

Question:

*Is there a way of rendering high resolution textures? – Alistair Wilson |
via email***Question and Answer (totalling 300-350 words of plain text)**

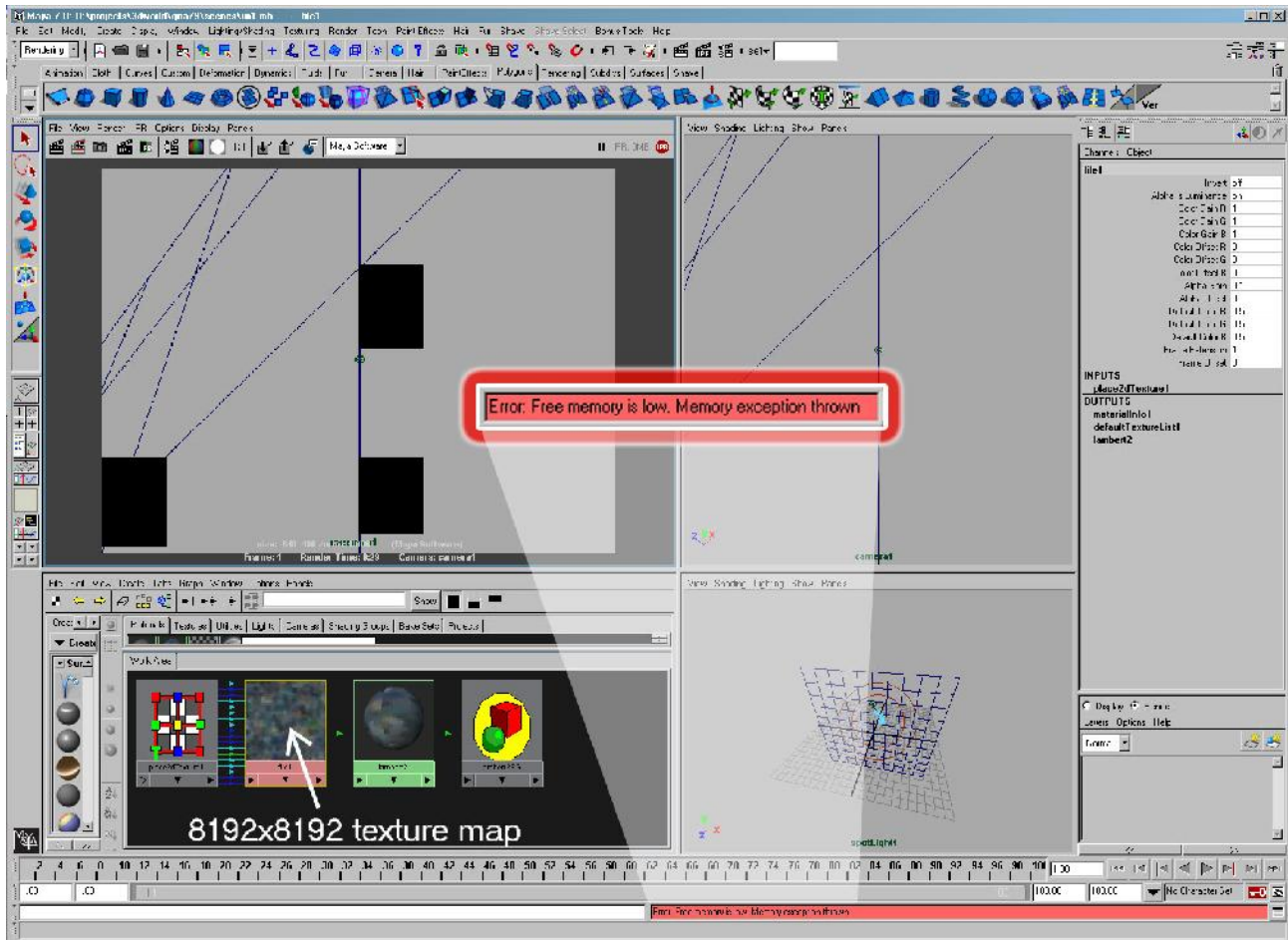
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High resolution texture maps are both a blessing and a curse. Good photographic textures make CGI more realistic, but if you've got to get really up close and personal on something you had better be sure you've got enough pixels to do it justice. Those added pixels, however, can kill a render dead in seconds. Here are a few tips to make low risk renders out of high resolution maps.

1. Use a compressed file format. Bought textures are generally very good quality because they have no compression, but you can compress images and not lose quality. As often as you can convert to a tif or iff, Maya's native file format, which both have lossless compression to ensure you don't fill up your RAM every time you try to render.
2. Do you really need a file that big? If your final render is 1024 pixels wide and 576 pixels high, it doesn't matter that your texture is 4096 by 4096. Unless you're doing an extreme zoom in you'll never see the hard work. Also, it's good practice to have different sized texture versions to use on different scenes depending on camera/object distance as smaller textures take less time to load and, therefore, make faster renders.
3. Is your texture map square? It sounds like a load of rubbish, but Maya is happier rendering square texture maps, especially if they follow the two-to-the-power-of rule eg. 256, 512, 1024, 2048 and so on.
4. 4. Split it into smaller pieces. If all else fails, take your map and using photoshop, GIMP or some similar art package, divide your image into four and then use texture placement and a layered texture to combine them back together. Four maps for the price of one. Champion.

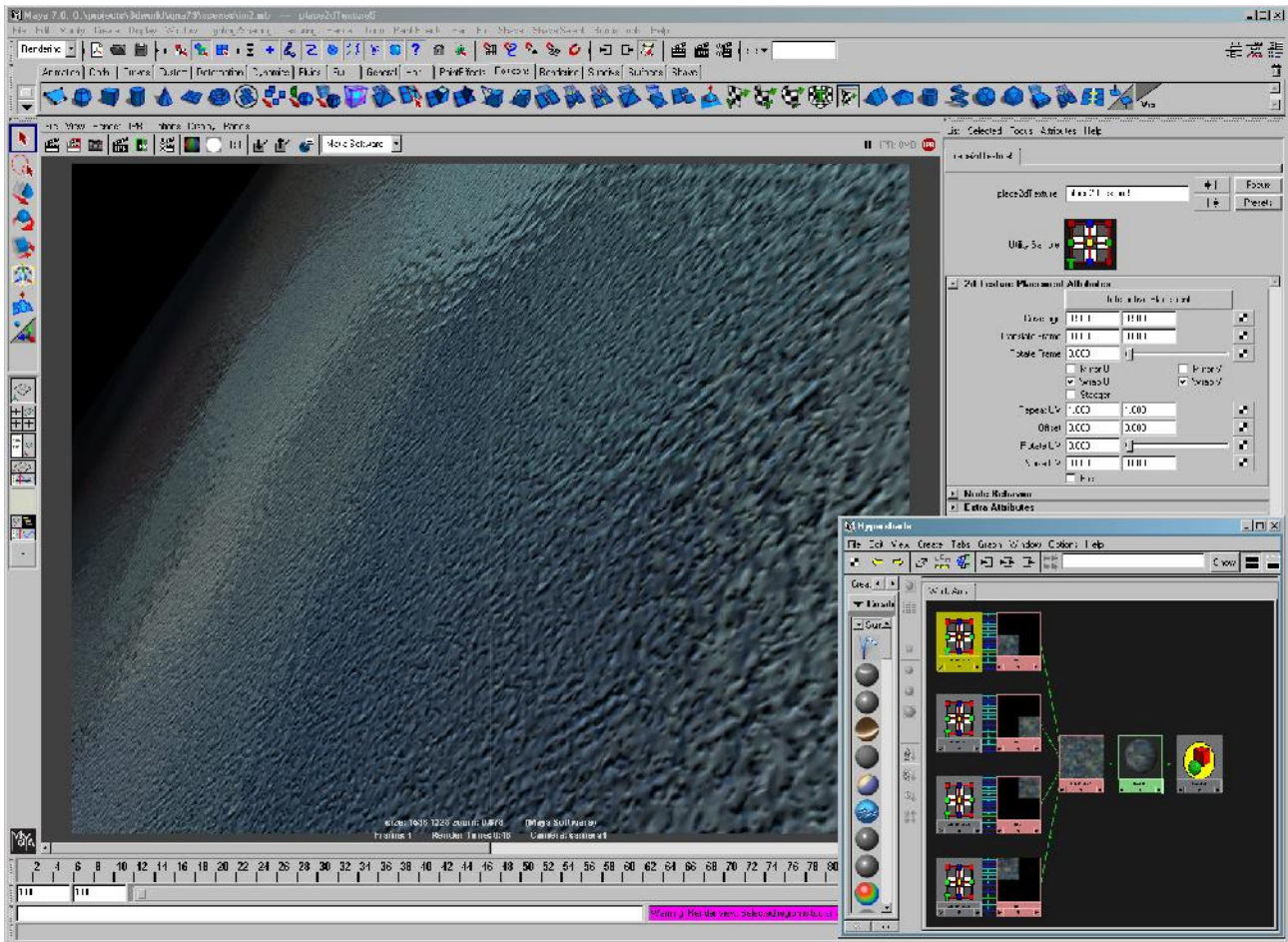
Don't ever forget that for all the artistic integrity you may have, at the end of the day it's all about getting the numbers to crunch correctly.

Im1.



Two Gigabytes of RAM and a 8192x8192 texture map on a polygon tile and very little else still causes a memory exception.

Im2.



Split up your image into four 4096x4096 maps, place them additively into a layered texture and you get the desired result.