

# printk() - console lock handling

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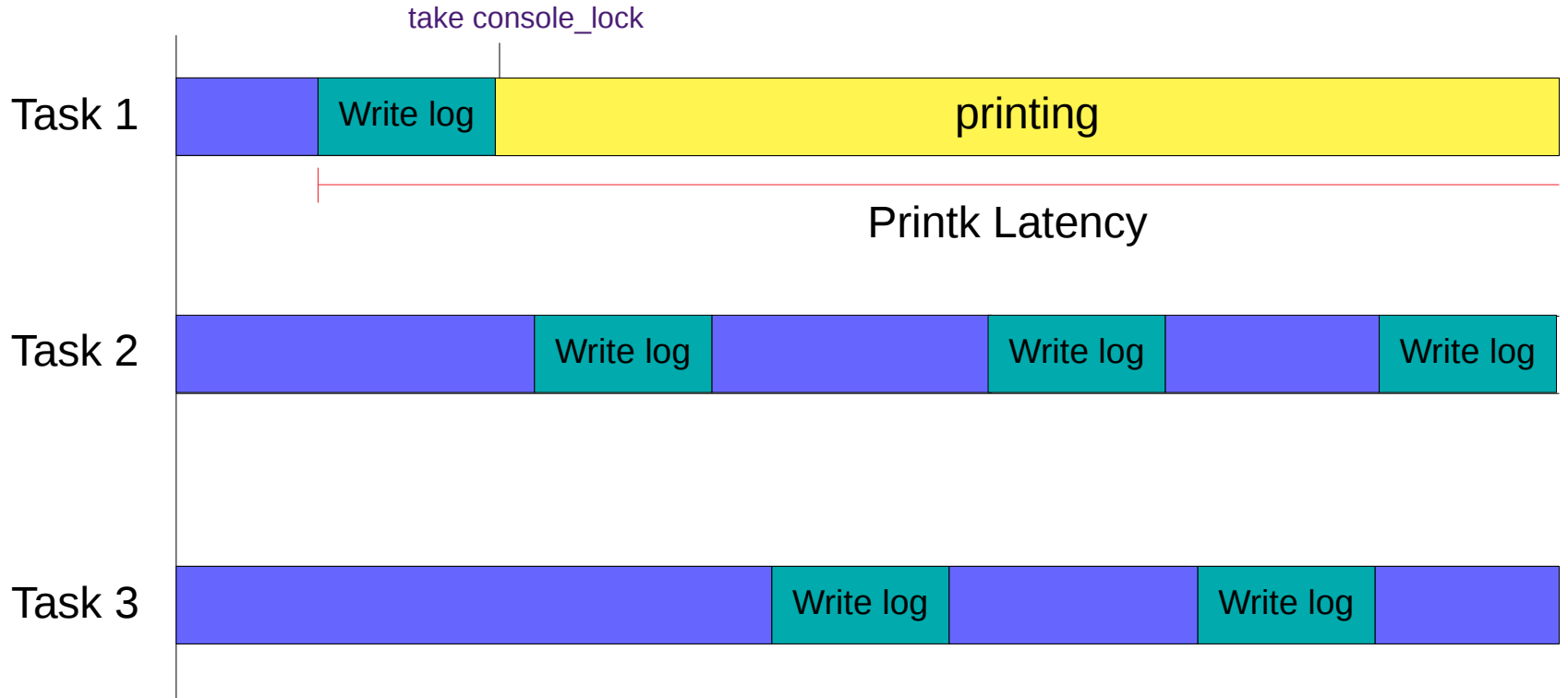
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## Current problem

- All printk()s use spinlock to write to log buf
- First to get console\_lock prints the buffer for all writes to log buf
- New printk()s during coming in will add to the log\_buf
- Can potentially (and has) prevent a CPU from ever finishing
- This can happen in atomic / interrupt context

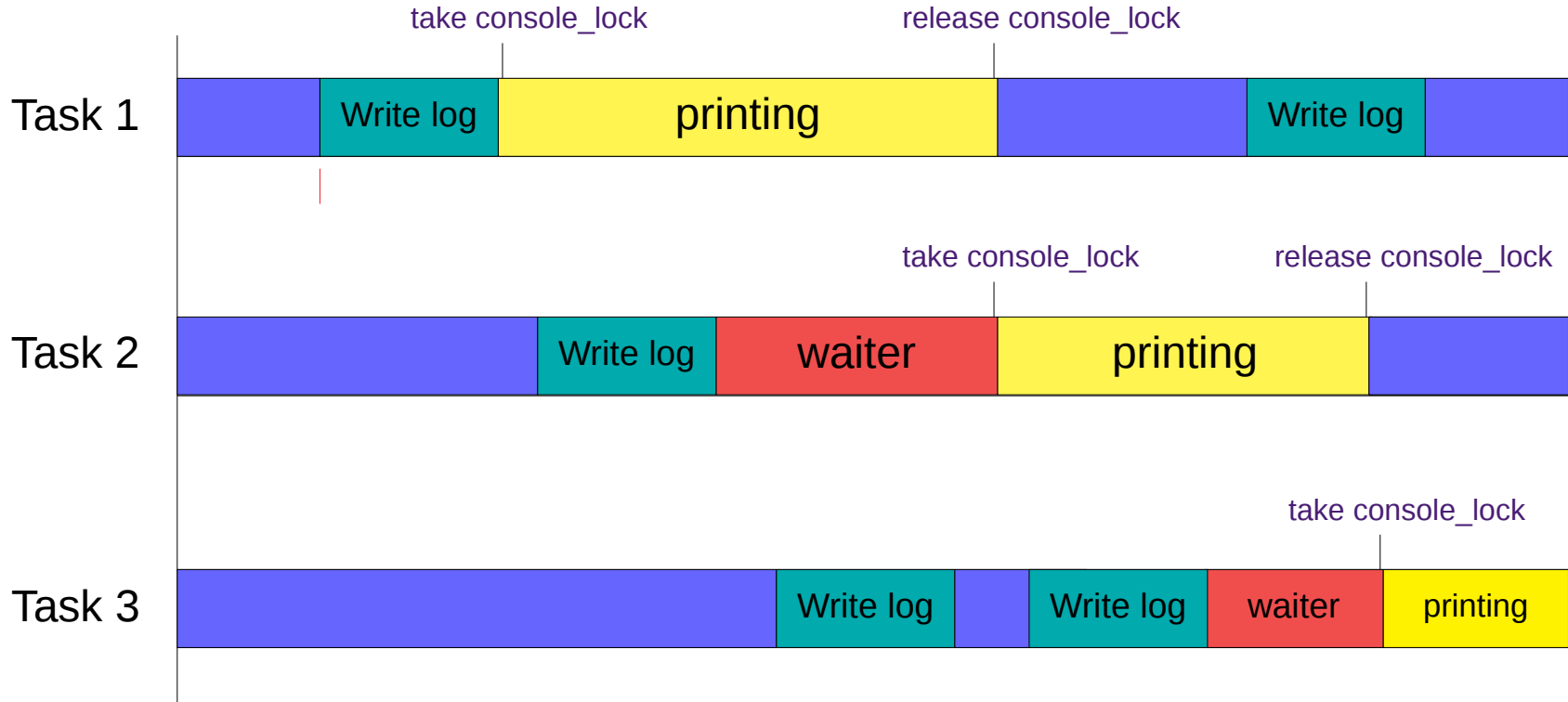
the console\_lock



## My solution

- Have three cases for printk
  - The active owner (own's console\_lock and is writing to the consoles)
  - A waiter (first printk() while active owner is writing to consoles)
  - All printk()s that don't get console\_lock and either of the below is true
    - No active owner
    - a waiter is present

the console\_lock



console\_unlock()

