Next Step: Software Virtual Memory

- Increase OS portability
- Flexible VM model
  - Capabilities, Dense Address Spaces, Sparse Address Spaces can coexist
  - Pages, data sharing at different granularities
- Overhead for SPEC92 on Sparc-10 averaged 21.2%
  - Simulation shows 2 simple RISC instructions can reduce overhead to 1.3% for SPEC92
  - can use physically addressed caches with fast cycle time
  - flexibility will lead to performance gain (e.g for video)
  - huge software TLB never misses