

Known Issues

Pasting Component As New

If you attempt to copy and paste most main SGT components (i.e. not the GameObject), this will likely not work properly, and destroying the new component will probably cause the old one to be affected.

In Unity 4.5 at least, this issue exists because when you make a new component using this method, the shared data that you paste over isn't fully deserialized before the Awake or OnEnable methods, meaning there's no sensible place where I can check to see if a component is referencing shared objects.

Ring Scattering on Mali 400 GPUs

If you attempt to use the Scattering setting on an SgtRing, then the ring will not render correctly on a Mali 400 GPU device (e.g. some older Android models).

Scattering on its own works fine, and rings on their own work fine, but when they are blended together you get a lot of pixel artifacting. I suspect this issue is caused by floating point precision from the sampled ring texture, which becomes apparent when multiplied with the incredibly high range values from the scattering calculations.

It may be possible to limit this effect by using a lower 'Sharpness' and/or 'Strength' value for the scattering, thus giving a lower value range from the scattering.

Shader Features

All SGT shaders are written for Shader Model 2, giving support for tons of devices. However, certain shaders (e.g. SgtAtmosphereInner & Outer) are very complex, and enabling all the features (e.g. Scattering with 2 lights) is not possible within the limits of this shader model.

To fix this, you'll notice that certain shader combinations are disabled within the shader files themselves. If you don't like this disabling then it's possible to modify the shaders to disable different features, or if you need everything, then the only solution is to allow them to be compiled for Shader Model 3.