
Table of Contents

Mocha® AE Release Notes	1
Introduction	1
New features in Mocha AE v7.5.0	1
New features in Mocha AE v6.1.2	2
New features in Mocha AE CC v6.0.1	2
New Features in Mocha AE CC 6.0.0	2
Fixed issues since Mocha AE CC 6.1.3	3
Known Issues	6
Hardware Requirements	37
Recommended Hardware	37
Minimal Requirements	38
Software Requirements for Mocha AE Plugin	38
Host Applications	38
Operating System	38

Mocha® AE Release Notes

Introduction

These release notes accompany **Mocha AE 7.5.0**.

Release notes cover **Mocha AE** but may also reference the standalone and plugin versions of the **Mocha Pro** products.

Documentation is available inside **Mocha AE** by pressing the F1 key.



The Mocha AE version is a light version of Mocha Pro. To compare versions, [see this chart](#)¹

New features in Mocha AE v7.5.0

- **Better wide-perspective track handling:** Now you can track longer and at further angles without getting distorted track planes or flipped mattes.
- **OCIO Support:** Load OCIO configs directly into Mocha

¹ <https://borisfx.com/products/mocha/compare-mocha/>

-
- **Thread-limiter:** You can now adjust the number of threads per thread pool in preferences. This is important for restricting machines that try to utilise too many cores which can cause Mocha to crash.

New features in Mocha AE v6.1.2

- **Layout Manager:** You can now save, modify and order layouts from the View menu. Any new layouts you create will appear in the workspace drop down
- **Spline and Matte rendering performance improvements:** Projects with many layers or control points now render much faster to screen. Mattes also render much faster.
- **Autosave now has backups:** You can now iterate autosaves to make sure minimal work is lost. Autosaves are no longer removed on exit to the host.
- **Improved global cache clearing for plug-ins:** The cache is now cleared across all projects, freeing up more disk space.
- **Memory Management Improvements:** The Mocha plugin now releases more memory when it fails to get an image from the host due to high memory pressure

New features in Mocha AE CC v6.0.1

- Some improvements have been made to the surface tool so that edges scale in the direction of the distortion

New Features in Mocha AE CC 6.0.0

- **Plugin-Based Mocha:** The Mocha interface launches inside of After Effects instead of as a separate application, and the plug-in can be applied to any footage files that After Effects supports.
- **GPU Accelerated Tracking:** GPU-accelerated planar tracking engine that significantly speeds up tracking (depends on your graphics card).
- **High-resolution support:** Support for Apple Retina displays and other high-DPI monitors.
- **Generate mattes directly:** You can now render masks directly to your layer from Mocha without needing to export
- **Tracking/Shape data creation:** Create After Effects masks or tracking data straight from the Effect Controls panel, without needing to copy and paste or relaunch the Mocha interface.

- **The new Mocha Essentials workspace:** simplified user interface. This hides some of the more advanced features such as Adjust Track module, the viewer icons, and layer properties. These tools are still available and can be accessed by switching to Classic Workspace.
- **New Tools:** New Ellipse and Rectangle spline tools.

Fixed issues since Mocha AE CC 6.1.3

Issue:	MO-10435 On Mac, the "Launch Mocha" button icon is not loaded if the Adobe Application is installed at a custom path which contains non-ASCII characters
Platform:	macOS
Product:	All Plug-ins
Bug Description:	Mocha now loads the Launch icon correctly when installed on a different path.
Issue:	MO-10422 Mask keyframes can become spaced out when creating AE masks
Platform:	macOS and Windows
Product:	Mocha Pro Adobe Plug-in
Bug Description:	Masks created in the Adobe plugin (Mocha AE or Mocha Pro) could become spaced apart incorrectly.
Issue:	MO-10373 Surface disappears if adjusted at the end of a track
Platform:	All Platforms
Product:	All Products
Bug Description:	The Surface could disappear if it was adjusted after a long perspective track.
Issue:	MO-10338 Matte feather is rendered incorrectly when tracking goes too far past camera
Platform:	All Platforms
Product:	All Products
Bug Description:	Matte feather was rendered incorrectly for spline segments adjacent to points behind camera.

Issue:	MO-10315 Surface distorts when tracking goes too far past camera
Platform:	All Platforms
Product:	All Products
Bug Description:	When tracking, especially in perspective, the track can distort too far and the surface becomes corrupted or disappears.
Issue:	MO-10310 Tracking fails when points go behind the camera
Platform:	All Platforms
Product:	All Products
Bug Description:	Tracking could fail when points go behind camera if the shape was unlinked from tracking data.
Issue:	MO-10272 During contour creation, deselecting the contour being created causes an error message
Platform:	All Platforms
Product:	All Products
Bug Description:	Fixed errors relating to deselecting when creating a new contour.
Issue:	MO-10243 Mocha crashes if you scroll in the keyframe window of the dopesheet
Platform:	All Platforms
Product:	All Products
Bug Description:	Mocha could crash if you scrolled in the dopesheet
Issue:	MO-10132 Cannot re-position zoom window
Platform:	All Platforms
Product:	All Products
Bug Description:	You can now move the Zoom window again.
Issue:	MO-10012 Crash when trying to track sequences with large frame offset
Platform:	All Platforms
Product:	All Products

Bug Description:	Tracking with a very large frame offset no longer can cause a crash
-------------------------	---

Issue:	MO-8393 Retracking a layer should overwrite prior tracking data
---------------	---

Platform:	All Platforms
------------------	---------------

Product:	All Products
-----------------	--------------

Bug Description:	Mocha would not overwrite previously tracked data when tracking again
-------------------------	---

Known Issues

Issue:	MO-10508 Shape becomes unselectable when undoing a control point change after moving the playhead
Platform:	All Platforms
Product:	All Products
Bug Description:	Undoing a control point move after moving the playhead can make the point unselectable
Workaround:	Deselect the layer then reselect.
Issue:	MO-10492 Mocha Edge Properties panel overlaps the module panels when moving between HD and 4k monitor
Platform:	All Platforms
Product:	All Products
Bug Description:	The Edge properties can overlap the parameters when moving the GUI between high and low resolution screens.
Workaround:	None.
Issue:	MO-10475 Point Insertion tool creates incorrect keyframes with Überkey
Platform:	All Platforms
Product:	All Products
Bug Description:	Point insertion can make single-point keyframes instead of spline keyframes when using überkey.
Workaround:	None.
Issue:	MO-10454 Mocha viewport can glitch to show flipped inverted video and interface elements
Platform:	All Platforms
Product:	All Products
Bug Description:	Mocha can occasionally flip or glitch UI graphics on certain hardware configurations.
Workaround:	Resize the GUI and the window should reset.
Issue:	MO-10450 GPU shows skipping in tracking where CPU doesn't for some shots

Platform:	All Platforms
Product:	All Products
Bug Description:	Some GPUs can miscalculate a track where the CPU tracker doesn't.
Workaround:	Use CPU.

Issue:	MO-10430 Splash screen will remain up even when the interface has loaded when launching via "Track in Boris FX Mocha"
Platform:	All Platforms
Product:	All Products
Bug Description:	The Splash screen can get in the way when launching Mocha via command line methods.
Workaround:	None.

Issue:	MO-10429 The QT_SCALE_FACTOR environment variable can break Mocha GUI
Platform:	All Platforms
Product:	All Products
Bug Description:	If the QT_SCALE_FACTOR environment variable is set, it can also scale the Mocha GUI
Workaround:	None.

Issue:	MO-10423 Changing Motion parameters only keyframes Search Parameters
Platform:	All Platforms
Product:	All Products
Bug Description:	If you change the Motion parameters in the Track module, the Search parameters are keyframed.
Workaround:	None.

Issue:	MO-10360 When Mocha AE window is on 2nd monitor, menus open on 1st monitor
Platform:	All Platforms

Product:	Mocha Adobe Plug-In
Bug Description:	If you are using Mocha Pro on a second monitor the menu items will default to the first monitor.
Workaround:	Move the window to the first monitor.

Issue:	MO-10359 Mocha can be "Unable to track" when input frame doesn't exist on some systems
Platform:	All Platforms
Product:	All Plug-ins
Bug Description:	Mocha can throw an error on some systems that it is unable to track due to not having an input frame.
Workaround:	None. Currently suspected to be related to memory exhaustion.

Issue:	MO-10347 Long delay when opening Mocha for first time in a host session
Platform:	All Platforms
Product:	Mocha Plug-ins
Bug Description:	There can be a significant delay when opening Mocha Pro for the first time in a session
Workaround:	None. Subsequent openings are normal speed.

Issue:	MO-10292 Wacom button assignments are ignored by Mocha GUI
Platform:	All Platforms
Product:	Mocha Pro Plug-ins
Bug Description:	Wacom assignments can be ignored when used in the plugin
Workaround:	None.

Issue:	MO-10254 Keyframes are drawn in black instead of yellow.
Platform:	Windows
Product:	Mocha Pro Plug-Ins
Bug Description:	Keyframes in the dope sheet can be black on Windows plugins.

Workaround:	None. Cosmetic only.
--------------------	----------------------

Issue:	MO-10234 Stopping playback can be unresponsive when caching frames in plugins
---------------	---

Platform:	All Platforms
------------------	---------------

Product:	Mocha Pro Plug-ins
-----------------	--------------------

Bug Description:	Stopping playback after you have started playing can sometimes take several clicks.
-------------------------	---

Workaround:	None.
--------------------	-------

Issue:	MO-10046 Mocha is extremely slow when playing backwards
---------------	---

Platform:	All Platforms
------------------	---------------

Product:	All Products
-----------------	--------------

Bug Description:	Playing backwards for some footage can be much slower than playing forwards
-------------------------	---

Workaround:	Play forwards or cache the clip.
--------------------	----------------------------------

Issue:	MO-10044 Mocha doesn't update output when a mask on the source layer is modified in After Effects
---------------	---

Platform:	All Platforms
------------------	---------------

Product:	Mocha AE and Mocha Pro Plug-ins
-----------------	---------------------------------

Bug Description:	When an After Effects layer has a keyframed mask, applying Mocha will not refresh the mask cutout
-------------------------	---

Workaround:	None.
--------------------	-------

Issue:	MO-10006 Crash opening Mocha GUI in some plugin hosts
---------------	---

Platform:	Windows
------------------	---------

Product:	All Products
-----------------	--------------

Bug Description:	Mocha can crash in some instances where multiple OpenCL devices are being enumerated. So far it has been determined to be related to the Intel Graphics Driver.
-------------------------	---

Workaround:	One current workaround is to stop Mocha from enumerating the OpenCL devices: In the registry, change the following REG_DWORD value for each platform listed from 0 to 1:
--------------------	---

	<ul style="list-style-type: none"> - HKLM\SOFTWARE\Khronos\OpenCL\Vendors (for 64-bit applications) - HKLM\SOFTWARE\Wow6432Node\Khronos\OpenCL\Vendors (for 32-bit applications)
Issue:	MO-9994 Shapes with deactivated points do not export correctly
Platform:	All Platforms
Product:	All Products
Bug Description:	Shapes that have deactivated points will not export properly.
Workaround:	Reenable points before export.
Issue:	MO-9982 Dope sheet can't scroll all items when there are many layers
Platform:	All Platforms
Product:	All Products
Bug Description:	Projects with many layers cannot show all items in the Dopesheet.
Workaround:	None.
Issue:	MO-9973 Can't select all control points at once after creating a bezier shape
Platform:	All Platforms
Product:	All Products
Bug Description:	When attempting to select all the bezier points at once, one of the points will be deselected which causes that one point to not move when attempting to move the entire shape.
Workaround:	Reselect all control points.
Issue:	MO-9956 Mocha UI does not look correct when using different resolution monitors with 200% scaling
Platform:	All Platforms
Product:	All Products
Bug Description:	When using multiple monitors at different resolutions and scaling, the Mocha UI can become squashed and unusable.
Workaround:	Match resolution or scaling.

Issue:	MO-9937 Mocha does not track backwards correctly for splines created on earlier frames
Platform:	All Platforms
Product:	All Products
Bug Description:	Tracking backwards does not update the spline correctly when the spline has been created on frames previous to the tracking starting point.
Workaround:	Track from the creation keyframe or create a new spline keyframe at the tracking point.
Issue:	MO-9933 Mocha rendering in Flame can stick playback
Platform:	All Platforms
Product:	All Products
Bug Description:	playing back a render on the Flame timeline can sometimes be hard to stop.
Workaround:	None.
Issue:	MO-9817 Can't pan and zoom while playing back on Mac
Platform:	macOS
Product:	All Products
Bug Description:	The pan/zoom tools sometimes cannot be used when playing back a shot
Workaround:	Stop playback.
Issue:	MO-9813 Surface Area situated around 1st point when using Add X/B-Spline
Platform:	All Platforms
Product:	All Products
Bug Description:	Drawing a new layer with the "Add" spline tools can cause the surface to sit on the first drawn point
Workaround:	Use the "Create" spline tools to create a new layer.
Issue:	MO-9806 Layout menu goes missing when changed from Big Picture to Roto
Platform:	All Platforms

Product:	All Products
Bug Description:	Switching from Big Picture to the Roto Layout causes the Layout dropdown to become hidden
Workaround:	Pull the Layout tool bar size out to the right to reveal the drop down.

Issue:	MO-9784 Canvas isn't centered when switching between Essential and Classic
Platform:	All Platforms
Product:	All Products
Bug Description:	When switching between Classic and Essential mode, the canvas isn't centered.
Workaround:	Hold Z and click once to recenter.

Issue:	MO-9744 0% progress bar at the top right after starting Mocha a second time
Platform:	All Platforms
Product:	Mocha Pro Plug-in
Bug Description:	Mocha will display a 0% Progress bar at the top right corner when you reopen Mocha any other time after the initial use.
Workaround:	None. Cosmetic only.

Issue:	MO-9711 Mocha Welcome screen graphics looks jagged on 4k
Platform:	All Platforms
Product:	All Products
Bug Description:	The High resolution version of the Welcome screen can look jagged in 4K.
Workaround:	None.

Issue:	MO-9685 AdjustTrack Master Reference follows shape when "Link to track" is set to "None"
Platform:	All Platforms
Product:	All Products
Bug Description:	When "Link to Track" is set to "None" the master frame reference points follow the unlinked shape.

Workaround:	Set "Link to track" to the current layer before adjusting.
--------------------	--

Issue:	MO-9632 Saving tracking data is not inserting the layer name
Platform:	All Platforms
Product:	All Products
Bug Description:	When you save tracking data exports to disk, they are not currently inserting the name into the save dialog.
Workaround:	Manually name the file.

Issue:	MO-9593 Pan/Zoom toggle doesn't work with some trackpads
Platform:	All Platforms
Product:	All Products
Bug Description:	Using Pan or Zoom toggles with a trackpad that has buttons may not work.
Workaround:	Select the tool rather than using the toggle key.

Issue:	MO-9552 Mocha can crash the host if you run out of disk space
Platform:	All Platforms
Product:	All Mocha Plug-ins
Bug Description:	If the system runs out of disk space, the Mocha host will crash.
Workaround:	Check disk space levels for large shots and make sure there is ample space.

Issue:	MO-9517 Zoom window are showing incorrect or missing labels on high-resolution screens
Platform:	All Platforms
Product:	All Products
Bug Description:	Zoom windows may be missing labels for high resolution screens.
Workaround:	Work in a lower resolution.

Issue:	MO-9447 Custom Spline & Layer Swatch Colors have zero Alpha
---------------	---

Platform:	All Platforms
Product:	All Products
Bug Description:	Choosing a custom colour for your spline or matte can cause them to disappear since the colour is set to zero alpha.
Workaround:	Change the alpha back to 255 before closing the color selector.

Issue:	MO-9426 GPU preferences on Mac are not remembered when you uncheck both <i>Use GPU Processing</i> and <i>Allow unsupported GPUs</i>
Platform:	All Platforms
Product:	All Products
Bug Description:	GPU preferences on Mac are not remembered when you uncheck both <i>Use GPU Processing</i> and <i>Allow unsupported GPUs</i>
Workaround:	Turn off just "Use GPU processing". "Allow unsupported GPUs" will be disabled when you do this.

Issue:	MO-9370 White screen flash when launching Mocha as a plug-in.
Platform:	All Platforms
Product:	Mocha AE Plug-in
Bug Description:	There can be a white screen before the full interface loads in the Mocha Plug-in
Workaround:	None.

Issue:	MO-9301 It is possible to move points while playing back in the mocha timeline
Platform:	All Platforms
Product:	All Products
Bug Description:	Pressing space while moving points in a layer will still keep moving the points while the clip plays.
Workaround:	None.

Issue:	MO-9300 Save button isn't completely rectangular
---------------	--

Platform:	All Platforms
Product:	All Products
Bug Description:	The Save button is slightly cut off.
Workaround:	None. Cosmetic only.

Issue:	MO-9192 Panel headings disappear when re-docked under each other
Platform:	All Platforms
Product:	All Products
Bug Description:	Docking a panel under another can hide the title of the panel
Workaround:	None.

Issue:	MO-9142 Add keyframe at current position not enabled when switching from Uber-key to Auto-key
Platform:	All Platforms
Product:	All Products
Bug Description:	You cannot add a keyframe when in Uber key mode after moving to another part of the timeline
Workaround:	Click the timeline again to activate the button.

Issue:	MO-8948 GPU tracking is abnormally slow to start on some machines
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	The GPU tracker can initially pause for several seconds before starting to track anything.
Workaround:	None.

Issue:	MO-8890 Deleting all keyframes for a shape ignores point weighting
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	Weighting is not restored to original state if shape keyframes are deleted
Workaround:	None

Issue:	MO-8721 Plugin crash when texture memory is too low
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	If GPU texture memory is set very low, Mocha can crash.
Workaround:	Set texture memory in Preferences to at least 50% of the available GPU memory.
Issue:	MO-8647 Applying tracking data via Mocha Adobe plugin to a 3d null will set Z scale to 0
Platform:	All Platforms
Product:	Mocha AE Plugin
Bug Description:	Applying Mocha transform data to a 3d Null in AE via the plugin UI will set a 3d null Z scale parameter to 0.
Workaround:	Reset the Z parameter after pasting.
Issue:	MO-8646 Time-remap/stretching a precomp containing a Mocha effect causes incorrect result
Platform:	macOS and Windows
Product:	Mocha AE Plugin.
Bug Description:	A Mocha plugin applied to any comp with native AE time manipulation (such as stretch) will not work predictably.
Workaround:	None
Issue:	MO-8623 Incremented steps when adjusting a layers Edge Width with the +/- (plus and minus) buttons is proxy dependent
Platform:	All Platforms
Product:	All plugins
Bug Description:	Changing proxy changes the pixel scale of the edge width tool.
Workaround:	Use the proxy you first adjusted the edge width with to make new adjustments.
Issue:	MO-8598 GPU tracking with very large search area fail in all versions of Mocha Pro (and VR with Lens set to anything non-equirectangular)

Platform:	All Platforms
Product:	Mocha Pro All, Mocha VR All, Mocha AE
Bug Description:	If you set a very large search area in the track module parameters, Mocha may not track when using GPU.
Workaround:	Turn off GPU tracking

Issue:	MO-8392 Cannot undock panels in Mocha Pro Plugin GUI
Platform:	All Platforms
Product:	All Mocha Plugins
Bug Description:	Panels cannot be undocked in the plugin
Workaround:	None.

Issue:	MO-8391 Mocha Plugin: Viewer preferences appear behind Mocha Plugin window
Platform:	All Platforms
Product:	All Mocha Plugins
Bug Description:	The view preferences opens up behind the Mocha GUI.
Workaround:	Move Mocha GUI window to access the viewer preferences dialog.

Issue:	MO-8383 Mocha Plugin: ".bundle" in dock when running plugin if "Blackmagic Codec.Component" installed
Platform:	All Platforms
Product:	All Mocha Plugins
Bug Description:	When loading any interface related to the Mocha GUI, an "xxxx.bundle" icon bounces in the OS X dock if the Blackmagic codec is installed
Workaround:	Cosmetic defect only. Remove the Blackmagic codec to get rid of the icon in the dock.

Issue:	MO-8296 Crash on tracking DPX footage with huge frame numbers
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	Crash on tracking DPX footage with huge frame numbers

Workaround:	Change the Frame Offset entry field to a low number, such as 1 (either manually or by choosing the Fixed Frame radio button).
--------------------	---

Issue:	MO-8266 When editing layers with multiple x-splines, spline tangents only animate for the selected layer
---------------	--

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Products
-----------------	--------------------

Bug Description:	In scenarios where a layer has multiple x-splines, when you try to relax all the spline tangents on both splines, only the ones for the layer you've selected with the mouse animate before you let go of the mouse
-------------------------	---

Workaround:	None.
--------------------	-------

Issue:	MO-8212 Infinite loop error message when adjusting surface in manual track
---------------	--

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Products
-----------------	--------------------

Bug Description:	In rare cases you can get a repeating error message if you try to adjust a tracked surface in Manual mode.
-------------------------	--

Workaround:	None.
--------------------	-------

Issue:	MO-8193 Tracking in AE via an adjustment layer will keep cache from last open Mocha plugin instance
---------------	---

Platform:	All Platforms
------------------	---------------

Product:	Mocha Pro Adobe Plugin, Mocha VR Adobe Plugin, Mocha AE Plugin
-----------------	--

Bug Description:	Adjustment layers don't always give correct source inputs.
-------------------------	--

Workaround:	Apply directly to the clip.
--------------------	-----------------------------

Issue:	MO-8183 Mocha Plugin: Copy and Paste commands are disabled in Edit menu if a layer is selected
---------------	--

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Plugins
-----------------	-------------------

Bug Description:	Copying in the edit menu is disabled for some layers
-------------------------	--

Workaround:	None.
--------------------	-------

Issue:	MO-8179 Point insertion tool reverts back to pick tool after zooming or moving
---------------	--

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Products
-----------------	--------------------

Bug Description:	If you zoom or pan using toggles, the point insertion tools returns to the Pick tool.
-------------------------	---

Workaround:	None.
--------------------	-------

Issue:	MO-8172 Link to track data not copied over multiple effect instances
---------------	--

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Plugins
-----------------	-------------------

Bug Description:	Copying an effect does not copy over layer property "Link to track" in the Mocha project.
-------------------------	---

Workaround:	Relink the layers.
--------------------	--------------------

Issue:	MO-8147 No warning if clip is timestretch/timeremapped changed from initial track in plugin
---------------	---

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Plugins
-----------------	-------------------

Bug Description:	If the user changes a video track, the plugin should warn the user they need to retrack.
-------------------------	--

Workaround:	None.
--------------------	-------

Issue:	MO-8146 Users cannot change the Insert clip of a hidden layer
---------------	---

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Products
-----------------	--------------------

Bug Description:	Changing the visibility of a layer will not update the Insert Clip setting properly.
-------------------------	--

Workaround:	Unhide the layer and set the property.
--------------------	--

Issue:	MO-8107 Updating Mocha Adobe Plugin 2D parameters hangs After Effects for a very long time
---------------	--

Platform:	All Platforms
Product:	Mocha AE Plugin
Bug Description:	Long projects can take a long time to update tracking keyframes in AE, making it appear to hang.
Workaround:	None.

Issue:	MO-8093 Zoom windows show whole clip image for the cropped clip
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	You can see the whole clip image in Zoom windows even if they are cropped.
Workaround:	None.

Issue:	MO-8077 Manual Track surface adjustments only works sporadically when using Wacom Tablet
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	Using a tablet can sometimes effect manual adjustment of the surface
Workaround:	Use a mouse instead.

Issue:	MO-8041 Masks and shapes with non-Latin characters are not pasted correctly in AE
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	Non-Latin 1 names for layers will paste to AE with incorrect characters.
Workaround:	None.

Issue:	MO-7951 Mocha Pro AE plugin stutters frames if AE is playing when launching Mocha
Platform:	All Platforms
Product:	Mocha Pro Adobe Plugin, Mocha AE Plugin

Bug Description:	If you hit space to play a clip in AE then launch Mocha from the Mocha Pro Plugin, the footage in Mocha Pro may stutter.
Workaround:	Don't play the clip while loading the plugin interface.

Issue:	MO-7941 Mocha AE plugin does not read in output of effects above it in the Effects stack
Platform:	All Platforms
Product:	Mocha AE Plugin
Bug Description:	The AE version of the Mocha Pro Plugin will only read the base layer, not the effects applied to it already.
Workaround:	Use a precomp to contain the effects you want to read into Mocha Pro Plugin.

Issue:	MO-7828 Wrong order after pasting copied layers if their order was changed
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	If you copy a layers after reordering them in the layer controls, they don't paste in the same order.
Workaround:	None

Issue:	MO-7813 Switching between different layouts makes canvas area change position
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	When switching between different views using CMD+1, CMD +2, CMD+3 buttons, the currently viewed area changes.
Workaround:	None

Issue:	MO-7774 Removing a selected point after stepping over points causes removing the layer
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	Using the { and } keys to step over points will delete the layer if you try to delete the single point.

Workaround:	Select the point without stepping first.
--------------------	--

Issue:	MO-7770 States of add/delete keyframe buttons are incorrect after adding/removing keyframes
---------------	---

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Products
-----------------	--------------------

Bug Description:	Delete keyframe is disabled and add keyframe button is enabled when animating a control point, and vice versa when on a non-keyframed frame.
-------------------------	--

Workaround:	None
--------------------	------

Issue:	MO-7734 Tracking data is not applied to the canvas when tracking starts from a frame without a keyframe
---------------	---

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Products
-----------------	--------------------

Bug Description:	If you start tracking a layer from a frame different to where you drew it, the layer will not update correctly until after tracking is done.
-------------------------	--

Workaround:	None
--------------------	------

Issue:	MO-7685 Cannot change some parameters for invisible layers on the Track page
---------------	--

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Products
-----------------	--------------------

Bug Description:	If you turn off the visibility of a layer, some of its parameters cannot be altered.
-------------------------	--

Workaround:	Turn on the layer visibility.
--------------------	-------------------------------

Issue:	MO-7664 Cannot change parameters in grouped layers for some projects
---------------	--

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Products
-----------------	--------------------

Bug Description:	Layers inside groups have sporadic ability to change radio buttons and check boxes
-------------------------	--

Workaround:	Pull layers out of group
--------------------	--------------------------

Issue:	MO-7617 Shape data to out of sync if layer has in point different to timeline
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	If a layer has a different in point to the project in point, it is out of sync.
Workaround:	Extend the layer in point to the start of the project.
Issue:	MO-7581 Twisted loops occur in beziers for some exports
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	Exported Beziers can sometimes have looped splines in closely animated points.
Workaround:	None
Issue:	MO-7529 Maximized Mocha window size never remembers state on Mac
Platform:	OS X
Product:	All Mocha Products
Bug Description:	Opening Mocha on OS X will resize the window, even if you have adjusted it to full screen previously.
Workaround:	None
Issue:	MO-7477 Mocha crashes when exporting shape data to some formats if layer name contains more than 205 characters
Platform:	Linux and Windows: all
Product:	All Mocha Products
Bug Description:	Layers with huge amounts of characters in the name may crash Mocha on exporting shape data.
Workaround:	Use a shorter name.
Issue:	MO-7476 A project can load without layers if the layers contain some peculiar characters
Platform:	All Platforms
Product:	All Mocha Products

Bug Description:	Some characters do not read in project files and may not load layers correctly.
-------------------------	---

Workaround:	None
--------------------	------

Issue:	MO-7436 Cannot add a control point in the left bottom corner of an image
---------------	--

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Products
-----------------	--------------------

Bug Description:	There is an issue with adding a point to the exact bottom left corner of a frame.
-------------------------	---

Workaround:	None
--------------------	------

Issue:	MO-7432 Checking the default tracking clip during project load should check the source location, not the cache
---------------	--

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Products
-----------------	--------------------

Bug Description:	Mocha is checking the cache location before the original source clip to restore the tracking clip on load.
-------------------------	--

Workaround:	None
--------------------	------

Issue:	MO-7429 Cannot detect and move spline points if they are located near spline line of another spline in the same layer
---------------	---

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Products
-----------------	--------------------

Bug Description:	Points that are close to other splines are hard to select and move.
-------------------------	---

Workaround:	Zoom in further to make selection easier.
--------------------	---

Issue:	MO-7418 Previous and Next keyframes zoom windows change according to the position of the current keyframe when moving surface corners in manual track mode
---------------	--

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Products
-----------------	--------------------

Bug Description:	The previous keyframe zoom window is referencing the current keyframe when adjusting in manual track mode.
-------------------------	--

Workaround:	None
--------------------	------

Issue:	MO-7416 It is possible to open or start a project while another is loading.
---------------	---

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Products
-----------------	--------------------

Bug Description:	If you are quick enough, or the project is large, it is possible to start or open another project while the first is still loading.
-------------------------	---

Workaround:	Wait until the project finishes loading before opening a new one.
--------------------	---

Issue:	MO-7415 Wrong surface behavior in adjusting on a frame which is before the master frame and contains a layer keyframe
---------------	---

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Products
-----------------	--------------------

Bug Description:	Reference points are adjusted instead of the surface points when adjusting on a frame before the master keyframe
-------------------------	--

Workaround:	Reset the AdjustTrack solution and try again.
--------------------	---

Issue:	MO-7402 Cache and rendered clips files aren't removed after closing a non-modified project
---------------	--

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Products
-----------------	--------------------

Bug Description:	If you don't edit a project that has "Cache original clip" turned on, the cache files are not removed on exit.
-------------------------	--

Workaround:	Don't cache the original clip unless you have to.
--------------------	---

Issue:	MO-7401 Undo of pasting a contour to existing layer drops layer selections
---------------	--

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Products
-----------------	--------------------

Bug Description:	Undoing a contour paste removes the selection from the current layer.
-------------------------	---

Workaround:	Reselect.
--------------------	-----------

Issue:	MO-7351 Panes that were undocked during loading process return to the dock state after opening a project
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	Undocked state is not remembered on closing.
Workaround:	None
<hr/>	
Issue:	MO-7343 Error when trying to paste spline data in the Dope Sheet
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	If you have spline data on the clipboard and try to paste to the dopesheet, there is an error.
Workaround:	Copy keyframes first.
<hr/>	
Issue:	MO-7326 Removing "activate/deactivate" layer keyframe doesn't update layer state on the canvas
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	The canvas doesn't refresh after removing activate or deactivate keyframes from a layer.
Workaround:	Move mouse cursor to the canvas or switch between frames
<hr/>	
Issue:	MO-7303 Cannot paste Mocha masks in AE if some layer has more than 32 characters in its name
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	Shape layers with very long names cannot be pasted into After Effects.
Workaround:	Use a shorter name.
<hr/>	
Issue:	MO-7279 Lasso and Marquee selections actions are in the wrong group of shortcuts
Platform:	All Platforms

Product:	All Mocha Products
Bug Description:	Lasso and Marquee shortcuts should be in the Tools category not General.
Workaround:	None

Issue:	MO-7271 Changing In/Out layer points by mouse rotation aren't added to Undo/Redo history
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	Rotational control adjustment of a layer in/out point is not undoable.
Workaround:	Type instead of using the mouse to adjust the value.

Issue:	MO-7250 There is ability to nudge shapes during tracking process
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	Shape nudging shortcuts are not disabled while tracking.
Workaround:	None

Issue:	MO-7211 Edge is shown for open splines that were made from closed splines
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	If you created an edge for a closed spline, then open it the edge for the close spine still shows.
Workaround:	Reset edge with before opening spline.

Issue:	MO-7195 There is ability to step between control points for locked or invisible layers
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	You can use the "Next control point" controls to cycle through locked or invisible layers.
Workaround:	None

Issue:	MO-7190 Cannot move points of a Bezier layer after undoing the creation of a new layer
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	If you have created a bezier layer then make another shape, undoing the second layer causes the bezier to be unadjustable.
Workaround:	None
Issue:	MO-7178 Inconsistent layer mode after undo moving points of several layers
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	Multiple changes to different layers then undoing them can cause problems with some layers.
Workaround:	None
Issue:	MO-7168 Tangents of slave neighboring points are changed when moving a master point
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	Lock Tangents doesn't work correctly if moving the point by attaching it to a master point on another layer.
Workaround:	None
Issue:	MO-7167 Inconsistent mode for Bezier tangents after undo/redo their changes
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	Bezier tangent handles can sometimes follow the cursor after undoing Bezier layer adjustments.
Workaround:	None
Issue:	MO-7144 Error when clicking on the "-" edge width button for open splines

Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	An error shows when trying to adjust the negative edge width of an open spline.
Workaround:	None

Issue:	MO-7139 Edge width minus doesn't compensate edge width plus for complicated layers
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	Edge curve doesn't match the spline curve and error is shown when adding large edge widths then reducing them again on complicated shapes
Workaround:	None

Issue:	MO-7116 Extra step in undo/redo history after using Set and +/- edge width actions
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	An additional undo step is created when performing edge width operations.
Workaround:	None

Issue:	MO-7107 Sometimes a slave point is unconstrained after constraining a master point
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	Chaining multiple layers with the vertex attach tool can sometimes unconstrain the points.
Workaround:	None

Issue:	MO-7083 Extra undo/redo operation is required for changing a master reference point position in the AdjustTrack page
Platform:	All Platforms
Product:	All Mocha Products

Bug Description: You have to undo or redo twice when changing the Master in AdjustTrack.

Workaround: None

Issue: MO-7078 There is no undo operation for changing corners mode for all layer handles after clicking right mouse button on some handle

Platform: All Platforms

Product: All Mocha Products

Bug Description: Switching to corner mode for all layer handles using right click cannot be undone.

Workaround: None

Issue: MO-7068 Layer in/out point fields are too narrow when working with timecodes

Platform: All Platforms

Product: All Mocha Products

Bug Description: Layer in/out point fields are too narrow when working with timecodes so they become hard to see.

Workaround: Stretch the left panel out further.

Issue: MO-7067 Tangent parameters are keyframed when creating a bezier layer in Überkey mode

Platform: All Platforms

Product: All Mocha Products

Bug Description: If you create Bezier layers with Überkey on, it will create keyframes only for the tangents.

Workaround: Create a layer with Autokey.

Issue: MO-7049 Incorrect Bezier handles at spline ends when exporting X-Splines to After Effects

Platform: All Platforms

Product: All Mocha Products

Bug Description: Smoothed X-Splines may export with incorrect Bezier handles when exported to After Effects.

Workaround:	None
--------------------	------

Issue:	MO-7048 Project out point doesn't change correctly after changing project length in the Project Settings dialog
---------------	---

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Products
-----------------	--------------------

Bug Description:	Changing the project length will not move the outpoint correctly.
-------------------------	---

Workaround:	Reset or adjust out point manually.
--------------------	-------------------------------------

Issue:	MO-6957 Cannot create a project based on image sequence with very large frame numbers
---------------	---

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Products
-----------------	--------------------

Bug Description:	You cannot create a project based on image sequence with very large frame numbers
-------------------------	---

Workaround:	Reduce the frame number index of the sequence.
--------------------	--

Issue:	MO-6848 Symbol # is shown in shortcuts instead of Esc on OS X
---------------	---

Platform:	OS X
------------------	------

Product:	All Mocha Products
-----------------	--------------------

Bug Description:	When you enter "Esc" into the Keyboard shortcuts, it appears as a symbol instead of "Esc"
-------------------------	---

Workaround:	None
--------------------	------

Issue:	MO-6074 Clicking in the Layer Controls pane when adding a spline causes spline to close without reverting back to arrow tool
---------------	--

Platform:	All Platforms
------------------	---------------

Product:	All Mocha Products
-----------------	--------------------

Bug Description:	If you click in the layer controls panel while drawing a spline, the spline will finish but the draw tool will remain active yet unusable.
-------------------------	--

Workaround:	None.
--------------------	-------

Issue:	MO-6068 Playhead continues to advance frames after the Contour shuttle controller jog is released
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	When using the Contour Design ShuttlePRO jog controller to drive frame advancement, the playhead will over compensate and keep moving after you have stopped rotating.
Workaround:	Rotate the jog slower.
Issue:	MO-5967 A master key is set as soon as you switch to AdjustTrack module
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	If you switch to the AdjustTrack Module, a master key is set immediately.
Workaround:	Set a new master key and delete the old one.
Issue:	MO-5930 Resizing/moving of GUI when creating a project with small screen resolution
Platform:	OS X
Product:	All Mocha Products
Bug Description:	On very small screen resolutions the Mocha interface blinks and adjusts when creating a project.
Workaround:	Use a larger screen resolution.
Issue:	MO-5856 AdjustTrack reference points have incorrect view when switching active state of a layer
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	Reference points are shown incorrectly when the active state of the layer is toggled off on one frame then on with another.
Workaround:	None
Issue:	MO-5843 Sometimes shape data exported to After Effects "Paste Mocha mask" gets corrupted spline points

Platform:	Windows and OS X
Product:	All Mocha Products
Bug Description:	Sometimes shape points can throw spline data out when using "Paste Mocha mask".
Workaround:	Find the problem point in Mocha and delete or adjust it.

Issue:	MO-5829 Custom modifier keys malfunction in Mac Remote Management (VNC)
Platform:	OS X
Product:	All Mocha Products
Bug Description:	If you open Mocha remotely some of the key shortcuts and toggles will not work.
Workaround:	None

Issue:	MO-5808 Moving tracking keyframes sometimes breaks tracking
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	Sometimes if you manipulate the tracking keys in the dope sheet, additional tracking for the layer will not work.
Workaround:	None

Issue:	MO-5709 Process icon isn't updated immediately when changing Link To Track dropdown
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	The process icon does not immediately turn off or on when updating the Link to Track property.
Workaround:	None

Issue:	MO-5379 Bounding box isn't shown for multiple selected layers if the clicked one was out of range
Platform:	All
Product:	All Mocha Products

Bug Description: The bounding box isn't shown for multiple selected layers if the first one clicked is out of range

Workaround: None

Issue: MO-5372 Cannot create a new layer group by clicking on the corresponding icon

Platform: All

Product: All Mocha Products

Bug Description: You can't create a group by itself. You need to select layers first.

Workaround: Select a layer you want to group before you click the group icon

Issue: MO-5304 Undoing adding a layer point, selecting Layer Controls pane and clicking on the canvas cause an error

Platform: All

Product: All Mocha Products

Bug Description: Undoing adding a layer point, selecting Layer Controls pane and clicking on the canvas cause an error

Workaround: None

Issue: MO-5220 Wrong layers order after redo including in a group

Platform: All

Product: All Mocha Products

Bug Description: If you group more than 2 layers and undo moving a layer outside of the group, it may not return to the right position

Workaround: None

Issue: MO-5210 Wrong surface detection for several selected layers

Platform: All Platforms

Product: All Mocha Products

Bug Description: Try to select and move the surface of different layers in a multi-selection it will only let you move one.

Workaround: Adjust one at a time

Issue:	MO-5166 There is no ability to toggle active for several selected layers
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	While you can apply all other right-click options to multiple layers, you can only apply "toggle active" to the layer you were over when you right clicked.
Workaround:	Choose "toggle active" on separate layers rather than a selection of layers.
Issue:	MO-5156 Wrong spline behavior in AdjustTrack
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	Sometimes using AdjustTrack on a surface will not adjust the spline as well.
Workaround:	None
Issue:	MO-5150 Transform tool sometimes interferes with tangents
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	Sometimes the transform tool can get in the way of adjusting tangents
Workaround:	Turn off transform tool
Issue:	MO-5099 Dope Sheet: Cannot select several blocks of keyframes
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	You cannot use the shift key to marquee-select multiple blocks of keyframes
Workaround:	None
Issue:	MO-5090 An error appears in using Point Insertion tool for multiple selected layers
Platform:	All Platforms

Product:	All Mocha Products
Bug Description:	If you select 2 layers and try to use the point insertion tool you get the error: "Error: Could not find parent contour of the point."
Workaround:	Add points to one layer at a time

Issue:	MO-4312 Using Ctrl+Z to undo values on the Parameters tab doesn't work
Platform:	OS X and Windows: 32-bit
Product:	All Mocha Products
Bug Description:	
Workaround:	None.

Issue:	MO-190 "Pick Edge" tool selects and moves both Inner and Outer Spline Points
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	"Pick Edge" tool selects and moves both Inner and Outer Spline points if you first move the outer point.
Workaround:	Reselect.

Issue:	MO-173 AdjustTrack Module's Reference Point Onscreen Widgets expand and shrink according to resolution
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	AdjustTrack Module's Reference Point Onscreen Widgets expand and shrink according to Footage Resolution (in the Standalone), and also the Proxy Resolution in the Host Applications of the Plugin Versions.
Workaround:	None.

Issue:	MO-162 Crop mask in Mocha plugin does not rescale correctly when jumping between different proxy resolutions
Platform:	All Platforms
Product:	All Mocha Plugins

Bug Description:	The Crop mask in the Clip Module of Mocha Pro/VR plugin does not rescale correctly when jumping between different proxy resolutions.
Workaround:	None.

Issue:	MO-159 Deselecting multiple shapes does not reselect them on undo
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	If you deselect multiple shapes, undoing the selection will only select one shape.
Workaround:	None.

Issue:	MO-137 Undo deselects shape
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	Using undo after tracking forward or backward de-selects the shape
Workaround:	None.

Issue:	MO-79 Outer edge width (feather) remains consistent when layer scales
Platform:	All Platforms
Product:	All Mocha Products
Bug Description:	Scaling down a layer retains the same pixel width in the feathering.
Workaround:	Animate the feather with the scale to the desired width.

Hardware Requirements

Recommended Hardware

- Processor: 3rd-generation Intel Core i7 or equivalent
- Memory: 16+ GB
- Disk: High-speed disk array or NVMe SSD

-
- Graphics Card: NVIDIA Quadro K4000 or equivalent
 - Monitor: 1920×1080 or higher
 - Network: Must have an enabled network adapter (wifi or ethernet)

Minimal Requirements

- Processor: x86-64
- Memory: At least 4 GB
- Graphics Card: For GPU tracking, must support OpenCL 1.2, for CPU tracking, OpenGL 2.1
- Monitor: Minimum resolution 1200x800 pixels
- Network: Must have an enabled network adapter (wifi or ethernet)

Working with high-resolution footage such as 4K is very demanding on system resources; a system with at least 16 GB of system memory and 2 GB of texture memory should be used.

Software Requirements for Mocha AE Plugin

Host Applications

The Mocha AE Plugin only works in this version of After Effects.

Operating System

- **Mac:** macOS X 10.12, 10.13, 10.14 or 10.15 on 64-bit Intel. For GPU support, macOS 10.13-10.15 is recommended.
- **Windows:** Windows 7, Windows 8 and Windows 10 on x64.

Community-supplied importers are known to work but are not supported by Imagineer/Boris FX.