KtoA 1.0.4

Download and Installation

Arnold, KtoA, and other downloads are available here. Installation instructions come with KtoA, but can also be viewed here: Installation.

Compatibility

- **Arnold:** 4.2.8+
- **Katana:** 2.0v1+
- **Platforms:** Linux x86-64, RHEL 6+ or compatible glibc

Enhancements

- **Arnold 4.2.9:** Updated to Arnold core 4.2.9, which includes numerous performance enhancements, new APIs and more. See https://support.solidangle.com/display/A5ARP/4.2.9.0 for more information.
- **Fast opacity for all surfaces:** Fast opacity, which used to apply only to hair and points, can now be extended to all surfaces whose shaders support it. It can result in significantly higher rendering performance on opacity-masked surfaces such as tree leaves. Although this can change the noise profile, it is enabled by default due to the performance benefits. (#30)
- **ARNOLD_PLUGIN_PATH environment variable:** To match the other DCC plugins such as MtoA and HtoA, KtoA now supports the ARNOLD_PLUGIN_PATH environment variable where shaders and procedurals can be located. (#34)
- **Explicit instancing of renderer procedurals:** Renderer procedural locations can now be explicitly instanced using Katana's instance.ID attribute. (#32)
- **Non-constant arbitrary data on instances:** Arnold has long-supported adding uniform, varying, and indexed data to ginstances, which can add to or override data on the instanced node, but KtoA disallowed it. This restriction has been lifted. It is up to the user to ensure that the arbitrary data is structured appropriately for the topology of the source node. (#38)
- **Basic support for Yeti:** The use of Peregrine Labs' Yeti is common enough to warrant support, which is now available in the ArnoldYeti node. Users will probably need to set an expression for the filename (`'/path/to/fur/cache.%04d.fur' % frame`), and also have the frame-relative motion sample times added, but otherwise it will greatly simplify Yeti integration into a Katana scene. (#37)
- **Explicit support of shutter curves:** The shutter type curve may now be set, and the shutter curve manually filled out. It takes X,Y pairs of number that represent time and shutter weight, respectively; an array of 0,0,1,1 represents a triangle where samples near shutter open are weighted down, but samples near shutter close have a much greater weight. The weight values can be anything zero and greater, while the time values should be between zero and one. Note that the alternate method of setting shutter curves via attribute still work, but the new method provides easier access to the feature. (#14)
- **Node update shelf script:** There is a new Arnold node update shelf script that will rename deprecated parameters, fix types and remove unused parameters. This script is intended to be updated at all times, and should be safe to run on any katana recipe. (#40)
- **Improved progressive samples handling:** A new parameter on ArnoldGlobalSettings, AA_progressive_samples replaces the old begin/step method for setting progressive pass samples. It is more straightforward, and now by default matches how kick handles progressive sampling (-3, -2,-1,1,final). (#12)

Incompatible Changes

- **Removed enable_aov_composition option:** This option is hard-coded to be on in recent Arnold versions, so this was removed. (#29)
- **Renamed aperture parameters:** Some of the camera aperture parameters in ArnoldGlobalSettings were deprecated, and have been renamed to their new names. Use the new node update shelf script to upgrade your nodes if you see the old parameter names still listed. (#31)
- **Removed old progressive sampling parameters:** Both AA_samples_progressive_begin and AA_samples_progressive_step in ArnoldGlobalSettings have been removed, and will be cleaned with the update script. You should translate your progressive sampling setup to the new parameter, AA_progressive_samples, although you may find you like the new defaults. (#12)

Bug Fixes

- #28 Incorrect enum values in ArnoldGlobalSettings for camera shutter type
- #29 Remove enable_aov_composition option
- #31 Rename aperture_* camera params to their modern names