

# KtoA 2.1.1.0

## 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:** 5.1.1+
- **Katana:** 2.5v7+, 2.6v4+, 3.0v1+
- **Platforms:**
  - Linux: x86-64, RHEL 6+ or compatible glibc
  - Windows: 7+ on x86-64, with VC++ 2015 redistributable installed

## Enhancements

- **Instance arrays:** While KtoA has long supported a non-standard pointcloud-based instancing, there is a new standard that has been in use by Pixar and Sony Pictures ImageWorks covering much the same functionality with locations of type `instance array`. KtoA now supports this, including nested instancing. (#223)
- **Curve root UVs:** Curves now use `geometry.arbitrary.st` as root UVs, available as the standard UV inside of shaders. They can be indexed or not, but there should ultimately be as many UVs (or indices) as there are curves. Due to an issue in Katana, you may need to set the scope to `p_rimitive` (Arnold constant) for it to pick up the UVs. (#138)
- **Per-curve radius:** By placing one value per curve in `geometry.width` or `geometry.curves_width` each curve will have an independent, but constant width. (#56)
- **Curve endpoint triplcation:** For Catmull-Rom and b-spline bases, it is now an option on `ArnoldGlobalSettings` to force triplcation of the start and end CVs for each curve so that the curve visually touches the endpoints. (#56)
- **Curves reliability:** Curves translation has generally been improved, with bezier basis working properly and other obscure bugs fixed. (#56, #294, #295)
- **AA\_samples override output:** `AA_samples` can now be overridden per renderer output, resulting in separate passes in disk renders (preview renders still use the main samples setting). (#298)

## Bug Fixes

- #280 Don't abort build process if pip is available for a python earlier than 2.7.9
- #293 Too many [osl] messages in Arnold log
- #294 `curveWidthStart` and `curveWidthEnd` should not use motion blur
- #295 Multi-segment bezier curves do not work
- #297 Object settings not always inherited from parent locations
- #299 Katana version can change `AA_seed`
- #300 Parameters with non-core defaults reset to core defaults erroneously
- #287 Vertex winding order for data coming from `pxrUsdIn`