



SILHOUETTE
What's New

ABOUT THIS GUIDE

Copyright

No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, for any purpose without the express written consent of Boris FX.

Copyright © Boris FX 2020. All Rights Reserved

April 10, 2020

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 2020.5 - 4/10/20

Features

Silhouette Paint Plug-in

Silhouette Paint is the industry's first paint and tracking plug-in designed to bring best-of-breed, 32 bit, high dynamic range paint tools to editing and effects applications. Artists can now access Silhouette's professional sequence based paint tools inside their host of choice including: Adobe After Effects and Premiere Pro, The Foundry's NUKE, Blackmagic Fusion & Resolve, Autodesk Flame and more. Available on macOS, Windows, and Linux. A Silhouette standalone license can run either the standalone or plug-in.

Nodes

Cycle Active Node Menu Keyboard Shortcuts

Alt-]

Cycles to next node in the Node pop-up menu.

Alt-[

Cycles to the previous node in the Node pop-up menu.

Math Composite Node Now Affects Alpha

The Math Composite node can now affect the Alpha channel. A Channels pop-up menu with RGB (the default), RGBA and Alpha are the available choices.

Node Favorites

Nodes can be tagged as a Favorite allowing them to be grouped separately in the Favorites tab of the Nodes window. You can tag a node as a Favorite by selecting the node (single click) and pressing the Favorite icon located at the top left of the Nodes window.



Time > Hold Node

The new Hold node repeats the specified frame for the duration of the session. Useful for freezing a single painted frame for a clean plate, among other things.

Paint

Auto Paint > Frame Range - New Options

Start>Current and Current>End options were added to the Auto Paint > Frame Range pop-up menu.

Paint Only Alpha

A new Paint Only Alpha parameter in the Paint > Node parameter selects either a hard or soft edged alpha channel when using the Paint Only output. Previously, a hard edged alpha was the one and only option.

Paint > Output Unpainted Frames Preference

An Output Unpainted Frames option was added to the Paint preferences. Normally, when using the Paint Only output, only painted frames are rendered. This preference renders the blank, unpainted frames as well, so there is a complete sequence.

Track

Exporting Mocha Tracked Layers as 4 Point Corner-Pin

You can now export a Mocha tracked layer as a 4 point corner-pin.

Point Tracker > Apply Behavior

Tracker > Apply is now enabled with only trackers selected and when clicked, a new layer is created and the tracking data is applied to that layer.

Note: If a layer is selected along with the trackers, the tracking data will be applied to the selected layer.

Trial Licensing

An unrestricted, 15 day trial license can now be obtained automatically.

Viewer

Onion Skin

A Viewer > Onion Skin mode was added to the Viewer. Onion Skin does a mix, as defined by the Mix value, between the current frame and either previous or later frames. This is useful for creating frame by frame, hand painted animations.

Stereo Align > Mix Mode

A Viewer > Stereo Alignment Type > Mix preference option is now available for the Viewer > Stereo Align mode.

Architecture

Python 3

Silhouette 2020.5 now uses Python 3.

VFX Reference Platform 2020

Silhouette 2020.5 now adheres to VFX Reference Platform 2020.

Changes

Paint

Auto Paint - Delete Key

The **Delete** key now deletes the selection in the Auto Paint window.

Blemish and Grain Brushes Now Randomize

The Blemish and Grain brushes now randomize from frame to frame.

Clone > Red Triangle/Exclamation Point

The red triangle/exclamation point icon in the Paint > Clone tabs was changed to a green dot.

User Interface

Actions > Copy > Selection Moved/Renamed

Actions > Copy > Selection was moved and renamed to Edit > Copy Selection.

Cursor Position Color Values

The cursor position color values when in the Paint node are now displayed in the Status Bar.

Hide Disconnected Inputs

Disconnected inputs are now hidden from the Paint and Roto View menus.

Zoom Default to Fit

The default zoom is set to Fit when activating a source or Session.

Bug Fixes

Alpha Only Render Issues

Alpha only renders from Silhouette either crashed when re-imported or couldn't be displayed.

Freehand Tool In Tracked Layer - Spline In Wrong Place

The Freehand tool was not using the layer transform during shape creation. This could also affect Magnetic shapes in certain cases.

Layer Center Motion Vector Used Layer Center

In the Tracker, when viewing the motion vectors for a selected layer, the center of the layer rectangle was used instead of the layer's position + anchor.

Lens Flare

Flare Editor Crash

Clicking in the Flare Editor Viewer, but not on a control point, caused a crash.

Occlusion Crash

When View > Occlusion was selected with no Occlusion input, Silhouette crashed.

License Window Loop After Deactivation

After deactivating, selecting Cancel cycled between the Silhouette license window and the Boris FX license tool. The only way to stop it was to activate or run in demo mode.

Mocha

Automatically Created Track Layers Not Really Selected

If you had a selected shape in the Mocha tracker and tracked, a new layer was created, the shape was placed in the layer and it was tracked. After tracking, the layer appeared to be selected, but the track controls were grayed out. To track again, you had to click on the selected layer to really select it and you could then track again.

Mocha Tracker With GPU Enabled In Hi-Res Sessions

The integrated Mocha tracker drifted with the Tracker > Mocha > Use GPU If Available preference enabled.

Mocha Stopped After 5 Frames

The integrated Mocha tracker stopped after 5 frames the second time you tracked using Mocha.

Multi-part EXR File Crash

EXR layers containing only alpha or only two channels caused a crash in the Sources window when set to Thumbnails view.

OCIO Initialization Failure

When using the ACES OCIO config, the OCIO processor would not initialize because the sRGB view was named differently. This could cause a crash on startup.

Paint

Align Mode Wrong With Source Match Move

When using Source Match Move, Clone > Align was not positioned correctly.

Clone > Interactive and Region

With Interactive enabled, turning Region on and then off caused Interactive to not work, but the Interactive button was still highlighted.

Clone > Warp Cursor Flashed in Onion Skin Mode

The Clone > Warp cursor flashed while moving it when Onion Skin is on.

Cutout Brush Not Saving

If you painted a stroke with the Cutout brush, the result was not saved on the frames you painted on.

Paint Only - Undo Strokes Appear

Strokes removed with Undo appeared in the Paint Only output.

Arrow Cursor Sticks On - Mac

When using a pen/tablet on Mac, if you slowly moved over a sash, the cursor changed to a split icon and stuck on. You had to hit **Esc** to get rid of it.

Stroke Tool Not Selecting Paint State

When using the Stroke tool, the associated paint state changes, like brush size and opacity changes, were not selected.

Tracker Node > Black Viewer

When hooking a source into a Tracker node, the Viewer was black until the cache was cleared.

Viewer > Node Selector Pop-up Menu Did Not Open

The Viewer > Node selector intermittently did not open.

Weighted Keyframe Crash

If you there was only 1 keyframe, pressing **Alt-K** and then OK or Cancel caused Silhouette to crash.

SILHOUETTE 2020.0.3 - 12/12/19

Features

Dongle Support For Nodelocked Licenses

Dongles are now supported for nodelocked licenses.

Bug Fixes

Crash When Dragging TimeBar With Fields Enabled

Silhouette crashed when dragging the Timebar with Fields enabled.

Field Rendering Did Not Work

Rendering using any of the Field Handling options did not work.

Mocha Pro

Project Crashed With Insert Rendering Enabled

A Mocha Pro node set to render an insert hung Silhouette when loading the saved project. Fixed in Mocha Pro 7.0.3.

Stop Button Did Not Work

During the initial playback and caching of a Mocha Pro node, the Stop button did not work. Fixed in Mocha Pro 7.0.3.

Node Name Error

Certain OFX nodes had legacy naming when adding nodes from the Node window context menu.

Paint > Alpha > Obey From Roto Node Aliased

Painting with Alpha > Obey enabled using a Roto node as the input resulted in aliasing around shape edges.

Known Issues

Tracker Stopped After 5 Frames

When running the Mocha Pro tracker twice in a row, it would stop after 5 frames. The workaround is to undo and track again.\

SILHOUETTE 2020.0.2 - 12/03/19

Changes

Enable Source > Extend Duration On By Default

Source > Extend Duration is now enabled by default. This means that the head and tail frames of a sequence are extended outside of the work range and that single frame imports exist on all frames.

Timeline > Show Work Range On By Default

Timeline > Show Work Range is now on by default. This allows keyframes set in the work ranges to be visible when different from the Session frame range.

Bug Fixes

Legacy Feather Did Not Work

Legacy feathering did not work.

Node Name Error

Certain OFX nodes had legacy naming in the Node window.

Nuke 9+ Exporter Issues

- The Silhouette Motion Blur > Samples value was not transferring to the Nuke Motion Blur > Global > motionblur parameter.
- The Silhouette Shutter Phase value was not transferring to the Nuke Motion Blur > Global > shutter offset parameter.

Open Spline Feather Handles Couldn't Be Hidden

Alt-F now toggles open spline feather handles on and off.

ROI Keyframes Not Saved With Project

ROI keyframes were not saved with the project.

RotoOverlay Was Opening By Default

The RotoOverlay window was opening by default and was not supposed to.

Shift-Alt Did Not Work For Stereo Align

The **Shift-Alt** shortcut did not work for stereo alignment.

Viewer Proxy Resolution Problems

Paint Node

The Paint node displayed a cropped image in the Viewer at proxy resolutions.

Transform Node

When Viewer proxy resolutions were used with a Transform node, images of a different size than the Session were blank in the Viewer.

SILHOUETTE 2020.0.1 - 11/22/19

Features

Copying/Pasting Mocha Trackers & Shapes to Silhouette

Shapes and trackers copied to the clipboard in Mocha can now be pasted into a Silhouette Roto node. Requires Mocha Pro 7.0.2 or later.

Changes

Make Disabled Nodes More Obvious

To make it clearer when a node is disabled, there is now an X over the node while disabled.

Mocha Tracker Status Window - Initializing Message

When using the Mocha tracker, an “Initializing” message appears in the tracking status window while the GPU shaders compile prior to tracking.

Paint > Subpixel > Speed Up

Some Paint > Clone brush filters, like Sinc, take longer to process. If there is no transform and no Clone offset, Silhouette will use a fast processing path regardless of the Subpixel setting.

Request a Trial Screen - Removed Host ID

The Host ID was removed from the Request a Trial screen as it was not needed.

Bug Fixes

Composite Node Crash

The Composite node could crash when working with different sized foreground and background inputs.

Trees Window Won't Zoom In Until You Zoom Out

You had to zoom out before you could zoom in to the Trees window.

Windows Crash On Startup

Windows could crash or exit unexpectedly during startup.

SILHOUETTE 2020 - 11/12/19

Features

Paint

Auto Paint > Replay (Ctrl-Alt-R)

Replays the last stroke. This can be used to apply the last stroke with changed settings and/or on a different frame.

Brush Compare Modes

The brush compare modes preview brush settings prior to painting. You can choose from Vertical Split and Horizontal Split. Previously only available in the Clone Brush, the compare modes now work for all brushes except for Drag, Repair, and Cutout.

Brushes - New

New brushes include Dodge, Burn and Detail.

Dodge (Alt-Shift-D)

Lighten areas in the image.



Burn (Alt-Shift-B)

Darkens areas in the image.



Detail (Alt-D)

Sharpens or smooths by separating the image into coarse, medium and fine detail layers. This results in selective sharpening, detail enhancement and edge aware smoothing.



Detail Separation

Paint can now separate the image into color and detail layers. The color and detail layers can be painted separately or simultaneously.

Painting on the color layer preserves detail.

Color Only - Before



Color Only - After



Painting on the detail layer preserves color.

Detail Only - Before

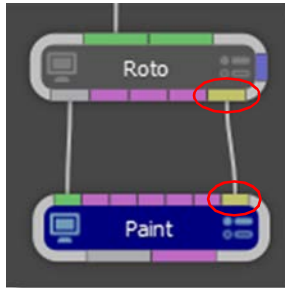


Detail Only - After



Show Shapes

Shape outlines from a Roto node can be displayed in a Paint node. To do so, connect a Roto node's Objects output into a Paint node's Objects input and enable Show Shapes in the Paint tab.



Stroke Tool (S)

Displays all strokes. Strokes can be selected by clicking or drag selecting in the Viewer. Hold **Shift** to add to the selection and **Ctrl/Cmd** to toggle the selection. As strokes are selected, they are highlighted in the Viewer and the Paint History.



Edit In Both Views

Controls editing in the Left/Right View.

Paint

When enabled, paint is added to both views simultaneously. When disabled, the left or right view is painted individually.

Roto

When enabled, shapes are edited in both views simultaneously. When disabled, shapes in the left or right view are edited individually.



Roto

Magnetic Freehand (Shift-F)

Creates magnetic freehand shapes with or without magnetic properties. A magnetic freehand shape snaps the shape boundary to the nearest object edge.



Magnetic Shape

Creates a freehand shape with magnetic properties. There are two methods of creating a magnetic shape: Tracing or Strokes.

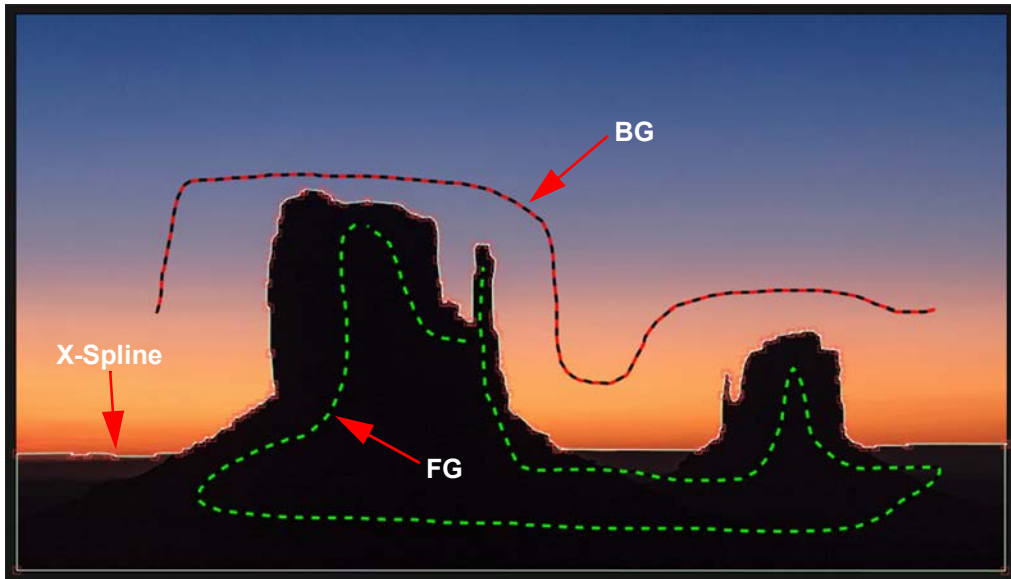
Tracing

Click once near the edge you want to start with and move your cursor along the edge you want to follow. The shape boundary snaps to the nearest edge to where the cursor lies, tracing the shortest path from any previous click. When you are done tracing, click the first control point that you added to close the shape.



Strokes

Draw temporary foreground (inside the shape) and background (outside the shape) strokes for the object you want to create a shape around. As soon as the foreground and background strokes are drawn, an X-Spline is created around the object.



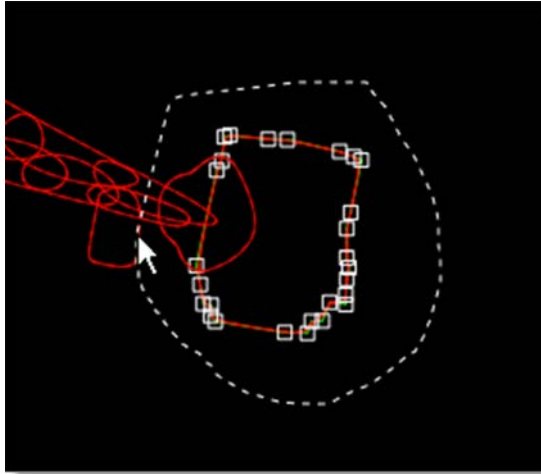
Edge Snapping

You can snap the control points of any X-Spline to edges of an object by using the Edge Snapping tool. Select the points you want to move and press the **Alt-S** key.

Alternatively, start dragging the points, hold the **Alt-S** key down and they will snap to the nearest detectable edge. In some cases, the points may not snap to where you want them to. If this happens, adjust the points manually.

Freehand Selection

Shape control points can now be selected by drawing a freehand polygon. **Ctrl/Cmd**-drag in the Viewer to begin the selection. Once the selection is started, release **Ctrl/Cmd** and complete the selection.



Layer > Corner-Pin

Shape layers now have Corner-Pin parameters and associated on-screen controls on the corners of the image.

RotoOverlay (Shift-O)

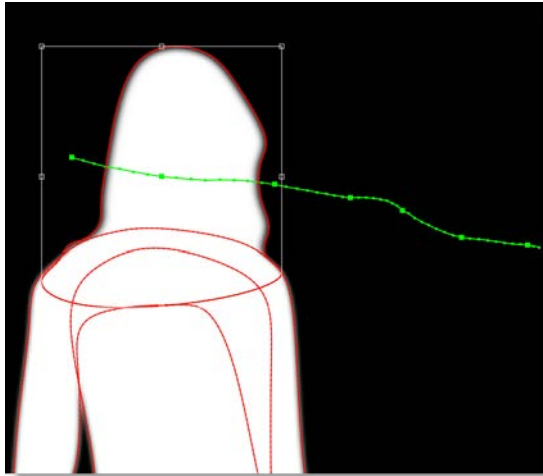
The RotoOverlay tool provides three options to visualize the selected shape's animation and motion blur: Motion Path, Motion Blur and Onion Skin.



Once selected, a Roto Overlay window opens allowing you to select or deselect various options.

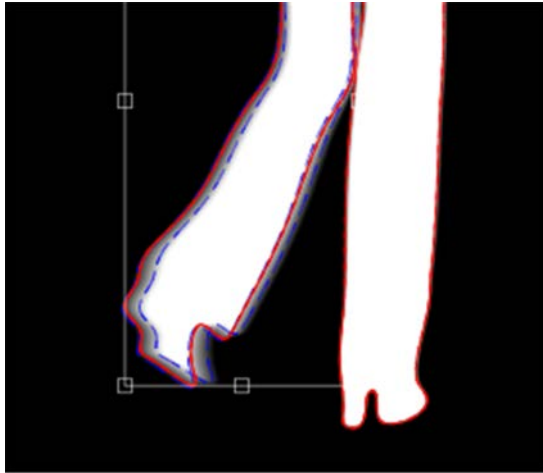
Motion Path

Displays the shape's motion path with visual indicators for frames and keyframes.



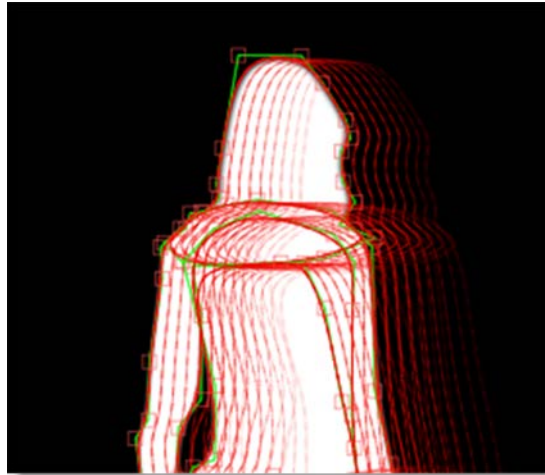
Motion Blur

Displays a dashed line to show the width of the motion blur.



Onion Skin

Shows the shape outline on previous and future frames as controlled by the Onion Skin Frame Range.



Holding **Alt** over an onion skin shape or motion path marker displays the frame number in the status bar. Clicking on the shape or marker jumps the Timebar to that frame.

Add Weighted Key (Alt-K)

Creates a keyframe at the current position which changes the timing of the animation between two surrounding keyframes. Park between two keyframes, select a shape, press **Alt-K** and drag the slider to adjust the weight.

Tracking

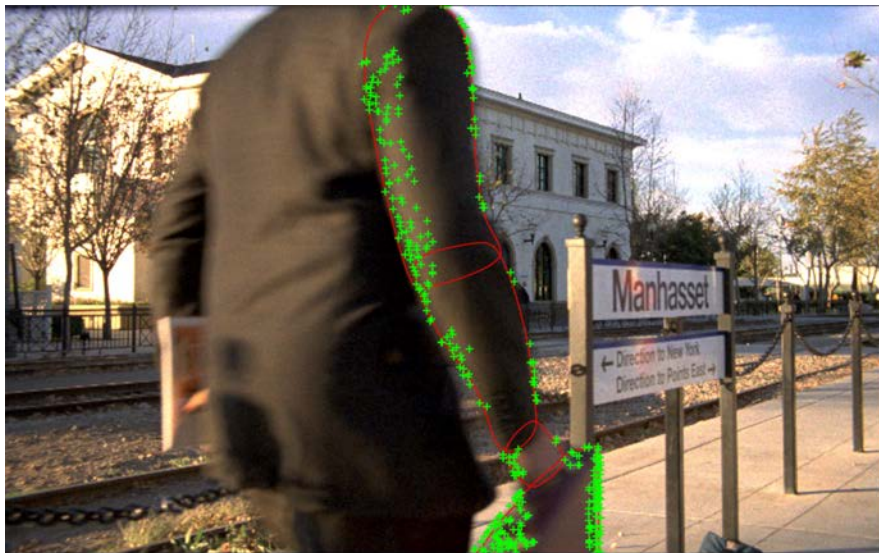
Planar Tracker > Group Tracking

You can now select multiple layers containing non-overlapping shapes and track them simultaneously. The layers are tracked as separate planar surfaces.



Planar Tracker > Part Tracking

With multiple layers containing overlapping shapes, there is an interaction between them whereby they share coarse motion, but have individual motion at the fine scale. This is helpful when tracking non-planar surfaces.



Mocha

Integrated Mocha Tracker

The integrated Mocha tracker is now included at no charge as part of the base Silhouette package. Note: Does not open the Mocha user interface.

Silhouette Mocha Pro Plug-in

Mocha Pro features GPU-accelerated tracking and object removal, advanced masking with edge-snapping, stabilization, lens calibration, 3D camera solver, stereo 360/VR support, and more. This purchasable option launches the Mocha Pro interface directly from within Silhouette.

Workflow Enhancements

- If shapes are selected and not in a layer, clicking the Track Forward/Backward buttons will create a new layer, make it active and begin tracking.
- If shapes are selected in an unselected layer, clicking the Track Forward/Backward buttons will make the layer active and begin tracking.

Output Node > Render Button

Added a Render button in the Output node that opens the Render Options. This is the equivalent of using the **Ctrl/Cmd-R** shortcut key.

New Nodes

DOD

The DOD (Domain of Definition) node located in the Transform tab defines the size of the DOD. The DOD can be expanded or reduced. A smaller DOD will speed up all image processes. Setting the DOD larger than the Session size will pad smaller images and the ROI (Region of Interest) can access the additional image area. This is useful for creating oversize plates.

Extract Detail

The Extract Detail node located in the Filter tab decomposes the image into color and detail layers. The color and detail can later be composited together using the Grain Composite node.

Session > Templates

Session > Templates are presets for automatically adding Roto and Paint nodes to the session and selecting a workspace.

The following templates are available:

Composite

Automatically adds an Output node to the Source and selects the Composite workspace.

Paint

Automatically adds Paint and Output nodes to the Source and selects the Streamlined workspace.

Roto

Automatically adds Roto and Output nodes to the Source and selects the Streamlined workspace.

Roto+Paint

Automatically adds Roto, Paint and Output nodes to the Source, connects the Roto > Objects output to the Paint > Objects input and selects the Streamlined workspace.

User Interface

Viewer

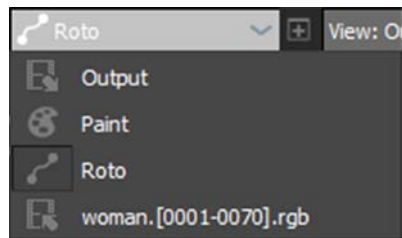
Multiple Viewers

Multiple Viewers can be opened and set to any node or view using the New Viewer icon.



Node Selector

A node selector at the top left of the Viewer selects the node to be displayed.



Node Renaming

If the node's name is renamed to be different from its type, the tooltip will show the node type in parenthesis. Likewise, a read-only field will appear to the right of the node name in the Node Parameters window, displaying the type.

Streamlined Workspace

Optimized for Roto and Paint projects, the size of the Trees window is reduced to make room for the Object List and Paint History immediately below.

Window Enhancements

Multiple Node and Object Windows

Like Object Lists, there can now be multiple Node and Object parameter windows. Click the Add Dock icon to create another window.



Lock A Window To a Node

Object Lists, Node or Object Windows can now be locked to any node in the tree regardless of which node is active using the Lock Node icon.



Setting Environment Variables In Silhouette

The Environments preference sets environment variables directly inside Silhouette without having to do so in the operating system. Once applied, variables are immediately available in Silhouette, sub-processes, and scripts.

Upgrade and Support

Designed to make upgrading and budgeting for Silhouette more convenient, the Upgrade and Support Plan is an annual program that ensures you have access to the latest available features, increased licensing flexibility, and the support you need. Each purchase of a new License or an Upgrade includes the 12-month Upgrade and Support Plan.

Changes

Boris FX Licensing

The Boris FX nodelocked and floating licensing system is used by Silhouette.

Keyboard Shortcuts

Paint > Paint Only

The View > Paint Only keyboard shortcut was changed to **P** so that View > Color Layer could be assigned **8**.

Roto - Shape Feather Handle Display

The shape feather handle display was changed to **Alt-F** so that the new Magnetic Freehand tool could be assigned **Shift-F**.

Paint > Scatter Brush

The Paint > Scatter brush keyboard shortcut was changed to **Shift-S** so that the new Paint > Stroke tool could be assigned **S**.

Panning

The **Space Bar**-drag panning keyboard shortcut was changed to **Space Bar**-move mouse so as not to interfere with drawing freehand shapes and paint strokes. The mouse can now stay depressed while drawing when panning occurs. Note: Only the Trees window still uses **Space Bar**-drag.

Mocha Tracker > Motion Default

Changed the integrated Mocha Tracker > Motion default from Small to Large motion. This is to have consistency with the Mocha Pro plug-in.

OFX List - Sash Added

A sash to resize the OFX list was added.

Paint

Color Correct Brush Icon

The Color Correct brush icon was changed to the icon below.



Cursor Position Color Values Moved

The cursor position color values when using the Color brush have been moved from the brush parameters to the Viewer > Display Options and are now available for all brushes.

Transform Input Renamed to Objects Input

The Paint node's Transform input has been renamed to Objects input since both shapes and tracker layers are utilized through this input port.

Version Format Change

Silhouette's versioning has moved to yearly numbering. For instance, this release is named Silhouette 2020.

ROI > Set ROI to Current DOD icon

The Set ROI to Current DOD icon was changed to the icon below.



Roto > Feather Line Drawing

When drawing a semi-transparent shape, the dashed feather line no longer appears when there is no feather.

Streamlined Workspace

A Streamlined workspace optimized for Roto and Paint projects replaces the previous Roto workspace.

Tracker > Create Point Trackers In Root Preference

The Tracker > Create Point Trackers In Root preference is now on by default.

Bug Fixes

Clone Offset Problem on Mac After Using Delete Frames

On Mac, you could not set the Clone Offset with a pen/tablet after using Delete > All Frames.

Mocha Tracker With ROI Larger Than DOD

The Mocha Tracker did not handle cases where the ROI was larger than the DOD.

Newly Created Object - Selection / Highlighting Error

If you clicked on a newly created and selected object, it would deselect but remain highlighted.

Output Node File Field Required File Extension - Windows

A recent change to Windows required a file extension to be entered in the Output node's File field.

Planar / Mocha Tracker - Matrix Keyframe at Frame 1

A Layer > Transform > Matrix keyframe was getting set at the first frame even when tracking from the middle of a sequence when using the Planar or Mocha Trackers.

Shift-0 Display Issue

Shift-0, which premultiplies the image in the Viewer, degraded shape outlines.