

1.3.0.1

Release Date

25 July 2016

This version uses the Arnold 4.2.14.2 core.

DOWNLOADS

- solidangle.com/arnold/download

ARNOLD FOR MAYA

Arnold for Maya is included with a default install of Maya 2017 via the [mtoa.mll](#) plug-in. This plug-in is auto-loaded, and Arnold is set as the preferred renderer in Maya. More information about Arnold for Maya can be found in the [Autodesk Maya User Guide](#). In Maya 2017, Arnold rendering no longer requires a license when executed from the Maya interface. This applies for the Arnold RenderView, Maya Render View, Sequence Rendering, and Render To Texture. Only Batch Rendering requires an Arnold license to be rendered without watermarks.

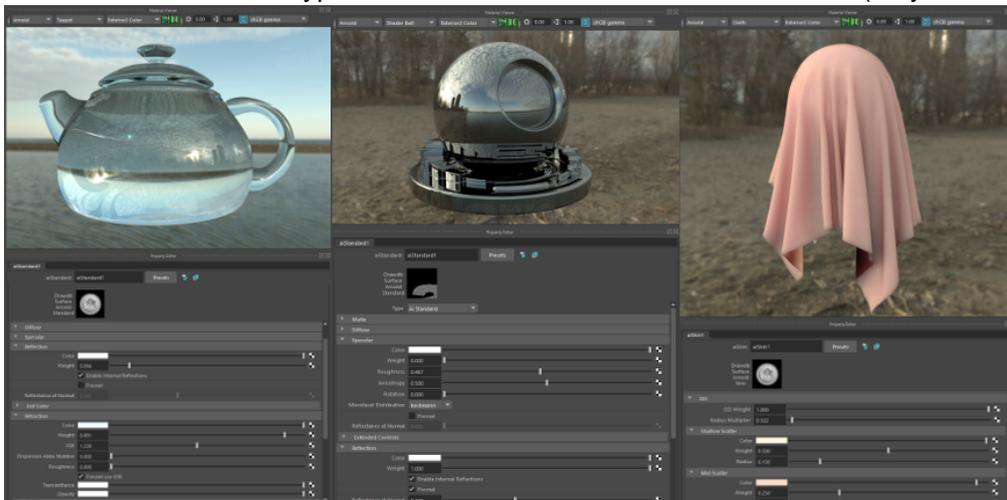


A guide to transitioning to Arnold for Maya 2017 can be found [here](#).

MAYA FEATURES SUPPORT

Some existing Maya features weren't previously supported with Arnold. MtoA 1.3.0 now supports the following ones :

- Material Viewer in the Hypershade can now be rendered with Arnold (Maya 2017)



- Maya LookDevkit shaders are supported
- Maya Color Management is supported with MtoA (Maya 2017, see below)
- Extended support for Viewport 2.0 (Maya 2017, see below)
- Support for Maya UV-tile tokens
- Support more materials and textures (phong, anisotropic, ramp, mountain, water, crater, granite, leather, rock)
- Support for stereo / multicam renders
- Fixed support for import/export AOV overrides
- PolyTools used to crash MtoA

MAYA 2017 NEW FEATURES

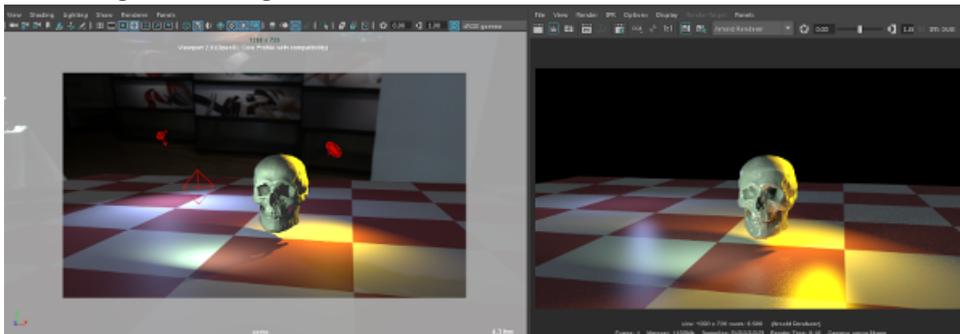
Maya 2017 comes with several new features related to rendering. MtoA 1.3.0 allows the following ones to be supported with Arnold :

- New Interactive sequence render mode (menu Render -> Render Sequence)
- Light Editor
- Scene assembly render settings
- AOV callbacks
- Render Setup Node templates

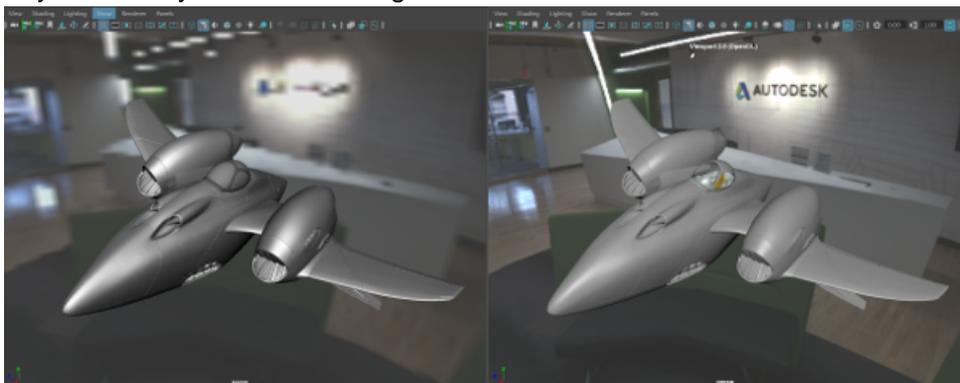
VIEWPORT 2.0

Previous versions of MtoA had poor support for Maya's Viewport 2.0 (VP2). Major improvements have been made with VP2 in MtoA 1.3.0 for Maya 2017, including :

- Arnold Lights drawing and illumination



- Stand-in drawing and selection
- Skydome / Sky shaders drawing and IBL illumination



- Light blocker display
- Support for OSD in VP2 shaders
- Volumes
- Hair rendering in VP2 now better matches the aiHair render in Arnold

COLOR MANAGEMENT / AUTO-TX

Maya's Color Management (aka SynColor) is now fully supported with Arnold. The Display View Transform defined in Maya Preferences (Windows->Settings / Preferences-> Preferences) is now applied to all display devices (Arnold RenderView, Maya Render Viewer, Material Viewer, VP2). For input textures, the Color management rules are applied when converting the textures to mipmaps (.TX files). The "Color Space" attribute was also added to Arnold Image nodes, and is taken into account during the TX conversion. A new attribute "auto-tx" in the Arnold Render Settings is enabled by default. It automatically converts all the files to .tx mipmaps when necessary. This way the default behavior is now that Color Management is correct for both input textures and display. A progress bar will appear on the first render (or when a texture is modified) to show how many images are being converted to mipmaps. By disabling "auto-tx", the textures will have to be converted manually : The TX Manager (Arnold->Utilities->TX Manager) now shows the color space for each texture, and converts each of them to the appropriate one. Depreciated "Gamma Correction" attributes from the Arnold Render Settings (Display Gamma, Shader Gamma, Texture Gamma, Light Gamma) were removed. The parameter texture_automip (similar to the new auto-tx but performed in RAM at every render) has been removed too.

ARNOLD RENDERVIEW (ARV)

- Maya Color Management is now fully supported in Arnold RenderView for Maya 2017. The View Transform appearing in ARV Display Settings now obeys the Maya preferences (including Syncolor native view transforms which are used by default). It is however still possible to override the view transform in ARV only, as with other Maya viewers.
- Pixel Aspect Ratio is now supported, and shows an undistorted image.
- A new option "File-> Save Rendered Images" was added to Arnold RenderView. When enabled, the output images (including AOVs) are automatically dumped to file at every final step of a progressive render. These images are saved in the appropriate folders, as defined in the Render Settings.
- Added support for Foreground images in ARV Display Settings
- Fixed display freezing issues that happened randomly
- Save UI Threads : we no longer restore full threads for last AA step as it was still introducing slowdowns in Maya UI
- MEL callbacks defined in the Render Settings are now supported
- In Debug Shading, the "barycentric" and "object" modes were inverted
- Fixed crashes in OSX when renaming a snapshot
- Changing the render resolution is now updated in the viewer
- Some OpenGL issues between Maya Viewport and ARV have been fixed.
- Fixed crashes happening in Linux when both Arnold and Maya Render View were used.

XGEN

- XGen "Export Selection as Archive" could fail or crash in some configurations (depending on the OS or the scene). This was fixed in MtoA 1.3.0.
- Interactive Groom Splines now render on Mac.
- The error message "could not find xgen_procedural" during load has been removed.

BUGFIXES

- Fixed IPR crashes when exiting "look through selected"
- Changing the translator is now updated during IPR sessions.
- Fixed Bifrost Aero support (was broken in Arnold since Maya 2016 Extension 2)
- Environment nodes used to be deleted when using "Delete Unused"
- Particle instancer didn't create instances when deform blur was disabled
- Standin export didn't work properly the first time with clean Maya preferences
- Batch render could not be stopped on linux
- Shadow Catcher AOVs are now behaving properly

- Arnold Render Settings could appear blank in some situations
- Merging AOVs could corrupt the output images

MTOA NEW FEATURES

- Render To Texture now supports procedural geometries
- Mental Ray to Arnold script is included for basic shader conversions
- New Outliner icons for Arnold nodes
- Tx Manager now supports all tokens in image filenames, relative paths, and texture color spaces.
- New function in MtoA NodeTranslators API to determine which attributes must trigger a re-render or not.

MTOA INSTALLATION

Maya 2017 comes with MtoA 1.3.0, which is installed automatically with Maya (by default), but it is still possible to manually install newer versions of MtoA. For these manual installations, a forced silent install option has been added for Windows and Linux. On linux, issues used to appear when MtoA was installed by a “super-user” with administrator rights, which have now been solved.

Fixes

Ticket	Summary
#1918	XGen > Export Selection as Archive doesn't work on Mac OS X or CentOS 7
#1939	Cannot export XGen archives on Windows 8
#2075	IPR crashes when exiting "look through selected"
#2172	Improve drawing of lights UI for VP2
#2173	Use Subcene override to draw standins in VP2
#2308	Add support for sky shader environment display in VP2
#2326	Linux installer needs a silent installation option
#2334	Windows installer option for forced silent install
#2354	Hide gamma attributes from MtoA
#2440	[MAYA-71151] On Linux, MtoA isn't found if Maya was installed from super user: docs/usability issue
#2442	Use VP2 IBL lighting for skydome/sky shader
#2443	[MAYA-71334] XGen interactive groom splines doesn't render on Mac
#2444	[MAYA-71350] Arnold in Maya's Render View fails in Chinese/Japanese language mode
#2445	Update EULA for MtoA
#2449	Fix support for Importing/Exporting Arnold AOV Overrides

#2464	[MAYA-71647] Linux Maya crash when using Maya Render View and then Arnold Render View
#2463	Remove Houdini Experimental Menu
#674	Environment node gets removed on "Delete Unused Nodes"
#1876	"Use existing .tx files" is not working with relative paths
#1998	Loading PolyTools and MtoA crashes Maya
#2296	Arnold Merge AOV's corrupting Render Settings
#2302	Support Maya UV-tile tokens
#2307	Add support for light blocker display in VP2
#2340	Update Gamma/Exposure from Maya impacts the RenderView display
#2342	Update About Box for MtoA
#2374	Bifrost aero broken in Maya 2016 Extension 2
#2382	Arnold Shading Node Problems
#2383	Update arnold VP2 shaders to support OSD
#2386	Particle instancer doesn't create instances when deform blur is disabled
#2390	Cannot assign new shader to object after you delete assigned shader
#2395	Render Selection to Texture renders with watermark
#2396	Arnold Stand-In export doesn't default to *.ass file
#2409	Include mr to arnold conversion script in MtoA release
#2456	Add new outliner icons
#2457	Add Render Setup Node Templates to MtoA
#2458	RenderView needs a progress message when 'Auto-convert Textures to .tx' is enabled
#2462	Highlight Arnold as "New" for Maya 2017
#1328	Batch render cannot be stopped on linux
#1924	MtoA logs a "Could not find xgen_procedural" error during load
#2157	XGen: Arnold crash when exporting selection as archive
#2242	Changing Render Resolution should update the RenderView
#2306	Add color management support for VP2 for skydome light
#2314	IPR Update Fail : Changing Translator
#2320	Update volumes for VP2 from draw override
#2330	Support Pixel Aspect Ratio in RenderView

#2332	Fix substring search out of bounds in debug, Part II
#2336	Prepare MtoA for Maya 2017
#2339	Provide mapping between VP2 hairPhysicalShader and aiHair
#2343	Add some support for VP2 lighting for arnold light types
#2349	Scene containing UDIM file textures crashes the RenderView
#2360	Fix exposure support for skydome VP2 display
#2362	Issues with OpenGL and ARV
#2380	Area light fails to display in VP2 when Maya first starts up
#2393	ShadowCatcher AOVs are failing
#2430	Render Settings window becomes corrupt if open when close/open Maya with Arnold renderer selected
#2441	Missing Scene Assembly render settings with Arnold
#2464	Remove texture_automip from MtoA parameters
#608	aiSky preview invisible in certain angles
#2292	Adding lights from the main Arnold menu does not add them to the light group in Hypershade
#2294	Fix substring search out of bounds in debug
#2341	maketx tries to access /home/oscar

Enhancements

Ticket	Summary
#2295	Automatic TX conversion
#2355	Support Maya's new interactive sequence render mode
#2403	TX Manager should be colorspace aware
#1302	No proper select implementation for the standin
#2284	Support shader nodes in Maya's LookdevKit
#2293	Support rendering to the Material Viewer in Maya's Hypershade editor
#2348	Add Support for Arnold AOV Callbacks
#2408	[MAYA-70831] Add layer name to Render View caption
#1617	On demand StandIn Update BBox info
#2122	Support stereo/multicam
#2318	Add support for Arnold lights in Maya's light editor
#2334	Migrate XGen UI script to Qt5/PySide2
#2364	Create AE/NE templates for Arnold shaders
#2368	Add support for more Maya materials and textures
#2376	Use sampling and ray depth values from render settings in the Material Viewer
#2406	Determine which parameters require to update IPR
#2434	Allow Render to Texture to support procedurals
#1905	Change range of "Anisotropy" in volume_scattering to [-0.9, +0.9]
#2321	Update comments to explain how to use Color Management in RenderView
#2324	Add Color Management to RenderView
#2337	Update MtoA Volume docs page with current image and menu info
#2338	Create Maya Fluids/Fire asset for VDB & aiVolumeCollector, aiVolumeSample workflows

MtoA 1.3.0.1

Ticket	Summary
#2489	[2016.5] Cannot load MtoA: invalid literal for int() with base 10: '2016.5'
#2494	[2016.5] Arnold not listed as a renderer
#2492	Maya Render View freezes Maya