

ABOUT THIS GUIDE

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October 29, 2025

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 2025.5.1 - 10/29/25

Features

NVIDIA RTX Video HDR Node – Al-Enhanced SDR to HDR Tone Mapping

Rec.709 SDR video is expanded into HDR10 compatible Rec. 2020 color, producing vibrant colors, deeper darks, and improving the overall sharpness of processed video frames. Windows-only / RTX GPU required.

Changes

Cryptomatte > Overlay

The Cryptomatte > Overlay parameter (enabled by default) composites a colored overlay of selectable mattes over the RGB channels--preserving the previous behavior but it blocked RGBA passthrough. Disabling this parameter allows RGBA to flow correctly to downstream nodes.

Bug Fixes

Auto-Matte Script Failed to Reliably Detect Output Format

The auto-matte script contained a bug that occasionally prevented it from identifying the correct output format. The issue originated in tools/session.py.

Cache > Preload Frames Functionality Broken

The Cache > Preload Frames feature stopped working due to a regression introduced in the threaded rendering system.

Composite Node Missing Matte Input

The matte input was missing from the Composite node.

Cryptomatte

Cryptomatte Object Selection Issues With Matte Assist ML

When using Cryptomatte with Matte Assist ML, selecting a tracked object could result in the wrong object being picked.

Matte Refine ML Had No Effect When Placed After Cryptomatte

Matte Refine ML had no visible effect when placed downstream of Cryptomatte due to the overlay blocking RGBA passthrough. Cryptomatte now includes an Overlay parameter (enabled by default); disabling it allows RGBA to flow correctly to subsequent nodes like Matte Refine ML.

Depth Map ML

Gamma Availability Limited to Scale Mode

Gamma adjustments were restricted to Scale mode, rather than being accessible in both Scale and Points modes.

Gamma Slider Adjustment Was Reversed

Gamma slider behavior was reversed relative to the Color Correct Gamma adjustment.

Disconnecting A Port Did Not Update The Viewer

The Viewer failed to refresh after a port was disconnected.

DOD Rendering Was Broken

When rendering with the Data Window set to DOD, the renderer would fail.

Matte Refine ML Produced Block Artifacts

Sometimes Matte Refine ML produced rectangular artifacts at the edge of the matte.

ML Tooltips Incorrect

Some ML node tooltips incorrectly displayed internal identifiers instead of userfacing labels.

Motion Blur ML Did Not Produce A Result

Motion Blur ML did not produce a result with an alpha channel from Cryptomatte.

Sapphire On-Screen Controls Became Unresponsive When Keyframing Was Enabled

In some Sapphire nodes, enabling keyframes caused the on-screen controls in the Viewer to become disabled.

Streamlined Workspace

The Streamlined workspace did not match the window positioning in Silhouette 2025.

UpRes ML Corruption

Visual corruption occurred in OFX hosts when UpRes ML was used with the NVIDIA RTX Super Resolution model and a high Scale value.

Viewer Gain and Gamma Adjustments Were Slow on Windows

On Windows systems, adjusting the Viewer's Gain and Gamma controls under an ACES configuration resulted in noticeable lag—particularly on machines with NVIDIA GPUs.

SILHOUETTE 2025.5 - 9/25/25

Features

Automated Object Detection & Masking

Automatically detect and segment arbitrary objects in images based on simple text prompts—whether you specify a category name ("car," "person," "tree") or use more descriptive phrases.

Masks are generated with Mask ML and seamlessly propagated using Matte Assist ML, giving you accurate and consistent results across frames. The workflow is fully flexible: use it through the UI or integrate it into pipelines via the command line for large-scale automation. This enables a true end-to-end automated workflow: prompt, segment, propagate, and render—dramatically reducing time spent on repetitive tasks

Face ML

Bring precision and flexibility to facial effects work. The Face ML node automatically detects and segments key facial regions—such as eyes, lips, mouth, and surrounding skin—into individual mattes. This granular separation allows for targeted adjustments or creative effects to each feature independently, all accomplished without manual rotoscoping.

When performing subtle beauty retouching or building complex composites, Face ML provides high-quality, tracked mattes, ensuring the fine control needed for invisible beauty work.

Syntheyes 3D Tracking

The 3D Scene node now includes a fully integrated SynthEyes camera tracking and solving system, directly inside Silhouette. Analyze 2D features in footage to accurately calculate the camera's 3D position and orientation, generating both a point cloud of the scene and a reliable camera solve.

This powerful integration supports an Unproject/Reproject workflow, enabling paint or compositing directly into a locked-down sequence with precision and ease—without leaving the Silhouette environment.

Mocha Pro 2025.5

Mocha Pro has been updated from v2025 to v2025.5. New features include face detection layers, Matte Assist ML improvements, updated export dialog, and camera solve improvements.

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

Sapphire 2025.5

Sapphire has been updated from v2025 to v2025.5. The latest update includes user interface improvements to the Preset Browser, Effect Builder, and Flare Designer. GPU support for AMD cards has been added on Windows, expanding compatibility for more users. The release also introduces new lens flares and Builder presets, along with additional presets for a variety of effects.

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

Particle Illusion 2025.5

Particle Illusion has been updated from v2025 to v2025.5. New features include 3D camera animation presets, allowing users to select from a range of preanimated options or create and save their own. The updated 2025.5 Emitter Library adds new content for enhanced visual variety and refinements to the user interface improve overall ease of use.

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

Node Enhancements

Cryptomatte

Image Input

Available mattes are applied as overlays to the optional image input.

Selection

The Cryptomatte node now supports selective matte activation directly within the viewer. Once enabled, these mattes become available for use in other nodes and are added to the Selection list. Hovering over the image highlights selectable mattes; clicking confirms your selection. To adjust the selection, use shortcut keys: **Ctrl/Cmd**-click or **Shift**-click adds mattes, **Ctrl/Cmd**-click removes them, and dragging over an area selects multiple mattes simultaneously.

Depth Map ML

Depth Preview

Increased the resolution of the Depth Preview.

Gamma

Added a Gamma parameter to Depth ML.

Mask ML

Cryptomatte Output

Mask ML objects are output as Cryptomatte data via the data port.

Multiple Object Support

Mask ML now supports multiple objects in an Object List. When Mask ML and Matte Assist ML's data ports are connected and Matte Assist ML > Mask Source > Cryptomatte is selected, each Mask ML object is considered a separate object.

- The first point or rectangle added automatically creates a new object.
- To manually create an empty object, click the Add Object icon in the Object List.
- Selecting an object reveals its controls; changes apply only to the selected object.
- Use the Object List to rename, delete, or toggle visibility per object.

Object Detection

Automatically detect arbitrary objects in images using text prompts—such as category names or descriptive phrases—instead of manual selection. Supports automation via scripting.

Matte Assist ML

Compute Cache

When advancing to a future frame, matte calculations are performed and cached for all intermediate frames. As a result, playback is seamles--those intermediate frames retrieve from cache instantly, without requiring recomputation.

Cryptomatte Output

When either the Mask Source > Cryptomatte or Roto options are selected and multiple objects are present in the Roto and Mask ML nodes, each object is output separately as Cryptomatte data via the data port.

ML Node Caching

Enhanced performance of the Mask ML, Matte Assist ML, Matte Refine ML, and Face ML nodes by caching their mattes. Once a node is played through, its mattes are computed and stored in the project, significantly improving responsiveness in both the Silhouette standalone application and plug-in.

Tracker

Occlusion Matte Input

Added an Occlusion Matte input on the left side of tracker nodes to mark areas that interfere with tracking so they're automatically ignored.

Tracked Layer Creation Based On 3D Point Selection

When a 3D Scene node is connected to Tracker capable node's data port, the Point Tracker can generate a tracked layer from the selected 3D track points. If one or more shapes are selected, their enclosed points are automatically used to create the layer, and the shapes are added to it.

New ML Models

Denoise ML

Compression+Noise Single Image v3.0 comes in two variants: Better and Faster. Both models are optimized for processing individual images rather than sequences.

Matte Assist ML

The matte propagation object count upper limit increased from 16 to 48. This is useful for when either the Mask Source > Cryptomatte or Roto options are selected and multiple objects are present in the Roto and Mask ML nodes.

Upres ML

NVIDIA RTX Video Super Resolution

This Windows-only model leverages an NVIDIA RTX GPU to enhance video quality. It processes each frame through an AI model trained to sharpen edges, restore intricate details and patterns, and remove blocky compression artifacts.

UpRes v2.0

The v2.0 model retains finer details compared to v1, which tends to smooth features. As a result, v2.0 delivers outputs that appear more natural and less painterly. Additionally, it processes frames individually rather than in six-frame chunks.

Preference Reset Options

Mac & Windows (Standalone and Plug-in)

Holding **Shift-Ctrl/Cmd** during startup now resets preferences.

Linux

Preferences can be reset using the -reset_prefs command-line option or by setting the environment variable SFX_RESET_PREFS=1

Scripting

Automate Mask ML And Matte Assist ML With Text Prompts And The auto-matte.py Script

Use the **auto-matte.py** script to drive object detection and masking with text prompts in Mask ML, which are then propagated by Matte Assist ML and rendered--all through the command line.

Batch > Transcode Action

The Batch Transcode action converts source media into a different file format. This is useful if you want a sequence of stills instead of a movie file.

New Command-Line Options

New command-line arguments/behavior to facilitate running scripts that do interesting things:

-save <path>

Saves the active project to <path>, overwriting if it exists.

-xscript <script> [args]

Executes the script at <script>, passing in the remaining command-line arguments as sys.argv.

New Behavior

If a script causes a project to become active, the -save switch will save it. Also, the -render and other session control options like -range will work. This allows a script to build an ephemeral project that can be saved and/or rendered as if it was loaded normally.

Scriptable Button Triggers With Optional Parameters

Options can now be passed when triggering buttons from scripts. Button properties include a trigger() method, which now accepts an optional dictionary of options. This allows scripts to provide necessary information that may not be available when running from the command line. For example, the "Find" button in Mask ML requires an option with a "frame" member to specify which frame to search. In the UI, this is automatically set from the player frame--but scripts must pass it explicitly.

Changes

Backups Directory Is Automatically Created If Missing

If the project's Backups folder is deleted, Silhouette automatically creates a new one.

Depth ML Parameter Ranges

Near Scale

Maximum value increased to 2.

Far Scale

Updated range now spans from -2 to 1.

Cryptomatte

Default Type

Objects (previously named Shapes) is now the default Type.

Renamed Type > Shapes

Updated the label from Type > Shapes to Objects, as Cryptomatte output is no longer limited to Roto nodes.

Matte Assist ML

Create Mask ML Node

To support multiple objects in a Mask ML to Matte Assist ML workflow, the Matte Assist ML > Create Mask ML Node button now automatically sets the Mask Source to Cryptomatte (data port).

Matte Assist ML Session Template

The Matte Assist ML session template now sets Matte Assist ML > Mask Source to Cryptomatte (data port).

Obey Matte Enabled By Default

Obey Matte is now enabled by default.

Point Tracker > Create Button Enhancements

Clicking the Point Tracker > Create button now opens a pop-up menu with options for converting 3D trackers or cards in any Tracker-capable node. Newly added options include Point Trackers From 3D Points, Layer From 3D Points, and Layer From Card.

Silhouette Shapes To After Effects Masks

To convert Silhouette shapes into After Effects masks, use the Silhouette plugin's Create AE Masks button.

UpRes ML Now in Transform Group

UpRes ML was moved from the Filter group to the Transform group to better reflect its functional role.

Bug Fixes

Alpha Composite Layout Issue

The Alpha Composite parameters were not arranged in rows as expected.

Beauty Studio - Incorrect Result In 8 bit Sessions

Beauty Studio produced a result even when the Master Amount was set to 0.

Default OCIO Config Preference Required A Restart

Changing the Color Management > Default OCIO Config preference now applies as expected. Previously, updates to this preference did not take effect until the Silhouette was restarted.

Enter Key Unresponsive in Manual Update Mode

When Viewer > Update Mode was set to Manual, pressing the **Enter** key failed to initiate processing as intended.

Extract Detail Node - Did Not Preserve Alpha in Detail Output

When decomposing an image using the Extract Detail node, only the Color output retained the original alpha, while the Detail pass did not.

Mocha Pro - FBX Import Offset Misalignment

Fixed an issue where FBX exports from Mocha Pro to Silhouette did not respect the restricted frame range, causing tracking data to start at frame 1 instead of the intended offset (e.g., frame 50).

Resolve > Fusion Incorrect Frames

A negative start frame appeared in the Silhouette timeline, causing incorrect frames to display in the Fusion tab.

Tree Refresh Delay After Node Deletion

Deleting nodes could result in a noticeable delay before the Tree view fully refreshed and reflected the updated state.