

Homework

Part 1: Virtualization – 5) Memory 3

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1 Beyond Physical Memory

1.1 Mechanisms

Conduct the measurement homework from *OSTEP, Chapter 21*, found at [ost].

★ Creating any graphs, and also answering Question 7 is optional.

🔑 The `swapon` tool must be executed as root / using `sudo`. Alternatively, you can also use `free` (e.g. “`free -m`”) to display the amount of swap space available.

1.2 Policy

Conduct the simulation homework from *OSTEP, Chapter 22* (`paging-policy.py`), found at [ost].

🔑 Random traces for Question 3 can directly be generated using `paging-policy.py`, no need to use another tool.

🔑 For Question 5, assume 32 bit addresses with 20 bit VPN.

References

[ost] *GitHub.com*, `remzi-arpacidusseau/ostep-homework`, <https://github.com/remzi-arpacidusseau/ostep-homework>.