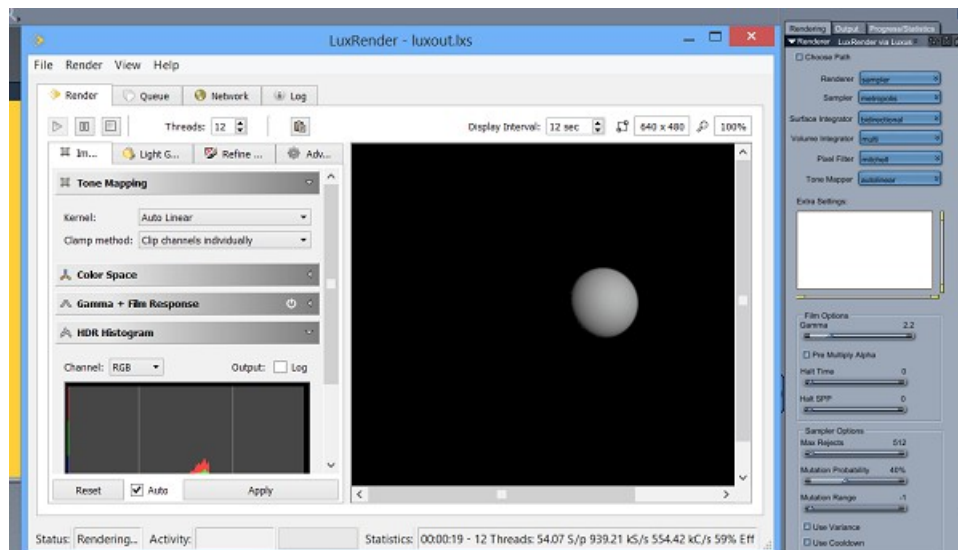


Luxus for Carrara

Getting Started

1. Download and run the appropriate Luxus installer for Carrara.
2. Download and run the appropriate LuxRender installer (note where you install it). Find LuxRender at <http://www.luxrender.net>. You want the standalone version, and then either the OpenCL or the No OpenCL version. Either will work fine and you can choose to use the other at anytime. On Mac 10.7 and 10.8, you must first run LuxRender manually once from Finder by right clicking on it and choosing open. This enables it to pass the security check.
3. Launch Carrara.
4. Create a New Document. Choose Medium Empty Room.
5. Insert a sphere.
6. Switch to the Render Room, change your Renderer from "PhotoRealistic" to "LuxRender via Luxus".
7. You will be prompted for a folder. The folder you want to choose is the folder that contains the LuxRender application. Remember you are not looking for the application itself, but the folder that contains it.
8. Ensure your LuxRender installation is working properly, click on Render. The LuxRender GUI should popup and look something like the image below.
9. You can then stop and close LuxRender.

If you mess up and choose the wrong folder or if you want to change which LuxRender for Luxus to use, you can change it. Make sure the LuxRender via Luxus is the current renderer, then go back to the assemble room, then choose Menu -> Edit -> Setup LuxRender Path.



General Thoughts

Best results will always be achieved through the manual setup of materials by an expert of LuxRender, but LuxRender does generally make things easy for the beginner. Most photo-realistic results are obtainable with a minimum of setup.

Luxus for Carrara will attempt to autoconvert existing Carrara materials, but this is limited to the more basic setups. A non-layered, non-nested Multi-Channel shader with colors, values, texture maps, and scales usually autoconvert with good results. LuxRender's excellent lighting usually makes these autoconverted shaders look quite good.

The work that Luxus itself does is rather simple. Luxus takes your Carrara scene and translates it to LuxRender. Most information that is needed and most of the skills that should be learned either relate to Carrara or relate to LuxRender.

The best information on using Carrara is found on the DAZ 3D forums under a post titled "Carrara Information Manual". CarraraCafe.com also has excellent information and tutorials for using Carrara. During the development of Luxus for Carrara, members of CarraraCafe.com created some excellent documentation. Please see this link here: <http://carraracafe.com/forum-3/#cid=1,tid=59>

The best information on using LuxRender is found on www.luxrender.net. The materials section is an excellent place to start and an excellent reference.

http://www.luxrender.net/wiki/LuxRender_Materials

LuxRender volumes and textures are documented here

http://www.luxrender.net/wiki/LuxRender_Volumes

http://www.luxrender.net/wiki/LuxRender_Textures

Shader Room

Carrara's Shader Room is very powerful. The Shader network is easy to manipulate and the possibilities are endless. Luxus for Carrara implements LuxRender's materials and textures as Carrara shaders to enable their use and manipulation in the Shader room.

These are not true Carrara Shaders. You will not be able to get the effect of LuxRender using the Carrara's built-in renderer. The preview of these shaders are also limited. Only the renderer labeled "LuxRende via Luxus" will understand these shaders.

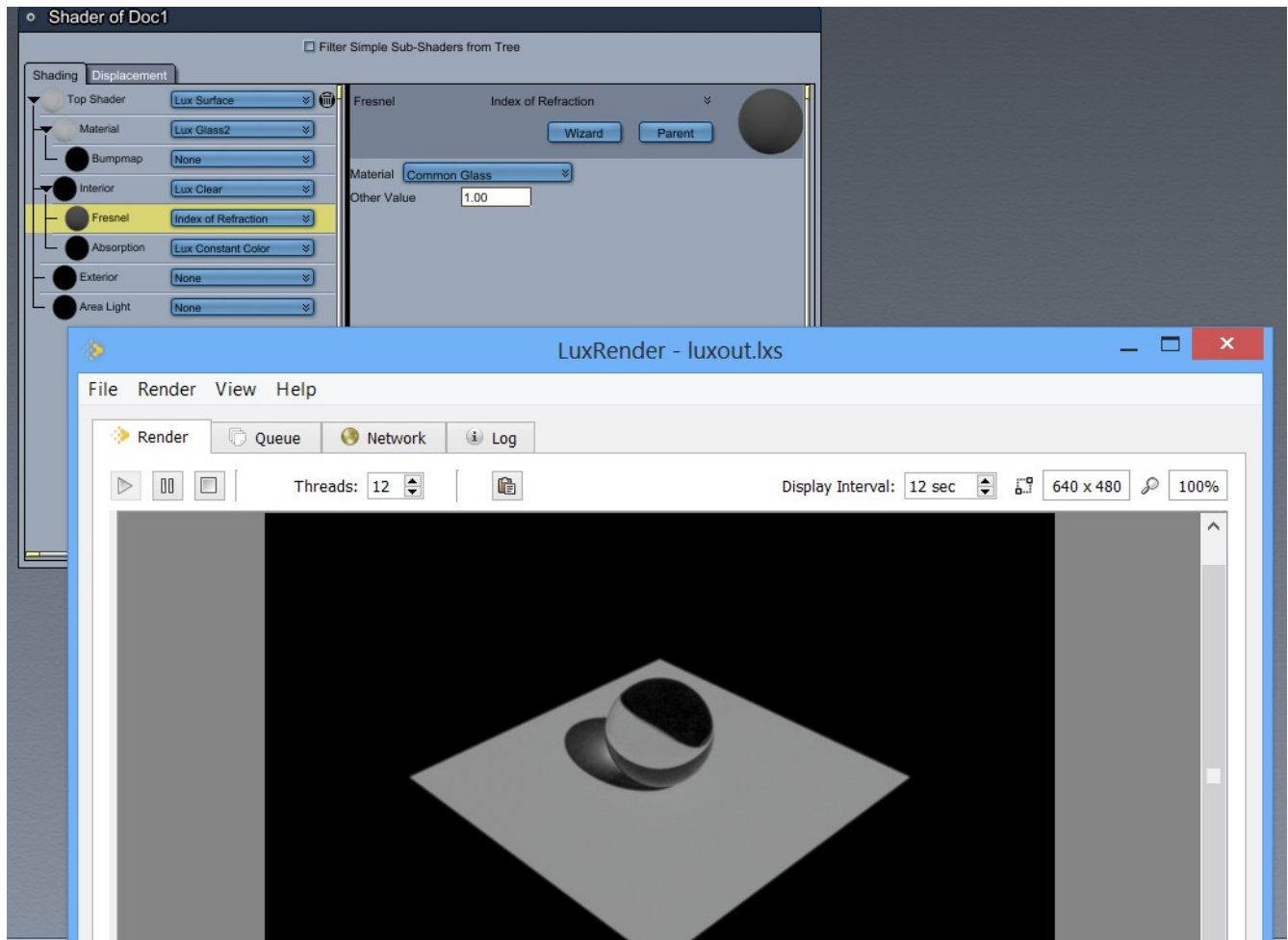
LuxRender's material and shader tree is very conducive to the way Carrara's shader room works. Pairing the two is an excellent match. Users can also save a shader, then reuse and adjust it later.

The most important shader is "Lux Surface". To manually setup a surface for LuxRender, you will need to change the top level shader to a "Lux Surface". You will note that there are 4 inputs to this shader: Material, Interior, Exterior, and Area Light.

The Material input of "Lux Surface" is where you would put Lux Materials. There is one exception and that is "Lux AreaLight". "Lux AreaLight" is special and gets plugged into the AreaLight input of "Lux Surface" if you want your mesh to emit light. The other two inputs, Interior and Exterior relate to

volumes. Volumes are best explained in the LuxRender documentation, but as an exercise to get started with Materials and Volumes, here is a walkthrough on making a glass shader:

1. Create a plane
2. Create a sphere
3. Edit the shader of the sphere in the Shader room
4. Change the top level shader to Lux Surface
5. Change the Material input to LuxMaterials > Lux Glass2
6. Make sure the bumpmap of Glass2 is None
7. Change the Interior input to Lux Clear
8. Adjust the Fresnel Index of Refraction to be Common Glass.
9. Render that using LuxRender via Luxus
10. You may want to save the shader for another time as glass is very common.



Lights

Luxus for supports the native Carrara Spot, Bulb, and Distant lights. Luxus adds the LuxRender lights Infinite, Projection, Sky2, Sun, and SunSky2.

Infinite is an sometimes called HDRI or IBL. It represents a light that is infinitely far away and all around. Sky2 is similar. You do not have to use an image with an Infinite light, you can simply use a color, but HDR images can give very realistic lighting.

Sky2 is similar to an Infinite light, but the color(and light) of the sky is determined based on the direction the Sky2 is pointing. You can think of this as an HDRI generator for the sky that has no clouds. Sun is similar to a Distant light, but the color of the light is determined based on the direction the Sun is pointing. SunSky2 is a combination of the Sun and Sky2 together as one light.

Render Settings

Although the defaults are recommended as a starting point, you can change most render settings in the Carrara interface. Also, many of these settings can be changed in the LuxRender GUI as it is rendering. LuxRender's power really shines when you change the effect and color of each light, known as Light Groups, during the rendering. To enable full control of the lights, choose Linear as the Tone Mapper.

Extra Settings

LuxRender is in active development, and as new features are added SphericLabs has provided a place for commands to be added that are directly passed to LuxRender. You won't have to wait for Luxus for Carrara to be updated to use the latest features for LuxRender. Render Settings has an Extra settings for additional commands to the Flex film and for extra global commands. Lux Surface also has a place for Extra Settings. As an example:

1. Create a plane
2. Create a sphere
3. Edit the sphere's shader.
4. Change the top level shader to Lux Surface
5. Put the text shown in the box into a Lux Surface
6. Click on something else to make sure the Carrara knows you are done editing the text, such as clicking and changing the Material input to None.
7. Render.

Material "mirror"

Trouble?

Your best place for help is in the forums of daz3d.com or carraracafe.com as Carrara users help each other. Please feel free to private message SphericLabs on either forum.