

Callisto™ FAQ (Frequently Asked Questions)

Why does my terrain disappear when I turn it around?

You have checked the “Backface Removal” checkbox. Uncheck it and the problem will go away. Terrains have a “front” and “back” side but no in-between. When you spin a terrain in such a way that you are looking at the “back” side, enabling the Backface Removal checkbox makes the terrain disappear. Leave the Backface Removal checkbox unchecked when viewing terrains if you don’t want to encounter this problem.

Why does the ambient light color not change when I select a new light color in the picker dialog?

Probably because you’ve applied a texture map to the surface of your terrain or planet. In that case, the color of the object is 100% dictated by your texture image. Changing the ambient light color will have little or no effect. If you want the ambient light color to show up on your object, regenerate the object *without* a texture map. But remember that you can color a terrain or planet *any* color, with the appropriately colored texture map. Change the texture map if you want to change the object’s color. You’re in total control of the texture color.

Will Callisto™ open files created by Lightwave 3D (or other 3D packages)?

Callisto™ will open and let you work with any 3DMF file created by any program. The 3DMF format is supported by many high-end packages (such as Lightwave 3D). In addition, there are utility programs that can convert 3D models from one format to another.

When I save an object in 3DMF format, am I saving just the geometry or do I also retain the textures and colors?

Callisto™ saves textures and colors with the object. When you open the 3DMF file again later, you will see the object with textures applied to it (i.e., fully colored and shaded).

When I save an object in 3DMF format, am I saving the smoothed object or will I have a faceted object?

Callisto™ saves fully smoothed terrains. That is, all vertex normals are saved with the object. When you open the object again, it will be smooth, not faceted.

Where can I get 3DMF models?

You can obtain 3DMF models for free on the Web. Check Apple’s web site (www.apple.com),

the America On-Line archives, and use the search engines (such as www.altavista.digital.com) to locate and retrieve 3DMF files. Some books also come with CDs in the back that have 3DMF models. Note that some 3DMF files have a “.b3d” filename extension; others have a “.t3d” extension. Callisto™ will open both types of 3DMF files. One is binary-based; the other is text-based.

Why are the 3DMF models that I get from Apple (and others) faceted or coarse-looking instead of smooth?

Many 3DMF models obtained from third parties are generated without vertex normals precalculated. This means the models will look faceted or rough. Version 1.0 of Callisto™ does not do any smoothing of 3rd-party objects. However the object looked when it was created, that’s how Callisto™ displays it.

What are the filetypes of files saved by Callisto™?

Callisto™ itself saves only one kind of file: 3DMF (with filetype ‘3DMF’). Photoshop® does all the 2D file saving, in whatever format you select.

Why doesn’t Callisto™ open 3DMF “text” files?

3DMF files normally have a filetype of ‘3DMF’; but some 3DMF models are in a text format (filetype: ‘TEXT’). If you have a third-party 3DMF file in ‘TEXT’ format, Callisto™ may not open (or recognize) it. The workaround is to use ResEdit or a suitable utility program to change the filetype of the text model to ‘3DMF.’ Callisto™ will open it then.

Why does the Texture button remain disabled when I view 3DMF models?

This version of Callisto™ doesn’t support texturing of imported 3D models. The Texture button is active only when you create your own terrain or planet geometries.

What can I do if the texture doesn’t line up precisely with the topology of my terrain?

Make slight alterations as necessary to the texture map image. (I.e., drag it slightly to the right or left, up or down, etc., in Photoshop®.) Then reapply the texture.

Can I “tile” my textures or get them to repeat on the surface of a terrain?

No. Callisto™ 1.0 will not do this for you automatically. To get this effect you’ll have to tile the texture image yourself in Photoshop®.

When I convert my 2D image into a “planet,” I get huge (ridiculously large) “continents” that look more like tumorous outgrowths than mountains. How can I get more subtle geographies?

It’s all a matter of contrast. In Photoshop®, select your entire source image and use the Brightness and Contrast controls to reduce the contrast of the image. Remove almost all of the contrast if you want very shallow features in your final “planet.” If you do this, of course, you’ll also remove most of the color from the image. If you still want your planet to be colorful, save the original (high contrast) source image and apply it as a texture map later. Use the low-contrast version to create the geometry; use the high-contrast version as a texture overlay.

What can I do to produce crisp-looking type for text banners?

Callisto™ isn’t really a logo-producing tool. The way that it “resamples” 2D images to produce terrain geometry means you’ll always have somewhat coarse-looking text. Still, there are some tricks you can use to improve the final appearance of text.

1. Use a large source image, with large letters. (Tip: The point size of your type should be in the hundreds.)
2. Try higher grid resolutions (in the Prefs dialog).
3. Try blurring the edges of your text in Photoshop®. This causes smoother slope transitions in Callisto’s terrains.
4. Apply the text in PICT form as a texture overlay on the final 3D object.
5. Reposition the light source to give a more dramatic effect.
6. Turn the light intensity up, if you want the “flat” (bottom) part of the terrain to be less visible.

When I create rounded objects with the Planet button, sometimes they have a deep “crease” in the surface. Why?

The crease happens because your 2D input image has different shadings on the right and left edges. When these edges meet on the spherized 3D object, a crease is the result because the pixel intensities “jump” abruptly. To avoid this, make sure your image is colored the same along each vertical edge, so that it wraps smoothly.

Why do my “spherized” objects have a wrinkled, bunched appearance at certain spots?

You’re looking at the North and South poles of the sphere. If your 2D source image has a lot of contrast variation at the top or bottom edges, those variations will translate into the kind of puckering and wrinkling you’re talking about. For smooth North and South poles, be sure your source image is smoothly colored at the top and bottom edges of the picture. The best bet is to fade the image to a solid color at the very top and very bottom.

Why do my “spherized” objects have a visible seam sometimes?

This can only happen if your original image does not have identical colors at left and right edges. The colors at the edges of the image should be the same if you want the image to “wrap” seamlessly.

Spherical geometries created by Callisto™ are truly seamless. If you want to see this for yourself, open a blank (white) window and immediately convert it to a Planet. The resulting sphere will be perfectly round and seamless. Visible seams are always the result of different-colored edges in the original image.

Can I save the 3D geometries of my objects or paste them to the Clipboard?

You can save 3D objects by using the “Save 3DMF” option in the File Menu. Pasting to the clipboard with Command-C only saves 2D renderings (PICTs) to the clipboard; it does not save the geometry.

Why does Command-C not work sometimes?

It works only when the cursor is within the preview area of the image.

When I do Command-C with the cursor in the image, won't I copy the cursor?

No. The final image copied to the Clipboard will *not* contain a “snapshot” of the cursor.

Will there be a Windows version of Callisto™?

No.

If I remove the splash screen from Callisto™ using ResEdit, will it still run?

Yes, but you will still have to wait for the countdown counter to run out, and you still won't be able to save images in high resolution unless you register (by sending \$20 to Kas Thomas, P.O. Box 477, Wilton, CT 06897). Please resist the urge to “hack” away at Callisto™ with ResEdit. We have kept the registration fee low enough so that anyone can afford it. Register your copy today. Include your e-mail address if possible.

Why doesn't the Callisto™ user interface follow Apple's guidelines on 3D interface design? Why didn't you use widgets and icon buttons like the 3D Viewer in SimpleText?

The widget-based Apple user interface is too modal and cumbersome, in our humble opinion. In Callisto™ simple actions like rotations and translations are performed directly with the mouse, with no need to click on cryptic icons or widgets, no need to exit one mode before entering

another, etc. One thing we wanted to avoid is a highly *modal* interface, where you have to enter and exit different modes before actions can be applied or carried out. (The prime example of a highly modal 3D interface is probably NewTek's Lightwave 3D, which has a dialog box for every action.) We also wanted to avoid cryptic icons and strange-looking buttons whose meanings might not be clear. Using a 3D program is hard enough without having decipher unfamiliar glyphs.

Where can I find out about upgrades, revisions, new information on Callisto™, etc.?

Try <http://users.aol.com/Callisto3D>.

Is there an address I can write to?

Kas Thomas, P.O. Box 477, Wilton, CT 06897 USA. Online: Callisto3D@aol.com.