

KDE performance (again)

Luboš Luňák



4.7.2010 | Tampere, Finland | Akademy 2010



Do we know our resource demands?

- Akonadi?
- Nepomuk?
- Plasma clock?
- KWin compositing?
- 4.4 to 4.5 change?

•



Do we know our resource demands?

- Akonadi?
- Nepomuk?
- Plasma clock?
- KWin compositing?
- 4.4 to 4.5 change?
- Do we care?



Rule of the big three

- "Choose two, you can't have the third"
- For performance: good, efficient, in time
- => performance is always last, unless it's bad enough to affect "good"



Benchmarking basics

- Use a proper tool
- Really measure what is intended to be measured
- Minimize noise
- Comparable conditions



System memory

- Forget classic tools like 'top' or 'free'
- KSysGuard
- Exmap
- xrestop
- Processes can be quite expensive



Application memory

- KSysGuard
- Massif
- kdesdk/kmtrace



CPU usage

- QTime
- Callgrind/KCachegrind
- Sysprof



I/O

- strace (-e file)
- SSD



Performance testsuite

- It would be useful to have a set of "standard" interesting measurements
- Everybody would be able to repeat
- Releases could be compared
- Regressions could be found
- Login time, memory after login, KFoo memory usage after doing XYZ,...