

## Small Tutorial on a good work-flow from LightWave3D to Octane

by Carlo Macchiavello

Octane is an amazing render engine, and is quite simple to interface with LightWave3D.

Best way to test it is to download the demo from their website

<http://www.refractivessoftware.com/>

and play with it

Actual demo limitation is that :

- not save scenes
- not save images
- render ones object at time
- rendering is size limited at 1024 x 512, but is enough to understand all power of this amazing unbiased engine.

Naturally you can grab the screen easily and save the image with a free utility called **Irfanview**

<http://www.irfanview.com/>

From LightWave3D we have many way to produce a scene compatible with octane, but we want to do more,, we want to build an animation workflow, and render it by Octane render.

Actually not exist a Lightwave3D exporter for Octane, but with some free scripts, and a bit of order during animation production, we can optimize the production, to reduce repetitive tasks at minimum.

Octane can load obj (wavefront) format, load its .mtl file to read some information of materials set upped from LightWave3D in surfaces.

Octane use only UV map to project images on surface, that mean you must create and use UV for mapping in LightWave3D.

Octane use actually ones obj at time during render.

How to optimize all work flow?

Tool for modeler

free scripts :

- **Batch Edit 2** <http://www.interialabs.de/lw/lscript/>

Standard Internal Tool

- **Objects collapse**

Tool for Layout

free scripts :

- **One Click Scene to Object** <http://www.interialabs.de/lw/lscript/>
- **Save transformed Sequence** <http://www.interialabs.de/lw/lscript/>

Standard Internal Tool to edit single mesh like many separate obj

- **Sock Monkey (to scale, move, rotate)**
- **Bones (to deform in every other way)**

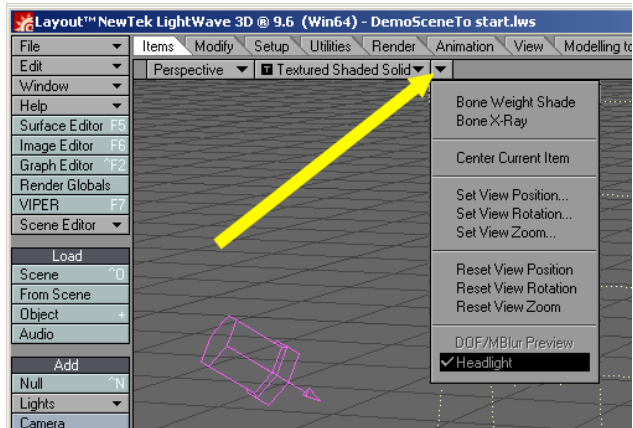
We use a different work-flow from Static frame to Animation.

In a static situation we can use different obj in layout, we pose scene, then we can collapse and export in a single obj with few work, but for an animation we can't work actually with a multiple mesh structure because we need to avoid a lot of repetitive task.

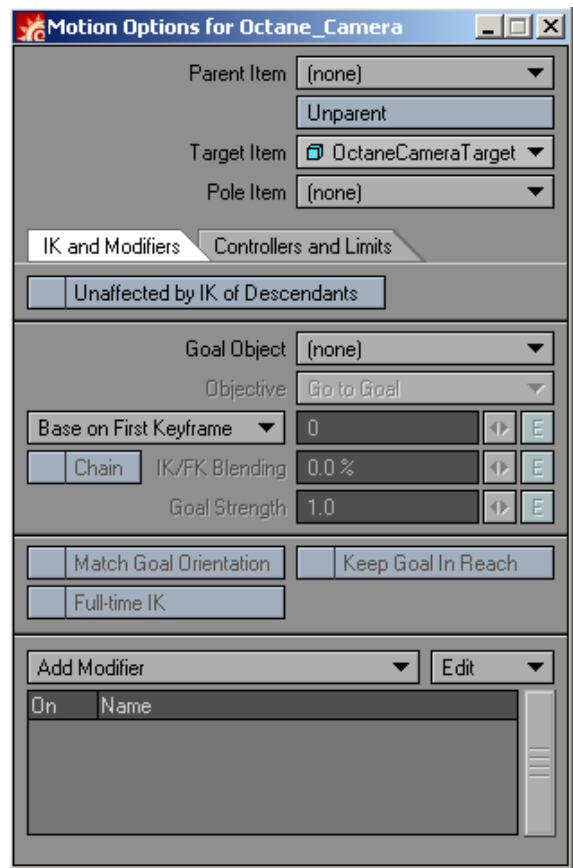
We have all tools to work with a single structured obj and animate every single part like many single objs.

## Static workflow

- build a folder called **Octane**
- build a subfolder called **obj, images, render**
- build or load in modeler every kind of obj that you need for your scene
- build a correct UV for every surface that you need to map in Octane, and apply or a final texture, or a generic square texture VERY IMPORTANT if UV is not used, is not exported in Obj structure
- Load all elements in Layout, enable Head Light in the viewport (is useful to have a flat light that allow you to see correctly all items of scene).

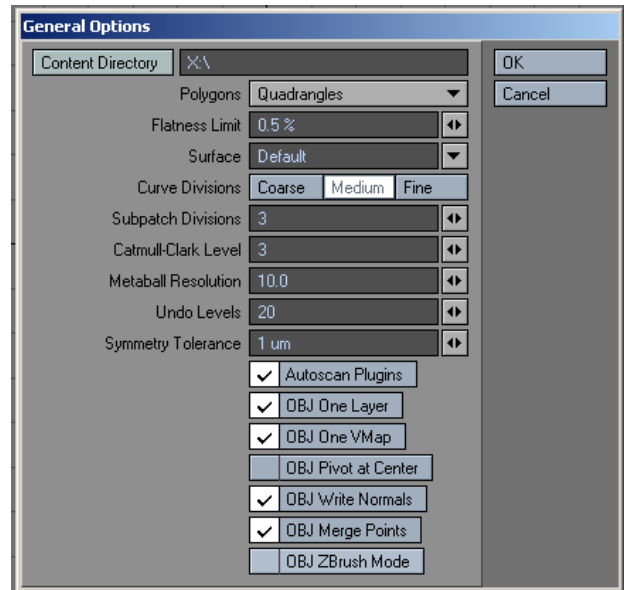


- Add a Null Point called Target camera
- Select Camera and hit "m", in the motion option enable target to "Target camera" null point, that allow you to simulate the configuration of Octane camera.



- Setup scene, arrange objs in pose, camera position,, target position, and write down coordinates of camera, coordinates of target, select all Objs and then run the plugin called **One Click Scene to Object**.

- save scene and close layout
- open modeler Options and verify that the setup of obj export is default, like this...



- then export obj files.
- Load in Octane, put camera and target info in the scene, setup Lights, Materials and render out you still.

## Animation workflow

We can't repeat this kind of work for every single frame, then we must optimize the work flow with a single mesh obj.

We need to build a scene in the modeler in a single layer, different surface, different UV map for every surface, and we can use point groups or weight map to control animation of single part of objects.

### Phase 1

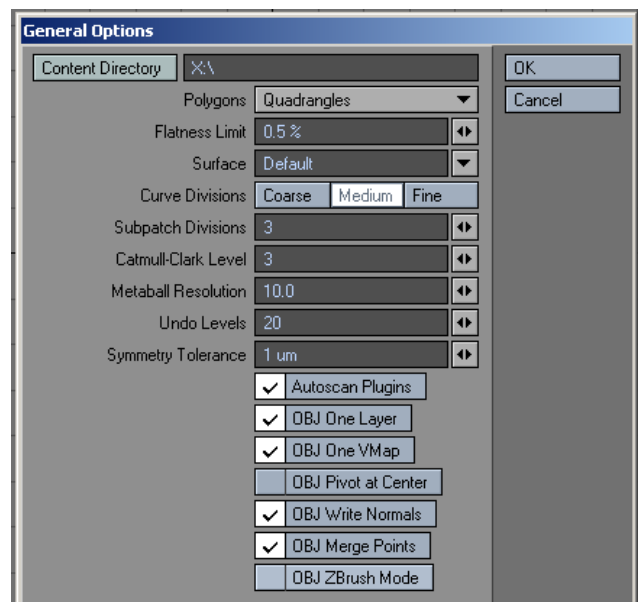
- build all elements of scene, with their UV maps.
- select single element that you want to animate with move, rotate, scale tool and add to it a **selection set**, to help animation system to move only these point.
- add a generic texture to all surface that you want to map with a texture.

this point is very important because LightWave3D export UV only if there is applied a texture in a someone channel.

- Load in a Layout and use ones tools to animate a part of objects like bones or Sockmonkey.
- Save scene
- Select obj, and save a sequence of objects, one obj for every frame, by simple script called **Save transformed Sequence**

### Phase 2

- Open Modeler
- open Modeler Options and verify that the setup of obj export is default, like this...



- then export obj files.
- Load in Octane, put camera and target info in the scene, setup Lights, Materials and render out you still
- load plugin called **Batch Edit 2**
- select folder where you saved all objects transformed, and use script to convert in a obj.

Now you can open Octane Demo, Load first object and define surface, materials, and so...

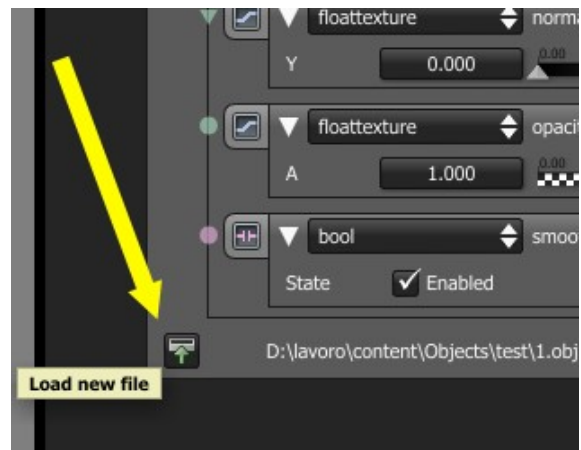
When you are satisfied, you can decide the quality of final render by sample x pixel and other parameters, and verify how many times you need to render all animation.

If you work with demo, that not allow to save scene, I suggest that is the right time to grab every single material and environment settings to avoid to loss data if you need to restart computer or software.

If you work with a licensed version of software is the right time to save the scene :-)

Know you can render first frame, then go in the node editor of object, go at end of settings and you can find this icon.

click on it and replace object of frame 000 with object of frame 001, then render again... this until you finish to render all frames of your animation.



If the animation is long, you can do a small batch to optimize and automate the replacement

Ok I know is a bit annoying task, like stop motion, but Octane Render is fast than light, the quality is amazing, and the result justify the work.