

Paper: Coordinated and Efficient Huge Page Management with Ingens

This paper Ingens which is a memory manager for the operating system and hypervisor that replaces the best-effort mechanisms and spot-fixes of the past with a coordinated, unified approach to huge pages which is better targeted to the increased TLB capacity in modern processors. Ingen addressed 4 problems (Latency, Bloat, Unfairness, High-performance memory savings), show the impact of the problems and make system achieve benefits of huge pages without harming performance. This paper shows that TLB has high translation cost in modern system and just using huge pages is not appropriate solution for it. Therefore, they made Ingens to use huge pages appropriately in modern system.