**Memory Managment**

In vulkan there is different type of memory (see vkspec). The FAST memory that is only visible to the device(DEVICE\_LOCAL) and there is the memory that is only visible to the host(HOST\_VISIBLE) and mappable but not very efficient. So you have to copy you’re data from the host memory to this host visible memory and then copy the data from it to the device local memory.

**HOST\_VISIBLE** MEMORY

**HOST MEMORY**

**=**

**RAM**

HOST

**DEVICE\_LOCAL** MEMORY

DEVICE

**FULL EXPLANATION**

-First we create a buffer that is HOST\_VISIBLE, this is call a staging buffer

-We copy our data from RAM to this buffer

-Then you copy the staging buffer to a wanted DEVICE\_LOCAL buffer by using a command buffer and then submitting it to a queue

**Frequently Updated Buffer**

Some buffer such as uniform buffers (matrices, etc) are frequently updated. It appear that copying the data as explain sooner is not that SLOW, **It’s pretty fast in fact.**

Remaining question