

RenderMan for Maya 22.2

- [Welcome to RenderMan for Maya 22!](#)
- [What's New](#)
 - [Miscellaneous and Important Changes](#)
 - [Fixes](#)
 - [Developer Documentation](#)
- [Known Limitations](#)
- [RenderMan for Maya](#)

Welcome to RenderMan for Maya 22!

This latest release of RenderMan for Maya 22 (RfM), includes a number of features to address feedback as well as some fixes to RenderMan for Maya workflow and performance.

Please see the release notes below for all the new capabilities and known issues! You may also wish to visit the [migration page](#) for selected highlights.

What's New

- Added a new [PxrCylinder](#) Light
- Many UI and performance improvements.

Miscellaneous and Important Changes

- Deforming objects with motion blur now deform when the frame is changed during IPR. However, only motion blurred meshes and transforms retain their blur after frame changes during IPR
- Light filters now work with mesh lights
- Xgen delta files should now work
- Statistics are not written for IPR sessions
- Added a selection to the IPR menu item to [render selected](#) items only, this also applies to the preview renders
- The Render command, when used with -r renderman, now accepts some additional flags, including: -rl (render layer), -crop, -preRender, -postRender, -preLayer, -postLayer, -preFrame, -postFrame
- RunProgram is now supported with a Maya node called RenderManProgram, which can be created via RenderMan->Archive->Create Run Program Node. The node should reference an executable or python program, and accepts an optional parameter list. The file browser for the [RenderManProcedural](#) node will now filter files using either *.so or *.dll, depending on the platform
- Improved PxrSurface approximation in Viewport 2.0. Supports diffuse, specular and glow display (Current Maya limitations prevent presence from working correctly)
- PxrVCM Max Path Length can be increased up to 46
- PxrRemap: Output range is now unlimited
- PxrGamma: gamma value can be greater than 4
- For texture atlases, we now default to clamp mode. This can still be changed in the texture manager window
- A new texture manager option has been added: users can now select to always use the fallback path for their texture location. Note, that the texture manager does not do any special management when it comes to texture naming collision in this mode, so users should take special care in naming
- The Relative Pixel Variance attribute is now available on transform nodes
- A list of xcpt message codes can be supplied in rfm.json to suppress (woff) during rendering
- The file dialog for PxrOSL now remembers the last file filter for osl and oso files
- Disconnected parameters now revert to their default value
- PxrOSL now supports matrix parameters
- The scene 21 to 22 scene migration script is now available in the RenderMan menu, under Utilities > [Migrate 21.x scenes to 22](#)
- Cryptomatte now defaults to saving to the image output directory, as defined in the rendering globals
- There is a new token: <imagedir>, which contains the full image output directory path
- Aborting IPR renders on Windows no longer has a lengthy delay before returning control to the application
- Added support for \$RFM_SHOT_PATH configuration path. Now we consider (by order of precedence): home directory, \$RFM_SHOT_PATH, \$RFM_SHOW_PATH, \$RFM_SITE_PATH, core directory
- Specular energy compensation is now enabled by default in PxrSurface and PxrMarschnerHair. This change will only impact new scenes
- [User tokens](#) can be predefined in one or more rfm.json files
- Display presets don't start with a mandatory underscore anymore
- rfm2.api.displays.create_preset_display(name) has been added to create fully configured displays as defined in aovs.json
- [PxrWireframe](#) now shows up under the pattern/geometry category
- All displays can be denoised in folders as long as the beauty is selected to be denoised
- RfM looks up the RFM_PLUGINS_PATH env var for a list of path to plugin directories. Each directory can contain its own config directory, define extension attributes, etc
- Added in the preferences an option to NOT launch the denoiser
- AOVs can be saved into separate directories by using a new <aovdir> token in the image output directory field of the globals
- Added a new -jobid flag to render on the command line
- config: added a new override.json file to override the default values of any RfM node

Fixes

- A regression that prevented materials from being exported into RIB archives has been addressed
- The holdout button on the shelf now works as expected
- The texture manager now correctly handles Mudbox texture atlases on Maya's file node
- A bug that caused the denoise commands to use the wrong camera has been addressed. In addition, denoising from multiple renderable cameras is now supported
- Fixed a bug where the scale and rotation of objects instanced with either the particle instancer or MASH were being ignored
- Fixed a bug where during IPR, sometimes animated objects wouldn't update the first time the time slider was moved, when Maya's evaluation manager was in parallel mode
- The RenderManArchive node now supports rendering zip archive files, but RfM no longer supports writing zip archives, so this fix is for backward compatibility only
- Fixed a bug where sometimes after a connectivity change in a shading network, changes to a pattern would stop responding in IPR
- An issue where adding certain tokens, like <ws>, to the file path to textures would fail has been addressed
- Issues where relative paths to textures would fail to convert has been fixed
- MASH networks now render correctly when motion blur is enabled. Note, it is necessary to start the sequence with the first frame, otherwise runup will not occur as expected
- MASH with motion blur relies on Maya's runup command which doesn't work by default with MASH, but you can work around this by creating some other dynamic object in the scene, like an emitter, which can even be invisible
- The preset browser would incorrectly handle materials when using Renderman plugs on the shadingEngine node
- Fixed a preset browser docking error caused by an unexpected Maya value
- Preset browser material creation could fail if the selected object was not unique
- Preset browser preview renders were failing when RMSTREE was not set
- Environment orientation in preset browser previews now match 21.x
- Preset browser fur samples are now rendered with 10 bounces to give a more accurate preview (Note some previews may take longer to render /populate)
- TextField objects could be deleted too early and create an error
- User tokens are now immediately taken into account. This was a 22.1 regression
- Fixed a performance issue when there were a lot of animated transforms with motion blur enabled
- Preset browser: saving environment maps was silently failing
- <jobid> doesn't vary anymore inside a single job
- Some PxrDisney parameters were incorrectly clamped to 0-1
- IPR adjustment for dome light exposure now works with attached portals.
- Materials were losing their param list when emitted to RIB archives

Developer Documentation

You can find a useful Doxygenated developer documentation in the Developers' Guide under [RfM2](#)

Known Limitations

RenderMan for Maya

- Light Linking volumes is not currently supported
- _pref references for Alembic caches not currently supported
- Only motion blurred meshes and transforms retain their blur after frame changes during IPR
- Deselecting "Receive Shadows" does not work.
- Creating a mesh light from existing geometry during IPR will duplicate the geometry in-render. Restart the render to remove the duplicate.
- We do not support Camera Facing Curves in Xgen
- Xgen will not reflect changes in the Collection
- Maya Fur Feedback is not supported



Xgen : Xgen will crash during live rendering unless you set Window > Preferences > Xgen > Multithreading to **"off"** (unchecked).