RenderMan For Katana 22.4

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Welcome to RenderMan 22.4 for Katana

RenderMan for Katana (RfK) capitalizes on the changes made for newer versions of Katana and continues full support of the latest RenderMan ProServer 22.4.

We're excited to have improved Live Rendering. All manner of changes and edits can be made during a Live Rendering session. Waits are minimal and results are stunning, the renderer will continue to refine your image continuously should you take a coffee break and pick up where you left off on your return. We've worked hard to avoid making the artist restart the render to see updates and stability is improved.

This current release offers support for:

- Katana 2.6
- Katana 3.0
- Katana 3.1
- RenderMan ProServer 22.4

Please see the release notes below for all the new capabilities and known issues!

What's New

- **Support for Katana 3.1 added**

Miscellaneous Changes

- Hydra Viewer improvements:
    - The PxrEnvDayLight sunDirection parameter now has a manipulator
    - The Refine Shape and Scale Edges manipulators for PxrRodLightFilter are now available
    - Viewer Manipulators now display annotations
    - Prevented the default Katana light locator from drawing when a light filter is added to a light
    - The PxrPortalLight and PxrDistantLight guides are now distinct from the PxrRectLight and PxrDiskLight representations
    - It is now easier to select lights
    - We now hide the analytic cookie manipulators if the cookieMode is "physical"
    - The width and height controls on the Barn Size manipulator now match line up with the BarnLightFilter visualization
    - The Rod Scale, Cookie Scale, and Barn Scale manipulator handles will now remain orthogonal no matter how the light filter is transformed
- The RenderMan built-in error handlers are now fully supported (prmanGlobalStatements.errorHandler). This has been extended to include a new handler 'abortall' which indicates the render should be terminated on a katana error
- All provided shaders with a ramp UI now allow a dynamic number of knots
- RfK no longer outputs uninitialized values to PxrRamp's colorRamp parameters
- Deleting primvars and primAttributes now updates in Live Render
- RfK no longer adds "origin" and "OriginalWindow" to the display lines. These values are properly computed by prman
- RfK's display option configuration has been adjusted to align with prman's expectations for crop window and overscan

Fixes

- Fixed live render crashes when deleting or renaming a light
- Fixed an error messaged that was displayed when "Tab" was pressed in the Hydra Viewer when a light with no manipulators was selected
- The Scale Edges manipulator for PxrRodLightFilter in the Viewer are now correctly positioned when the scaleWidth, scaleHeight, and scaleDepth parameters are non-default
- Fixed a bug where a parented, shared light filter using the "Light + Light Filter" Coordinate System was not drawn in the Viewer and Hydra Viewer
- Fix a bug that would cause "point" output channels to be emitted with type "int"
- The UI default value for the Visible In Refraction parameter on lights now matches the default in the renderer
- The preset browser tab works again
- Addressed a bug with the preset browser where exporting light rigs and materials from a parent group failed
- The preset browser now supports array and dynamic array parameters. Materials that use PxrRamp can now be correctly saved and imported
- The autocrop option on RenderOutputDefine for raw OpenEXR renders now works

Known Limitations

Live Rendering

- Creating a mesh light from existing geometry will duplicate the geometry in-render. Restart the render to remove the duplicate.
- Cannot change a geometry primitive type during live rendering (e.g. from NURBS to polymesh)
- When assigning a material to a Scene Graph location, that location must be enabled in the live render working set

Katana Limitation

- Instanced lights with filters using the "Light Filter" coordsys have an incorrect transform. The workaround is to promote the light filter to a shared light filter using a light filter reference.
- When rendering to "it" from Katana, do not stop the render from "it", abort the render from Katana. Your Katana session may freeze for a time if you abort from "it". If you make this mistake you can restore Katana to operation by terminating the prman render process manually. This will be fixed in a future version. You can also avoid this entirely by rendering to the Katana Monitor.
- We do not receive live render edits from Katana for nodes added at the end of the node graph, right above the Render node. If a no-op node (e.g. Merge) is inserted above the Render node and the node is added above that then the edit is received.
- Any live updates will cause interactive motion blur to be disabled. The render must be restarted.
- There are a few live render limitations in Katana 2.6 that have been resolved in Katana 3.0 based on the improvements to 3.0, typically limitations with live working sets and adding/deleting locations in 2.6