditGeo

• ID 38954 - The transform handle of selections in the Viewer is not updated between frames on geometry with animation baked into its vertices.

  To update the transform handle, toggle the axis alignment control between **object** and **average normal**.

• ID 38699 - Changing the visibility of objects within an Alembic Scene Graph causes geometry to ignore the EditGeo node.

• ID 38670 - Setting a keyframe can be slow to update the Viewer with the appropriate keyframe marker.

• ID 36094 - Setting **axis alignment** to **average normal** displays the axis incorrectly on edge and corner vertices.

Flipbook

• ID 271435 - Flipbook: Using the flipbook with nuBridge installed causes Nuke to crash.

• ID 201156 - Nuke's flipbook defaults to the Write node's colorspace, which can result in different output when compared to the Viewer.

  As a workaround, either flipbook the node upstream of the Write node, or enable **Burn in the LUT** in the **Flipbook** dialog.

• ID 47005 - In the Flipbook Viewer, clicking the **Go to start** button always goes to frame 0, even if the clip doesn't start at 0.

• ID 47005 - Enabling **Burn in the LUT** in the Flipbook dialog uses the **rec709** LUT for both **rec709** and **rec1886**.

Frame Server

• ID 273472 - Canceling or pausing a comp render in the **Background Renders** panel displays errors in the terminal.

• ID 272523 - Non-contiguous frame ranges cannot currently be flipbooked.

GPU

• ID 45018 - R3D: Only half float linear gamma space works with GPU debayering.

Import Nuke

• ID 40131 - Importing Nuke in a Python script destroys **sys.argv**, making command-line arguments unavailable.

   As a workaround, preserve **sys.argv** in another variable before you import Nuke.

• ID 39836 - Importing Nuke hangs when there are Qt conflicts between Nuke and other applications.

• ID 38963 - Calling **import nuke** terminates the Python session if no applicable license is available.

Linux Only

• ID 271807 - Linux only: Adjusting pane or window borders left and right causes redraw lag.

• ID 199990 - In some situations NVIDIA Quadro Linux drivers 319.23 can cause Nuke to hang during start up.

   As a workaround, update your drivers to 361.42.

• ID 49262 - Scrubbing in the timeline in large projects can force memory use to hit 100%, causing Nuke to become unresponsive.

• ID 43766 - Calling **uuid.uuid4()** causes Nuke to crash due to a bug in **libc**.

   As a workaround, launch Nuke from the command-line using:

```
LD_PRELOAD=/lib64/libuuid.so.1 ./Nuke8.0
```

• ID 42581 - Keyboard Shortcuts: Using **Ctrl+C** to quit Nuke from the command-line when a dialog box is open displays an error.

• ID 39537 - Using a Blackmagic Decklink Extreme 2 card causes Nuke to become unresponsive.

LiveGroups

• ID 274174 - Reloading a LiveGroup currently resets all edited User knobs.

• ID 272281 - Adding a user knob and then undoing the action sets expression links to nodes with matching names in main Node Graph.

Mac OS X/macOS Only

• Installation - If you're running Mac OS X 10.10 "Yosemite", you may need to install alternative NVIDIA CUDA drivers so that Nuke can detect your GPU correctly. You can obtain the required drivers directly from NVIDIA here:

   http://www.nvidia.com/object/macosx-cuda-6.5.18-driver.html.

- ID 316577 - macOS only: Current localization progress does not update if the pointer focus is on Nuke's menu bar.

- ID 228076 - The PySide QtUiTools library is currently missing from the Nuke build.

- ID 163543 - Mac OS X 10.11 only: Dragging handles in the 3D Comp Viewer can be slow to respond.

- ID 50371 - Script corruption can occasionally occur on Mac OS X 10.9 (Mavericks), and above, when writing to SMB 2.1 and SMB 3 Sharepoint locations.

- ID 50182 - Nuke cannot be launched from the Finder if it has already been launched from the Terminal.

- ID 43343 - Modifying the label of a Python user knob causes Nuke to crash.

- ID 39429 - Crash Reporting: The 'save to' dialog is hidden behind the crash report dialog when you click **Save Report**.

- ID 38686 - Enabling **Use GPU if available** on supported nodes, such as Kronos, in more than one instance of Nuke at the same time, can cause display corruption and/or entire system freezes. This seems particularly likely to occur on GPUs with low amounts of RAM, such as the GeForce GT 650M.

  As a workaround, upgrade your NVIDIA drivers, or if this is not possible, only enable GPU acceleration in one instance of Nuke at a time.

- ID 35123 - PrmanRender: If you're using Mac OS X 10.8 (Mountain Lion) or above, make sure X11 is installed on your system. Unlike previous versions of OS X, 10.8 and above do not have X11 installed by default.

  For more information, see http://support.apple.com/kb/HT5293.

- ID 34697 - Launching Nuke from a network shared drive causes Nuke to crash on launch.

  As a workaround, either:
    - tarball the installation from Mac OS X and unzip it on the alternate file system (using NFS or Samba, depending on source), or
    - using the command-line, copy the installation from Mac OS X to the network location using the same file system as the destination.

- ID 33970 - Using a node, such as Grade, as a custom viewer process outputs a blank Viewer.

  As a workaround, adjust the Viewer **gain** control to refresh the Viewer.

- ID 22062 - Nuke doesn't currently give the option to restore the autosave of an unsaved script, except when Nuke is run from the command-line.

- ID 13638 - The following graphics cards are not currently supported for Mac:
    - ATI Radeon X1600
    - ATI Radeon X1900

  Users with these cards are able to render from the command-line, but in GUI sessions, the Node Graph renders incorrectly due to a requirement of OpenGL 2 drivers.

- ID 12048 - Nuke crashes if you activate screen sharing when there is no screen plugged in.
- ID 11776 - Node text appears aliased, unclear, or garbled at certain zoom levels.

ModelBuilder

- ID 41352 - Setting the **segments** control to a negative number causes Nuke to crash.
- ID 41148 - Editing geometry UVs and then switching the Viewer to look at the geometry through a ScanlineRender node causes Nuke to crash.

Monitor Out

- ID 250107 - Monitor Output: 10-bit output from Blackmagic DeckLink HD Extreme 3D+ cards at the extents of color ranges is incorrect.

  As a workaround, using the **Desktop Video Setup** utility, ensure that the **SDI Settings 4:4:4 RGB** checkbox is enabled and the **SDI Configuration** is set to **Single Link**.
- ID 40942 - AJA Io Express: Enabling monitor output causes Nuke to crash.
- ID 37700 - AJA Kona LHe+ 2k formats are not displayed correctly.

OCIO

- ID 201193 - Read node **Metadata** tabs occasionally include irrelevant **in** and **out** colorspace controls.

Particles

- ID 41259 - ParticleCache: Setting **emit from** > **points** and connecting the **emit** input to geometry, does not render all frames to the **.nkpc** file.
- ID 39796 - ParticleCache nodes upstream of ScanlineRender nodes display **ParticleCache is out-of-date** errors for negative frame numbers.
- ID 39210 - ParticleCache: Error messages displayed when **read from file** is toggled on and off are not reliably cleared when rendering through ScanlineRender.
- ID 37254 - The progress bar does not cancel if you scrub to a frame that has already been calculated within the particle system.
- ID 18268 - Enabling **color from texture** always renders a solid white alpha for the texture.
- ID 17520 - Geometry representation textures are displayed even when **display** is set to **off**.
- ID 17243 - Using sprites instead of geometry representations causes particles to render behind the 3D grid lines.

Pixel Analyzer and Scopes

• ID 44176 - PixelAnalyzer: The **full frame** sampling **mode** doesn't work immediately in the timeline Viewer when the analyzer is initially added to the layout.

• ID 39180 - Scopes: Switching to a layout with a scope window, while rendering, forces the Viewer bounding box to 1x1 for that frame.

• ID 36508 - Scopes do not currently update when zooming into the Viewer.

• ID 36491 - Scopes clip color values between 0 and 1 when **Preferences** > **Scopes** > **Include viewer color transforms** is enabled.

PrmanRender

• In the Nuke camera, the **window roll** control is not yet mapped to RenderMan.

• ID 27648 - After a security update for Mac OS X, Nuke is unable to load the PrmanRender plug-in the environment.plist file when in GUI mode.

   See http://support.apple.com/kb/TS4267 for more information.

Python

• ID 44296 - Running **nuke.scriptOpen()** at the same time as creating a Python panel causes Nuke to crash.

• ID 40994 - Rendering an Alembic camera using a Python script produces incorrect values when run from the command-line.

   Run the script from Nuke's **Script Editor** to avoid this issue.

• ID 40645 - Using **setInput()** within an **onCreateCallback** doesn't work as expected.

• ID 40534 - Using Python to set metadata in ModifyMetadata nodes does not work from the command-line.

   To work around this issue, run the Python script from Nuke's Script Editor.

• ID 39308 - Accessing a node's x and y positions using the **xpos** and **ypos** controls reports incorrect values.

   As a workaround, either call **nuke.Node.xpos()** or **nuke.Node.ypos()** first, or ensure no nodes are currently selected in the Node Graph.

• ID 38994 - **nuke.Node.screenWidth()** and **screenHeight()** are incorrect when a node is first created if it has an autolabel.

• ID 8063 - Creating many new nodes with **nuke.createNode()** and the in-panel argument at default **(True)** may crash when too many node control panels are created too quickly. The workaround is to

pass the in-panel argument as **False** or else use **nuke.nodes.NodeClass()** (where NodeClass is the type of node to create) to create the node and then connect it to the currently selected node manually.

- ID 6455 - You should not call the Python command **nuke.restoreWindowLayout()** from the Script Editor as that can cause Nuke to crash. Instead, you can use the same command from your **menu.py**, restore layouts by selecting **Layout** > **Restore Layout**, or use a custom menu or toolbar item.

- Nuke sometimes reports errors in Groups and Gizmos, appearing similar to the following:

groupName.NodeName.knobname: unexpected 'k' in '0.knobname'

The problem is most likely that there is an expression using the input TCL command and doesn't validate that there is an input connected. An example expression:

[input parent 0].translate.x

The input command returns 0 when it can't find the requested input, which generates an expression of '**0.knobname**' that doesn't refer to anything. The fix is to restructure the expression to use the value TCL command and specify a default value to return in the case that the expression is invalid. It takes the form:

[value [input parent inputnumber].knob defaultValue]

Here is the modified example:

[value [input parent 0].translate.x 0]

The modified example returns 0 in the event that there is no input 0, and no longer results in an error message.

- There is a Python syntax conflict when assigning knob names on the fly with **nuke.nodes.<node>()** if the knob is called 'in'.

For example, this gives a syntax error:

nuke.nodes.Shuffle(in = 'depth')

while this works because 'in' is a string here and not a keyword:

sh = nuke.nodes.Shuffle()

sh['in'].setValue('depth')

RayRender

- ID 230256 - Soft Shadows are not currently supported.

- ID 197294 - Reflection occlusion is not currently supported.
- ID 196980 - Clipped alpha shadows are not currently supported.
- ID 196776 - Multiple bounce reflecton is not currently supported.
- ID 196124 - RayRender does not currently support refraction.
- ID 195051 - The Wireframe shader node, located in **3D** > **Shader** > **Wireframe**, is not supported by RayRender.
- ID 195004 - Custom lens shaders/projection modes are not currently supported.
- ID 194819 - RayRender does not currently support Deep workflows.
- ID 191108 - Particle sprites are not currently supported.
- ID 174849 - The Displacement shader node, located in **3D** > **Shader**, is not currently supported by RayRender.

Read and Write

- ID 50046 - The default colorspace values when writing using **.mov** codecs differ in command-line and GUI modes.
- ID 48935 - MXF: Importing a certain JPEG2000 file causes Nuke to crash or display the file incorrectly.
- ID 47256 - MXF: Super whites are currently displayed as white in the Timeline Viewer.
- ID 47248 - MXF: Setting **debayer quality** to **High Quality** on some Sony RAW files displays an **error decoding frame** message in the Comp Viewer.
- ID 42717 - Certain **.exr** files rendered from Modo display the **alpha** channel rather than the **rgba** channels by default.
- ID 41006 - The last audio frame of a QuickTime encoded with AAC compression is muted.
- ID 40684 - Rendering certain **h264** encoded **.mp4** files using the **mov32** encoder results in color shifts using QuickTime 10.3 codecs.
- ID 40533 - There are slight differences in color and sharpness when rendering Alexa footage to ProRes 4444.
- ID 40074 - Writing out stereo **.sxr** files with additional channels does not write out both eyes correctly.
- ID 39165 - ReadGeo: When reading in **.fbx** files, the transform/scale state can become incorrect while toggling the **read transform from file** in combination with **all objects** and/or **read on each frame**.
- ID 35611 - Writing .**exr**s with the Write node's **interleave** control set to **channels** adds a superfluous **main** view.
- ID 33863 - FBX geometry: Faces on geometry read in from **.fbx** files are not connected to neighboring faces, leaving gaps in certain circumstances.

This issue is particularly visible when using the EditGeo node, which should not allow you to remove faces from the geometry.

• ID 31424 - Sub-sampling in **.exr** files is not currently supported.

• ID 27211 - Alembic: The state of the Viewer **Lock Frame** control is not always honored for **.abc** files.

As a workaround, ensure that **ReadGeo** > **read on each frame** is enabled.

• ID 21663 - Read: After reading in a stereo/multiview **.exr** file and choosing not to add new views to the project, subsequent reads of any stereo/multiview **.exr** files won't give the option to add new views.

• If you have trouble with FBX files, it may be because they were written with an older version of FBX. If they load very slowly, it is also possible that they are ASCII rather than binary. To get around these problems, you can use the FBX converter on the Autodesk website. It converts between various different formats, including older FBX versions, ASCII, and binary, and is available on Windows, Mac OS X, and Linux.

To download the FBX converter:

1. Go to http://usa.autodesk.com/adsk/servlet/pc/item?siteID=123112&id=10775855.

2. Scroll down to FBX Converter and click on one of the links to start the download.

Render codecs

Rendering with certain codecs occasionally causes Nuke to crash. Due to this, we recommend the following:

• If you're using the Sorensen Video codec, it's recommended you use the Sorensen Video 3 codec instead. If you're unable to switch to Sorensen Video 3, try using a format smaller than 2K for better performance.

• If you're experiencing crashes with Cineform HD, try updating your Cineform codec to version 5 or above. You may need to download the Neoplayer at http://estore.cineform.com/neoplayer.aspx.

• If you're using Avid Meridien, you should only write out in NTSC and PAL.

Roto/RotoPaint Open Splines

• ID 42997 - Rendering artifacts can occur if the **feather** control is used in conjunction with the feather handles in the Viewer.

• ID 42995 - Stereo: Adding an open spline creates the spline in the left view only by default.

As a workaround, select the shape and then manually change the Properties **view** control to include both views.

• ID 42991 - Python API: Moving points on an open spline using Python causes Nuke to crash.

- ID 42932 - Rendering artifacts can appear where the spline hull crosses over itself with negative **feather** values.
- ID 42422 - Rotating the tangent of an end point occasionally causes the hull to behave erratically.
- ID 42413 - Holding **Ctrl/Cmd** to move a point's tangent handles independently causes defects in the hull or feather.
- ID 42412 - Changing the Viewer overlay visibility, such as from **always** to **never**, occasionally produces artifacts in the spline's hull.
- ID 42390 - It is not possible to increase the **width** for individual points if the overall **width** is set to **0**.
- ID 42387/42310 - Cusped points occasionally cause hull rendering artifacts.
- ID 40962 - Animated splines with **varying** width and **feather** occasionally contain slight rendering glitches inside the hull.
- ID 40433 - Roto Open Splines - Shape of hull/feather curve can look incorrect when width changes greatly from one point to the next
- ID 36219 - The **Select Feather Points** tool does not work consistently between the **Open Spline** and **Bezier** tools.

Other Roto/RotoPaint Bugs

- ID 41917 - RotoPaint shape colors don't change when expression linked to another RotoPaint color.
- ID 32459 - RotoPaint: Undoing a point move that created a keyframe doesn't currently undo the keyframe creation.
- ID 32450 - RotoPaint Stereo: Attempting to undo multiple split-control transforms on the same shape reverts the shape to its original position.
- ID 31552 - Point handles for paint strokes, whose lifetime doesn't extend to the current frame, disappear when drag-selected.

  As a workaround, select the shape in the **curves** list to re-display the points.
- ID 30920 - Expression linking extra matrices in the **Transform** tab doesn't work as expected.

> 📝 **Note:** This also applies to SplineWarp matrices.

- ID 30551 - Several levels of smoothing applied to one shape are carried over to subsequent shapes for a single smooth operation.
- ID 29170 - The cut, copy, and paste keyboard shortcuts don't work for entries in the **curves** list.
- ID 28838 - Gizmos from Nuke 6 containing Roto/RotoPaint nodes should be recreated in Nuke 8, but bear in mind that they won't be backwards compatible with Nuke 6 once converted, unless you follow the instructions below:

Nuke 6 scripts containing Roto display a conversion prompt when you open them in Nuke 8:

- Click **Save As** to convert the script to the Nuke 8 Roto format, or
- Click **Ignore** to load the Nuke 6 format into Nuke 8. You might select this option if:
  - You don't intend to make any changes, or
  - You want to overwrite the file with a Nuke 7 and 8 only Roto format when saving.

If you want Nuke 8 scripts to load in Nuke 6, use the **convertToNuke6** or **convertDirectoryToNuke6** Python functions when running Nuke 8 in command-line only mode:

> **Note:** The conversion functions cannot convert stereo-split curves as they are not supported by Nuke 6.

- To convert individual **.nk** scripts:
  ```
  convertToNuke6(fromScript, toScript, overwrite = False)
  ```
- To convert all **.nk** scripts in a given directory:
  ```
  convertDirectoryToNuke6(fromDir, toDir, matchPattern =.*\.nk, overwrite =
  False)
  ```

> **Note:** The pattern is a regular expression.

An example single script conversion and rename to the same directory, from the command-line (or Terminal):

```
$ <NukeInstallDir>/Nuke8.0v1 -t
>>> import nuke.rotopaint
>>> nuke.rotopaint.convertToNuke6(/tmp/myRoto8.nk, /tmp/myRoto6.nk)
```

- ID 26855 - The **undo** and **redo** buttons in the Properties panel didn't work as expected and have been disabled.

  The workaround is to use the undo (**Ctrl/Cmd**+**Z**) and redo (**Ctrl/Cmd**+**Y**) keyboard shortcuts or the **Edit** menu instead.
- ID 21361 - Artifacts are produced until mouse up when painting over a stroke on another frame.
- ID 11524 - Adding strokes/shapes in RotoPaint is slow when there is another RotoPaint after it.
- ID 9238 - Painting on Mac OS X and Linux is slower when the paint cursor is near the edges of the screen.
- The foreground onion skin overlay updates as you paint, rather than only updating with the new stroke on pen up.
- It is not currently possible to clone RotoPaint nodes.

• Interactivity of laying down strokes/shapes in the Viewer may be faster when motion blur is disabled on the layer you are working in.

ScanlineRender

• ID 38329 - Deep renders from ScanlineRender currently ignore the ScanlineRender's **bg** input.
• ID 38205 - Deep: Depth, motion, position, and normals information is occasionally incorrect in semi transparent areas.
• ID 37967 - Deep: Geometry with alpha 0 renders black when the deep output is converted to an image.

SmartVector Toolset

• ID 275683 - SmartVector: Due to VFX Platform library changes, vectors generated by the Nuke 11 SmartVector toolset do not match legacy versions. For example, vectors generated by Nuke 11.0v1 do not match those generated by Nuke 10.5v4.
• ID 196455 - Rendering vectors after correcting the **file** control in the SmartVector node occasionally displays a spurious **No such file or directory** error.

   As a workaround, scrub to a different frame to remove the message.
• ID 175605 - Entering a partial file path in the SmartVector **file** control and then clicking the file browser icon does not open the file browser.

   As a workaround, click **OK** on the error message and then click the file browser icon again.

Text

• ID 48418 - Different operating systems handle the **Shadows** tab **shrink/expand** control differently, producing inconsistent output.
• ID 39556 - In **text edit** mode, it is not currently possible to edit text attributes when the Viewer overlay is disabled.
• ID 39552 - Transforming animation groups using an expression-linked Transform node does not work as expected.

   As a workaround, expression link the **translate x** and **y** controls separately.
• ID 39291 - Splitting the **transform** control on the **Group** tab splits all controls.
• ID 39239 - Transforming a character generated from an expression, and then going to a frame where the character no longer exists, results in the transformation being lost.
• ID 39130 - Splitting the **message** field does not work as expected.
• ID 38789 - Viewer toolbar controls steal cursor focus.

- ID 38425 - The undo history becomes unreliable when the panel focus changes.
- ID 36372 - Selecting a TCL expression in the **message** field doesn't always select the result in the Viewer.

Tracker

- ID 40542 - After tracking and centering a track, the Viewer no longer caches when playing back the tracked frames.

  As a workaround, you can enable full frame processing, though this may increase render times.
- ID 40038 - **Ctrl/Cmd** clicking in the Viewer to select a pixel and then adding a track, sets the tracking anchor coordinates to 0,0.
- ID 39225 - Moving tracking anchors is occasionally unresponsive and jerky.
- ID 39200 - Holding **Shift** and clicking tracks in the Viewer doesn't add to the current selection.
- ID 38356 - The zoom window occasionally doesn't update correctly when scrubbing between frames.
- ID 32359/32353 - Right-clicking on a point in the Viewer doesn't always update the available **Link to** > **Tracker linkingdialog** or **Tracker** options.

  As a workaround, close and re-open the Roto/RotoPaint properties panel to update the **Link to** menu.
- ID 29382 - Tracking keyframes with different sized patterns doesn't work as expected.

  As a workaround, keyframe patterns should, where possible, be of comparable sizes.

VFX Platform

- You may experience issues when importing PySide modules into their Python scripts due to the migration from PySide 1.2.2 to PySide 2.0.

  In some cases, you can just change calls to:

  ```
  import Pyside.some_module
  ```

  to:

  ```
  try:

      import Pyside.some_module

  except:

      import Pyside2.some_module
  ```

However, the definition of some classes has moved between modules in PySide 2.0. This particularly affects any Widget related classes, which have been moved from QtGui to QtWidgets, however there are other cases where this may be experienced.

If you experience any problems with this, please refer to the Qt 5.6.1 documentation, or contact support.foundry.com.

- ID 282593 - Switching to a fullscreen workspace on the primary monitor occasionally causes the secondary monitor to turn black.
- ID 280371 - Mac OS X/macOS only: OpenGL errors are printed on the command line when using an ATI Radeon 5770 GPU.
- ID 277875 - VFX Platform: Switching workspace occasionally draws the new workspace incorrectly.
- ID 277548 - A **QComboBox** with a custom **QCompleter** currently emits incorrect signals.
- ID 275719 - Mac OS X/macOS only: The **Help** > **About Nuke** pop-up is positioned incorrectly on some machines.
- ID 275251 - Mac OS X/macOS only: Hovering over clip instances in the timeline does not change the pointer icon.
- ID 275246/270914 - The terminal or command line displays **libpng warning: iCCP: cHRM chunk does not match sRGB** on start-up.
- ID 274301 - Node toolbar menu items do not always deselect correctly.
- ID 274264 - CameraTracker results from Nuke 11.1 are not identical to previous versions of Nuke, though the differences are negligible.
- ID 272767 - Launching Nuke from the terminal with the **-b** argument has been deprecated as a result of library upgrades to comply with the VFX Platform 2017 requirements. There are two workarounds available on Mac and Linux :
  - Run Nuke from the Terminal with **&** added to the launch command. This allows Nuke to run in the background and returns the command prompt, but closing the Terminal still causes Nuke to close. For example:
    ```
    ./Nuke11.1v1 --studio &
    ```
  - Run Nuke from the Terminal using the **nohup** command. This allows Nuke to run in the background and returns the command prompt, but closing the Terminal does not cause Nuke to close. For example:
    ```
    nohup ./Nuke11.1v1 --studio &
    ```

> 💡 **Tip:** The **nohup** command prints output to **/Users/<username>/nohup.out** or **/home/<username>/nohup.out** by default, but you can specify a different file by appending **> /filepath/filename** to the command. For example:

```
nohup ./Nuke11.1v1 --studio & > /Users/<username>/nuke.out
```

- ID 272750 - The remove all panels button in the node **Properties** panel is displayed inconsistently.
- ID 272504 - The timeline Viewer in and out point previews are not working as expected when scrubbing.
- ID 272442/281108 - The **Licensing** dialog jitters when moved around the screen.
- ID 272338 - The Windows command prompt displays **QWidget::paintEngine: Should no longer be called** on launch.
- ID 272274 - Closing Nuke Studio does not remove the application icon from the task bar.
- ID 271632 - Nuke prints a **libDeckLinkAPI.so** error in the terminal on launch.

Warpers

- ID 32340 - SplineWarp: Using **Ctrl/Cmd**+drag to create rectangles and ellipses doesn't display an overlay until pen-up.
- ID 32083 - SplineWarp: Deleting all but one point on a curve resets its correspondence points to 0,0, which cannot be undone.
- ID 32082 - SplineWarp: Correspondence points are too sensitive when control points are removed.
- ID 32079 - SplineWarp: Moving correspondence points on curves with no keyframes cannot currently be undone.
- ID 30429 - SplineWarp: Transform links are not maintained when the source curve is moved to a new layer.
- ID 31322 - SplineWarp/GridWarp: Preview doesn't handle upstream transforms correctly.
- ID 20000 - GridWarp: When using cropped input, moving control points causes the Viewer to display the cropped image and the black area between the crop box and the format when merged over a background.
- ID 19995 - GridWarp: Locked source and destination grids still allow adding and removing grid lines.
- ID 19835 - SplineWarp/GridWarp: The Viewer LUT is incorrect in **morph** mode, when **mix** is set at an intermediate value.
- ID 19755 - SplineWarp: Placing correspondence points at each end of an open spline causes rendering problems.
- ID 19565 - GridWarp: The Viewer does not show the correct mix amount when in **morph** mode with **mix** set at an intermediate value.
- ID 19386 - GridWarp: All keyframes are removed from the Dope Sheet after undoing, rather than just the latest, and the keyframes remain on the timeline and in the properties.
- ID 19148 - SplineWarp: Rendering fails if a curve is reduced to a single point.
- ID 19079 - SplineWarp: The **C** keyboard shortcut does not currently select the **Add Correspondence Point** tool.
- ID 18712 - GridWarp: The timeline currently shows both source and destination keyframes, even if a grid is not visible in the Viewer.

- ID 18709 - GridWarp: Rotating the transform jack with both grids selected, but in different positions, does not undo as expected.
- ID 18342 - SplineWarp: The spline keyframe + button does not add keys to the Curve Editor or Dope Sheet.
- ID 18304 - GridWarp: Existing control point keyframes are not cleared when you draw a new grid using the **Draw Boundary** Viewer button.
- ID 18019 - GridWarp: You cannot select all grid points in the Curve Editor using **Ctrl/Cmd**+**A** shortcut.
- ID 18012 - GridWarp: The grid can flicker between white and gray when zooming in and out of the Viewer, particularly when the grid is subdivided.
- ID 17697 - GridWarp: In stereo mode, the right view is labeled as **default** when you split controls into separate views.

Windows Only

- Nuke Non-commercial: Navigating to **Help** > **License**, clicking **Deactivate** or **Deauthorize**, and then clicking **Quit**, causes Nuke Non-commercial to crash on exit.

   As a workaround, change the **mode** a few times until it work as expected.
- ID 198430 - Nuke cannot read DNxHD **.mxf** files that have spaces in the file name.
- ID 46759 - File Browser: Location defaults (such as Home, Root, etc.) may not display if you have a previously saved **FileChooser_Favorites.pref** file in your **~/.nuke** directory.

   As a workaround, move or rename the **FileChooser_Favorites.pref** file, and re-launch Nuke.
- ID 40407 - When using a tablet, Nuke does not automatically switch to **Eraser** mode when you use the erase end of the pen.
- ID 39636 - QuickTime: The **Blackmagic 10 bit (v210)** codec defaults to the **YCbCr 8-bit 422 (2vuy) pixel format** due to a bug in the codec, resulting in solid green frames.

   As a workaround, manually set the pixel format to **b64a RGB** to preserve image fidelity.
- ID 35800 - Scopes: The alpha channel doesn't update correctly when modified through a node, such as Primatte or Shuffle, even after the node is removed from the Node Graph.
- ID 28921 - Changing the 3D selection mode does not update until you click in the Viewer.

Miscellaneous

- ID 339241 - MatchGrade: Clicking **Analyze Reference Frames** with a Read node with no valid **file** path displays an **Uncaught C++ exception occurred during the execution of python script!** error.

- ID 312350 - Visual Diagnostics: The **Profile** tab occasionally flickers when the application window is maximized.
- ID 309259 - Documentation: The Python Developers Guide incorrectly references Qt 4.8.5 source code.

  For links to the correct source files, see the Nuke Developers page under **Nuke Qt binaries and source files**: https://www.foundry.com/products/nuke/developers
- ID 273462 - Licensing: Nuke cannot retrieve a license from the license server when the hostname contains **.local**.
- ID 272296 - Adding a user knob and then undoing the action doesn't remove the added knob.
- ID 271804 - Documentation: The node **Properties** panel **?** link to the reference documentation doesn't work as expected.
- ID 271456 - UI: Some interface elements appear larger than usual when compared to previous versions of Nuke.
- ID 271256 - Denoise: Rendering frames to disk with a **Temporal Frame Offset** greater than 1 causes Nuke to crash.
- ID 271074 - PointCloudGenerator: **Track Points** does not work as expected when creating a point cloud from CameraTracker data.
- ID 228258 - Calling **fromScript()** on a knob that has not been added causes Nuke to crash.
- ID 226394 - Preferences: There are currently duplicate **Script Editor** controls under **Other** in the **Preferences** dialog.
- ID 169458 - Compositing Viewer: Setting the **gamma** control to **0** with **Panels** > **Viewer (Comp)** > **use GPU for Viewer when possible** enabled in the preferences, renders the alpha channel black.
- ID 168350 - AMD GPUs are reported as ATI GPUs in the node properties and **--gpulist** on the command line.
- ID 50715 - ZDefocus: Switching the **filter type** to **image** causes Nuke to crash in a customer script.
- ID 49803 - AJA Monitor Output: Setting the NUKE_AJA_CHANNEL environment variable to 4 when the NUKE_AJA_DUALOUTPUT environment variable is set, streams the output to SDI3, rather than SDI4.
- ID 49186 - ColorCorrect: Adding an expression to the curves on the **Ranges** tab and then changing a value, such as **Gain**, causes Nuke to crash.
- ID 46488 - Switching between certain workspaces displays black in the Viewer until the frame is changed.
- ID 46441 - ParticleBounce: Using custom geometry as the bounce object in a particle system occasionally allows particles to pass through the bounce surface.
- ID 42339 - The **Modo** Viewer control scheme (**Preferences** > **Panels** > **Viewer Handles** > **3D control type**) does not work as expected.
- ID 42240 - Setting a channel with a non-standard name to use as the Viewer's **alpha** channel doesn't work as expected.

- ID 42159 - Nodes that use the **Iop::sample()** call to get input pixels, such as LensDistortion, perform poorly when they are downstream of nodes using PlanarIop, such as Denoise.
- ID 41450 - AppendClip forces upstream nodes to re-evaluate on every frame.
- ID 41411 - Loading a script from a disconnected network drive creates an empty script with the same name as the file path to the original.

> ⚠️ **Warning:** If you save this empty script when the network drive is reconnected, the original is overwritten.

- ID 41122 - MatchGrade: **Match Different Clip** mode does not allow you to set keyframes on the **Target** for **.mov** clips with a frame range offset.
- ID 40617 - Some filter nodes, such as Erode (fast), are caching more slowly than in previous versions.
- ID 39459 - Virtual Sliders: Clicking the left-mouse button, while holding down the middle-mouse button, pastes values into the control.
- ID 39407 - Project3D: The node class name has changed to **Project3D2**. As a result, the Nuke<>Mari bridge won't work unless all instances of Project3D are renamed appropriately in the **mari_bridge.py** file.
- ID 39365 - The Viewer **headlamp** control can not currently be managed using expression links.
- ID 39287 - Plug-ins: Loading scripts with plug-ins compiled against older versions removes the nodes from the Node Graph.
- ID 39260 - Custom knobs on Groups and NoOp nodes cannot be retimed.
- ID 39122 - Switching the Viewer to **wipe** mode and wiping between inputs with different format sizes causes corruption and constant refreshing in the Viewer.
- ID 38713 - Capture: Roto opacity and feather settings are not included in captured images.
- ID 35661 - Capture: Capturing the Viewer with a custom file path saves the file path in the script, resulting in error when the path doesn't exist:

```
Flipbook render failed: viewerCaptureOp: Cannot write to specified path
```
- ID 35659 - Capture: Capturing a 3D scene containing lights produces Viewer flashes in the captured images.
- ID 32856 - PositionToPoints: Textures occasionally disappear during playback or when mousing over the Viewer.
- ID 32666 - FrameHold nodes have no effect on Deep nodes.
- ID 32628 - DeepToPoints: Command-line rendering appears to calculate renders even when render is set to **off**.
- ID 32497 - The R3D parameter labels in Nuke aren't entirely consistent with REDCINE-X and Hiero.

- ID 32219 - DepthToPosition: Reading depth information from the same layer as the **output** layer produces corrupt output.

  As a workaround, shuffle the depth information to an alternate layer.
- ID 32118 - Card3D: When **motionblur** is enabled in the properties, FrameHold and TimeOffset nodes are ignored when connected to the **cam** or **axis** inputs.
- ID 31803 - Using **Shift**+drag on a control's animation icon only copies the value for the current frame, not the entire expression.
- ID 31714 - In the Viewer settings, enabling **3D** > **show_prim_bbox** does not display individual bounding boxes for polymesh primitives.
- ID 31310 - TimeOffset: Checking **reverse input** doesn't affect cameras, lights, or axes.
- ID 31238 - RAM cache: Any action that changes a frame's hash value, it's unique identifier, causes the cache to release. Actions such as adjusting the Viewer **Gamma**, **Gain**, or **channels** dropdown affect the frame hash.
- ID 30502 - Copying and pasting spline keys does not work as expected in the Dope Sheet.

> **Note:** This known issue only applies to Roto and SplineWarp keys.

- ID 30256 - Script Editor: Flagging a control as invisible using **setFlag()** is not honored when the node is copy/pasted in the Node Graph.
- ID 30173 - Manipulating 3D handles in the 2D Viewer is unreliable.
- ID 29677 - Connecting a FrameHold node to an animated Camera and connecting both to a Scene node only displays the animated Camera in the Viewer. There should be two cameras: one static and one animated.
- ID 29083 - Using **Create Camera** in the 3D Viewer only sets position and rotation. The **focal length** of the new camera does not match that of the Viewer camera.
- ID 28291 - Nuke crashes on start up if the **disk cache** location set in the **Preferences** is no longer available.
- ID 20431 - CameraTracker: It's not possible to pick colors in the Viewer with the control panel open.
- ID 20204 - Multitexturing: When **Preferences** > **Viewers** > **Multiframe** is enabled, increasing **downrez** in the Viewer toolbar can cause textures to flicker in the 3D Viewer.

  You can switch back to **Classic** mode or avoid using proxy in 3D to workaround this issue.
- ID 19933 - ReadGeo: Geometry occasionally doesn't display as a solid until you click in the Viewer.
- ID 19185 - Attaching an FBX ReadGeo to the Viewer occasionally causes a slight graphical glitch in the **Properties** panel.
- ID 18649 - The transform jack is currently scaling incorrectly from the corner pivot point.

• ID 12505 - Motion Vector output has been improved, but still doesn't work properly because some large polygons are clipped by the front camera plane.

  You can minimize this effect by increasing the geometry **tessellation max** parameter.

• ID 12424 - Ultimatte: Overlays are not updating correctly or reverting when panning or zooming.

• ID 11620 - In the 3D Viewer, there is currently a conflict between 3D geometry selection and points drawn with RotoPaint. This only occurs if you have two Viewers open, one in 2D mode and the other in 3D mode, and you have the panel for the RotoPaint visible.

• ID 9521 - Currently, the Nuke Viewer cannot cache very large plate sequences in float. The limit per frame is 50MB. If your frames are larger than this, you may need to switch to proxy mode for the caching to work.

• ID 5922 - At the moment, cloning does not work properly with all OFX nodes. This affects, but is not restricted to, any nodes that have an analysis pass.

• ID 5690 - Windows run-time libraries are not packaged properly with Nuke.

  Nuke runs correctly from a network install on Windows without specifically installing the run-time libraries, though we still recommend that you do so as there are still some minor problems without them.

• ID 5083 - Flipbooking the output of the Anaglyph node asks which view you want to render. This question is unnecessary as the result is an anaglyph image. Irrespective of what view you choose, the flipbook output is the same.

• File types in Windows and Mac OS X are associated with the standard version of Nuke by default, so if you save a script on NukeX using features that are only included in NukeX (such as CameraTracker or FurnaceCore) and then double-click on the script icon to open it, it opens in standard Nuke instead of NukeX.

• CameraTracker: Canceling lens distortion initialization results in corrupt tracks.

• 3D Camera: If you want to navigate through the 3D point cloud created by the CameraTracker node when using **Create Scene**:

  • Select the Camera that was created in the 3D view when using the **Create Scene** button.

  • Press **F** to focus on the selected Camera. You can now navigate around the cloud. Do not try to focus (using **F**) on the point cloud. The resulting tumble camera movement is likely to be jumpy.

• Plug-ins installed using the Nuke Plug-in Installer may not work correctly as they were compiled against an earlier version of Nuke.

Known Issues Specific to Nuke Studio and Hiero

AAF

• ID 274824 - Elastic keyframes imported from Avid do not translate correctly into Nuke Studio.

Create Comp

• Multi-view, such as stereoscopic, is not supported for clip instances created using right-click **Effects** > **Create Comp**.

• ID 47044 - Inserting scripts into comps containing Text nodes using unsupported fonts causes Nuke Studio to crash when the Text nodes are disabled.

• ID 46470 - Create Comp: Enabling **Collate Shot Name** in the comp export preset offsets the comp frame range compared to the annotations precomp frame range.

• ID 41665 - There are currently no options to load or overwrite an existing script when you select **Create Comp**.

Exporting

• ID 49024 - Enabling the **Collate...** options in the **Export** dialog when exporting ignores the **Media** tab **Output Resolution** setting for the track above, and produces output with incorrect formatting.

• ID 47828 - Exporting retimed or reversed clips as **.xml** does not work as expected when imported into Final Cut Pro.

• ID 46403 - Controls set in the **Export** dialog **Content** tab occasionally default to the values from the **Nuke Write Node** Content preset.

Linux Only

• ID 282599 - Linux only: Input and timecode metadata is currently incorrect in the timeline Viewer if the framerate is changed.

• ID 239672 - Reading files from NTFS disks/partitions can be extremely slow, particularly for large files. This is a limitation of Linux NTFS file systems, rather than Foundry products.

 We recommend avoiding timeline playback that relies on source footage from NTFS disks/partitions.

• ID 235327 - CPU usage can reach 100% on a single thread during flipbooking, causing Nuke to become unresponsive.

• ID 167058 - PulseAudio (ALSA) can cause Nuke Studio to crash or impair playback.

 As a workaround, you can stop the **pulseaudio** daemon:

> 1. Open **/etc/pulse/client.conf**
>
> 2. Set **autospawn = no** and **daemon-binary** to **/bin/true**. Ensure these lines are not commented out.
>
> 3. Call **ps -e | grep pulse** to check the process is still running.
>
> 4. Call **pulseaudio --kill**

5. Call **ps -e | grep pulse** again to check the process has stopped.

• Linux only: Nuke Studio does not currently support any QuickTime audio reading. Support for audio on Linux is scheduled for a later release.

• ID 32613 - Dragging clips to the timeline with certain older NVIDIA drivers occasionally causes Nuke Studio to crash.

   As a workaround, ensure that you have the latest NVIDIA drivers installed, available from:

   www.nvidia.com/Download/index.aspx?lang=en-us

Mac OS X/macOS Only

• ID 39113 - QuickTime ProApps Codecs v1.0.3 break HDV and XDCAM on Mac OS X 10.7.5, and earlier.

   This is a codec issue rather than an application issue.

• ID 34779 - The shortcut for **Clear In/Out Points** (**Alt**+**U**) is not always triggered correctly due to a conflict with the combination for the umlaut symbol.

   To work around this, press **U** momentarily before **Alt**+**U**.

OCIO

• ID 198348 - Saving and closing a project that uses an OCIO config, and then relocating the Nuke install path, causes a **Could not load OpenColorIO config** error on reload.

Preferences

• The **Preferences** > **Path substitution** table for cross platform compatibility currently only comes into effect at project load, not EDL/XML import.

   As a workaround, import your sequence and set the **Path substitution** rule, then save the project and reload to force the conversion.

Python API

• ID 50113 - QActions are not added to the **Edit** menu in the menu bar when finding the menu action by name.

   As a workaround, use the **objectName** (**foundry.menu.edit**), where possible.

• ID 44394 - Calling **hiero.core.addPathRemap()** does not work for soft effect file paths.

Read and Write

- ID 278312 - Read/Write: The import progress bar occasionally persists after the import is complete, and cannot be closed.

  As a workaround, save and close the project, then restart Nuke Studio and reload the project.
- ID 49912 - HieroPlayer: Projects created in version 1.9, or earlier, are not editable in HieroPlayer 9.0.
- ID 46174 - XML: Shot names are occasionally not imported correctly from Adobe Premiere **.xml** files.
- ID 46100 - Exporting: Export speeds may be slower than expected. This may be due to the **Rendering** preference set to **limit renderer**.
  As a workaround, you can change the preference **Performance** > **Threads/Processes** > **Rendering** > **export renders** to **no renderer limits** to improve rendering speeds. You can also experiment with the custom renderer limits to adjust performance on your machine.
- ID 39897 - Importing and playing back very large format **.tif** files causes Nuke Studio to crash.
- ID 39557 - Writing **.exr**s with 200+ layers, when **interleave** is set to **channels**, can be sluggish.
- ID 36726 - Executing **Clip** > **Rescan Clip Range** displays frame read errors if the rescan adds frames to the clip.
- ID 35080 - QuickTime: Certain files read into Nuke Studio with a different start timecode to other applications, such as Premiere or Resolve.
- ID 31549 - Single layer exports from multi-pass clips fail if the selected layer is not a default Nuke layer, such as **depth** or **motion**.
- ID 28067 - Certain formats produce no monitor output, such as 2K 23.98 and 720P 25.
- ID 18880 - R3D: The aspect ratio of anamorphic **.r3d** footage is not displayed correctly when added to the timeline.

Soft Effects

- ID 280413 - Soft Effects: The Text effect cursor placement shifts incorrectly after typing first character.
- ID 278275 - Soft Effects: Closing a Timewarp effect's **Properties** panel disrupts the interface briefly.
- ID 275314 - Soft Effects: Additional keyframes are added incorrectly when animating Text effects.
- ID 230536 - The Burn-in effect does not maintain a constant text baseline for all characters when the format is changed.
- ID 175574 - Undo and redo of **Properties** panel changes can be unreliable if a soft effect delete is in the same undo stack.
- ID 50442 - TimeWarp: Applying a TimeWarp to a clip instance occasionally causes the associated sequence bin item to display an error.

- ID 50441 - TimeWarp: Applying a TimeWarp to clip instances retimed to values other than 100% does not work as expected.
- ID 49771 - Text/Burn-in: Nuke Studio doesn't warn you if the font used in an effect could not be found.
- ID 49298 - Burn-in: The Burn-in effect does not auto-update when switching between sequences until the playhead is moved.
- ID 49112 - Dissolve transitions do not work as expected in Custom soft effects, based on the examples provided here:

```
<install_directory>/pythonextensions/site-packages/hiero/examples/custom_
soft_effect.py
```

- ID 48970 - Burn-in: Burn-in elements are not updated automatically when the underlying metadata is updated.

  As a workaround, either change the frame displayed in the Viewer or choose an alternate element from the dropdown controls.
- ID 48878 - Burn-in: The Burn-in effect is currently a gizmo and cannot be cloned on the timeline.
- ID 48098 - Adding a transition when a Text effect containing an expression is on a track above, causes text rendering to fail during the transition.
- ID 48097 - Adding a transition when a Text effect containing an expression is on a track above, causes the text size to reset.
- ID 47075 - Exporting sequences containing clip-level Text effects using the **[frame]** expression writes incorrect frame numbers.
- ID 45835 - Expression links are incorrectly allowed between node and soft effect controls in the Properties panel, if the node and effect names are identical.
- ID 42438 - Effects are only visible in the Viewer if there is a clip instance below them in the timeline.
- ID 42401 - Renaming a soft effect does not update the clip instance until you click in the timeline.
- ID 42307 - Adding soft effects at clip level, using **Open In** > **Timeline View**, is only available using the toolbar button on the timeline panel. The right-click **Effects** menu is currently disabled.

Timeline

- ID 43913 - Locking a track currently prevents adding clip instances from the locked track to the Viewer input buffers. You can still open clip instances in the various right-click **Open In** options and access clip instance metadata.
- ID 41745 - It is not currently possible to drag-and-drop a clip to a new track between or below existing tracks.

  As a workaround, drag the clip to a new top-level track and then manually move the track to the required position.

- ID 27484 - It is not currently possible to alter the **Output Resolution** of clips opened using the right-click **Open in Timeline** option.

Timeline Disk Caching

- ID 280256 - Opening a Text effect's **Properties** panel directly after project load causes the cache bar to disappear.
- ID 272897 - Caching continues after closing the project associated with the frames being cached.
- ID 270934 - The caching logic does not currently account for gaps in sequences, resulting in the caching state icon remaining gray for fully cached sequences.

Timeline Read Nodes

- ID 313013 - Opening the Node Graph from the Project bin and then returning to the timeline environment behaves as if the left mouse button is held down.

  As a workaround, left-click in the timeline to cancel the mouse press.
- ID 310067 - Loading large projects is currently slower than expected.

Windows Only

- ID 314088 - Localization: The first frame of localized files in the outdated state, colored red, do not always update correctly.
- ID 49339 - Soft Effects: The background on Burn-in effects, when enabled, alters size depending on the timecode displayed.
- ID 28701 - Nuke Studio cannot currently parse Unicode characters during export.

Miscellaneous

- ID 313849 - Localization: Reading certain multiview **.exr** files causes Nuke to crash.

  As a workaround, rename or move your **.nuke** folder and re-launch Nuke to refresh the **uistate.ini** file.
- ID 272723 - Closing Nuke Studio when it was launched from the command line does not end all Nuke processes.
- ID 200015 - Selecting multiple bin clips can cause the right-click menu to respond slowly.
- ID 167919 - Localization: Re-importing clips into the Node Graph or project bin multiple times retains the original localization policies settings.
- ID 50490 - Audio: Zooming in on a waveform displays a **Failed to decode audio** error in the timeline.

- ID 50102 - Adding a custom Hiero window to a workspace and then saving it as the Nuke default workspace causes Nuke to crash on start up.
- ID 46235 - Comps with relative paths are not currently working when imported into the project.
- ID 42462 - Cache pausing stops working if any change is made to the timeline.

Developer Notes

Here are the changes relevant to developers. See **Help** > **Documentation** from the Nuke menu bar or www.thefoundry.co.uk/products/nuke/developers/111/ndkdevguide/appendixc/index.html for more information.

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 plugins and/or make changes to the source code.

Release Type	Example	Compatibility	Recompile	Rewrite
Version	10.0v1 to 10.0v2	API and ABI		
Point	10.0v1 to 10.5v1	API	●	
Major	10.0v1 to 11.0v1	-	●	●

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")
```

New Features

There are no new features in this release.

Feature Enhancements

• ID 197003 - Localization: You can now query a Read node's localization state using Python API calls. See File Localization API Extension for more information.

Bug Fixes

• ID 348068 - Python: The **onDestroy()** callback was called twice on exit.

Release Notes for Nuke and Hiero 11.2v1

Release Date

17 July 2018

Qualified Operating Systems

• macOS Sierra (10.12) or macOS High Sierra (10.13)

• Windows 7 or Windows 10 (64-bit)

• CentOS 6 or CentOS 7 (64-bit)

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

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

With graphics drivers capable of running CUDA 8.0 & 6.5 or above.

• On Windows and Linux, CUDA graphics drivers are bundled with the regular drivers for your NVIDIA GPU. Driver version r361 or above is required.

Go to http://www.nvidia.com/Download/Find.aspx?lang=en-us for more information.

• On Mac, the CUDA driver is separate from the NVIDIA graphics driver and must be installed, if you don't have it already. The minimum requirement is driver version r361 which can be downloaded from www.nvidia.com/drivers.

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

AMD

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

Windows GPU	Driver	Linux GPU	Driver
AMD FirePro W8100	17.Q2.1	AMD FirePro W8100	17.Q2.1
AMD FirePro W9100	17.Q2.1	AMD FirePro W9100	17.Q2.1
AMD Radeon R9 Fury X	17.4.3 - 17.6.2	AMD Radeon R9 Fury X	17.10
AMD Radeon RX 480	17.Q2.1	AMD Radeon RX 480	17.Q2.1
AMD Radeon Pro WX 7100	17.4.3 - 17.6.2	AMD Radeon Pro WX 7100	17.10

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

• On Mac an AMD FirePro GPU on late 2013 Mac Pro 6,1, mid 2015 MacBook Pro 11,5, and late 2016 MacBook Pro 13,3, running OS X 10.9.3 'Mavericks', or later.

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 FirePro W9100s.

New Features

Improved Tab Menu

The Node Graph's tab menu has been improved, including a new search algorithm, allowing you to search for and add nodes more easily using partial names. Commonly used nodes are weighted so that they appear higher up the list of choices and you can also favorite nodes, pinning them to the top of the list with the star icon. Weights and favorites can be enabled, disabled and cleared in **Preferences** > **Behaviors** > **Nodes**. The **J** Bookmarked nodes menu also supports the updated search functionality.

New Interface for User Knob Creation

Also known as Drag-and-drop knobs (DnD), this update significantly reduces the time spent exposing user knobs and adding custom knobs to node properties panels within Nuke. As a result, you can create and modify gizmos and Live Groups more easily, stream-lining collaborative workflows.

Instead of right-clicking and selecting **Manage User Knobs**, simply click the edit button at the top of the **Properties** panel to get started. You can drag-and-drop knobs between open node panels or add your own using the knob icons listed at the top of the panel. You can also order, hide, customize, and delete knobs within the **Properties** panel. If you work with floating panels, you can float the **User Knob Editor** too. Click the edit button again to finish customization.

Nuke Studio Project Panel Improvements

These are a number of enhancements to the way you can organize, manage and, navigate through your projects in Nuke Studio. These enhancements also apply to the spreadsheet and the timeline.

- **New Sorting** - a new way to arrange your project bin alphabetically or by custom order. This is accessible through the new buttons at the top of the **Project** panel and it has controls for the hierarchy view and on the bin view independently.
- **Improved Searching** - improved search functionality on the **Project** panel and on the spreadsheet with new options to search all metadata or not, and to use all or any of the input string.
- **Poster Frame** - a new poster frame functionality allows you to set the poster frame for your source clips and shots. You can set it for single or multiple source clips using absolute or relative frames, which is useful when you have shots with slates or black handles.
- **Color Assignments** - you can now assign colors to your source clips, shots, and spreadsheet events. You can also set colors based on file types.

Smart Vector Toolset Improvements

The Smart Vector Toolset in NukeX has several improvements that speed up the generation of vectors and extend the use cases where the toolset can be used.

- **GPU Acceleration** - the SmartVector and VectorDistort nodes have been rewritten to make the best use of the GPU, dramatically reducing the time it takes to both create the smart motion vectors and use them to warp images.
- **Mask Input to SmartVector** - you can now supply a mask to the SmartVector node to specify regions containing unwanted objects or motion to help with handling occlusions and image boundaries.
- **Background Vector Rendering** - you can now render vectors in the background using the **Export Write** button.

File Localization API Extension

Building on the updates to the localization system in Nuke 11.1, the system has been further extended to provide greater control over customization through new callbacks. We have also added a new environment variable, NUKE_LOCALIZATION_NUMWATCHERS, to improve performance when checking the validity of localized files, especially when working with scripts with a high number of Read nodes or a high number of frames.

Additional Python callbacks:

The following Python callbacks have been added, giving further control over files and Read nodes as they are added to the queue to be localized and transition between being out-of-date and localized.

Callback functions executed on each file's localization event:

- localization.FileEvent.ADDED
- localization.FileEvent.REMOVED
- localization.FileEvent.OUT_OF_DATE
- localization.FileEvent.CACHE_FULL
- localization.FileEvent.DISK_FULL

Callback functions executed on each Read nodes localization event:

- localization.ReadStatus.NOT_LOCALIZED
- localization.ReadStatus.LOCALIZING

• localization.ReadStatus.PARTIALLY_LOCALIZED

• localization.ReadStatus.LOCALIZED

• localization.ReadStatus.OUT_OF_DATE

• localization.ReadStatus.LOCALIZATION_DISABLED

Auto switch from localized to network files:

A new preference, **read source files when localized files are out of date**, has been added. When enabled, Nuke checks the localized files against the source files and switches to their source files if the local files become out of date.

Control over the number of simultaneous file checks:

A new environment variable NUKE_LOCALIZATION_NUMWATCHERS controls the number of simultaneous file checks, improving performance when working with large scripts over a high capacity network. We have found that checking the status or force-updating a large number of reads or large sequences could create a bottleneck as Nuke evaluated the files. To improve this we have added an option to increase the number of file checks that can occur at once to expedite this process with an appropriate network configuration.

ARRI SDK Update

ARRIRAW has been updated to version 5.4.3.5, adding the following features:

• Alexa LF formats and color tables

• Rec2100/PQ and Rec2100/HLG HDR colorspaces

• Extended white balance CC values from -16 to +16

The full ARRI SDK release notes are publicly available from:
http://www.arri.com/support/downloads/searchable_downloads/

R3D SDK Update

R3D SDK has been updated to version 7.0.6, adding the following features:

• R3D Weapon Monstro 8K VV and Helium 8K S35 Sensors

• ImageColorDCIP3, ImageColorProPhotoRGB, ImageColorDCIP3D65 colorspaces

• ImageGammaHybridLogGamma, ImageGamma2_2, ImageGamma2_6 Gamma Curves

> **Note:** Support for IPP2 will be available in a future release.

The full R3D SDK release notes are publicly available in the SDK download from:
https://www.red.com/developers/

New Deep Compositing API

Nuke has a new API for Deep Compositing, which manages memory more efficiently resulting in improved performance for some nodes. Nuke's native deep compositing nodes have been converted to this new API and in our tests, scripts are processed up to 1.6x faster compared to Nuke 11.1. Performance improvements vary by node and set up; for example, DeepRecolor and DeepTransform show the best gains, while DeepColorCorrect has little improvement.

To take advantage of these performance improvements, custom deep nodes need to be converted to the new API. Existing custom nodes still work in Nuke 11.2, defaulting to the pre-existing API, but will not have any improvement to performance.

Details on the API changes and converting custom nodes are available in the NDK Developer Guide.

Deep Compositing Improvements

In addition to the new API, Nuke 11.2v1 includes a number bug fixes and improvements to the deep compositing tools including the DeepExpression node having functional parity with Nuke's standard Expression node.

Workflows using metadata have also been added to Nuke's Deep nodes. Metadata nodes (ModifyMetadata, ViewMetadata, CopyMetadata, and so on) can now be used in a tree with Deep nodes.

The DeepMerge node has been updated to allow you to use metadata from either the A input, the B input, or both.

> **Note:** 2D nodes should not be inserted in between Metadata nodes within a deep stream. The Viewer must be connected to a Deep node rather than a Metadata node in order to view the output of deep streams.

Feature Enhancements

• ID 134441 - Deep: The functionality of the DeepExpression node has been expanded to match the standard Expression node.

- ID 139582 - Deep: The **Preferences** dialog now includes a control to choose the connector color between Deep nodes under **Panels** > **Node Graph** > **Arrow**.
- ID 151165 - DeepWrite: Only **Zip1** compression is supported for **.exr** output. The other options have been removed.
- ID 158323 - Deep: A new control, **target input alpha**, has been added to the DeepRecolor node. When enabled, the **color** input's alpha is distributed among the samples so that the final resulting alpha after flattening of the deep data matches the **color** input's alpha.
- ID 163251 - Deep: The nodes listed under MetaData in the nodes toolbar now work in Deep node trees.
- ID 196909/196912/196941/197559 - SmartVector: Render progress bars and error reporting has been improved.
- ID 196839 - Deep: A new **deep** option has been added to the DeepRecolor node's **set bbox to** control, allowing you manage bounding boxes between deep and standard nodes.
- ID 219397 - SmartVector: A new control, **Flicker Compensation**, has been added to the **Properties** panel. When enabled, SmartVector compensates for luminance changes in the source image when calculating vectors.
- ID 278255 - Localization: You can now use **Cache** > **Localization** > **Force Update** > **Selected** on nodes when Localization is paused.
- ID 333431 - Mac OS X/macOS only: Nuke now supports AMD Radeon Vega GPUs.
- ID 345759 OCIO: The Log3G10 LUT has been added to Nuke's standard LUTs list.

Bug Fixes

- ID 136654 - R3D: Certain single frame **.r3d** files beginning on frame 0 were interpreted incorrectly as starting on frame 1.
- ID 142813 - Deep: Executing a script in terminal mode that read in a Deep image then wrote it to disk caused Nuke to crash.
- ID 145272 - Node Graph: The Tab menu included a **@;&<node>Branch** entry incorrectly.
- ID 145308 - DeepSample: Particles employing sprites caused the **deep.front** and **deep.back** channels to display **Inf** values in a customer script.
- ID 148823 - Nuke Assist: Nuke scripts containing Keylight or FurnaceCore nodes checked out a nuke_ i license.
- ID 150961 - Deep: It was possible to connect Framehold nodes to Deep nodes, even though they did not function.
- ID 154977 - Deep: The DeepColorCorrect node culled samples incorrectly.
- ID 161956 - Deep: The DeepExpression node did not clamp output in the same way as the standard Expression node.

- ID 161979/328288 - Deep: The DeepRead node set the **width** and **height** controls to 1 under the correct value.
- ID 168261 - Deep: Copying and pasting DeepExpression nodes discarded control values.
- ID 174062 - Documentation: It was not clear in the documentation that Nuke scales non-HD DNxHD output to 1080p.
- ID 196487 - Documentation: The port range of local Frame Server processes was missing from the documentation.
- ID 196940 - ARRIRAW: The **uuid** metadata for **media.arri.camera** displayed incorrectly.
- ID 201586 - Mac OS X/macOS: The **Restore Snapshot** function did not work as expected.
- ID 202223 - Deep: DeepWrite nodes included several unusable EXR **compression** options.
- ID 221568 - Deep: Enabling **specify z** in the DeepFromImage **Properties** panel caused DeepWrite nodes to output corrupt data.
- ID 251544 - Monitor Output: Switching from **Active** to **A/B** mode with **Full Resolution Stereo** selected caused the monitor to display multiple images incorrectly.
- ID 253572 - Calling **Array_Knob.valueAt()** ignored the **view** argument and returned incorrect values.
- ID 271373 - A **QOpenGLContext::swapBuffers() called with non-exposed window, behavior is undefined** error was occasionally printed to the command line.
- ID 272541 - Linux only: Changing the root directory for cached files occasionally caused the timeline disk cache state to become inconsistent.
- ID 273650 - OCIO: Looks were not applied correctly in the timeline Viewer.
- ID 280273 - Monitor Output: 10-bit monitor output signals were different from Nuke and Nuke Studio.
- ID 281553 - Linux only: Setting the OCIO environment variable did not load LUTs correctly.
- ID 286434 - Soft Effects: Cloning effects occasionally caused the clone to misbehave.
- ID 305193 - Frame Server: Background renders did not support container formats, such as **.mov** files.
- ID 306607 - Timeline Disk Caching: Enabling or disabling **See Through Missing Media** in the timeline Viewer controls did not clear the cache.
- ID 308402 - Python Developers Guide: The **Extending Nuke with PySide** section was out-of-date.
- ID 310306 - VectorDistort: The **mask_channel** and **premult** controls did not work as expected and have been removed.
- ID 328914 - DnD: Swapping tabs did not deselect knobs.
- ID 329006 - Timeline Disk Caching: Duplicating a sequence stopped the **Clear Sequence Range** function working on the original sequence.
- ID 329014 - Timeline Disk Caching: Clearing the cache deleted files that were in use in duplicate sequences without warning the artist.

- ID 329029 - Timeline Disk Caching: Enabling or disabling **See Through Missing Media** in the timeline Viewer controls did not clear the cache.
- ID 329113 - Clearing or closing large scripts occasionally caused Nuke to crash.
- ID 330219 - DnD: Edit mode selection boxes were occasionally visible after actions were completed.
- ID 331325 - Node Graph: HTML tags were occasionally included in Bookmark names in the Tab menu.
- ID 332248/332276/337288/348013 - DnD: Colorwheels and user knob controls with no labels were not marquee selectable and the highlight or placement was inconsistent.
- ID 332312 - ARRIRAW: Certain colorspace options displayed **Arriraw Decoder Settings** errors.
- ID 333372 - Timeline Disk Caching: Changing the values in a cached soft effect and then reverting the change did not re-instate the cache.
- ID 333381 - Timeline Disk Caching: Canceling a disk cache render did not list the render task as canceled in the **Timeline disk cache render** panel.
- ID 335607 - DnD: Colorwheel knobs with no label could be hidden by other knobs.
- ID 336052 - Denoise: Rendering a script from the command line with **Temporal Processing** enabled took a long time to process and included a blank first frame.
- ID 336903 - Windows only: Opening a comp referencing a certain **.r3d** file caused Nuke Studio to crash.
- ID 337293 - DnD: Knob selection highlights did not scale with panel size adjustments.
- ID 337666 - DnD: Text input knobs did not allow other knobs to be added to the same properties line.
- ID 338425 - Localization: Manually setting the localization mode to the current setting displayed an error.
- ID 338746 - Deep: Comparing DeepColorCorrect nodes using the DeepCompare node (available from the **X** menu or by using **Update**) produced inconsistent results.
- ID 338755 - Deep: The DeepCompare node (available from the **X** menu or by using **Update**) ignored the bounding box.
- ID 338764 - Deep: The DeepCompare node (available from the **X** menu or by using **Update**) did not work as expected with DeepCrop nodes.
- ID 338777 - Deep: The DeepCompare node (available from the **X** menu or by using **Update**) **multiplier** control behaved differently to the same control in the standard Compare node.
- ID 339768 - Localization: Pausing localization occasionally didn't work as expected.
- ID 339978 - Deep: The DeepCompare node (available from the **X** menu or by using **Update**) occasionally produced channel mismatch errors.
- ID 339987 - Deep: Viewing a DeepFromImage node's output caused Nuke to crash.
- ID 340112 - Denoise: Resizing and moving the analysis box displayed CUDA errors in the Viewer.
- ID 340282 - Python: Dragging a link from a browser into Nuke did not trigger a drop event.

- ID 340300/340559 - The desktop shortcuts linked to the wrong binary.
- ID 340791 - Context-sensitive controls, such as those exposed when reading **.exr** files, failed to copy and paste correctly when the control was driven by an expression.
- ID 341283 - Project Panel: Right-clicking a source clip and selecting **Clip** > **Reconnecting Media** caused Nuke Studio to crash.
- ID 342109 - RED SDK: Loading legacy scripts into Nuke 11.2 displayed rounding errors.
- ID 342324 - OCIO: Multiple **createLutAndShader** error messages were printed to the command line at start-up.
- ID 342580 - Deep: Disabling a DeepRead node upstream of a DeepMerge node caused Nuke to crash.
- ID 342627 - Soft Effects: Retiming **.r3d** clips with the TimeWarp effect displayed an error message.
- ID 342740 - RED SDK: Copying and pasting **.r3d** files enabled certain knobs incorrectly.
- ID 342973 - Deep: Connecting a Viewer to a DeepToPoints node while rendering a script in the Viewer caused Nuke to crash.
- ID 342983 - Deep: Output from Deep scripts containing DeepRecolor nodes was not consistent with legacy Nuke releases.
- ID 343390 - Linux only: The Viewer right-click **Stereo Modes** > **OpenGL Stereo** option was missing.
- ID 343510 - Linux only: Rendering an **.nk** script containing **.jpeg** files Pythonically returned an error.
- ID 343568 - CameraTracker: Exporting distortion from CameraTracker used the LensDistortion1 node, rather than the improved LensDistortion2 node.
- ID 343643 - Windows only: Denoise/VectorBlur nodes displayed CUDA errors in the Viewer during normal operation.
- ID 343699 - RED SDK: Several RED colorspace settings were missing from Nuke.
- ID 343943 - DnD: Some text knobs could not be exposed using drag-and-drop.
- ID 344083 - R3D: Project panel thumbnails were blank for certain **.r3d** files.
- ID 344303 - Deep: DeepHoldout caused Nuke to crash in certain scripts.
- ID 344552 - VectorDistort: Disabling **Use GPU if available** caused Nuke to crash.
- ID 344947 - Windows only: Executing **basicReadCallback.py** caused Nuke to crash on exit.
- ID 344971 - SmartVector: Connecting a Denoise node downstream of a SmartVector node displayed an error.
- ID 345702 - Linux only: Minimizing Nuke caused RAM caching to stop, even with **pause caching when the application goes to the background** disabled.
- ID 346215 - Hiero: Opening a project containing a large number of files displayed a **Too Many Open Files** error message and caused the application to crash.
- ID 346766 - Deep: Adjusting the controls in a DeepReformat node caused Nuke to crash.
- ID 346935 - Write: The **yuv** option was missing from the **file type** control.
- ID 347085 - Kronos: Single GPU command line renders were faster than Multi-GPU renders.

- ID 347426 - Deep: Connecting Deep nodes to a ScanlineRender node and Metadata node produced odd results.
- ID 347672 - SmartVector: Rendering certain images with **premult** enabled created blurred output.
- ID 347745 - Python: Custom panels were limited to simple layouts.
- ID 347798 - DnD: Enabling and disabling editing mode caused floating panels to resize incorrectly.
- ID 347828 - DnD: The tooltips for the drag-and-drop interface were not OS-specific.
- ID 347835 - R3D: The TimeWarp soft effect altered color output in the Viewer incorrectly.
- ID 347840 - Monitor Output: Video output applied colorspaces and ViewerProcesses incorrectly, resulting in artificially dark images.
- ID 348032 - Windows only: Rendering a comp that referenced a certain **.r3d** clip displayed background render errors for some **Gamma Curve** settings.
- ID 348351 - R3D: Certain **.r3d** files had blank **color space** and **gamma space** controls.
- ID 348354 - DnD: Marquee-selecting knobs did not automatically scroll inside the **Properties** panel.
- ID 348552 - DnD: Pop-up widgets were occasionally hidden behind floating **Properties** panels.
- ID 348746 - Creating a clip with an empty **MediaSource()** path caused Nuke to crash.
- ID 348957 - DnD: Selecting a knob inside a selection of knobs did not update the selection correctly.
- ID 349217 - DnD: Holding **Ctrl/Cmd** to select knobs only allowed you to drag-and-drop the knob under the pointer.
- ID 349317 - Read: Selecting an **.r3d** file in the file browser with the preview active and then opening the selected file caused Nuke to crash.
- ID 349457 - DnD: Resizing panels containing tables did not resize the table knob.
- ID 349475 - DnD: Certain Roto knob labels were grayed-out after saving and reloading a script.
- ID 349679 - R3D SDK: Reading certain 8K footage displayed a **Reader did not set bounding box** error.
- ID 349735 - Project Settings: The **Frame Offset** control extended for the entire length of the panel.
- ID 349739 - DnD: Deleting the first knob on a line shifted the remaining knobs to the line above.
- ID 349744 - DnD: Reordering the knobs on a line shifted all knobs to the line above.
- ID 349746/352272 - DnD: The knob placement guide lines did not work as expected.
- ID 349905 - Preferences: The color of the Edit mode button could not be changed.
- ID 350166 - RED SDK: CDL files were not applied in the Nuke Viewer.
- ID 350353 - RED SDK: The **REDWideGamutRGB** and **Rec2020** colorspaces were incorrect.
- ID 350393 - RED SDK: The **Sharpness**, **Denoise**, and **Detail** controls could not be changed in a legacy script.
- ID 350655 - RED SDK: The **SimpleBlend** and **MagicMotion** HDRx controls did not retain their values in a legacy script.

- ID 350661/350896 - RED SDK: Copying and pasting a Read node that did not use the default **CC ID** from the **CDL** file did not work as expected.
- ID 350665 - RED SDK: The **MagicMotion** blend bias **HDRx** control did not work as expected in legacy script.
- ID 350683 - RED SDK: Labels and knob names were capitalized inconsistently.
- ID 350844 - DnD: The preference controlling the color for linked knobs was labeled incorrectly.
- ID 350888 - RED SDK: The colorwheel controls for **Lift**, **Gamma**, and **Gain** did not work as expected.
- ID 350897 - DnD: The **profile** tab controls in the Denoise node's properties were placed on the **Denoise** tab.
- ID 350900 - RED SDK: Selecting certain **CDL** presets displayed an error.
- ID 350903 - DnD: The LensDistortion node's properties incorrectly included three new, empty groups.
- ID 350907/351860 - RED SDK: Collapsing a colorwheel icon for the **Lift**, **Gamma**, and **Gain** controls did not work as expected.
- ID 350915 - DnD: Using the scroll bar in the **Properties** panel discarded knob selections in Edit mode.
- ID 350990 - Linux only: Publishing a LiveGroup Pythonically occasionally truncated the file name.
- ID 350991 - RED SDK: Localizing a particular **.r3d** file rendered the clip upside down in the Viewer.
- ID 350997/352398 - RED SDK: The **Look** > **Color Version** control included **v3** incorrectly.
- ID 351334 - RED SDK: Right-clicking an **.r3d** file in the **Project** panel caused Nuke Studio to crash.
- ID 351585 - RED SDK: The **HDRx** settings did not convert **Low exposure** to **X frame** in legacy scripts.
- ID 351591 - RED SDK: Activating controls, such as **Blend Bias**, did not activate the knob label.
- ID 351895 - RED SDK: The **D.E.B** control was not available for **.r3d** clips created using the DRAGON sensor, or later.
- ID 352383 - DnD: Dragging knobs from one tab to another in the same node **Properties** panel did not work as expected.
- ID 352399 - RED SDK: Reading files written with IPP2 support did not convert them to Nuke's legacy color pipeline and displayed an error.
- ID 352403 - RED SDK: Clicking **Load Settings from RMD** multiple times caused Nuke to crash.
- ID 352406/352989 - RED SDK: Clicking **Load Settings from RMD** did not always display an error message if the **.r3d** was written with IPP2 support.
- ID 352423 - RED SDK: Zooming and changing control values caused the Viewer cache to behave erratically.
- ID 352432 - Project Panel: Clicking the color picker button in the **Project** panel turned clip shading on, even when it was disabled in the **Preferences**.
- ID 352474 - RED SDK: Changing the **Color Version** to **v1** in an **.r3d** file's **Properties** caused Nuke to crash.

- ID 352477 - RED SDK: Certain Read node thumbnails in legacy scripts displayed a **ReaderMessageUnknown** error.
- ID 352564 - RED SDK: Adjusting the **Gamma Curve** control caused Nuke Studio to crash.
- ID 352710 - RED SDK: Importing certain **mov64** clips displayed an error in the Viewer and created black shots on the timeline.
- ID 352725/352746 - RED SDK: Right-clicking in an **.r3d** file's **Properties** panel and selecting **Set knobs to default** or **Set Key on all knobs** caused Nuke Studio to crash.
- ID 352902 - DnD: The CameraTracker node's **Properties** panel was rearranged incorrectly.
- ID 352939 - Project Panel: Exporting a sequence or clip or using the color picker reset the sorting mode in the **Project** panel.
- ID 353051 - RED SDK: Certain **Gamma Curve** settings displayed an invalid LUT error in the Viewer.
- ID 353071 - DeepRecolor: Enabling **target input alpha** did not process AOV passes through the color input.
- ID 353210 - RED SDK: The **HDR Mode** and **Decode Resolution** controls did not work as expected when used together and occasionally caused Nuke to crash.
- ID 353237/353253 - RED SDK: Setting the **Gamma Curve** to **Half Float Linear** did not disable unnecessary controls in the **Properties** panel.
- ID 353248 - Windows only: The EULA in the installer was not formatted correctly.
- ID 353310 - Localization: Certain **.r3d** files were not localized as expected when **Localization Policy** was set to **On Demand** in the clip's Read **Properties** panel.
- ID 353405 - DnD: Marquee selecting knobs and then dragging the selection did not work as expected.
- ID 353660 - Create Comp: Undoing a Create Comp operation and then executing Create Comp again caused Nuke Studio to crash.
- ID 353670 - ARRIRAW: The **color space** and **color processing** controls did not work as expected when used together and displayed an error in the Viewer.
- ID 353693 - Windows only: Nuke could not read **.mxf** files from the Alexa Mini.
- ID 353838 - RED SDK: Create Comp and Export operations produced different output for files containing HDRx **X-Frame** blend information.
- ID 353895 - RED SDK: The tooltip for the **HDRx** > **Blend Bias** control was out-of-date.
- ID 353903 - RED SDK: The tooltip for the **Look** > **Contrast** control was out-of-date.
- ID 353910 - RED SDK: The **Look** > **RGB** control had incorrect range parameters.
- ID 353911 - RED SDK: The **Gamma** and **Gain** control had incorrect range parameters.
- ID 353952 - RED SDK: HDRx **X-Frame** blend information was not applied to exported files from the Frame Server.
- ID 353981 - RED SDK: Cloning a Read node referencing an **.r3d** file and then changing a control caused Nuke to crash.

- ID 354159 - DnD: The unnamed channel matrix in ShuffleCopy nodes was selectable, even though it was not applicable in DnD edit mode.
- ID 354251 - RED SDK: The **Gamma Curve** tooltip did not specify all the controls that are disabled when **Half Float Linear** is selected.
- ID 354398 - VectorGenerator: Enabling **Flicker Compensation** altered the motion vectors produced.
- ID 354515 - RED SDK: The **Look** > **DRX** control did not work as expected for certain non-DRAGON sensor **.r3d** files.
- ID 354531 - Project Load: Loading a project from a different operating system that referenced **.r3d** files caused Nuke Studio to become unresponsive.
- ID 354537 - DnD: Dropping a knob on the **Node** tab in the **Project Settings** caused Nuke to crash.
- ID 354900 - DeepHoldout: Connecting a Viewer to a DeepHoldOut node with only the **main** input connected caused Nuke to crash.
- ID 355069 - Alexa LF Open Gate Material (4448 x 3096): UHD-1 was missing from the **resolution** dropdown.
- ID 355070 - Alexa LF Open Gate Material (4448 x 3096) - Selecting an **aspect ratio** other than 1.0 limited the available **resolution** options incorrectly.
- ID 355116 - Alexa LF UHD-1 material (3840 x 2160) - Selecting an **aspect ratio** other than 1.0 limited the available **resolution** options incorrectly.
- ID 355121 - Alexa material (2880 x 1620) 16by9: 1.25 **lens squeeze** could not be selected.
- ID 355138/355139/355143/355144 - Alexa 4:3 (2880 x 2160) - 4by3: It was not possible to select 1.25/1.3/1.33/1.5 lens squeeze when **unsqueeze anamorphic** was enabled.
- ID 355146/355147/355149/355150 - Alexa "Clean Open Gate" (3414 x 2198): It was not possible to select 1.25/1.3/1.33/1.5 lens squeeze when **unsqueeze anamorphic** was enabled.
- ID 355151 - Alexa "Clean Open Gate" (3414 x 2198): Support for 1.55 **aspect ratio** with 2.0 **lens squeeze** was unavailable
- ID 355152/355153 - SXT/Mini "Open Gate" (3424 x 2202): It was not possible to select 1.33/1.5 lens squeeze when **unsqueeze anamorphic** was enabled.
- ID 355154/355155/355156 - 6:5 Alexa SXT (2578 x 2160): It was not possible to select 1.33/1.5/2.0 lens squeeze when **unsqueeze anamorphic** was enabled.
- ID 355157/355158 - 16:9 3.2K Alexa SXT (3168 x 1782): It was not possible to select 1.33/1.5 lens squeeze when **unsqueeze anamorphic** was enabled.
- ID 355259 - ARRIRAW: The mxfReader failed to decompress large **.mxf** files.
- ID 355294 - RED SDK: The tooltips for the **Shadow**, **Saturation**, **Contrast**, **Brightness**, and **RGB** controls contained incorrect information.
- ID 355421 - ARRIRAW: ARRI - ALEXA_LF_Sensor footage displayed an error in the Viewer.
- ID 355544 - ARRIRAW: Loading a legacy **.hrox** project containing certain **.r3d** files caused Nuke to crash.
- ID 355717 - Calling **getLinkedKnob()** incorrectly on an a unlinked Knob caused Nuke to crash.

- ID 355812 - ARRIRAW: Loading legacy scripts did not load knob settings from the project file.
- ID 356167 - ARRIRAW: Opening a legacy script containing unsupported ARRI footage caused Nuke to crash.

New Known Issues Specific to this Release

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

New Known Issues Specific to Nuke

- ID 355719 - ARRIRAW: Deprecated resolution modes are not labeled in Nuke.
- ID 355712 - ARRIRAW: The 2668 resolution output mode, necessary for ProRes output, is currently not available.
- ID 347416 - Rendering a standard Write node that has deep data in its stream causes Nuke to crash.
- ID 340749 - Mac OS X/macOS only: Reading **.r3d** files and changing the **color version** to **v1** produces a corrupt image.

  This is a known issue in the RED SDK, and will be addressed in a future release.

Other Known Issues

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

Known Issues Specific to Nuke

AudioRead

- ID 18924 - Changes to the **rate** control value are not honored when **ratesource** is toggled between **file** and **custom**.
- ID 18666 - Changing the sample rate has no effect on playback in a Flipbook.
- ID 18465 - The **time range** control doesn't limit the range when an **endtime** is specified.
- ID 18451 - Flipbooking doesn't honor the time range knob.
- ID 18217 - Redo keyframe generation doesn't replace the keys.
- ID 18213 - Changing **Draw Style** in the Curve Editor or Dope Sheet doesn't redraw the curves correctly.

BlinkScript/CUDA

• ID 43319 - CUDA: Scripts containing GPU accelerated nodes, such as ZDefocus, display a CUDA error when the OS wakes up from sleep mode.

  As a workaround, close and reopen Nuke to reactivate the CUDA drivers.

CameraTracker

• ID 40798 - Centering a track in the Viewer does not work as expected in proxy or downrez modes.
• ID 37411 - Sequences containing alpha channels display the alpha premultiplied by the image in reference thumbnails, rather than just the RGB values.

Deep

• ID 43383 - Executing a script in command-line mode that reads in a deep image and then writes it to disk, causes Nuke to crash.

  As a workaround, run the script from the Script Editor inside Nuke.
• ID 40145 - Nuke occasionally reads and writes Deep **.exr** files with a pixel aspect ratio of 1.

  As a workaround, preview the **.exr** in the file browser before reading it into Nuke.

Dope Sheet

• ID 43463 - Scripts containing Ocula's O_VerticalAligner plug-in cause Nuke to crash when you execute **Analyze Sequence** with the Dope Sheet open.
• ID 40206 - Adding a curve to the Dope Sheet and then deleting it causes Nuke to crash.
• ID 39426 - Undoing individually animated text characters removes their keys completely from the Dope Sheet.
• ID 39156 - Keys remapped with descending TimeWarp lookup curves don't snap to frames when **frame snap** is enabled.
• ID 38910 - Keys from Viewer buffers not currently being viewed are still visible.
• ID 38630 - Read and TimeClip representations disappear in the Dope Sheet if they are set to have a non-empty frame expression.
• ID 37869 - The Dope Sheet is not updated correctly when a Retime's **speed** control is animated.
• ID 37815 - Multiple instances of the same clip within one AppendClip are only represented once in the Dope Sheet.

EditGeo

- ID 38954 - The transform handle of selections in the Viewer is not updated between frames on geometry with animation baked into its vertices.

  To update the transform handle, toggle the axis alignment control between **object** and **average normal**.
- ID 38699 - Changing the visibility of objects within an Alembic Scene Graph causes geometry to ignore the EditGeo node.
- ID 38670 - Setting a keyframe can be slow to update the Viewer with the appropriate keyframe marker.
- ID 36094 - Setting **axis alignment** to **average normal** displays the axis incorrectly on edge and corner vertices.

Flipbook

- ID 271435 - Flipbook: Using the flipbook with nuBridge installed causes Nuke to crash.
- ID 201156 - Nuke's flipbook defaults to the Write node's colorspace, which can result in different output when compared to the Viewer.

  As a workaround, either flipbook the node upstream of the Write node, or enable **Burn in the LUT** in the **Flipbook** dialog.
- ID 47005 - In the Flipbook Viewer, clicking the **Go to start** button always goes to frame 0, even if the clip doesn't start at 0.
- ID 47005 - Enabling **Burn in the LUT** in the Flipbook dialog uses the **rec709** LUT for both **rec709** and **rec1886**.

Frame Server

- ID 273472 - Canceling or pausing a comp render in the **Background Renders** panel displays errors in the terminal.
- ID 272523 - Non-contiguous frame ranges cannot currently be flipbooked.

GPU

- ID 45018 - R3D: Only half float linear gamma space works with GPU debayering.

Import Nuke

• ID 40131 - Importing Nuke in a Python script destroys **sys.argv**, making command-line arguments unavailable.

  As a workaround, preserve **sys.argv** in another variable before you import Nuke.
• ID 39836 - Importing Nuke hangs when there are Qt conflicts between Nuke and other applications.
• ID 38963 - Calling **import nuke** terminates the Python session if no applicable license is available.

Linux Only

• ID 271807 - Linux only: Adjusting pane or window borders left and right causes redraw lag.
• ID 199990 - In some situations NVIDIA Quadro Linux drivers 319.23 can cause Nuke to hang during start up.

  As a workaround, update your drivers to 361.42.
• ID 49262 - Scrubbing in the timeline in large projects can force memory use to hit 100%, causing Nuke to become unresponsive.
• ID 43766 - Calling **uuid.uuid4()** causes Nuke to crash due to a bug in **libc**.

  As a workaround, launch Nuke from the command-line using:

```
LD_PRELOAD=/lib64/libuuid.so.1 ./Nuke8.0
```
• ID 42581 - Keyboard Shortcuts: Using **Ctrl+C** to quit Nuke from the command-line when a dialog box is open displays an error.
• ID 39537 - Using a Blackmagic Decklink Extreme 2 card causes Nuke to become unresponsive.

LiveGroups

• ID 274174 - Reloading a LiveGroup currently resets all edited User knobs.
• ID 272281 - Adding a user knob and then undoing the action sets expression links to nodes with matching names in main Node Graph.

Mac OS X/macOS Only

• Installation - If you're running Mac OS X 10.10 "Yosemite", you may need to install alternative NVIDIA CUDA drivers so that Nuke can detect your GPU correctly. You can obtain the required drivers directly from NVIDIA here:

  http://www.nvidia.com/object/macosx-cuda-6.5.18-driver.html.

- ID 316577 - macOS only: Current localization progress does not update if the pointer focus is on Nuke's menu bar.
- ID 228076 - The PySide QtUiTools library is currently missing from the Nuke build.
- ID 163543 - Mac OS X 10.11 only: Dragging handles in the 3D Comp Viewer can be slow to respond.
- ID 50371 - Script corruption can occasionally occur on Mac OS X 10.9 (Mavericks), and above, when writing to SMB 2.1 and SMB 3 Sharepoint locations.
- ID 50182 - Nuke cannot be launched from the Finder if it has already been launched from the Terminal.
- ID 43343 - Modifying the label of a Python user knob causes Nuke to crash.
- ID 39429 - Crash Reporting: The 'save to' dialog is hidden behind the crash report dialog when you click **Save Report**.
- ID 38686 - Enabling **Use GPU if available** on supported nodes, such as Kronos, in more than one instance of Nuke at the same time, can cause display corruption and/or entire system freezes. This seems particularly likely to occur on GPUs with low amounts of RAM, such as the GeForce GT 650M.

  As a workaround, upgrade your NVIDIA drivers, or if this is not possible, only enable GPU acceleration in one instance of Nuke at a time.
- ID 35123 - PrmanRender: If you're using Mac OS X 10.8 (Mountain Lion) or above, make sure X11 is installed on your system. Unlike previous versions of OS X, 10.8 and above do not have X11 installed by default.

  For more information, see http://support.apple.com/kb/HT5293.
- ID 34697 - Launching Nuke from a network shared drive causes Nuke to crash on launch.

  As a workaround, either:
    - tarball the installation from Mac OS X and unzip it on the alternate file system (using NFS or Samba, depending on source), or
    - using the command-line, copy the installation from Mac OS X to the network location using the same file system as the destination.
- ID 33970 - Using a node, such as Grade, as a custom viewer process outputs a blank Viewer.

  As a workaround, adjust the Viewer **gain** control to refresh the Viewer.
- ID 22062 - Nuke doesn't currently give the option to restore the autosave of an unsaved script, except when Nuke is run from the command-line.
- ID 13638 - The following graphics cards are not currently supported for Mac:
    - ATI Radeon X1600
    - ATI Radeon X1900

  Users with these cards are able to render from the command-line, but in GUI sessions, the Node Graph renders incorrectly due to a requirement of OpenGL 2 drivers.

- ID 12048 - Nuke crashes if you activate screen sharing when there is no screen plugged in.
- ID 11776 - Node text appears aliased, unclear, or garbled at certain zoom levels.

ModelBuilder

- ID 41352 - Setting the **segments** control to a negative number causes Nuke to crash.
- ID 41148 - Editing geometry UVs and then switching the Viewer to look at the geometry through a ScanlineRender node causes Nuke to crash.

Monitor Out

- ID 250107 - Monitor Output: 10-bit output from Blackmagic DeckLink HD Extreme 3D+ cards at the extents of color ranges is incorrect.

  As a workaround, using the **Desktop Video Setup** utility, ensure that the **SDI Settings 4:4:4 RGB** checkbox is enabled and the **SDI Configuration** is set to **Single Link**.
- ID 40942 - AJA Io Express: Enabling monitor output causes Nuke to crash.
- ID 37700 - AJA Kona LHe+ 2k formats are not displayed correctly.

OCIO

- ID 201193 - Read node **Metadata** tabs occasionally include irrelevant **in** and **out** colorspace controls.

Particles

- ID 41259 - ParticleCache: Setting **emit from** > **points** and connecting the **emit** input to geometry, does not render all frames to the **.nkpc** file.
- ID 39796 - ParticleCache nodes upstream of ScanlineRender nodes display **ParticleCache is out-of-date** errors for negative frame numbers.
- ID 39210 - ParticleCache: Error messages displayed when **read from file** is toggled on and off are not reliably cleared when rendering through ScanlineRender.
- ID 37254 - The progress bar does not cancel if you scrub to a frame that has already been calculated within the particle system.
- ID 18268 - Enabling **color from texture** always renders a solid white alpha for the texture.
- ID 17520 - Geometry representation textures are displayed even when **display** is set to **off**.
- ID 17243 - Using sprites instead of geometry representations causes particles to render behind the 3D grid lines.

Pixel Analyzer and Scopes

- ID 44176 - PixelAnalyzer: The **full frame** sampling **mode** doesn't work immediately in the timeline Viewer when the analyzer is initially added to the layout.
- ID 39180 - Scopes: Switching to a layout with a scope window, while rendering, forces the Viewer bounding box to 1x1 for that frame.
- ID 36508 - Scopes do not currently update when zooming into the Viewer.
- ID 36491 - Scopes clip color values between 0 and 1 when **Preferences** > **Scopes** > **Include viewer color transforms** is enabled.

PrmanRender

- In the Nuke camera, the **window roll** control is not yet mapped to RenderMan.
- ID 27648 - After a security update for Mac OS X, Nuke is unable to load the PrmanRender plug-in the environment.plist file when in GUI mode.

    See http://support.apple.com/kb/TS4267 for more information.

Python

- ID 44296 - Running **nuke.scriptOpen()** at the same time as creating a Python panel causes Nuke to crash.
- ID 40994 - Rendering an Alembic camera using a Python script produces incorrect values when run from the command-line.

    Run the script from Nuke's **Script Editor** to avoid this issue.
- ID 40645 - Using **setInput()** within an **onCreateCallback** doesn't work as expected.
- ID 40534 - Using Python to set metadata in ModifyMetadata nodes does not work from the command-line.

    To work around this issue, run the Python script from Nuke's Script Editor.
- ID 39308 - Accessing a node's x and y positions using the **xpos** and **ypos** controls reports incorrect values.

    As a workaround, either call **nuke.Node.xpos()** or **nuke.Node.ypos()** first, or ensure no nodes are currently selected in the Node Graph.
- ID 38994 - **nuke.Node.screenWidth()** and **screenHeight()** are incorrect when a node is first created if it has an autolabel.
- ID 8063 - Creating many new nodes with **nuke.createNode()** and the in-panel argument at default **(True)** may crash when too many node control panels are created too quickly. The workaround is to

pass the in-panel argument as **False** or else use **nuke.nodes.NodeClass()** (where NodeClass is the type of node to create) to create the node and then connect it to the currently selected node manually.

- ID 6455 - You should not call the Python command **nuke.restoreWindowLayout()** from the Script Editor as that can cause Nuke to crash. Instead, you can use the same command from your **menu.py**, restore layouts by selecting **Layout** > **Restore Layout**, or use a custom menu or toolbar item.

- Nuke sometimes reports errors in Groups and Gizmos, appearing similar to the following:

groupName.NodeName.knobname: unexpected 'k' in '0.knobname'

The problem is most likely that there is an expression using the input TCL command and doesn't validate that there is an input connected. An example expression:

[input parent 0].translate.x

The input command returns 0 when it can't find the requested input, which generates an expression of '**0.knobname**' that doesn't refer to anything. The fix is to restructure the expression to use the value TCL command and specify a default value to return in the case that the expression is invalid. It takes the form:

[value [input parent inputnumber].knob defaultValue]

Here is the modified example:

[value [input parent 0].translate.x 0]

The modified example returns 0 in the event that there is no input 0, and no longer results in an error message.

- There is a Python syntax conflict when assigning knob names on the fly with **nuke.nodes.<node>()** if the knob is called 'in'.

For example, this gives a syntax error:

nuke.nodes.Shuffle(in = 'depth')

while this works because 'in' is a string here and not a keyword:

sh = nuke.nodes.Shuffle()

sh['in'].setValue('depth')

RayRender

- ID 230256 - Soft Shadows are not currently supported.

- ID 197294 - Reflection occlusion is not currently supported.
- ID 196980 - Clipped alpha shadows are not currently supported.
- ID 196776 - Multiple bounce reflecton is not currently supported.
- ID 196124 - RayRender does not currently support refraction.
- ID 195051 - The Wireframe shader node, located in **3D** > **Shader** > **Wireframe**, is not supported by RayRender.
- ID 195004 - Custom lens shaders/projection modes are not currently supported.
- ID 194819 - RayRender does not currently support Deep workflows.
- ID 191108 - Particle sprites are not currently supported.
- ID 174849 - The Displacement shader node, located in **3D** > **Shader**, is not currently supported by RayRender.

Read and Write

- ID 50046 - The default colorspace values when writing using **.mov** codecs differ in command-line and GUI modes.
- ID 48935 - MXF: Importing a certain JPEG2000 file causes Nuke to crash or display the file incorrectly.
- ID 47256 - MXF: Super whites are currently displayed as white in the Timeline Viewer.
- ID 47248 - MXF: Setting **debayer quality** to **High Quality** on some Sony RAW files displays an **error decoding frame** message in the Comp Viewer.
- ID 42717 - Certain **.exr** files rendered from Modo display the **alpha** channel rather than the **rgba** channels by default.
- ID 41006 - The last audio frame of a QuickTime encoded with AAC compression is muted.
- ID 40684 - Rendering certain **h264** encoded **.mp4** files using the **mov32** encoder results in color shifts using QuickTime 10.3 codecs.
- ID 40533 - There are slight differences in color and sharpness when rendering Alexa footage to ProRes 4444.
- ID 40074 - Writing out stereo **.sxr** files with additional channels does not write out both eyes correctly.
- ID 39165 - ReadGeo: When reading in **.fbx** files, the transform/scale state can become incorrect while toggling the **read transform from file** in combination with **all objects** and/or **read on each frame**.
- ID 35611 - Writing .**exr**s with the Write node's **interleave** control set to **channels** adds a superfluous **main** view.
- ID 33863 - FBX geometry: Faces on geometry read in from **.fbx** files are not connected to neighboring faces, leaving gaps in certain circumstances.

This issue is particularly visible when using the EditGeo node, which should not allow you to remove faces from the geometry.

- ID 31424 - Sub-sampling in **.exr** files is not currently supported.
- ID 27211 - Alembic: The state of the Viewer **Lock Frame** control is not always honored for **.abc** files.

  As a workaround, ensure that **ReadGeo** > **read on each frame** is enabled.

- ID 21663 - Read: After reading in a stereo/multiview **.exr** file and choosing not to add new views to the project, subsequent reads of any stereo/multiview **.exr** files won't give the option to add new views.
- If you have trouble with FBX files, it may be because they were written with an older version of FBX. If they load very slowly, it is also possible that they are ASCII rather than binary. To get around these problems, you can use the FBX converter on the Autodesk website. It converts between various different formats, including older FBX versions, ASCII, and binary, and is available on Windows, Mac OS X, and Linux.

  To download the FBX converter:

  1. Go to http://usa.autodesk.com/adsk/servlet/pc/item?siteID=123112&id=10775855.

  2. Scroll down to FBX Converter and click on one of the links to start the download.

Render codecs

Rendering with certain codecs occasionally causes Nuke to crash. Due to this, we recommend the following:

- If you're using the Sorensen Video codec, it's recommended you use the Sorensen Video 3 codec instead. If you're unable to switch to Sorensen Video 3, try using a format smaller than 2K for better performance.
- If you're experiencing crashes with Cineform HD, try updating your Cineform codec to version 5 or above. You may need to download the Neoplayer at http://estore.cineform.com/neoplayer.aspx.
- If you're using Avid Meridien, you should only write out in NTSC and PAL.

Roto/RotoPaint Open Splines

- ID 42997 - Rendering artifacts can occur if the **feather** control is used in conjunction with the feather handles in the Viewer.
- ID 42995 - Stereo: Adding an open spline creates the spline in the left view only by default.

  As a workaround, select the shape and then manually change the Properties **view** control to include both views.

- ID 42991 - Python API: Moving points on an open spline using Python causes Nuke to crash.

- ID 42932 - Rendering artifacts can appear where the spline hull crosses over itself with negative **feather** values.
- ID 42422 - Rotating the tangent of an end point occasionally causes the hull to behave erratically.
- ID 42413 - Holding **Ctrl/Cmd** to move a point's tangent handles independently causes defects in the hull or feather.
- ID 42412 - Changing the Viewer overlay visibility, such as from **always** to **never**, occasionally produces artifacts in the spline's hull.
- ID 42390 - It is not possible to increase the **width** for individual points if the overall **width** is set to **0**.
- ID 42387/42310 - Cusped points occasionally cause hull rendering artifacts.
- ID 40962 - Animated splines with **varying** width and **feather** occasionally contain slight rendering glitches inside the hull.
- ID 40433 - Roto Open Splines - Shape of hull/feather curve can look incorrect when width changes greatly from one point to the next
- ID 36219 - The **Select Feather Points** tool does not work consistently between the **Open Spline** and **Bezier** tools.

Other Roto/RotoPaint Bugs

- ID 41917 - RotoPaint shape colors don't change when expression linked to another RotoPaint color.
- ID 32459 - RotoPaint: Undoing a point move that created a keyframe doesn't currently undo the keyframe creation.
- ID 32450 - RotoPaint Stereo: Attempting to undo multiple split-control transforms on the same shape reverts the shape to its original position.
- ID 31552 - Point handles for paint strokes, whose lifetime doesn't extend to the current frame, disappear when drag-selected.

  As a workaround, select the shape in the **curves** list to re-display the points.
- ID 30920 - Expression linking extra matrices in the **Transform** tab doesn't work as expected.

> 📝 **Note:** This also applies to SplineWarp matrices.

- ID 30551 - Several levels of smoothing applied to one shape are carried over to subsequent shapes for a single smooth operation.
- ID 29170 - The cut, copy, and paste keyboard shortcuts don't work for entries in the **curves** list.
- ID 28838 - Gizmos from Nuke 6 containing Roto/RotoPaint nodes should be recreated in Nuke 8, but bear in mind that they won't be backwards compatible with Nuke 6 once converted, unless you follow the instructions below:

Nuke 6 scripts containing Roto display a conversion prompt when you open them in Nuke 8:

- Click **Save As** to convert the script to the Nuke 8 Roto format, or
- Click **Ignore** to load the Nuke 6 format into Nuke 8. You might select this option if:
  - You don't intend to make any changes, or
  - You want to overwrite the file with a Nuke 7 and 8 only Roto format when saving.

If you want Nuke 8 scripts to load in Nuke 6, use the **convertToNuke6** or **convertDirectoryToNuke6** Python functions when running Nuke 8 in command-line only mode:

> **Note:** The conversion functions cannot convert stereo-split curves as they are not supported by Nuke 6.

- To convert individual **.nk** scripts:

```
convertToNuke6(fromScript, toScript, overwrite = False)
```

- To convert all **.nk** scripts in a given directory:

```
convertDirectoryToNuke6(fromDir, toDir, matchPattern =.*\.nk, overwrite =
False)
```

> **Note:** The pattern is a regular expression.

An example single script conversion and rename to the same directory, from the command-line (or Terminal):

```
$ <NukeInstallDir>/Nuke8.0v1 -t
>>> import nuke.rotopaint
>>> nuke.rotopaint.convertToNuke6(/tmp/myRoto8.nk, /tmp/myRoto6.nk)
```

- ID 26855 - The **undo** and **redo** buttons in the Properties panel didn't work as expected and have been disabled.

  The workaround is to use the undo (**Ctrl/Cmd**+**Z**) and redo (**Ctrl/Cmd**+**Y**) keyboard shortcuts or the **Edit** menu instead.
- ID 21361 - Artifacts are produced until mouse up when painting over a stroke on another frame.
- ID 11524 - Adding strokes/shapes in RotoPaint is slow when there is another RotoPaint after it.
- ID 9238 - Painting on Mac OS X and Linux is slower when the paint cursor is near the edges of the screen.
- The foreground onion skin overlay updates as you paint, rather than only updating with the new stroke on pen up.
- It is not currently possible to clone RotoPaint nodes.

• Interactivity of laying down strokes/shapes in the Viewer may be faster when motion blur is disabled on the layer you are working in.

ScanlineRender

• ID 38329 - Deep renders from ScanlineRender currently ignore the ScanlineRender's **bg** input.
• ID 38205 - Deep: Depth, motion, position, and normals information is occasionally incorrect in semi transparent areas.
• ID 37967 - Deep: Geometry with alpha 0 renders black when the deep output is converted to an image.

SmartVector Toolset

• ID 275683 - SmartVector: Due to VFX Platform library changes, vectors generated by the Nuke 11 SmartVector toolset do not match legacy versions. For example, vectors generated by Nuke 11.0v1 do not match those generated by Nuke 10.5v4.
• ID 196455 - Rendering vectors after correcting the **file** control in the SmartVector node occasionally displays a spurious **No such file or directory** error.

   As a workaround, scrub to a different frame to remove the message.
• ID 175605 - Entering a partial file path in the SmartVector **file** control and then clicking the file browser icon does not open the file browser.

   As a workaround, click **OK** on the error message and then click the file browser icon again.

Text

• ID 48418 - Different operating systems handle the **Shadows** tab **shrink/expand** control differently, producing inconsistent output.
• ID 39556 - In **text edit** mode, it is not currently possible to edit text attributes when the Viewer overlay is disabled.
• ID 39552 - Transforming animation groups using an expression-linked Transform node does not work as expected.

   As a workaround, expression link the **translate x** and **y** controls separately.
• ID 39291 - Splitting the **transform** control on the **Group** tab splits all controls.
• ID 39239 - Transforming a character generated from an expression, and then going to a frame where the character no longer exists, results in the transformation being lost.
• ID 39130 - Splitting the **message** field does not work as expected.
• ID 38789 - Viewer toolbar controls steal cursor focus.

- ID 38425 - The undo history becomes unreliable when the panel focus changes.
- ID 36372 - Selecting a TCL expression in the **message** field doesn't always select the result in the Viewer.

Tracker

- ID 40542 - After tracking and centering a track, the Viewer no longer caches when playing back the tracked frames.

  As a workaround, you can enable full frame processing, though this may increase render times.
- ID 40038 - **Ctrl/Cmd** clicking in the Viewer to select a pixel and then adding a track, sets the tracking anchor coordinates to 0,0.
- ID 39225 - Moving tracking anchors is occasionally unresponsive and jerky.
- ID 39200 - Holding **Shift** and clicking tracks in the Viewer doesn't add to the current selection.
- ID 38356 - The zoom window occasionally doesn't update correctly when scrubbing between frames.
- ID 32359/32353 - Right-clicking on a point in the Viewer doesn't always update the available **Link to** > **Tracker linkingdialog** or **Tracker** options.

  As a workaround, close and re-open the Roto/RotoPaint properties panel to update the **Link to** menu.
- ID 29382 - Tracking keyframes with different sized patterns doesn't work as expected.

  As a workaround, keyframe patterns should, where possible, be of comparable sizes.

VFX Platform

- You may experience issues when importing PySide modules into their Python scripts due to the migration from PySide 1.2.2 to PySide 2.0.

  In some cases, you can just change calls to:

```
import Pyside.some_module
```

  to:

```
try:
    import Pyside.some_module
except:
    import Pyside2.some_module
```

However, the definition of some classes has moved between modules in PySide 2.0. This particularly affects any Widget related classes, which have been moved from QtGui to QtWidgets, however there are other cases where this may be experienced.

If you experience any problems with this, please refer to the Qt 5.6.1 documentation, or contact support.foundry.com.

- ID 282593 - Switching to a fullscreen workspace on the primary monitor occasionally causes the secondary monitor to turn black.
- ID 280371 - Mac OS X/macOS only: OpenGL errors are printed on the command line when using an ATI Radeon 5770 GPU.
- ID 277875 - VFX Platform: Switching workspace occasionally draws the new workspace incorrectly.
- ID 277548 - A **QComboBox** with a custom **QCompleter** currently emits incorrect signals.
- ID 275719 - Mac OS X/macOS only: The **Help** > **About Nuke** pop-up is positioned incorrectly on some machines.
- ID 275251 - Mac OS X/macOS only: Hovering over clip instances in the timeline does not change the pointer icon.
- ID 275246/270914 - The terminal or command line displays **libpng warning: iCCP: cHRM chunk does not match sRGB** on start-up.
- ID 274301 - Node toolbar menu items do not always deselect correctly.
- ID 274264 - CameraTracker results from Nuke 11.1 are not identical to previous versions of Nuke, though the differences are negligible.
- ID 272767 - Launching Nuke from the terminal with the **-b** argument has been deprecated as a result of library upgrades to comply with the VFX Platform 2017 requirements. There are two workarounds available on Mac and Linux :
  - Run Nuke from the Terminal with **&** added to the launch command. This allows Nuke to run in the background and returns the command prompt, but closing the Terminal still causes Nuke to close. For example:
    ```
    ./Nuke11.1v1 --studio &
    ```
  - Run Nuke from the Terminal using the **nohup** command. This allows Nuke to run in the background and returns the command prompt, but closing the Terminal does not cause Nuke to close. For example:
    ```
    nohup ./Nuke11.1v1 --studio &
    ```

> 💡 **Tip:** The **nohup** command prints output to **/Users/<username>/nohup.out** or **/home/<username>/nohup.out** by default, but you can specify a different file by appending **> /filepath/filename** to the command. For example:

```
nohup ./Nuke11.1v1 --studio & > /Users/<username>/nuke.out
```

- ID 272750 - The remove all panels button in the node **Properties** panel is displayed inconsistently.
- ID 272504 - The timeline Viewer in and out point previews are not working as expected when scrubbing.
- ID 272442/281108 - The **Licensing** dialog jitters when moved around the screen.
- ID 272338 - The Windows command prompt displays **QWidget::paintEngine: Should no longer be called** on launch.
- ID 272274 - Closing Nuke Studio does not remove the application icon from the task bar.
- ID 271632 - Nuke prints a **libDeckLinkAPI.so** error in the terminal on launch.

Warpers

- ID 32340 - SplineWarp: Using **Ctrl/Cmd**+drag to create rectangles and ellipses doesn't display an overlay until pen-up.
- ID 32083 - SplineWarp: Deleting all but one point on a curve resets its correspondence points to 0,0, which cannot be undone.
- ID 32082 - SplineWarp: Correspondence points are too sensitive when control points are removed.
- ID 32079 - SplineWarp: Moving correspondence points on curves with no keyframes cannot currently be undone.
- ID 30429 - SplineWarp: Transform links are not maintained when the source curve is moved to a new layer.
- ID 31322 - SplineWarp/GridWarp: Preview doesn't handle upstream transforms correctly.
- ID 20000 - GridWarp: When using cropped input, moving control points causes the Viewer to display the cropped image and the black area between the crop box and the format when merged over a background.
- ID 19995 - GridWarp: Locked source and destination grids still allow adding and removing grid lines.
- ID 19835 - SplineWarp/GridWarp: The Viewer LUT is incorrect in **morph** mode, when **mix** is set at an intermediate value.
- ID 19755 - SplineWarp: Placing correspondence points at each end of an open spline causes rendering problems.
- ID 19565 - GridWarp: The Viewer does not show the correct mix amount when in **morph** mode with **mix** set at an intermediate value.
- ID 19386 - GridWarp: All keyframes are removed from the Dope Sheet after undoing, rather than just the latest, and the keyframes remain on the timeline and in the properties.
- ID 19148 - SplineWarp: Rendering fails if a curve is reduced to a single point.
- ID 19079 - SplineWarp: The **C** keyboard shortcut does not currently select the **Add Correspondence Point** tool.
- ID 18712 - GridWarp: The timeline currently shows both source and destination keyframes, even if a grid is not visible in the Viewer.

- ID 18709 - GridWarp: Rotating the transform jack with both grids selected, but in different positions, does not undo as expected.
- ID 18342 - SplineWarp: The spline keyframe + button does not add keys to the Curve Editor or Dope Sheet.
- ID 18304 - GridWarp: Existing control point keyframes are not cleared when you draw a new grid using the **Draw Boundary** Viewer button.
- ID 18019 - GridWarp: You cannot select all grid points in the Curve Editor using **Ctrl/Cmd**+**A** shortcut.
- ID 18012 - GridWarp: The grid can flicker between white and gray when zooming in and out of the Viewer, particularly when the grid is subdivided.
- ID 17697 - GridWarp: In stereo mode, the right view is labeled as **default** when you split controls into separate views.

Windows Only

- Nuke Non-commercial: Navigating to **Help** > **License**, clicking **Deactivate** or **Deauthorize**, and then clicking **Quit**, causes Nuke Non-commercial to crash on exit.

  As a workaround, change the **mode** a few times until it work as expected.
- ID 198430 - Nuke cannot read DNxHD **.mxf** files that have spaces in the file name.
- ID 46759 - File Browser: Location defaults (such as Home, Root, etc.) may not display if you have a previously saved **FileChooser_Favorites.pref** file in your **~/.nuke** directory.

  As a workaround, move or rename the **FileChooser_Favorites.pref** file, and re-launch Nuke.
- ID 40407 - When using a tablet, Nuke does not automatically switch to **Eraser** mode when you use the erase end of the pen.
- ID 39636 - QuickTime: The **Blackmagic 10 bit (v210)** codec defaults to the **YCbCr 8-bit 422 (2vuy) pixel format** due to a bug in the codec, resulting in solid green frames.

  As a workaround, manually set the pixel format to **b64a RGB** to preserve image fidelity.
- ID 35800 - Scopes: The alpha channel doesn't update correctly when modified through a node, such as Primatte or Shuffle, even after the node is removed from the Node Graph.
- ID 28921 - Changing the 3D selection mode does not update until you click in the Viewer.

Miscellaneous

- ID 339241 - MatchGrade: Clicking **Analyze Reference Frames** with a Read node with no valid **file** path displays an **Uncaught C++ exception occurred during the execution of python script!** error.

- ID 312350 - Visual Diagnostics: The **Profile** tab occasionally flickers when the application window is maximized.
- ID 309259 - Documentation: The Python Developers Guide incorrectly references Qt 4.8.5 source code.

  For links to the correct source files, see the Nuke Developers page under **Nuke Qt binaries and source files**: https://www.foundry.com/products/nuke/developers
- ID 273462 - Licensing: Nuke cannot retrieve a license from the license server when the hostname contains **.local**.
- ID 272296 - Adding a user knob and then undoing the action doesn't remove the added knob.
- ID 271804 - Documentation: The node **Properties** panel **?** link to the reference documentation doesn't work as expected.
- ID 271456 - UI: Some interface elements appear larger than usual when compared to previous versions of Nuke.
- ID 271256 - Denoise: Rendering frames to disk with a **Temporal Frame Offset** greater than 1 causes Nuke to crash.
- ID 271074 - PointCloudGenerator: **Track Points** does not work as expected when creating a point cloud from CameraTracker data.
- ID 228258 - Calling **fromScript()** on a knob that has not been added causes Nuke to crash.
- ID 226394 - Preferences: There are currently duplicate **Script Editor** controls under **Other** in the **Preferences** dialog.
- ID 169458 - Compositing Viewer: Setting the **gamma** control to **0** with **Panels** > **Viewer (Comp)** > **use GPU for Viewer when possible** enabled in the preferences, renders the alpha channel black.
- ID 168350 - AMD GPUs are reported as ATI GPUs in the node properties and **--gpulist** on the command line.
- ID 50715 - ZDefocus: Switching the **filter type** to **image** causes Nuke to crash in a customer script.
- ID 49803 - AJA Monitor Output: Setting the NUKE_AJA_CHANNEL environment variable to 4 when the NUKE_AJA_DUALOUTPUT environment variable is set, streams the output to SDI3, rather than SDI4.
- ID 49186 - ColorCorrect: Adding an expression to the curves on the **Ranges** tab and then changing a value, such as **Gain**, causes Nuke to crash.
- ID 46488 - Switching between certain workspaces displays black in the Viewer until the frame is changed.
- ID 46441 - ParticleBounce: Using custom geometry as the bounce object in a particle system occasionally allows particles to pass through the bounce surface.
- ID 42339 - The **Modo** Viewer control scheme (**Preferences** > **Panels** > **Viewer Handles** > **3D control type**) does not work as expected.
- ID 42240 - Setting a channel with a non-standard name to use as the Viewer's **alpha** channel doesn't work as expected.

- ID 42159 - Nodes that use the **Iop::sample()** call to get input pixels, such as LensDistortion, perform poorly when they are downstream of nodes using PlanarIop, such as Denoise.
- ID 41450 - AppendClip forces upstream nodes to re-evaluate on every frame.
- ID 41411 - Loading a script from a disconnected network drive creates an empty script with the same name as the file path to the original.

> ⚠️ **Warning:** If you save this empty script when the network drive is reconnected, the original is overwritten.

- ID 41122 - MatchGrade: **Match Different Clip** mode does not allow you to set keyframes on the **Target** for **.mov** clips with a frame range offset.
- ID 40617 - Some filter nodes, such as Erode (fast), are caching more slowly than in previous versions.
- ID 39459 - Virtual Sliders: Clicking the left-mouse button, while holding down the middle-mouse button, pastes values into the control.
- ID 39407 - Project3D: The node class name has changed to **Project3D2**. As a result, the Nuke<>Mari bridge won't work unless all instances of Project3D are renamed appropriately in the **mari_bridge.py** file.
- ID 39365 - The Viewer **headlamp** control can not currently be managed using expression links.
- ID 39287 - Plug-ins: Loading scripts with plug-ins compiled against older versions removes the nodes from the Node Graph.
- ID 39260 - Custom knobs on Groups and NoOp nodes cannot be retimed.
- ID 39122 - Switching the Viewer to **wipe** mode and wiping between inputs with different format sizes causes corruption and constant refreshing in the Viewer.
- ID 38713 - Capture: Roto opacity and feather settings are not included in captured images.
- ID 35661 - Capture: Capturing the Viewer with a custom file path saves the file path in the script, resulting in error when the path doesn't exist:

```
Flipbook render failed: viewerCaptureOp: Cannot write to specified path
```

- ID 35659 - Capture: Capturing a 3D scene containing lights produces Viewer flashes in the captured images.
- ID 32856 - PositionToPoints: Textures occasionally disappear during playback or when mousing over the Viewer.
- ID 32666 - FrameHold nodes have no effect on Deep nodes.
- ID 32628 - DeepToPoints: Command-line rendering appears to calculate renders even when render is set to **off**.
- ID 32497 - The R3D parameter labels in Nuke aren't entirely consistent with REDCINE-X and Hiero.

- ID 32219 - DepthToPosition: Reading depth information from the same layer as the **output** layer produces corrupt output.

  As a workaround, shuffle the depth information to an alternate layer.
- ID 32118 - Card3D: When **motionblur** is enabled in the properties, FrameHold and TimeOffset nodes are ignored when connected to the **cam** or **axis** inputs.
- ID 31803 - Using **Shift**+drag on a control's animation icon only copies the value for the current frame, not the entire expression.
- ID 31714 - In the Viewer settings, enabling **3D** > **show_prim_bbox** does not display individual bounding boxes for polymesh primitives.
- ID 31310 - TimeOffset: Checking **reverse input** doesn't affect cameras, lights, or axes.
- ID 31238 - RAM cache: Any action that changes a frame's hash value, it's unique identifier, causes the cache to release. Actions such as adjusting the Viewer **Gamma**, **Gain**, or **channels** dropdown affect the frame hash.
- ID 30502 - Copying and pasting spline keys does not work as expected in the Dope Sheet.

> 📝 **Note:** This known issue only applies to Roto and SplineWarp keys.

- ID 30256 - Script Editor: Flagging a control as invisible using **setFlag()** is not honored when the node is copy/pasted in the Node Graph.
- ID 30173 - Manipulating 3D handles in the 2D Viewer is unreliable.
- ID 29677 - Connecting a FrameHold node to an animated Camera and connecting both to a Scene node only displays the animated Camera in the Viewer. There should be two cameras: one static and one animated.
- ID 29083 - Using **Create Camera** in the 3D Viewer only sets position and rotation. The **focal length** of the new camera does not match that of the Viewer camera.
- ID 28291 - Nuke crashes on start up if the **disk cache** location set in the **Preferences** is no longer available.
- ID 20431 - CameraTracker: It's not possible to pick colors in the Viewer with the control panel open.
- ID 20204 - Multitexturing: When **Preferences** > **Viewers** > **Multiframe** is enabled, increasing **downrez** in the Viewer toolbar can cause textures to flicker in the 3D Viewer.

  You can switch back to **Classic** mode or avoid using proxy in 3D to workaround this issue.
- ID 19933 - ReadGeo: Geometry occasionally doesn't display as a solid until you click in the Viewer.
- ID 19185 - Attaching an FBX ReadGeo to the Viewer occasionally causes a slight graphical glitch in the **Properties** panel.
- ID 18649 - The transform jack is currently scaling incorrectly from the corner pivot point.

• ID 12505 - Motion Vector output has been improved, but still doesn't work properly because some large polygons are clipped by the front camera plane.

You can minimize this effect by increasing the geometry **tessellation max** parameter.

• ID 12424 - Ultimatte: Overlays are not updating correctly or reverting when panning or zooming.

• ID 11620 - In the 3D Viewer, there is currently a conflict between 3D geometry selection and points drawn with RotoPaint. This only occurs if you have two Viewers open, one in 2D mode and the other in 3D mode, and you have the panel for the RotoPaint visible.

• ID 9521 - Currently, the Nuke Viewer cannot cache very large plate sequences in float. The limit per frame is 50MB. If your frames are larger than this, you may need to switch to proxy mode for the caching to work.

• ID 5922 - At the moment, cloning does not work properly with all OFX nodes. This affects, but is not restricted to, any nodes that have an analysis pass.

• ID 5690 - Windows run-time libraries are not packaged properly with Nuke.

Nuke runs correctly from a network install on Windows without specifically installing the run-time libraries, though we still recommend that you do so as there are still some minor problems without them.

• ID 5083 - Flipbooking the output of the Anaglyph node asks which view you want to render. This question is unnecessary as the result is an anaglyph image. Irrespective of what view you choose, the flipbook output is the same.

• File types in Windows and Mac OS X are associated with the standard version of Nuke by default, so if you save a script on NukeX using features that are only included in NukeX (such as CameraTracker or FurnaceCore) and then double-click on the script icon to open it, it opens in standard Nuke instead of NukeX.

• CameraTracker: Canceling lens distortion initialization results in corrupt tracks.

• 3D Camera: If you want to navigate through the 3D point cloud created by the CameraTracker node when using **Create Scene**:

   • Select the Camera that was created in the 3D view when using the **Create Scene** button.

   • Press **F** to focus on the selected Camera. You can now navigate around the cloud. Do not try to focus (using **F**) on the point cloud. The resulting tumble camera movement is likely to be jumpy.

• Plug-ins installed using the Nuke Plug-in Installer may not work correctly as they were compiled against an earlier version of Nuke.

Known Issues Specific to Nuke Studio and Hiero

AAF

• ID 274824 - Elastic keyframes imported from Avid do not translate correctly into Nuke Studio.

Create Comp

• Multi-view, such as stereoscopic, is not supported for clip instances created using right-click **Effects** > **Create Comp**.

• ID 47044 - Inserting scripts into comps containing Text nodes using unsupported fonts causes Nuke Studio to crash when the Text nodes are disabled.

• ID 46470 - Create Comp: Enabling **Collate Shot Name** in the comp export preset offsets the comp frame range compared to the annotations precomp frame range.

• ID 41665 - There are currently no options to load or overwrite an existing script when you select **Create Comp**.

Exporting

• ID 49024 - Enabling the **Collate...** options in the **Export** dialog when exporting ignores the **Media** tab **Output Resolution** setting for the track above, and produces output with incorrect formatting.

• ID 47828 - Exporting retimed or reversed clips as **.xml** does not work as expected when imported into Final Cut Pro.

• ID 46403 - Controls set in the **Export** dialog **Content** tab occasionally default to the values from the **Nuke Write Node** Content preset.

Linux Only

• ID 282599 - Linux only: Input and timecode metadata is currently incorrect in the timeline Viewer if the framerate is changed.

• ID 239672 - Reading files from NTFS disks/partitions can be extremely slow, particularly for large files. This is a limitation of Linux NTFS file systems, rather than Foundry products.

  We recommend avoiding timeline playback that relies on source footage from NTFS disks/partitions.

• ID 235327 - CPU usage can reach 100% on a single thread during flipbooking, causing Nuke to become unresponsive.

• ID 167058 - PulseAudio (ALSA) can cause Nuke Studio to crash or impair playback.

  As a workaround, you can stop the **pulseaudio** daemon:

    1. Open **/etc/pulse/client.conf**

    2. Set **autospawn = no** and **daemon-binary** to **/bin/true**. Ensure these lines are not commented out.

    3. Call **ps -e | grep pulse** to check the process is still running.

    4. Call **pulseaudio --kill**

5. Call **ps -e | grep pulse** again to check the process has stopped.

• Linux only: Nuke Studio does not currently support any QuickTime audio reading. Support for audio on Linux is scheduled for a later release.

• ID 32613 - Dragging clips to the timeline with certain older NVIDIA drivers occasionally causes Nuke Studio to crash.

  As a workaround, ensure that you have the latest NVIDIA drivers installed, available from:

  www.nvidia.com/Download/index.aspx?lang=en-us

Mac OS X/macOS Only

• ID 39113 - QuickTime ProApps Codecs v1.0.3 break HDV and XDCAM on Mac OS X 10.7.5, and earlier.

  This is a codec issue rather than an application issue.

• ID 34779 - The shortcut for **Clear In/Out Points** (**Alt**+**U**) is not always triggered correctly due to a conflict with the combination for the umlaut symbol.

  To work around this, press **U** momentarily before **Alt**+**U**.

OCIO

• ID 198348 - Saving and closing a project that uses an OCIO config, and then relocating the Nuke install path, causes a **Could not load OpenColorIO config** error on reload.

Preferences

• The **Preferences** > **Path substitution** table for cross platform compatibility currently only comes into effect at project load, not EDL/XML import.

  As a workaround, import your sequence and set the **Path substitution** rule, then save the project and reload to force the conversion.

Python API

• ID 50113 - QActions are not added to the **Edit** menu in the menu bar when finding the menu action by name.

  As a workaround, use the **objectName** (**foundry.menu.edit**), where possible.

• ID 44394 - Calling **hiero.core.addPathRemap()** does not work for soft effect file paths.

Read and Write

• ID 278312 - Read/Write: The import progress bar occasionally persists after the import is complete, and cannot be closed.

  As a workaround, save and close the project, then restart Nuke Studio and reload the project.

• ID 49912 - HieroPlayer: Projects created in version 1.9, or earlier, are not editable in HieroPlayer 9.0.

• ID 46174 - XML: Shot names are occasionally not imported correctly from Adobe Premiere **.xml** files.

• ID 46100 - Exporting: Export speeds may be slower than expected. This may be due to the **Rendering** preference set to **limit renderer**.
  As a workaround, you can change the preference **Performance** > **Threads/Processes** > **Rendering** > **export renders** to **no renderer limits** to improve rendering speeds. You can also experiment with the custom renderer limits to adjust performance on your machine.

• ID 39897 - Importing and playing back very large format **.tif** files causes Nuke Studio to crash.

• ID 39557 - Writing **.exr**s with 200+ layers, when **interleave** is set to **channels**, can be sluggish.

• ID 36726 - Executing **Clip** > **Rescan Clip Range** displays frame read errors if the rescan adds frames to the clip.

• ID 35080 - QuickTime: Certain files read into Nuke Studio with a different start timecode to other applications, such as Premiere or Resolve.

• ID 31549 - Single layer exports from multi-pass clips fail if the selected layer is not a default Nuke layer, such as **depth** or **motion**.

• ID 28067 - Certain formats produce no monitor output, such as 2K 23.98 and 720P 25.

• ID 18880 - R3D: The aspect ratio of anamorphic **.r3d** footage is not displayed correctly when added to the timeline.

Soft Effects

• ID 280413 - Soft Effects: The Text effect cursor placement shifts incorrectly after typing first character.

• ID 278275 - Soft Effects: Closing a Timewarp effect's **Properties** panel disrupts the interface briefly.

• ID 275314 - Soft Effects: Additional keyframes are added incorrectly when animating Text effects.

• ID 230536 - The Burn-in effect does not maintain a constant text baseline for all characters when the format is changed.

• ID 175574 - Undo and redo of **Properties** panel changes can be unreliable if a soft effect delete is in the same undo stack.

• ID 50442 - TimeWarp: Applying a TimeWarp to a clip instance occasionally causes the associated sequence bin item to display an error.

- ID 50441 - TimeWarp: Applying a TimeWarp to clip instances retimed to values other than 100% does not work as expected.
- ID 49771 - Text/Burn-in: Nuke Studio doesn't warn you if the font used in an effect could not be found.
- ID 49298 - Burn-in: The Burn-in effect does not auto-update when switching between sequences until the playhead is moved.
- ID 49112 - Dissolve transitions do not work as expected in Custom soft effects, based on the examples provided here:

```
<install_directory>/pythonextensions/site-packages/hiero/examples/custom_
soft_effect.py
```

- ID 48970 - Burn-in: Burn-in elements are not updated automatically when the underlying metadata is updated.

   As a workaround, either change the frame displayed in the Viewer or choose an alternate element from the dropdown controls.
- ID 48878 - Burn-in: The Burn-in effect is currently a gizmo and cannot be cloned on the timeline.
- ID 48098 - Adding a transition when a Text effect containing an expression is on a track above, causes text rendering to fail during the transition.
- ID 48097 - Adding a transition when a Text effect containing an expression is on a track above, causes the text size to reset.
- ID 47075 - Exporting sequences containing clip-level Text effects using the **[frame]** expression writes incorrect frame numbers.
- ID 45835 - Expression links are incorrectly allowed between node and soft effect controls in the Properties panel, if the node and effect names are identical.
- ID 42438 - Effects are only visible in the Viewer if there is a clip instance below them in the timeline.
- ID 42401 - Renaming a soft effect does not update the clip instance until you click in the timeline.
- ID 42307 - Adding soft effects at clip level, using **Open In** > **Timeline View**, is only available using the toolbar button on the timeline panel. The right-click **Effects** menu is currently disabled.

Timeline

- ID 43913 - Locking a track currently prevents adding clip instances from the locked track to the Viewer input buffers. You can still open clip instances in the various right-click **Open In** options and access clip instance metadata.
- ID 41745 - It is not currently possible to drag-and-drop a clip to a new track between or below existing tracks.

   As a workaround, drag the clip to a new top-level track and then manually move the track to the required position.

• ID 27484 - It is not currently possible to alter the **Output Resolution** of clips opened using the right-click **Open in Timeline** option.

Timeline Disk Caching

• ID 280256 - Opening a Text effect's **Properties** panel directly after project load causes the cache bar to disappear.
• ID 272897 - Caching continues after closing the project associated with the frames being cached.
• ID 270934 - The caching logic does not currently account for gaps in sequences, resulting in the caching state icon remaining gray for fully cached sequences.

Timeline Read Nodes

• ID 313013 - Opening the Node Graph from the Project bin and then returning to the timeline environment behaves as if the left mouse button is held down.

  As a workaround, left-click in the timeline to cancel the mouse press.
• ID 310067 - Loading large projects is currently slower than expected.

Windows Only

• ID 314088 - Localization: The first frame of localized files in the outdated state, colored red, do not always update correctly.
• ID 49339 - Soft Effects: The background on Burn-in effects, when enabled, alters size depending on the timecode displayed.
• ID 28701 - Nuke Studio cannot currently parse Unicode characters during export.

Miscellaneous

• ID 313849 - Localization: Reading certain multiview **.exr** files causes Nuke to crash.

  As a workaround, rename or move your **.nuke** folder and re-launch Nuke to refresh the **uistate.ini** file.
• ID 272723 - Closing Nuke Studio when it was launched from the command line does not end all Nuke processes.
• ID 200015 - Selecting multiple bin clips can cause the right-click menu to respond slowly.
• ID 167919 - Localization: Re-importing clips into the Node Graph or project bin multiple times retains the original localization policies settings.
• ID 50490 - Audio: Zooming in on a waveform displays a **Failed to decode audio** error in the timeline.

- ID 50102 - Adding a custom Hiero window to a workspace and then saving it as the Nuke default workspace causes Nuke to crash on start up.
- ID 46235 - Comps with relative paths are not currently working when imported into the project.
- ID 42462 - Cache pausing stops working if any change is made to the timeline.

Developer Notes

Here are the changes relevant to developers. See **Help** > **Documentation** from the Nuke menu bar or www.thefoundry.co.uk/products/nuke/developers/111/ndkdevguide/appendixc/index.html for more information.

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 plugins and/or make changes to the source code.

Release Type	Example	Compatibility	Recompile	Rewrite
Version	10.0v1 to 10.0v2	API and ABI		
Point	10.0v1 to 10.5v1	API	●	
Major	10.0v1 to 11.0v1	-	●	●

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")
```

New Features

There are no new features in this release.

Feature Enhancements

• ID 197003 - Localization: You can now query a Read node's localization state using Python API calls.
  See File Localization API Extension for more information.

Bug Fixes

• ID 348068 - Python: The **onDestroy()** callback was called twice on exit.