EECE.4810/EECE.5730: Operating Systems

Spring 2018

Lecture 18: Key Questions
April 9, 2018

1. **Example:** Consider a logical address space of 256 pages with 4 KB page size, mapped onto a physical memory of 64 frames

a. How many bits are in the virtual address?

b. How many bits are in the physical address?

c. What's the total size of each address space (virtual and physical)?

2. **Example:** Given a system using 32-bit virtual addresses, a 4 KB page size, and 4 bytes in each page table entry, what's the size of the page table?

3. Describe the organization of a multilevel page table.

4. Describe the organization of a hashed page table.

5. Describe the organization of an inverted page table.

6. Describe the contents of a page table entry.

7. How is a page chosen to evict when necessary?