User Guide

Deferred Shading

Instructions

The Deferred Shading code sample requires hardware support for floating-point filtering and blending, as well as multiple render targets.

Deferred Shading works by rendering the variables of the lighting equation into separate render targets, and then performing high-dynamic range lighting in screen-space by accessing these render targets. Figure 1 shows an example of how the code sample should look when it starts up.

Table 1 lists the controls used for this code sample.

Table 1. List of Control Keys

Key	Description
H key	Toggles the Control window on and off
F1	Lists additional keyboard controls
W, A, S, D	First-person shooter type controls to fly around the scene
Q	Move camera Up
E	Move camera Down
Left-Drag	Point camera as you look around the scene
Esc	Exit

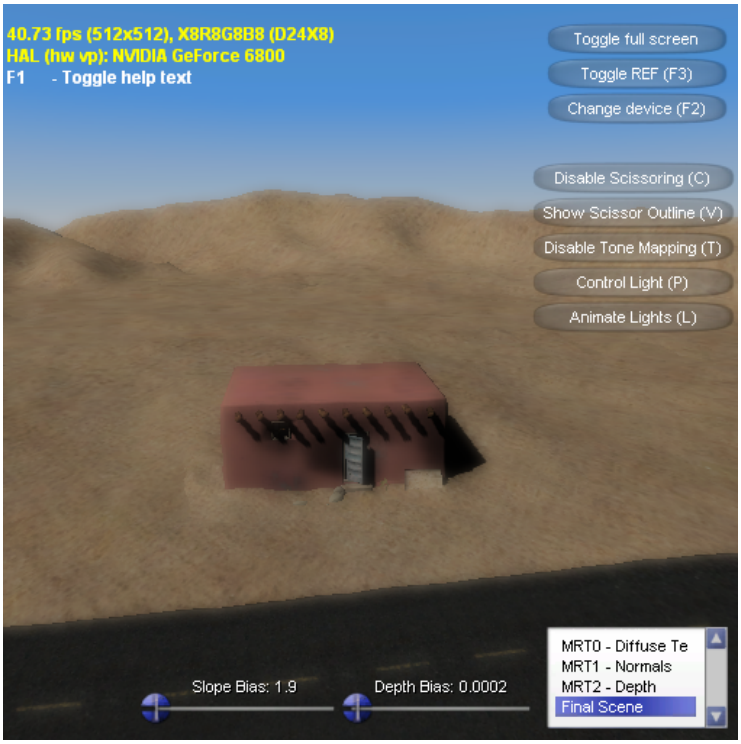

Figure 1. Deferred Shading Sample

Controls Dialog:

- **Disable Scissoring**
  Toggles whether or not to use scissor rectangles to restrict screen updates when doing the lighting passes.
- **Show Scissor Outline**
  Highlights the scissor rectangles currently being used.
- **Disable Tone Mapping**
  Toggles the tone mapping effect. Without tone-mapping, high-dynamic range lighting overflows the representable range of the final 8bpp display format, resulting in clamping and loss of detail. This also disables the adaptation effect.
- **Control Light / Camera**
  Toggles whether or not the movement controls move the light inside the house or the camera.

- **Animate Lights**
  Toggles automatic rotation of the light within the house.
- **MRT0/MRT1/MRT2/Final Scene**
  This selection allows you to visualize the individual MRT buffers that are used in the final scene rendering. MRT0 shows the diffuse texture, MRT1 shows the scene normals, and MRT2 shows the scene depth (which is used to reconstruct world-space position in the lighting pass). Final Scene is the default.

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