**Arnold Standin/Redshift Proxy Notes**

A standin is a procedural (or proxy) file used by the Arnold renderer. It allows objects to remain hidden in the scene (while only being visible through a “standin node”) and appear visible in the Arnold render view.

(Redshift has a similar file called a “proxy.”)

EXPORTING A STANDIN

* Select Arnold > Standin > Export Standin to export the current selection.
* Standin files are saved as .ass.
* Enable any objects you would like to export, including shaders, shapes, lights, etc.
* If the object has animation, make sure to enable “sequence” and select the frame range.

CREATING A STANDIN

* Select the object you would like to import into the scene. (If there are multiple files in a sequence, simply select the first file.)
* A standin node will be created, allowing you to move, rotate, and scale the object. (NOTE: Scaling certain objects such as an xgen description might have undesirable effects on the appearance.)

STANDIN ANIMATION

* If a standin object has animation, open the aiStandinShape attribute and enable “Use File Sequence.” This will automatically grab the associated standin file for the frame.
* To loop the animation, we can edit it using an expression. Right click on the frame box and choose “Edit Expression.” In the expression field, replace the code with the following:

$loopFrame = 30;

$a = frame%$loopFrame;

if ($a == 0)

{

$a = $loopFrame;

}

redshiftProxy1.frameExtension=$a

* *“$loopFrame” is the local variable we created for our loop number.*
* *“frame” is the current frame of the animation playback.*
* *“aiStandInShape.frameNumber” is the frame of the animation we set.*
* *The percent symbol used in “frame%loopFrame” seems to create the loop, but it skips frame 30 and jumps to frame 0. Since frame 0 doesn’t exist in the animation we exported, we simply replace it with frame 30 and continue the loop.*

PROXY

* A redshift proxy file is like an Arnold standin file. There are a few differences that make them distinct:
  + A proxy file takes longer to create than an Arnold standin. However, the redshift file is approximately half of the size.
  + A proxy file will use a default cube size instead of a node.
  + A proxy file allows you to change the material after it has been created. This allows you to create the proxy when you’re happy with the finalized mesh+animation and you can simply edit the materials after. (This *can* be done in Arnold, but it requires a bit of a workaround.)