

# RenderMan for Houdini 23.3

## Welcome to RenderMan for Houdini 23.3!

This release of RenderMan for Houdini (RfH) 23, includes a number of new features and bug fixes that address feedback.



- Please see the [required version](#) of Houdini for 17.5 and 18.0
- Rendering with RenderMan will not operate on Houdini Apprentice editions. See Side FX's website for options that allow Third Party Rendering.
- Houdini Indie is only compatible with 17.5 and higher, and you must be using at least version 17.5.210 or higher

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## New Features in 23.3

- RenderMan for Houdini now supports rendering packed USD geometry within the geometry context.
- Added new ROP options to enable illumination baking.

### Fixes

- Fixed a crash when merging VDBs
- Fixed a bug where primvars are dropped when material is applied on SOP
- Fixed an issue preventing render updates for keyframed parameters on light shaders
- Fixed an issue that would prevent an interactive render from stopping if an abort was issued in the "it" display
- Fixed an issue that was causing the IPR Render shelf tool to read the ROP display rather than always starting an IPR session
- Fixed a bug that could cause Pixel Filter mode to remain pinned to "importance"
- Fixed a bug that would cause interactive rendering to crash when modifying materials or the timeline
- Packed Geometry:
  - Fixed a bug where unpacked primitive geometry would not get material attribute applied
  - Fixed a bug where velocity motion blur was not applied when packed SOP was not time-dependent
  - Fixed some motion blur bugs with packed geo
  - We now export packed alembic string attributes as user attributes
- Instancing:
  - Fixed an issue to more closely match Mantra behavior when pinstance = off
  - Fixed a crash when instances would be created from points out of a POP or DOP node
  - Numerous other bugs when using instancing have been addressed
- Preset Browser:
  - Fixed logging bug when using the preset browser with textures
  - A bug causing importing and exporting shader networks with PxrOSL shaders to the preset browser has been fixed
  - A bug causing importing and exporting nodes with arrays to the preset browser has been fixed
  - Address an issue where the preset browser would not import material assets with textures correctly

### Miscellaneous Changes



Renamed Houdini velocity primvars called "v" to "vel"; as "v" is a reserved attribute for RenderMan geometry. Shaders in RenderMan for Houdini should refer to "vel" instead of "v".

- "Smooth Displacement" parameter label has been changed to "Prevent Polygon Cracking" and moved to Displacement folder.
- oslbuilder now shows up in PxrMaterialBuilder
- Added support for ptmotionblur="deform" on Instance OBJ
- Added RFH\_USER\_LOG\_DIR, RFH\_USER\_OTLS\_DIR, RFH\_USER\_PREF\_DIR
- Reorganized ROP for illumination baking options
- The "darkfalloff" option has been added back to the adaptive sampling options
- Added biasR, biasT, rawld, and dPcameradtime AOVs to LOPs, ROPs, and TOPs
- Parameters with unknown widget types still being added to hda with a default UI

## Known Limitations

### RenderMan for Houdini

- Can only apply materials to packed instances
- Display edits cannot be changed from the image tool to mplay

- Cross-frame denoising pdg support
- Applying undo of deleted nodes or collapsing to subnet may not work as expected
- Rewiring subnet indirect inputs
- Rendering with Mantra lights or VOPs not possible
- Bypassing shader nodes
- Auto camera creation for IPR
- RenderMan clipping planes