This is

SÿSTEM TAP

Real time kernel performance monitoring

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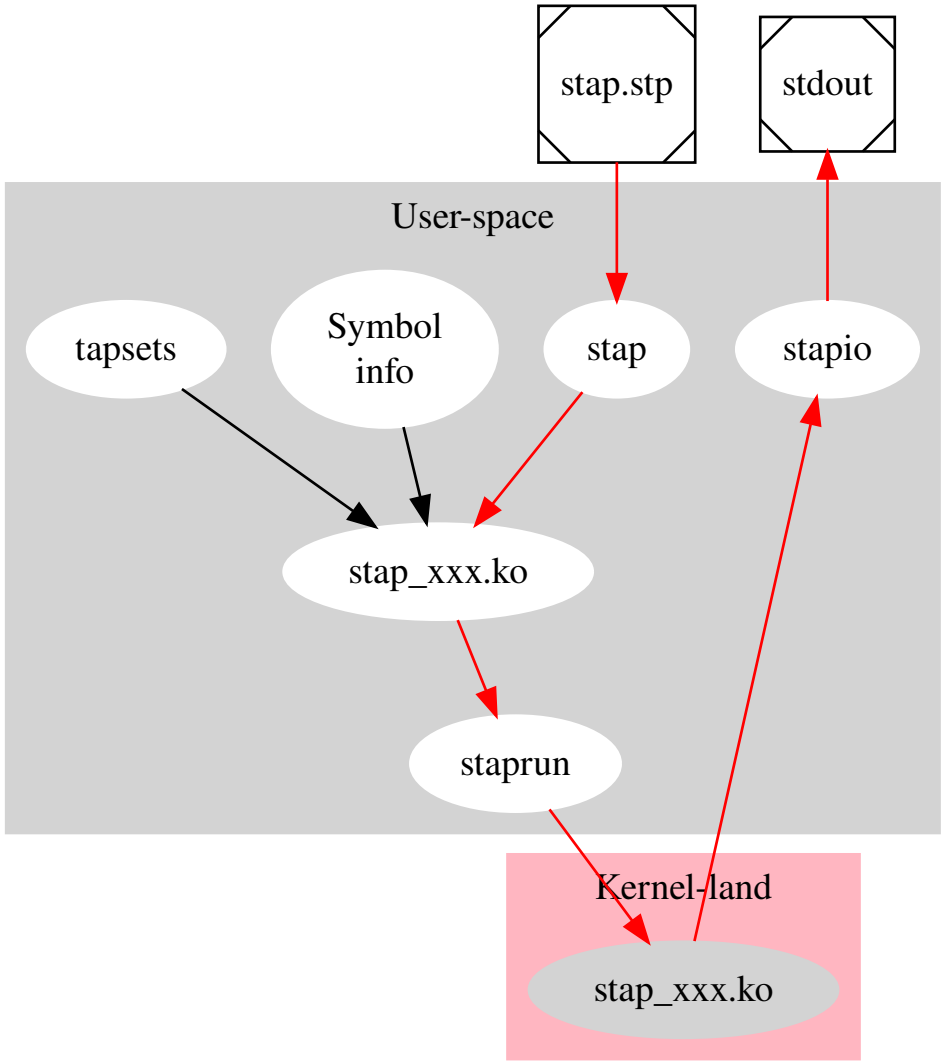
What is SystemTap?

> SystemTap is a dynamic method of monitoring and tracing the operation of a running Linux kernel.

SystemTap Workflow

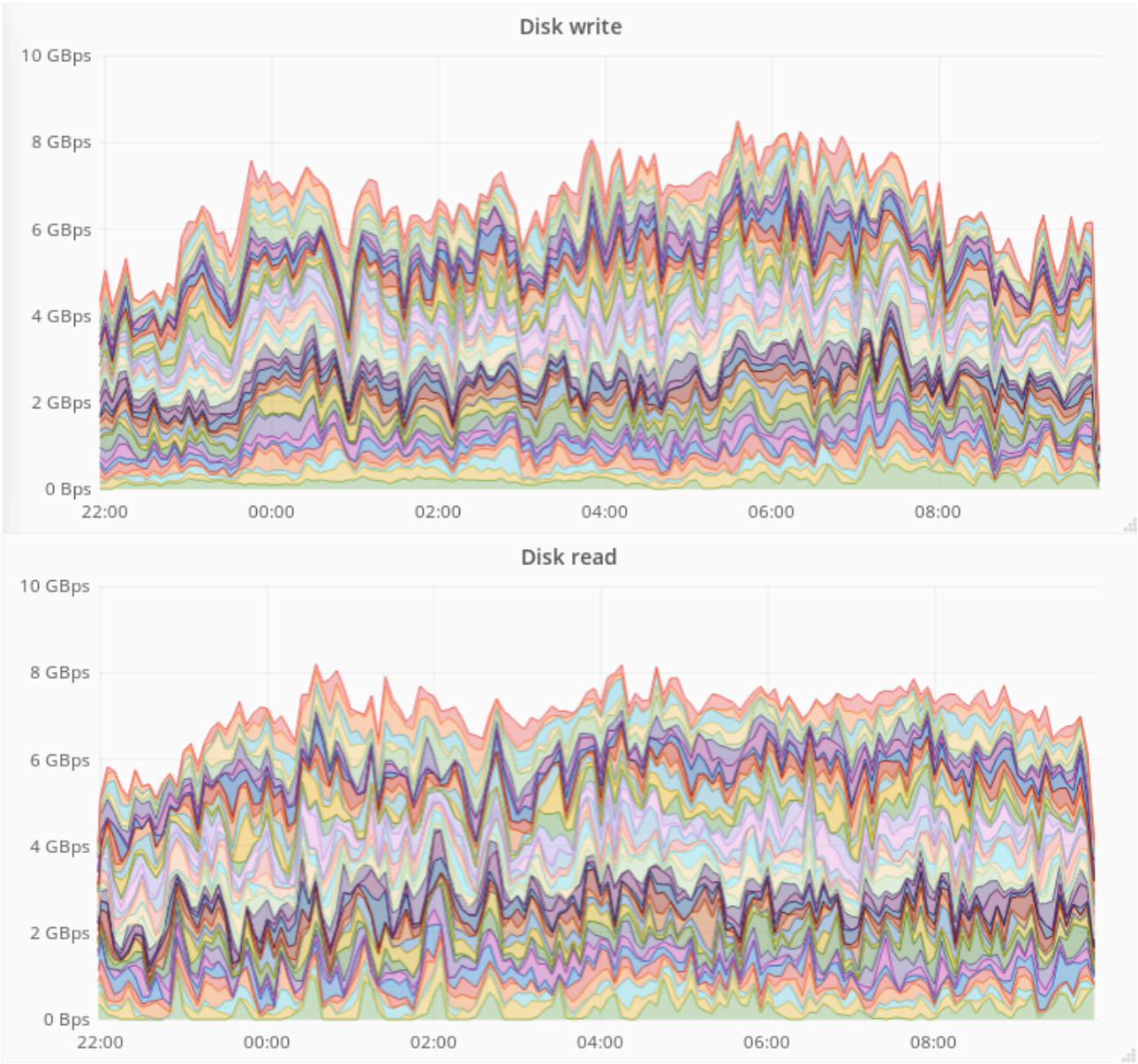


Tape REPACK v3.x monitoring

Realtime kernel device drivers metrics per second.
Collects **all bandwidth metrics**:

- tape drive read/write rate, tape IO time
- SSDs read/write rates
- network in/out rates per process per protocol

Tape REPACK v3.x monitoring



(https://meter-cta.web.cern.ch/dashboard/db/perf5m)

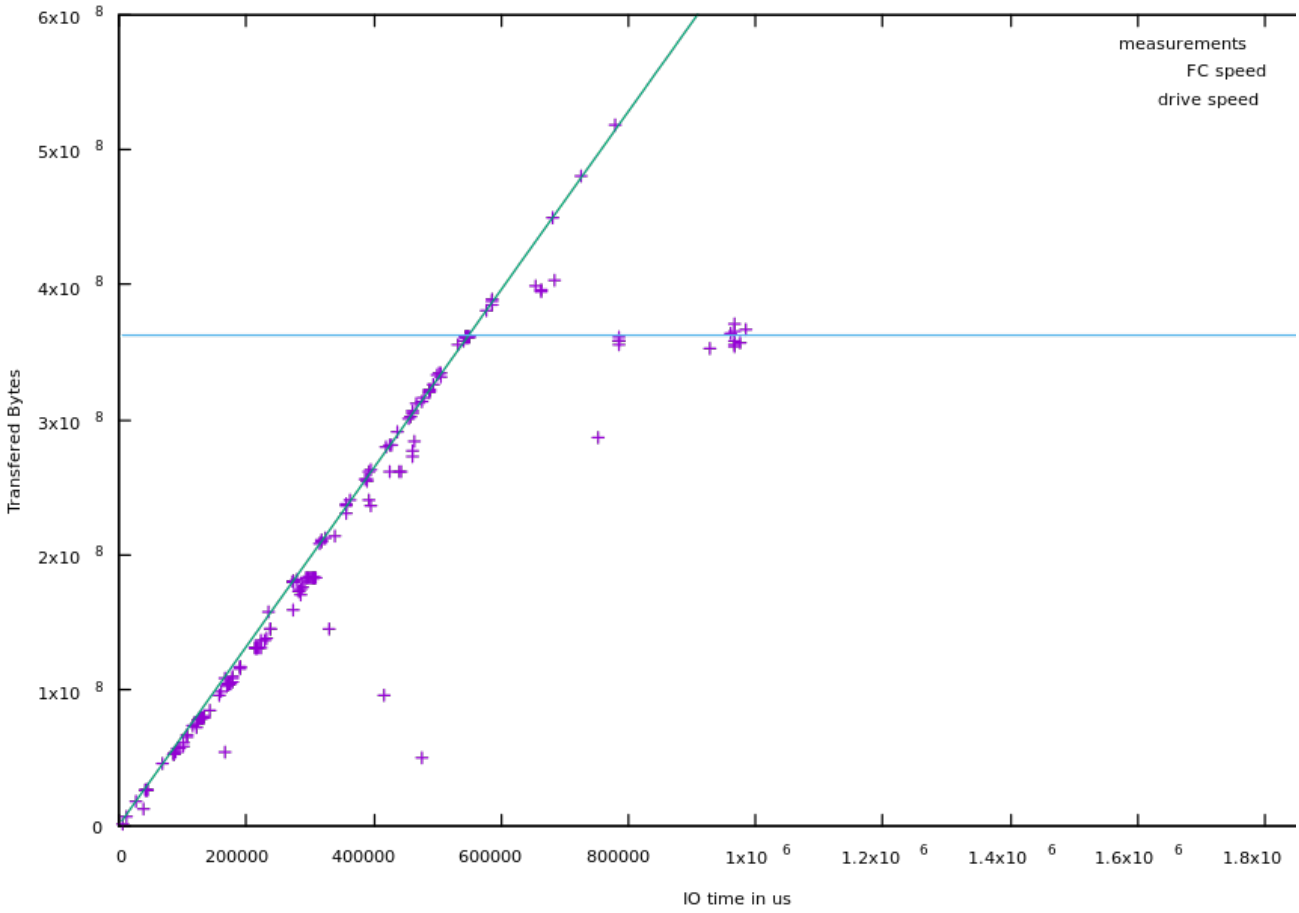
Should we buy overpriced FC cards?

Current tape drives read and write at **360MB/s** over Fiber Channel.
Few questions when buying new tape servers:

- What is the maximum tape drive speed our current 8Gb/s FC cards can sustain?
- Should we already buy overpriced 16Gb/s FC cards?

Let's measure effective FC speed with SystemTap!

Should we buy overpriced FC cards?



Conclusion

We can now rely on SystemTap instrumentation:

- kind of bad situation in SLC6 (wrong headers…)
- several broken metrics in CC7, I reported 1 bug to RedHat (fixed in 7.4)
- I need to report another bug to RedHat…
- CERN IT various cloud infrastructures allow for infrastructureless performance mon

Production grade finally!!

THIS IS

Question Time