

What is my Kernel Doing????

Team Details



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Report



The following system commands were executed and analysed using strace and perf record.

Firefox

The following links were opened in the browser

Youtube - https://www.youtube.com/watch?v=dQw4w9WgXcQ

PESU Academy - https://www.pesuacademy.com/Academy/ (after login)

Google Sheets -

https://docs.google.com/spreadsheets/d/10vQEuuc8iKT7H6JBv4R2IA1m8JpTAz-OUYa0czozmtQ/edit?usp=sharing

Reddit - https://www.reddit.com/r/PESU/

LibreOffice Write - A new document as opened and 2 lines of bold and colored text written and saved.

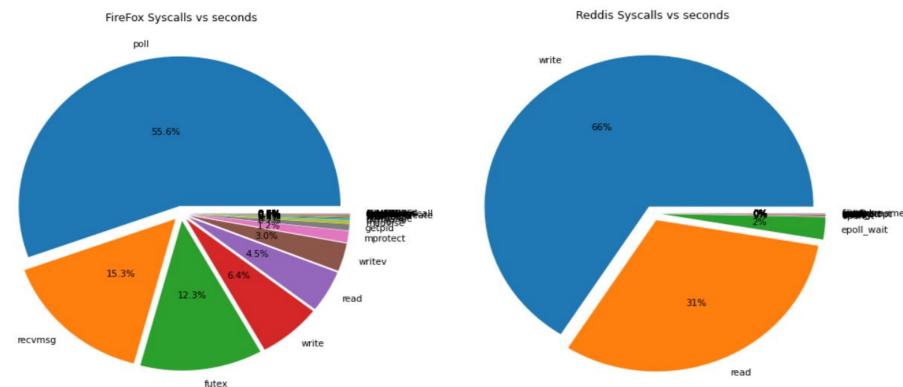
Redis Benchmark - redis-benchmark -q command was executed

Redis Recompile - Redis source code was recompiled using make

Bash Script - Script involved mkdir, echo, cat, cd and ls. Script link: Link

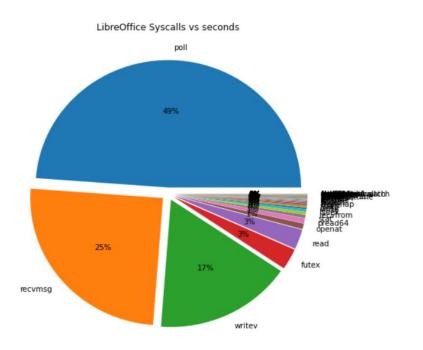
Syscalls and % of time spent



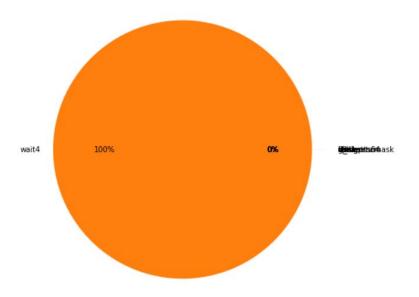


Syscalls and % of time spent





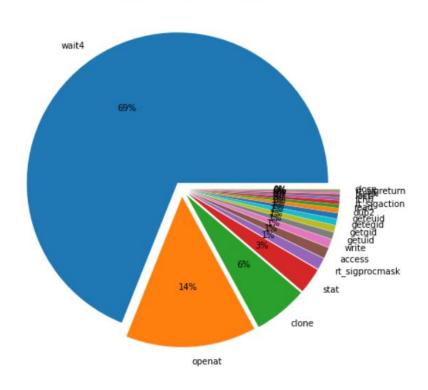
Reddis make(1,2,3) Syscalls vs seconds



Syscalls and % of time spent



Bashtrace Syscalls vs seconds



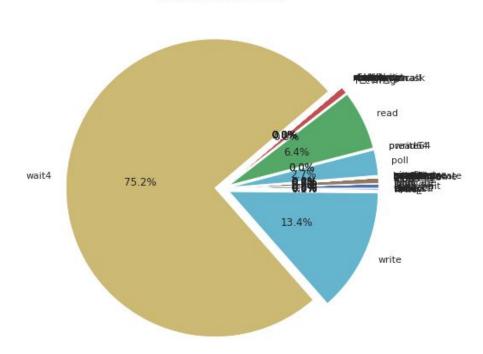
Syscalls



Total Syscalls vs seconds

Most popular syscalls across all the applications: wait4(), write(), read() and poll()

Most infrequently used syscalls across all applications: lseek(), pipe2() and getgid()



Number of Threads for each process



Process	Number of Threads
Firefox	16
LibreOffice Write	3
Redis Benchmark	1
Redis Recompile	1
Bash Script	1

LOCKS

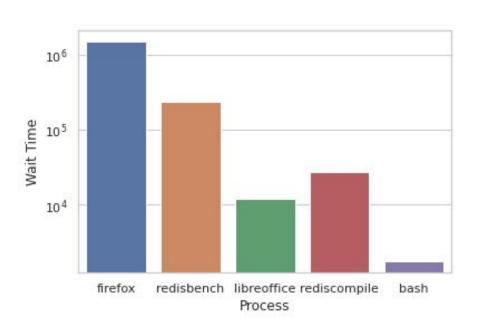


```
__acquire
             __contended
              <wait>
    __acquired
      <hold>
    __release
      unlock
lock, unlock - the regular lock functions
__* - the hoo - states
      - the hooks
```

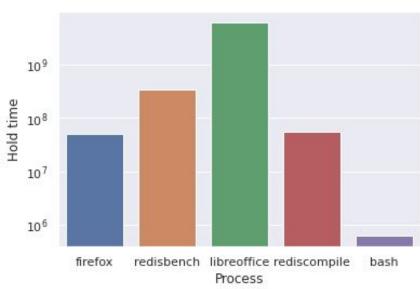
Amount of Time spent in locks (µs)



Total lock wait time



Total lock hold time



Github Repository



All the contents added (the strace outputs, perf record outputs, graphs) are accessible in the Github Repo mentioned below.

GitHub - aasimmd/What-Is-My-Kernel-Doing



THANK YOU!