



SILHOUETTE
What's New

ABOUT THIS GUIDE

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About Us

Founded in 1995, Boris FX is a leading developer of VFX, compositing, titling, video editing, and workflow tools for broadcast, post-production, and film professionals. Boris FX products have grown to serve over a million artists worldwide. The company's success lies in its ability to tightly integrate and leverage technologies through strong partnerships with Adobe, Apple, Avid, Blackmagic Design, Autodesk, FilmLight, Grass Valley, Magix, SGO, and other leading developers of video editing software. In 2014, Boris FX acquired Imagineer Systems, the Academy Award-winning developer of Mocha planar tracking software. In 2016, Boris FX acquired GenArts, the developer of Sapphire, the gold standard plug-in package for high-end visual effects. In 2019, Boris FX acquired the Academy Award-winning Silhouette for advanced feature film rotoscoping, painting, and effects.

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Features

Sapphire, Mocha Pro, Particle Illusion & Continuum

Sapphire, Mocha Pro, Particle Illusion and select Continuum BCC+ filters are now included in Silhouette.

Sapphire

Over 270 effects and thousands of presets seamlessly integrate into Silhouette's resolution independent node-based compositor. Sapphire features the industry's favorite lighting effects, lens flares, glows, blurs and useful processing filters for film and television visual effects work.

Mocha Pro

Launch the Mocha Pro interface from within Silhouette to access the Academy-award winning planar tracking interface. Mocha Pro brings PowerMesh organic mesh tracking, object removal, AdjustTrack and more advanced tracking features to Silhouette users. Mocha's new Data port enables seamless workflows for passing tracking, shapes and mesh data from Mocha Pro to Silhouette.

Particle Illusion

Create realistic particle animations with Particle Illusion's 3D emitters, fluid dynamics, and massive preset library. Add useful environmental elements such as dust, smoke, fire, explosions or explore curated graphics such as HUDs and sci-fi elements. Available for Mac and Windows.

Continuum BCC+ Filters

The following Continuum BCC+ filters are now included with Silhouette: Beauty Studio, Blur, Channel Blur, Channel Blur YUV, Directional Blur, Film Glow, Light Leaks, Magic Sharp, Prism, Radial Blur, Smear Blur and Video Glitch.

Inpaint

Inpainting is a technique which fills a section of an image. This is useful for removal of unwanted objects such as wires, markers or blemishes. Integrated Roto tools create shapes and multiple algorithms are available to automatically fill-in the specified regions with information surrounding them. To create a seamless result, the detail (texture) from another part of the image or other image can optionally be composited over the inpainted area using the Detail controls. All of the tools from Silhouette's Roto node are integrated within the Inpaint node.

PowerMesh Warp

PowerMesh enables a powerful sub-planar tracking process that tracks warped surfaces and organic objects. Mesh tracking takes place in the Mocha Pro node and when connected to the PowerMesh Warp > Data input, images are either warped or unwarped based on the generated mesh.

DOD - Surface

A Layer input and selector are now available in the DOD node. When selected, the input Layer > Surface size is used to define the DOD. A margin can also be added to the boundary of the surface.

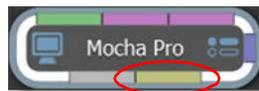
GStreamer Rendering

Currently, Silhouette imports movie file formats using GStreamer, a versatile media handling library for reading various codecs and footage containers. Now, rendering to movie file formats is also supported.

Mocha Pro

Data Output

Mocha Pro's Data output passes shape, layer and mesh data through to other nodes with Data inputs.



DOD

Use the selected Mocha Pro Layer > Surface to set the DOD dimensions.

PowerMesh Warp

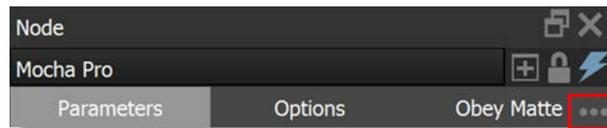
Warp or unwarp images based on the selected Mocha Pro mesh.

Transform

Select the Mocha Pro layer as a source for stabilization, match moving or inserts.

Node Actions

The Mocha Pro > Actions menu creates Silhouette Roto and Tracker nodes from the Mocha Pro project without having to go into the Mocha UI.



Copy Data

Copies all Mocha shapes, layers, and PowerMesh data which can then be pasted into nodes that accept layers and shapes.

Create Roto Node

Creates a Roto node from all Mocha shapes, layers and PowerMesh data.

Create Tracker Node

Creates a Tracker node from all Mocha shapes, layers and PowerMesh data.

Point Control Parameter Tracking

Point control parameters can now be match moved. To achieve this, a Data input port was added to all nodes with point control parameters. Match moving happens when a node with tracking data is plugged into the node's Data input and either a point tracker or tracked layer is selected in the Transform pop-up menu to the right of the point control.

Roto

Jump To Midpoint Between Keyframes

Alt-Z jumps to the midpoint of the current frame and the previous shape keyframe while **Alt-X** jumps to the midpoint of the current frame and the next shape keyframe.

Select All Open Shape Start or End Points

The Reshape context menu now has Select Start Points and Select End Points options which automatically select all open shape start or end points. The selected points can then be edited simultaneously, for instance, for feathering the ends of open shapes to a point when rotoing hair.

Surface

You can check the accuracy of a planar track by turning on the Viewer > Surface icon and setting the inner corners of the Surface to match the perspective of the tracked plane.

The following tasks can be achieved using a Surface:

- **Create Corner Trackers from Layer Surface**

When using Create Corner Trackers from Layer Surface, point trackers are created from the Surface corner points.

- **DOD**

When the Data output of a node with a layer surface is plugged into the DOD > Data input and the layer is selected, the DOD is automatically set to the bounding box of the surface.

- **Transform Node > Insert**

Use the Layer > Surface corner points to set the insert corner-pin.

Tracker Creation From Layer Surface

With the Point Tracker tab selected, right-clicking opens the Tracker pop-up menu and there are two new items:

Create Corner Trackers from Layer Surface

Creates four trackers around the four corners of the layer surface.

Create Tracker from Surface Center

Creates one tracker in the center of the surface.

Transform > Insert Mode

The Transform > Mode > Insert feature uses the selected Layer > Surface corner points to set the insert corner-pin.

Native Mac M1 Support

Optics now runs as a native, Mac M1 application.

OpenColorIO v2

Upgraded from v1, OpenColorIO v2 is a major update and contains a number of new features including:

- **A more accurate GPU renderer and faster CPU renderer**
- **More accurate ACES transforms and support for the Academy Common LUT Format (CLF)**
- **New mathematical operator types and inversion support for all operators (including 3d-LUTs)**
- **Better support for display color spaces and ICC monitor profiles**
- **New color space properties such as categories to support a better user experience**

Alpha Channel Processing

Applicable filters, for instance lens flares, glows and blurs, can now affect the alpha channel.

Scripting

Import/Export Objects

Added the ability to import/export .sfxnodes files. Trees > Save/Load Nodes can be built on top of the following:

- **`fx.exportObjects(path, objects)`**
- **`fx.importObjects(path)`**

Paint Preset Menu Scriptable

Scripts now register menu actions with the PaintPresets root.

Shape Feather and Open Spline Info

In previous versions of Silhouette, you could change shape points/weights, but not feather or open spline info. The same syntax is used as before, but now is context sensitive depending on whether you pass the additional per-point tuple values.

User Interface

Additional Viewers > OCIO Controls

Additional viewers now have their own OCIO controls. Previously, they were shared with the main viewer.

Color Picker Live Changes

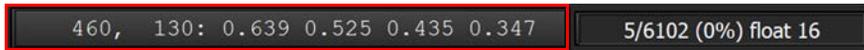
When using a color picker, color changes update live in the Viewer.

Enhanced On-Screen Controls

The on-screen controls have been enhanced in a number of Silhouette nodes, most noticeably in gradient based effects.

Pixel Color Status

The pixel color status was previously only available in Paint. Now, it updates all the time. Pressing the ' key locks the values and displays them to the left of the live values. Pressing " clears the locked values.



Preview

The Viewer > Preview includes a variety of display options when an alpha channel is present such as: RGB Straight, Over Black, Over Gray, Over White, and Over Checkerboard.



Tab Key Node Search/Add

Press the **Tab** key in the Trees window to open a search window, type the name of a node and press **Enter** to add it to the tree. With a selected node, the new node automatically connects to it. Without a node selection, the new node appears at the cursor location. You can also press the **Tab** key in the Nodes window to enter search mode.



Two-Axis Dragging

2D control point fields now have an icon, located to the left of Reset, that acts as a two-axis dragger. Instead of dragging the X or Y parameters, you can click-drag on the icon and the control point will move with respect to the mouse/tablet offset.



Changes

Manual Mode

When Manual mode is engaged, opening a project or switching sessions does not force a render. This is useful to open up a project that may be crashing.

Preferences

Paint > Clone > Reset Frame Number With Transform

A Paint > Clone > Reset Frame Number With Transform preference was added and defaults to off.

User Interface

Data Ports Renamed

All Transform/Objects node inputs/outputs were renamed to Data.

Removed View and Update Labels From Viewer

The View and Update labels were removed from the Viewer.

Viewer > Gain Control Range

The Viewer > Gain control range was expanded from -3/3 to -5/5 and you can now type in values up to -10/10.

Bug Fixes

GPU Selection

Silhouette didn't always choose the best GPU when multiple GPU's were present.

Nodes

Color Correct > Color Wheel Crash

Double-clicking in the center of the Color Wheel or in the Brightness bar caused Silhouette to crash.

Lens Flare > Flare Editor

Some Image Colorspaces Displayed Incorrectly

Some image colorspaces displayed incorrectly in the Flare Editor. When necessary, the images are now converted from linear to sRGB.

Flare Editor Didn't Open on Mac or Linux

The Flare Editor did not open on Mac or Linux.

Math Composite

The Difference blend mode did not work as expected.

Pin Warp and Sapphire Nodes Changed DOD

When compositing a smaller image over a larger background and a Pin Warp or Sapphire node was placed after the smaller image, the Composite DOD was clipped to the smaller image.

Sapphire And Swap Channel

If Swap Channels was used before a Sapphire node, the alpha was ignored and opaque alpha was used instead.

zMatte Composite Output Clipped Highlights On Linux

On Linux, zMatte's Composite output clipped highlights.

Paint

Paint > Average Color Selection With Pen

Right-click-drag to average the colors within the selection did not work with a pen/tablet.

Straight Line Overlay Not Visible With ROI Enabled

When the ROI controls were enabled, the straight line overlay was not visible when using **Alt-click-click** in Paint.

Paint > Clone > Interactive Issue

When using QWE with Clone > Interactive enabled, the Interactive overlay was removed, but the Interactive button was still enabled.

Clone Offset Not Matching Onion Skin - Linux

The clone offset did not match the onion skin view when using corner-pin and an image that was smaller than the session size.

Cloning From Other View And Stereo Offset

Cloning from the other view did not use the Stereo Offset.

Plug-in

After Effects MFR Error Message

After Effects MFR (Multi-Frame Rendering) error no longer appears.

Source Bit Depth Display Wrong

Sources always displayed as 8 bit on the thumbnail information even when it was 16 or 32 bit.

PNG

Corrupt Edges When Rendering 16 Bit PNG

When rendering a shape with blur or motion blur to the PNG file format in a 16 bit float session, the shape edges were corrupt.

Grayscale PNG Would Not Load/Render

Grayscale PNG's would not load or render.

Roto

Adjusting A Shape In One View Affected Other View

When editing a shape in the Left or Right View with the Edit In Both Views icon enabled, the shape in the other view was also mistakenly edited.

Extract/Combine Shape Had No Effect

Extract Shape and Combine Shape had no effect.

Magnetic Reshape and Edit in Both Views

When Edit in Both Views was enabled while viewing the LR view, editing with Magnetic Reshape only affected the view the points were edited in instead of both views.

Tracking

Exporter Issues

Exported layers to Nuke trackers, when reloaded in Silhouette, only displayed the top right track. Exported layers to Simple format, when reloaded in Silhouette, displayed two sets of corner-pin tracks.

Extra Keyframe When Tracking Backwards

When tracking backwards with the Planar or Mocha tracker using a work range in the center of the sequence, for instance frame 60 to 30, a keyframe was created on frame 29.

Off-Screen Trackers Caused Crash When Selected

When selected, off-screen point trackers would, in some cases, crash Silhouette.

Tracking One Frame Displayed Progress Window

Tracking one frame would pop up the progress window.

User Interface

DOD Magnifier Corruption

The Magnifier window was corrupted when used outside of the DOD.

Lock Project Crash

Silhouette crashed when the project was locked and a node was added to the Trees window. You can no longer add nodes to the Trees window when the project is locked.

Numeric Keypad Did Not Work

The Numeric Keypad did not work when using Num-Lock with numbered keyboard shortcuts.

OCIO

OCIO Colorspace Default Config

The Color Management > OCIO Configuration preference, when changed, now sets the default config displayed in the OCIO Colorspace node after a restart.

OCIO Colorspace Node With Aces Config

In the OCIO Colorspace node after loading the Aces Config, the pop-up menu size was so small that you could not tell what was being selected. You had to jump to another node and back before the pop-up menu would resize. The pop-up menu now automatically changes size when a new config file is selected.

Known Issues / Limitations

GStreamer

Command-Line Rendering

It is not currently possible to command-line render with GStreamer as the output format.

Hang When Rendering GStreamer From Interlaced Session

There is a hang when exporting with GStreamer as the output format in an interlaced session.

Uncompressed Movies In Plug-in - Mac

If you load an uncompressed movie from within the plug-in, it will not flow through to the host.

Warning In Nuke Terminal

On Windows, there is a benign GStreamer warning in the Nuke terminal when running the Silhouette plug-in.

OpenColorIO

OpenColorIO is not implemented in Particle Illusion or the Lens Flare > Flare Editor which results in the image in those interfaces not exactly matching the Silhouette viewer.

Power Mesh

The Power Mesh node renders a slightly different result than Mocha Pro.

Silhouette Plug-in

Flame Sequence Numbering

Flame is not obeying the OFX parameter that determines the start frame, so a Flame sequence starting at 1 instead starts at 0 in Silhouette.

Multiple Instances of Silhouette Plug-in

You can't connect two Silhouette plug-ins in a row. There can be multiple Silhouette plug-ins, just not chained together.

Premiere Pro

Alpha Channels With Soft Edges

By default, Premiere Pro is linearizing the alpha channels exported from the Silhouette plug-in even though they are already linear. This causes the alpha to appear smaller when using soft edges. To avoid this issue, disable Composite in Linear Color in the sequence settings.

Misreporting The Resolution

Silhouette requires that Premiere Pro's Playback Resolution be set to Full. Otherwise, an error message is displayed when you try to open the Silhouette user interface. Sometimes, Premiere Pro misreports the correct resolution even though it is set to Full. If this happens, change to a different frame and try again. Adobe is aware of this issue and is working on a fix.

Trimmed Footage Loads Entire Clip Into Silhouette

If a clip is trimmed in Premiere Pro, the entire clip is loaded into the Silhouette plug-in instead of the trimmed clip. Adobe is aware of this issue and is working on a fix.

Resolve and Vegas > Multiple Inputs

Resolve and Vegas do not allow more than one input for plug-ins that use custom user interfaces. However, additional sources can be added directly within Silhouette.