Week 9 Critique

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1. [Efficient Virtual Memory for Big Memory Servers](https://research.cs.wisc.edu/multifacet/papers/isca13_direct_segment.pdf)

This paper proposes new memory management scheme for big memory server. Unlike page-based memory management scheme, this paper introduces segment-based memory management scheme called direct segment. This direct segment has benefit by aggregating many pages into one segment, therefore TLB miss dramatically dropped. The paper said almost all TLB performances losses are eliminated by using direct segment. But this scheme is suitable for system has huge memory pool like big memory servers.

this paper’s new scheme direct segment has good backward compatibility because it doesn’t hurt previous page-based scheme. But I think this paper should give us overhead of using direct segment.