



**Silhouette 4.5 What's New**

## ABOUT THIS GUIDE

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### About Us

SilhouetteFX brings together the unbeatable combination of superior software designers and visual effects veterans. Add an Academy Award for Scientific and Technical Achievement, 3 Emmy Awards and experience in creating visual effects for hundreds of feature films, commercials and television shows and you have a recipe for success.

## WHAT'S NEW IN 4.5.4

### Features

#### Allow Brush Size To Be Less Than One Pixel

Allow brush size to go down to 0.1 in size. Internally, this multiplies the brush profile values by the size  $< 1$  to simulate being smaller by adjusting the opacity.

#### Keyframe Motion Blur

The Motion Blur Shutter Angle and Shutter Phase can now be keyframed.

#### New Nuke 6.2+ Exporter Features

An alternate mode of the “Embed each layer in its own node” Input/Output > Nuke 6.2+ Shapes preference has been added. The “Embed each layer in its own node fully baked” mode bakes all shape control points on every frame of the work range. While this creates larger files, it works around a known Nuke motion blur problem.

A check box has also been added to the Input/Output > Nuke 6.2+ Shapes preferences which instructs the exporter to connect layers together using Merge nodes. However, if you set a layer in Silhouette to Subtract for example, you will have to manually adjust the corresponding Merge node in Nuke to Minus.

**Note:** Connecting of nodes with Merge nodes in Nuke is only supported in the layer based export modes: “Embed each layer in its own node” and “Embed each layer in its own node fully baked”.

### Scripting

#### Added flush() in stdout and stderr

When writing to stdout or stderr from a script, if the last character is a newline, the output will be flushed. Also, `fx_console` now contains a `flush()` method, so scripts can call it directly if necessary. This only changes behavior when running scripts from within the Silhouette user interface. When running in the command-line renderer, normal iostream flushing will occur.

## Added Variable Expansion To Output “Filename” Field

Added variable expansion to the Filename field to allow adding the version number after the specified view.

## Changes

### Bézier Tangent Manipulation Stereo

You can now manipulate a Bézier tangent on two linked shapes simultaneously.

### gMask Exporter

- Shapes now carry through the names they had in Silhouette with the exception of illegal characters which are replaced with underscores.
- Axis and Shape node pairs are now assigned a position on the Schematic View so that they do not overlap as before. The position scheme is a simple one, tiling the Axis and Shape node pairs horizontally to the right.

## Fixed Bugs

### Brush Squeezed in Anamorphic Session

If you set the session to an aspect ratio of 2 for anamorphic, the brush was squeezed horizontally like the image.

### Cineon/DPX Round-off Error

Cineon and DPX had a slight round-off error on save.

### JPEG Module

The JPEG module was modified to load a broader range of images.

### Layer Position Editing Broken When Nested

When moving a layer that was inside another layer, the transform was not calculated correctly.

### Linux Tablet Issues

Tablet pressure sensitivity was not working under some Linux distributions. Upgrading our user interface toolkit version solved this problem.

### Nuke Export and Large Frame Numbers

Very large frame numbers were getting written in scientific notation.

### Paint Shoots Across Screen - Left/Right View

In a stereo project with Left/Right view on, paint will shoot across the screen if you paint on the left side image and the stroke hits the far right of the image.

### Planar Tracker > Points Outside of the Selection

The Planar Tracker was not setting the error properly for features that were "lost" and generated points outside of the selection.

### Render Suffix Preferences Had No Effect

The Render Suffix Preferences had no effect on the filename.

### Roto Motion Blur Problem

The motion blur would not blend properly if some of the samples started out off-screen.

## Scripting

### Script Path Fixes

Added another script path that gets searched before the other paths: SFX\_SCRIPT\_PATH. This is useful for a site-wide scripting location. Also fixed an issue where if back slashes were used in environment variables, Python would not import from that location.

### RenderInfo.prefix

RenderInfo.prefix was not scriptable.

### Problem With frameSet and Output Start Frame

Setting the renderInfo.frameSet attribute would not immediately update the session state, so it would not kick in most of the time. In addition, there was no way to set the output start frame from scripting. Added renderInfo.startFrame attribute (read/write).

## Shift View by Stereo Offset of Active Layer

The Right view is now shifted when in Left/Right and Align mode, but not just when viewing the Right view. Shifting it helps line up the plates for another level of checking.

## Stereo Left/Right View and Shape Selection

The selection rectangle for the left side was being used for the right side.

## TIFF Compression Support

Added compression on/off property to TIFF (like SGI).

## Tracker Files Not Importing on Linux

Tracker files were not importing on Linux.

## Tracker - Multiple File Import

You could not import multiple tracker files at once.

## Viewer > Gamma and Gain Affected Alpha

Changing the Viewer > Gamma or Gain controls was also applied to the alpha.

## WHAT'S NEW IN 4.5.3

### Features

#### **Composite Node - Add Background Color Parameter**

Added a parameter to control the background color in the Composite node. It allows the color to be changed and automatically clear the appropriate caches. The Background Color for a new Composite node is automatically set to the Composite > Background Color preference.

#### **SFX\_VALID\_XML Environment Variable**

Silhouette shape files are not valid XML. Now, shape files can be written as valid XML by setting the SFX\_VALID\_XML environment variable to anything (except 0, which will disable the option). When enabled, shape files will not import into older versions of Silhouette.

### Changes

#### **Allow Valid XML Shape File I/O**

The shape file format was not valid XML. We now support importing valid XML and exporting (optional with an environment variable) valid XML.

#### **Opening New Project Shows Timeline**

If you are in one project and then open another, the Timeline is now displayed by default. Previously, the Console would be displayed in some cases.

#### **Show MultiFrame Timeline Bar in Red**

When enabled, the MultiFrame Timeline bar is now red instead of blue.

### Fixed Bugs

#### **Alpha Display State Between Projects**

If you opened a project, pressed Shift-A, opened another project and pressed **A** to cycle the alpha, Silhouette would get into a state where scripting would not accept the color value.

## Demo Mode Watermark

Demo mode was missing the watermark logo. Instead, there was a black square over the image.

## Mouse Wheel in Timebar Caused Player to Get Out of Sync

Using the mouse wheel in the Timebar would trigger a continuous time change to the current frame, which could conflict with other player operations.

## MultiFrame Mode Bugs

- If editing a control point on a shape that was not a keyframe, the point did not follow the pointer when in a transformed layer.
- Keyframes were getting added when they did not need to be.
- Modifying points (Linear, Corner, Cardinal) in the Reshape tool did not properly obey the MultiFrame range.

## Nudging Problem

Pressing and holding one of the arrow keys did not continuously move the selected object.

## Nuke Export and illegal Characters

It was possible for exported shape and layer names to contain what Nuke considered illegal characters. They are now converted to underscores.

## Render to Channels Only Inherited From Most Immediate Layer

When rendering to channels, a shape would only look to its most immediate parent layer to see if the channel should be overridden. Now, it will walk all the way up the tree until it hits an override.



## WHAT'S NEW IN 4.5.2

### Fixed Bugs

#### **Drawing Rectangle or Circle into Transformed Layer Not in Screen Space**

Attempting to draw a rectangle or circle into a transformed layer had the rectangle transformed, and it wasn't in screen space.

#### **EXR to 8 bit Corruption**

EXR to 8 bit conversions were corrupting.

#### **Tracking Preview Black with EXR's**

The tracking preview window displayed black with EXR files.

## WHAT'S NEW IN 4.5.1

### Changes

#### Updated OCIO Config

The OCIO config was updated by Sony.

### Fixed Bugs

#### Missing Luts on Linux and Mac

Added missing luts to Linux and Mac resources folders.

#### Reshape Tool Nudge Not in Screen Space

The Reshape tool did not nudge correctly in transformed layers.

#### Shift-Alt Change

**Shift-Alt** instead of just **Shift** must now be held down to move keys in the Timebar to work around possible accidental movement/selection of keyframes in the Timeline.

#### Zoom with Tablet - Linux

Zooming with the tablet was not working as expected on Linux.

## WHAT'S NEW IN 4.5

### Features

#### OpenColorIO Color Management

Silhouette now uses the OpenColorIO standard originally developed by Sony Pictures Imageworks for its color management. You can load custom color configuration files and custom LUTs, apply colorspace conversions, as well as use other controls for fine tuning. Silhouette includes a set of preset color profiles, plus you can configure and use your own by specifying one in the Color Management > OCIO Configuration preference.

For a more detailed explanation of OpenColorIO, including generating LUT's and suggested workflows, please visit <http://opencolorio.org/>.

#### Color Management Preferences

There is a new Cineon/DPX Working Colorspace preference that controls whether or not Cineon and DPX images are converted to linear. In addition, an OCIO Configuration preference sets the path to a global configuration file. The default is "\$OCIO". Silhouette will initially look for \$SFX\_OCIO and will use that first. Otherwise, it will use whatever the configuration preference is set to and finally it will check for \$OCIO. If it still can't find a configuration, it will fall back to the embedded configuration in the resources/ocio folder.

#### DPX INTERPRETATION Environment Variables

##### SFX\_DPX\_INTERPRETATION

Sets the default DPX interpretation for loading and saving to either log or linear. This value only gets queried when media is first imported.

##### SFX\_DPX\_LOAD\_INTERPRETATION

Sets the default DPX interpretation for loading to either auto, log, or linear.

##### SFX\_DPX\_SAVE\_INTERPRETATION

Sets the default DPX interpretation for saving to either log or linear.

## OpenColor IO Environment Variables

### SFX\_CINEON\_WORKING\_SPACE

Set to either log or linear. This environment variable overrides the Color Management > Cineon/DPX Working Colorspace preference.

### SFX\_OCIO\_COLORSPACE

Sets the default Viewer > Display > Colorspace.

### SFX\_OCIO\_DISPLAY

Sets the default Viewer > Display > Display.

### SFX\_OCIO\_LUT

SFX\_OCIO\_LUT can be used to set the default LUT. This will get set when a new session is first created. The value for this variable is the full path to the LUT, including extension. The name is case sensitive. This environment variable replaces the previous SFX\_DEFAULT\_LUT.

### SFX\_OCIO\_VIEW

Sets the default Viewer > Display > View Xform.

## Paint > Color Palette

The Color Wheel in Paint has been replaced with a HSV Color Palette. This new palette is now color managed and properly displays float color values.



## Changes

### 16 Bit Sessions Removed

16 Bit Sessions are no longer used. If you have 16 bit footage, it will be promoted to float.

### Cineon Conversion Bypass

The Cineon Conversion Bypass sequence option has been removed and replaced by the Color Management > Cineon/DPX Working Colorspace preference.

### Input/Output Preference Removed

Float Conversion and Cineon/DPX preferences have been removed from the Input/Output preference group. These preferences are no longer needed and have been replaced by the Color Management > Cineon/DPX Working Colorspace preference.

### Paint Compatibility

Painted projects created in Silhouette v4.3 and below are not compatible with Silhouette v4.5. Attempting to load a paint project from a previous version will result in unexpected results because a different conversion method is being used for certain files.

Silhouette v4.5 will install in it's own folder allowing you to simultaneously run v4.3 and v4.5. This will enable you to continue to open and work on older paint projects if you need to.

### Session Preference Removed

The Session preference group was removed. It is no longer needed.

### Viewer Display Changes

- The Display Options controls have been removed and replaced with a new Color Management toolbar which can remain on-screen as long as the Display Options icon is enabled. This setting is remembered as a preference.
- Exposure, Gamma, Black, White, and LUT have been replaced with OpenColorIO related controls for Colorspace, Display, View Xform, Gain (exposure), and Gamma.



- **The Display control is used to specify what kind of monitor profile to use. This is almost always sRGB but some OCIO configurations support more advanced monitors.**

## **Viewer > Display Gamma Preference**

Since old-fashioned controls for display gamma are no longer used, Display Gamma has been removed from the Viewer preference group.