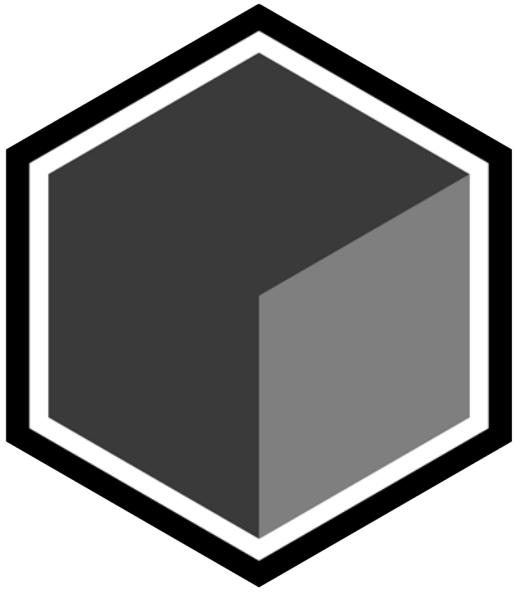

SILHOUETTE

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.

SILHOUETTE 2025.0.2 - 7/10/25

Bug Fixes

3D Scene

Added Pop-Up Notification For Missing Camera In Imported File

A clear error message is now displayed when no camera is detected in the imported Alembic or FBX file.

Alembic Importer Didn’t Handle Camera Transforms With An Array Size Of 3

The Alembic importer now properly supports camera transforms with an array size of 3.

Y-Axis Rendered Incorrectly When Camera Was At Origin

When the camera was positioned at the origin, the Y-axis failed to render correctly.

Default Session Format

The default session format when a clip was not selected was changed from NTSC D1 720 29.97 (720x486) to HDTV 1080 24 (1920x1080).

DOD and Matte Assist ML - Performance Degradation

Processing was significantly slower when using a DOD node prior to Matte Assist ML.

Fusion - Frozen Frame

Fusion would display a frozen frame when the Timeline began at certain start frames, such as frame 1000.

Locale-Dependent Project Data Issues

Projects saved in non-English locales--such as German--could experience compatibility issues. These can affect node arrangement in the Trees window and shape control point positioning.

Matte Refine ML - Video Matting v1.0 Crash

Selecting the Video Matting v1.0 model could intermittently cause Silhouette to crash.

NVIDIA Driver Issue With Version 550 And Later

Silhouette could hang when GPU nodes were applied using NVIDIA drivers version 550 or newer.

Scripting - MediaFormat.parts() Crash

Invoking MediaFormat.parts() to query the part list of a multi-part file could trigger a crash under certain circumstanses.

SXR File Right View Failure

SXR files would fail to display the right view unless the Stream > Right parameter in the Source node was manually set.

SILHOUETTE 2025.0.1 - 6/26/25

Bug Fixes

3D Scene

Camera Did Not Appear With Maya Exported Alembic File

The camera did not appear in the 3D Scene node when using an Alembic file created in Maya.

Front/Back Views Were Identical

The Front and Back views were identical.

Orbiting Improved

The 3D Scene node now orbits around the distance between the camera and the origin, rather than the focal length. Previously, when zoomed out, the old method caused the orbit to behave more like a pan—objects in the background remained largely unaffected, making the movement feel less like a true orbit. The orbit behavior can be controlled by the 3D > Orbit Mode preference.

Views Without An Image Did Not Playback

3D views without an image did not playback. This happened in Quad Perspective, Top, Bottom, Left, Right, Front and Back.

Curve Editor - Dragging Points Crashed Silhouette

Dragging points in the Curve Editor caused Silhouette to crash.

Depth Matte ML - No Result When Connected To Matte Refine ML At Default RGBA Output Setting

At the default Depth Map ML > RGBA output setting, adding a Matte Refine ML node afterwards displayed black instead of a result. However, setting the output to Alpha worked as expected.

SILHOUETTE 2025 - 5/26/25

Features

New Nodes

3D Scene

The 3D Scene node provides an environment where you can load scenes in Alembic or FBX formats. Once loaded, you can select 3D tracks, solve them into a plane, and place cards in 3D space. Using the Data output port, you can:

- **Use cards to Insert, Match Move and Stabilize in the Transform node**
- **Unproject images, paint or composite them, and then reproject the results**
- **Transform Paint strokes with cards**
- **Import cards and convert them to layers for use in Roto**
- **Unproject and stabilize directly in the Viewer using cards**
- **Convert 3D trackers into 2D point trackers**

Colorspace

Converts to L*a*b*, XYZ, and YCbCr colorspaces.

Depth Map ML

Depth Map ML analyzes an image and determines how far away each part of the scene is. Use the depth map with other depth objects in the Depth node, control blur or color correct based on depth in the Depth of Field and Color Correct nodes, and create mattes according to a particular depth level.

Frame Fixer ML

Replace damaged frames with newly generated ones to solve issues like photo flash artifacts. When Paint is connected to both the main and Data input ports, a morph occurs between the painted keyframes.

Matte Refine ML

Produces a natural edge from a hard matte providing fine detail with semi-transparency. Great for hair, feathers, fur, or any irregular edge. Use Matte Assist ML to automatically create a hard, animated matte and then let Matte Refine ML do the rest.

PowerMesh Morph

Morphs between specified frames using Mocha Pro's powerful sub-planar PowerMesh tracking which tracks warped surfaces and organic objects. When Mocha Pro's Data output is connected to the PowerMesh Morph > Data input, a morph occurs between either painted keyframes or individual frames from two separate inputs based on the generated mesh.

Unproject / Reproject

The Unproject/Reproject node workflow consists of unprojecting motion derived from a 3D Scene node (effectively stabilizing the motion), painting or compositing on the locked down sequence and then reprojecting back to the original motion.

Unproject

Unprojects motion derived from a 3D Scene node which effectively stabilizes the motion.

Reproject

Restores the original motion that existed before using the Unproject node.

Mocha Pro 2025

Mocha Pro has been updated from v2024.5 to v2025. New features include 3D Camera Solve enhancements, Object Brush, Matte Assist ML, and Vector Matte Clips.

For a complete list of features, fixed bugs and changes, see: **Release Notes**

Sapphire 2025

Sapphire has been updated from v2024.5 to v2025. New features include VHSDamage, DissolveLightLeak, new presets, and user interface updates to the Preset Browser, Effect Builder, and Flare Designer.

For a complete list of features, fixed bugs and changes, see: **Release Notes**

Particle Illusion 2025

Particle Illusion has been updated from v2024.5 to v2025. New features include copy/paste gradients, Repeat animation option, improved user interface, and new 2025 Emitter Library.

For a complete list of features, fixed bugs and changes, see: **Release Notes**

Compound Nodes

Compound nodes allow you to merge selected nodes into a single combined node, with parameters grouped by node for streamlined access within the Parameters window, enabling you to view one node while editing another. Customization is provided by adding, removing or renaming nodes and input/output ports as well as hiding parameters. Additionally, compound nodes can be published to a designated node group and are stored in an external location for reuse on other systems.

Node Enhancements

Difference Matte

The Highlight Difference controls add a colored overlay to show what is different between the two inputs.

Matte Assist ML - Create Mask ML, EZ Mask, Roto Node

Three buttons in the Parameters window add a Mask ML, EZ Mask, or Roto node before Matte Assist ML with their Data output connected to the Data input. In addition, when the Create Mask ML and EZ Mask Node buttons are selected, Reference Frames is automatically set to Keyframes (data port) while the Create Roto Node button automatically sets the Mask Source to Roto (data port).

Mocha Pro

The Copy Data, Create Roto Node and Create Tracker Node actions are now available as buttons in the Parameters window.

Motion Blur ML

Motion Blur has been renamed to Motion Blur ML and Optical Flow ML is now built in.

Roto

Brush Reshape Shortcut For Transform Point Mode

Ctrl/Cmd-Alt-drag left/right rotates the selected points left or right in Transform Point mode while in the Brush Reshape tool.

Import From Data Port

In all Tracker-based nodes, the I/O > Import From Data Port button imports all layers from a Roto or Mocha Pro node, or all cards from a 3D Scene node, and converts them into layers in the Object List.

Transform > Insert > Corner-Pin

The Corner-Pin controls now work when doing an insert.

Stability

Added four new generative modes to Stability.

Erase

Removes unwanted objects using the alpha.

Search and Replace

Search and Replace, similar to Inpaint, replaces specified areas with new content, but this time with the help of a prompt instead of alpha. Automatically segments the searched object and replaces it with the object described in the Select Prompt.

Search and Recolor

Search and Recolor, similar to Inpaint, provides the ability to change the color of a specific object in an image using a prompt. Automatically segments the object and recolors it using the colors requested in the Select Prompt.

Remove Background

Accurately segments the foreground from an image to remove the background.

Collect Files

File > Collect Files copies the project and media to a new location with the media placed inside the project folder.

ML

GPU Memory Usage Improved On Linux

1.5GB of GPU memory is saved on Linux when using Mask ML with Matte Assist ML.

Models Load Faster

Most ML models load faster.

ACES 2.0

ACES 2.0 OCIO config files are now bundled with Silhouette and can be selected using the Color Management > Default OCIO Config preference.

Preferences

Default OCIO Config

Chooses the default OCIO configuration. Silhouette is the default, but various ACES 2.0 config files can be selected.

Motion Blur

Roto and Shape group Motion Blur preferences were added to determine the default motion blur enable state of the Roto node and shapes.

- **Roto > Motion Blur on/off**
- **Shape > Motion Blur on/off**

Shape > Color Mode

Auto

Shape colors are assigned based on the Color > Object Colors preference. Each new shape's color rotates between the 16 predefined Object Colors.

Manual

Shape color is set based on the Color > Default Outline Color preference.

Shape > Create Layers In Active Layer

Layers are created within the active layer rather than the root.

Tracker > Track Subtracted Layers

Sets the default state of Track Subtracted Layers.

Scripting

Added "no_ reset" Capability To Property

User-defined properties can now have a "no_reset" flag set such that when the Reset All button is pressed in the UI, they won't be reset to their default value. Useful for private hidden opaque properties that should have persistent state.

Added State To All Objects

Previously, only Nodes had user-defined state. Now, you can now attach opaque data to all objects without using properties.

Allow Projects To Be Created In startupComplete Hook

Silhouette now handles a project being created during startupComplete.

Made Data Types And Data Type Lists Just Be Strings

Previously data-types were hard-coded as link-time string pointers. Now, they are "soft" (ie. simple strings) so they can be created and used in Python scripts.

SFX_NATIVE_IMPORT_DIALOG Environment Variable

Setting the SFX_NATIVE_IMPORT_DIALOG environment variable to a value of 1 always uses the native OS file import dialog.

User Interface

AI/ML Node Group

A new AI/ML node group was added and includes: Denoise ML, Depth Map ML, Edge Refine ML, Frame Fixer ML, Mask ML, Matte Assist ML, Motion Blur ML, Optical Flow ML, Stability, and UpRes ML.

Cache Window - Image Display

Double-clicking an entry in the Cache > Object List displays the image.

Ctrl+L To Lock Selected Objects

Ctrl/Cmd+L and Actions > Edit > Toggle Object Lock locks selected shapes, layers and trackers.

Grids & Masks

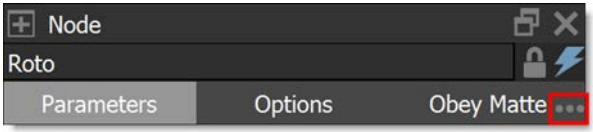
The previous Show Format Mask icon has been renamed to Grids & Masks. When selected, the Grids & Masks toolbar opens where you can configure and display grid and mask overlays.

Matte Assist ML Session Template

Automatically adds Mask ML, Matte Assist ML, and Output nodes to the source and selects the Composite workspace. When using the plug-in, the Render parameter is automatically set to Output: Cutout.

Node Actions - Reset All

Added an Options icon for all nodes to the right of Obey Matte that includes Reset Parameters. Depending on the node, other node actions can be performed through this menu.



Node Input/Output Port Connection Indicators

When hovering over a node line connection, the associated input and output ports, as well as the connected nodes, are highlighted.

Show Library Versions In About Box

The version information for all libraries (such as OCIO, EXR, etc) that Silhouette uses appear in the About Box.

Use Current Frame

A Use Current Frame button (F) was added next to the Frame field parameters to automatically enter the current frame.

Viewer Stabilization

Toolbar

Clicking the Stabilize icon opens the Stabilize toolbar where you can enable stabilization, select a transform source or optionally unproject.

Unproject

Unproject remaps the area inside the layer or card so that it becomes flat--making it easier to work with pixels that have a regular repeating pattern or tend to be more horizontal or vertical.

Utilizes Cards

Cards from the 3D Scene node are available to stabilize the Viewer.

Changes

Shape Motion Blur Enable State

In Silhouette 2024.5 and earlier, new shapes had motion blur enabled if the Roto node motion blur state was enabled. Now in 2025 and later, the motion blur enable state is controlled by the Roto and Shape > Motion Blur preferences.

User Interface

Activate Pasted Node

When coping and pasting a single node, the pasted node is now activated.

Add Dock Icon Moved To Title Bar

The Add Dock icon was moved to the top left of the title bar.

Bug Fixes

Auto Paint Jitter With Stabilize Enabled

With Viewer > Stabilize enabled when Auto Painting with Match Move, the Viewer jittered.

Dot Node Cleared Transform Node Layer Selection

If a Dot node was added to an existing data port connection connected to the Transform node, the Transform layer selection was cleared.

File Browser > Open Native Dialog Button (Linux)

On Linux, the File Browser > Open Native Dialog button and User Interface > Use Native File Dialog For Importing Media preference did not work.

Inpaint Data Port Was Not On Far Right

The Inpaint data port was in the middle instead of on the far right of the node.

Matte Assist

An Improper Matte Was Created When Interrupted

If the Matte Assist processing was interrupted, for instance with a frame change, the resulting matte was incorrect.

Transform Node Corrupted Alpha

Repositioning the image with a Transform node corrupted the Matte Assist alpha.

Painting While Auto Painting Caused A Crash

Painting a stroke during auto painting caused a crash.

PNG/TIFF Rendering Was Slower Than Other Formats

Rendering to PNG or TIFF was much slower than other formats because of their default compression settings.

Python Library Missing On Linux

The Python libssl.1.1.1 library was missing on Linux.

Transform Edge Output Premultiplied

The Transform node outputted premultiplied image edges which required downstream Composite nodes to have Unpremultiply enabled. To retain backward compatibility, only v2025 and later Transform nodes fix this issue.

Known Issues / Limitations

GStreamer

ProRes

All ProRes movies are imported as 16-bpc. This is a limitation of the GStreamer ProRes decoder.

Rendering Interlaced Footage

Rendering interlaced footage is not supported at this time.

OpenColorIO - Particle Illusion and Flare Editor

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.

PowerMesh Warp

The PowerMesh Warp node renders a slightly different result than Mocha Pro.

Silhouette Plug-in

Flame

Upstream Node Changes Don’t Update Until Silhouette Is Opened

Upstream node changes in Flame don’t update when viewing the Silhouette plug-in unless Purge Cache is selected, the Render menu is toggled or Silhouette is opened.

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 Premiere sequence settings.

Resolve > Multiple Inputs

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