

When executing, for each tasklet in linked list (at either priority)

A. set TASKLET_STATE_RUN atomically (if already set, stop)

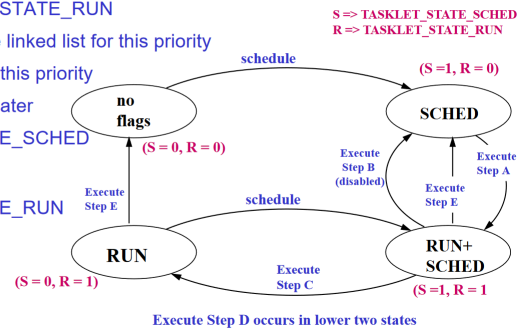
B. check if tasklet is software disabled (count field)

- if so, clear TASKLET_STATE_RUN
- leave the tasklet in the linked list for this priority
- set the pending bit for this priority
- daemon will try again later

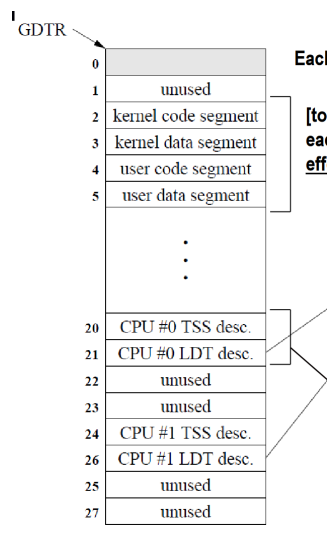
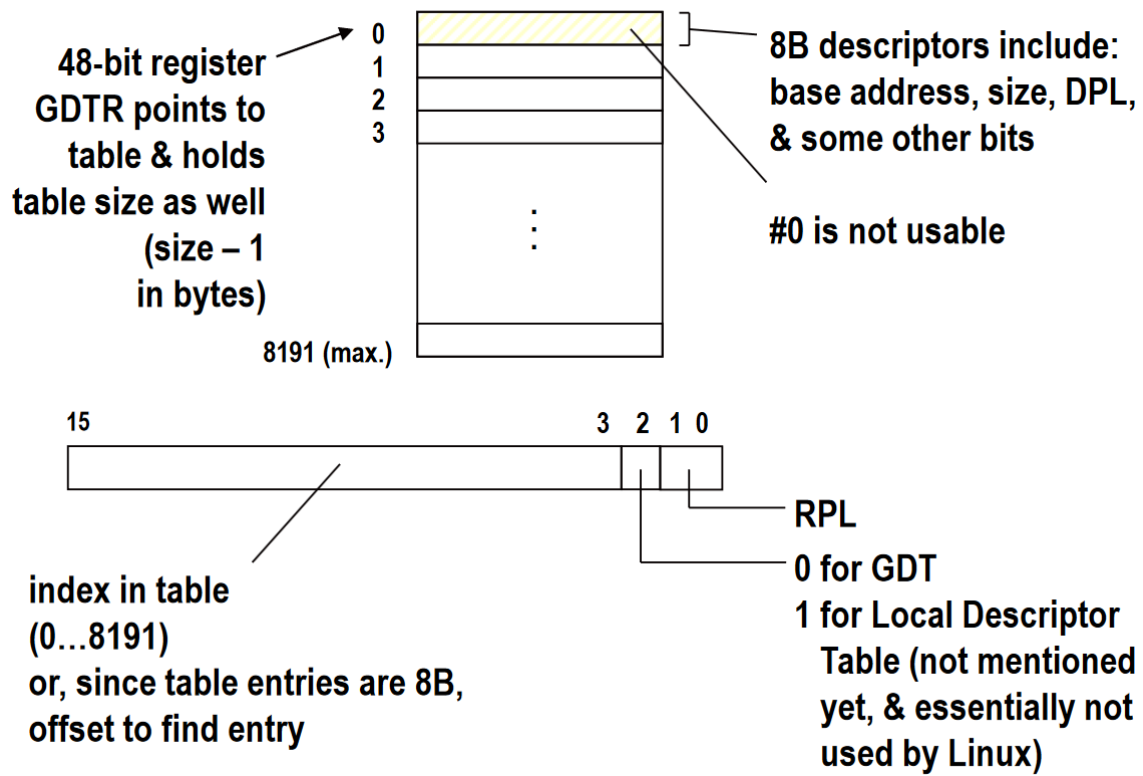
C. clear TASKLET_STATE_SCHED

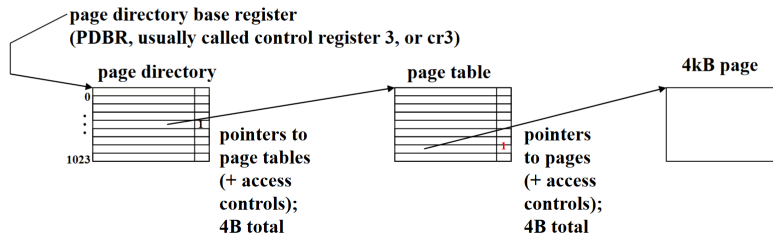
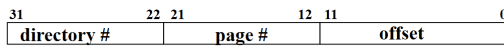
D. execute handler

E. clear TASKLET_STATE_RUN



- Protection
 - Programs cannot access memory outside of their space
- Effective Sharing
 - Can share memory between two programs quite easily
 - Libraries, global data
- Limited Fragmentation
 - Can piece together disconnected memory into a single "virtually" connected piece of memory
- Simplifies Program Loading
 - We can place a program wherever we like and simply redirect the pointers the program is expecting to their actual locations





x86 supports both

- **G flag—global**

- TLB not flushed when changing to new program or address space (i.e., when cr3 changes)
- used for kernel pages (in Linux)

- **4MB pages**

- skip the second level of translation
- indicated by PS (page size) bit in PDE
- PS=1 means that the PDE points directly to a 4MB page
- remaining 22 bits of virtual address used as offset
- x86 provides separate TLBs for 4kB & 4MB translations

