CSE 430: Operating Systems

Fall 2015

Class: 20
Date: 11/9

Page 5

5. Logical to physical translation

6. Need 2 memory lookups per page table entry

7. Mem lookup + B/AB performance
Cache is shares part of the disk

TLB — Translation Loader Buffer

Value

In fast memory

not done
LO To locate the address

"Confused address memory"

\#前期

\# Check TLB
no power concentration

exercise in hands

*graded search?

*searched
Not all entries fit in the TCB
- so which ones to store?
  - What is the benefit of a cache?
  - faster if entry in cache
    quantify
$\text{lookup} \rightarrow \text{cache} \rightarrow \text{yes} \rightarrow x \times \text{time}$

$\text{lookup}$

$\begin{cases} \text{NO} & \rightarrow \% \text{ of yet } \rightarrow \text{hit ratio} \\ \quad \rightarrow \% \rightarrow y \times \text{time} \\ \quad \rightarrow \% \rightarrow (\text{mem} + \text{cache} \rightarrow \text{lookup}) \end{cases}$

$\quad \quad \quad n \ll y \quad \rightarrow \text{hit } \rightarrow \text{miss } \rightarrow$

$\text{Time} = (\text{hit }\% \cdot x + \text{miss }\% \cdot y)$
Locally (emergency e.g. a day)

Prisoner immediate release

Locality transfer
Locality $\rightarrow$ working set

is set of pages being used all the time (small subset)

Keep working set in TLB.
Cache replacement policy

\[ \text{Cache size} = \text{replacement policy} \]

What is the replacement policy?

LRU

Least Recently Used

Among all the entries, the one that has been accessed least recently will be discarded.

Entries that have been accessed recently will stay in the cache.

Cache size will fill up
Parent benefits

- mean age of receipts

- shared profile

- professional profile
For each pair, per process
of production can be set
as 

As may need to be expressed
does need excessive preference
God needs some preference
Enter checks
main duty
checked by
flushing
< 0.1 K
< 0.5 mH
Reset
If
Place table
other location
If not ready
Dry Synth