

Radiant Light Sources. © Mark Jeffers

Simulating Radiant Light Sources with trueSpace

One feature that trueSpace lacks is the ability to display light sources as visible/renerable objects. The ability to render light sources as visible objects is a key component of many of the CGI sequences you see each week in television shows like Babylon 5, Seaqwest DSV, Deep Space Nine and Space Above and Beyond (to name a few) that use Lightwave and other similar 3D packages that DO have this ability.

I've discovered one work around that allows you to simulate this effect in trueSpace. The following tutorial will demonstrate how you can simulate radiant light sources with a simple ploygon in conjunction with a local light source.

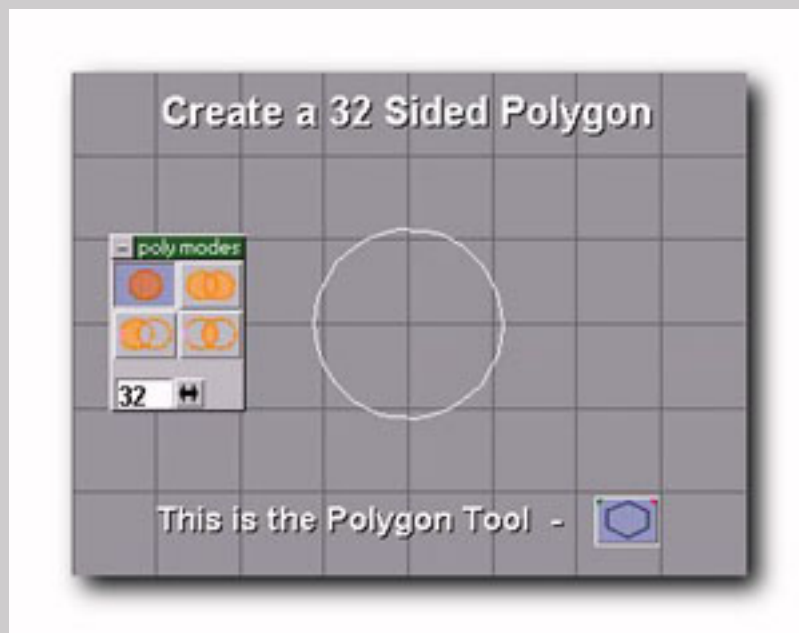
Suggested Environment

BACKGROUND Black

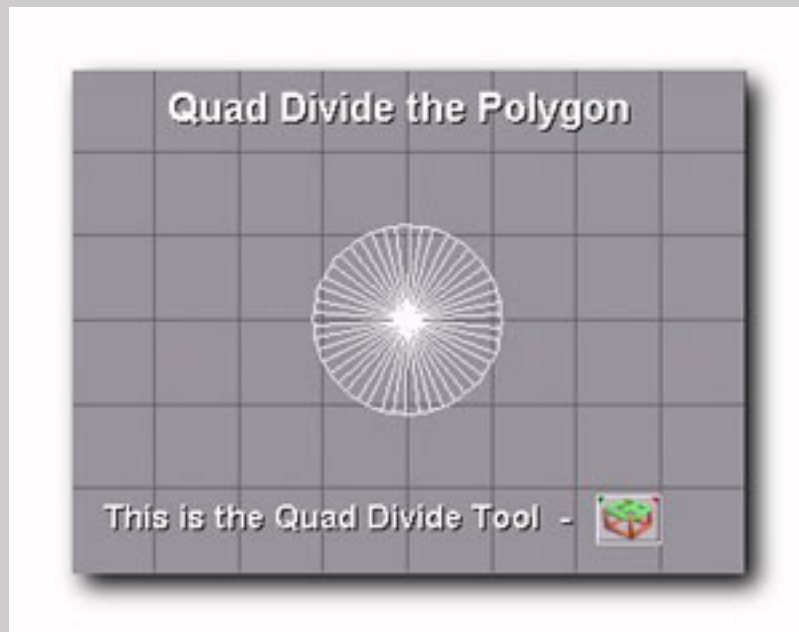
LIGHTING Delete Default Lighting and replace with a Single infinite source that is above the grid plane on the Z axis.

Creating the light disk.

1. Start a new scene with the above parameters. If you are unsure how to change these parameters refer to the [Terrain Tutorial](#) (in the section that covers lighting).
2. Choose the Regular Polygon tool and set the number of faces to 32 (to vary the effect you may alter this number. Lower numbers will result in a more faceted outer radius, higher numbers will result in a smoother outer radius when rendered).
3. Once you have your settings the way you want them, create a circular polygon like this:



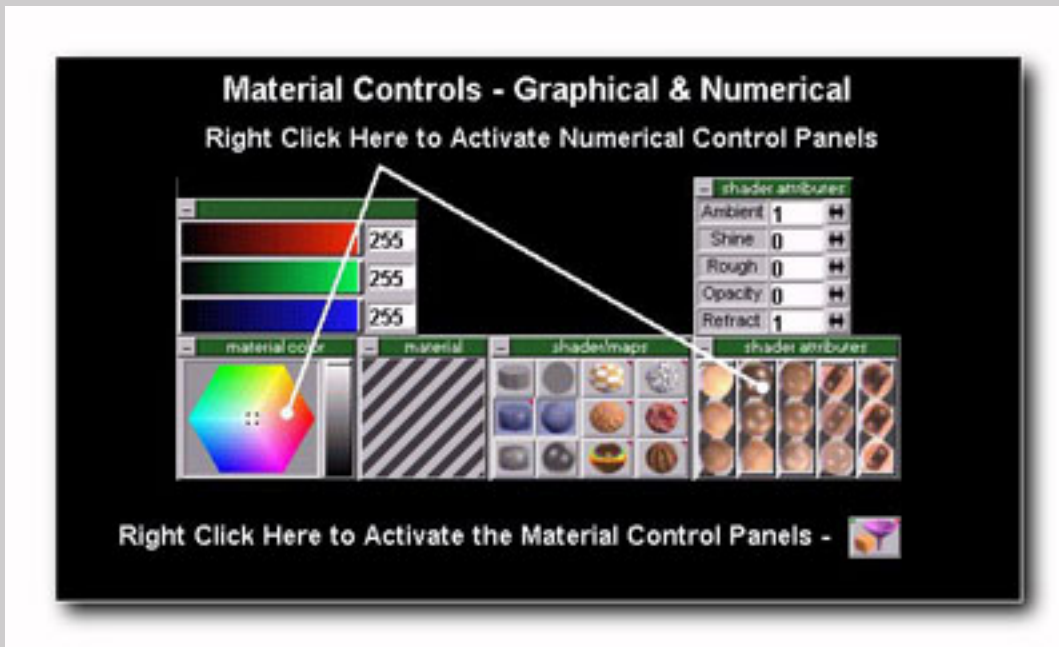
4. Next use the Quad Divide tool to divide the circular polygon like this:



Painting the light disk.

So far all we have is a sub-divided polygon. To transform this into something that we can use to simulate the radiant glow of a visible light source we have to do a little object and vertex painting.

1. Right click on the active paint tool to activate the material controls dialogue boxes.



2. Deactivate any procedural or bitmap textures by left clicking on the appropriate icons. Also turn off metal shading and choose phong shading.
3. Set the Ambient Glow, Shininess, Roughness and Refraction controls to zero. Set the Transparency control all the way to 100.
4. Paint the disk with the Paint Object tool. This will make the wire frame of the disk disappear. To restore the wire frame press the Wire frame Display button.
5. After you have activated the numerical dialogue boxes enter the following:
(Note: By right clicking on the material controls you will activate a numerical control dialogue. The same holds true of the material color dialogue. Using the numerical controls allows us to communicate color settings without the necessity of having to trade material libraries or scene files).

Ambient: 1

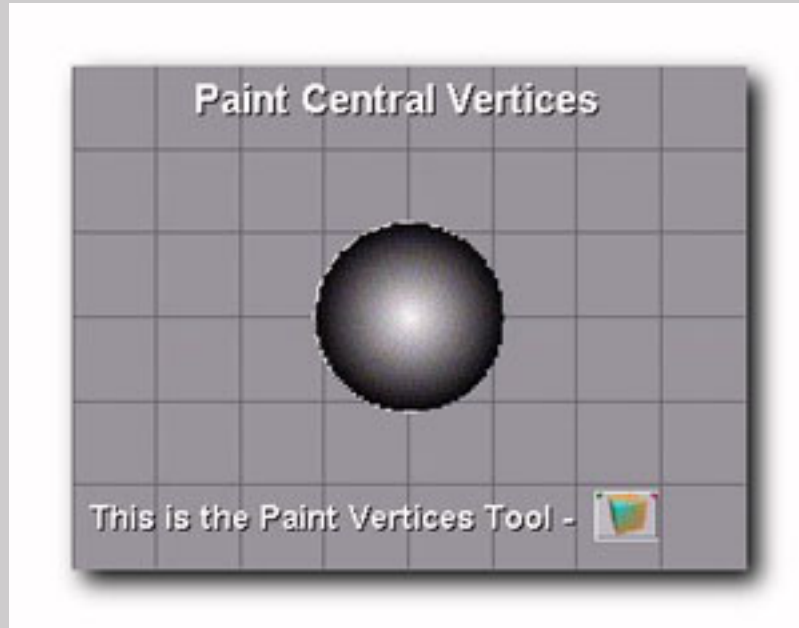
Shine: 0

Rough: 0

Opacity: 1

Refract: 1

6. Using the Paint Vertices tool paint the intersection in the center of the circular polygon.



Close