

Rendering Very Large Images

This page provides a tutorial on rendering large images with V-Ray.

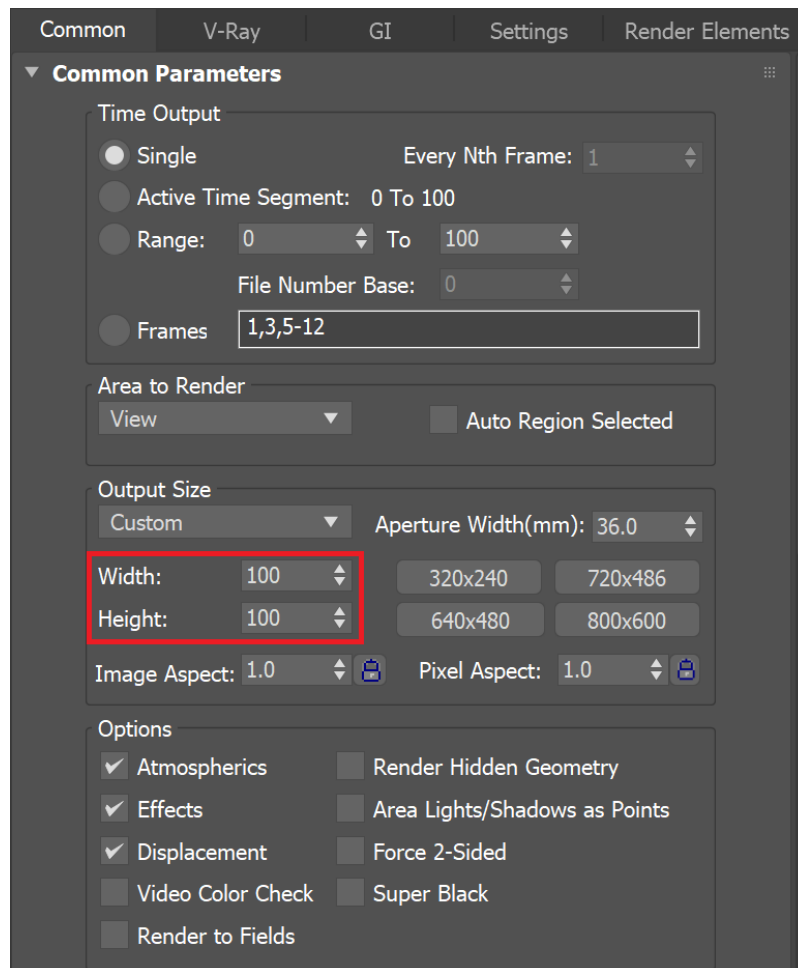
Overview

Rendering very large images can be memory intensive as very large resolutions require more memory to be added to the scene's own memory needs. This tutorial explains how to set up V-Ray to render very large images *directly to disk*, optimizing memory efficiency. By writing the rendering image file directly to disk, the memory buffer is disabled, saving on overall memory use. This is very advantageous for machines with limited memory.

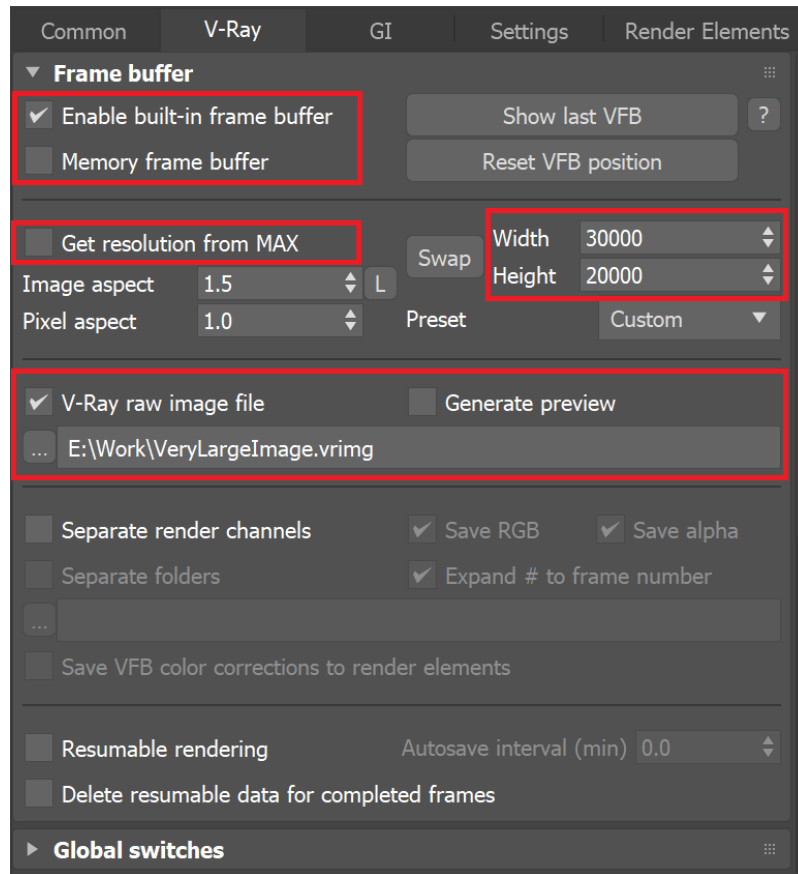
The Progressive sampler type is not supported for rendering out large images in this way.

Setting Up to Render Large Images

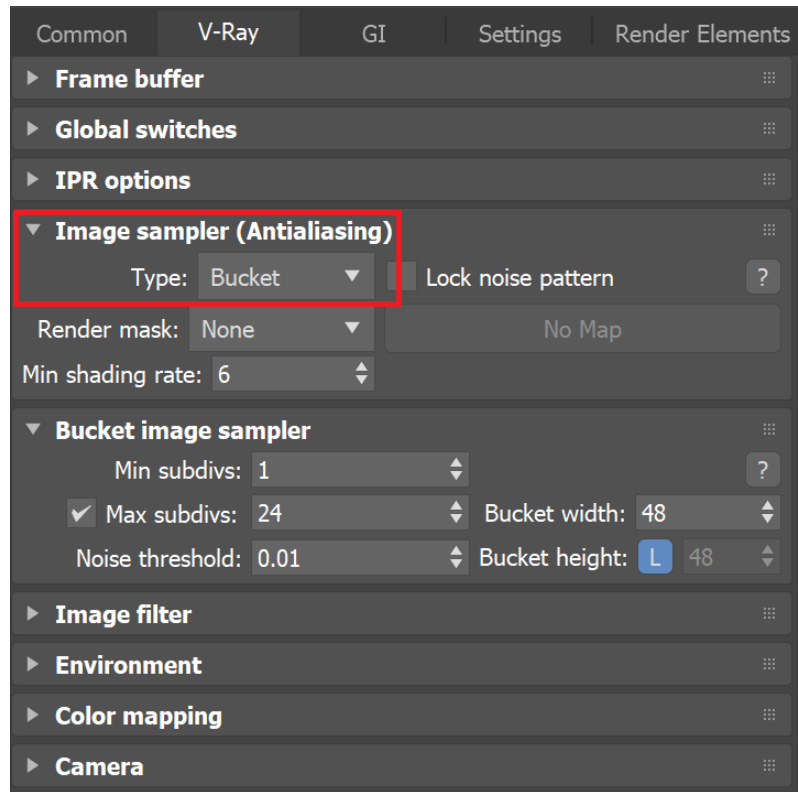
1. In the Common tab of the Render Setup dialog, set the 3ds Max output resolution to something small, like 100x100 pixels:



2. Switch to the V-Ray tab and make sure that the V-Ray frame buffer is enabled.
3. Turn off the **Memory frame buffer** option - this causes V-Ray to not allocate memory to hold the final image. Instead, it will be writing directly to disk.
4. Turn off the option **Get resolution from 3ds Max**, and then set the desired resolution in the **VFB**, such as 30000 x 20000 shown below.



5. Turn on the **V-Ray raw image file** option, and select a *.vrimg* or OpenEXR file output file name, as shown above. You are also able to select a Multi-Channel OpenEXR as the output format. Note that if you choose an OpenEXR file, it will be a tiled file and not scanline-based, because **Memory frame buffer** is off. However, OpenEXR files do support multi-channel output when the **Memory frame buffer** is turned off.
6. Optionally, turn on the **Generate preview** option so that V-Ray can generate a small resolution preview of the final result.
7. In the Image sampler rollout, switch the Image sampler **Type** to *Bucket* as shown below.



8. Render the image.

9. If you rendered to a `.vrimg` file, you can use the [VRImag to OpenEXR](#) tool to convert the file to a scanline-based OpenEXR file.

Due to increasing the resolution of the rendered image, you may find that the render settings may need to be revised to keep the render noise free due to the large size.