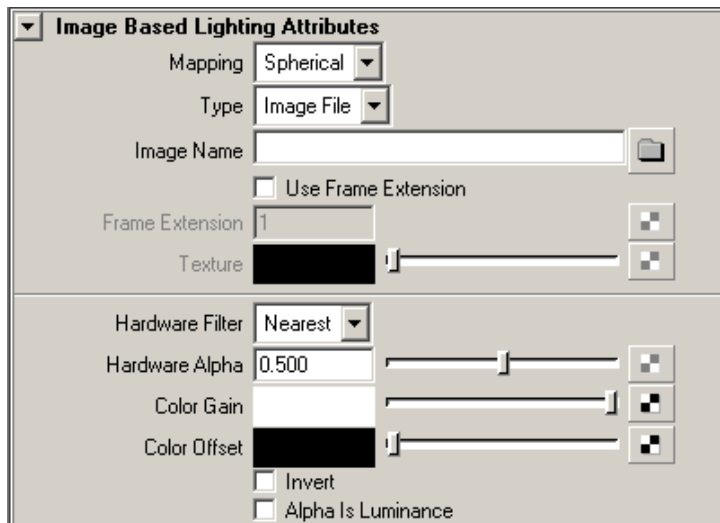


IBL Node for Mental Ray: Using Final Gather

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This tutorial explains a quick way to get good results using mental ray and image-based lighting. There are many different applications of image-based lighting but I believe this is a good way to get some pretty good results while keeping render times manageable.

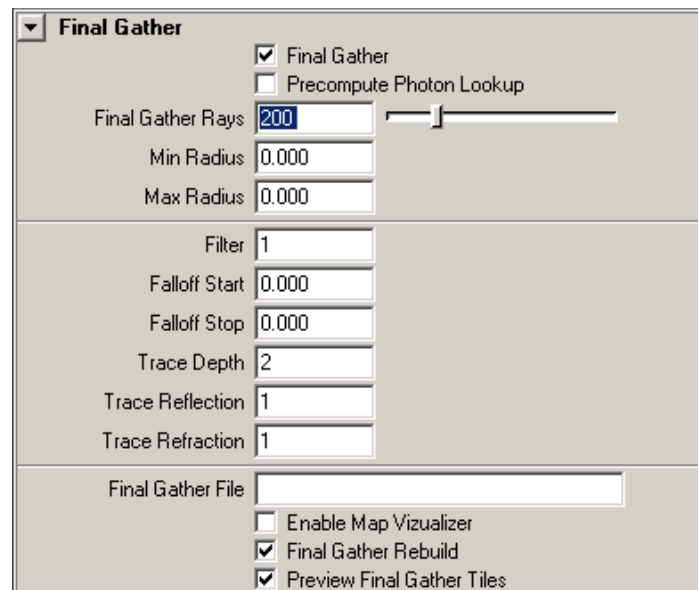
The first thing you're gonna want to do is open your render globals, and under the mental ray tab there will be an Image Based Lighting option. Click 'Create' and a new section will open in your attribute editor named mentalrayIblShape1.



Now, click the final gather option in your render globals (under the mental ray tab) and check final gather. The main drawback to this technique is that you must have some lights set in your scene. In some ways this is good, because you have control of your keylight and shadows. You can add in extra lights as needed. So before you render, be sure to add some lights. I'm not gonna go too in depth on final gather but I'll give you some quick tips to start with. Start with a low number of final gather rays (like 200 for testing). Min and Max radius should correspond to the units of your scene(not including IBL sphere) so if your scene is 50 units, your Max radius should be 1/10 of that (5) and your Min radius should be 1/10 of your Max radius (0.5). It's a good place to start, but you may have to tweak these numbers. Fire off a render and see the results. If you are getting splotchy colors on your object it is probably from the detail in your HDR image. Try blurring the image until the splotches are gone. Another route would be to turn up your Final Gather Rays, but don't be surprised if the render times go through the roof.



You should now have a panel or window open that looks like this. You can now click the folder to the right of the 'Image Name' and load your HDR image. Most likely you're gonna want a lat/long version of your HDR and have 'Spherical' selected under your Mapping attribute. A sphere should be showing up in your world space containing your HDR image, and be about 50% transparent. You can now rotate your sphere as you desire, but you can not use your translate or scale tools because the IBL node actually creates an infinite sphere extending outwards from the origin. (this is a good thing...especially for the next part)



Your image hopefully looks pretty by now, but make sure to render an animation. Final Gather is known to cause flickering artifacts. This is where you will adjust namely the FG Rays, Min/Max Radii, and blur your HDR image. Have fun exploring the power of mentalray and check out www.lamrug.org for more information.