An update on the Cached BDII

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WLCG
Worldwide LHC Computing Grid
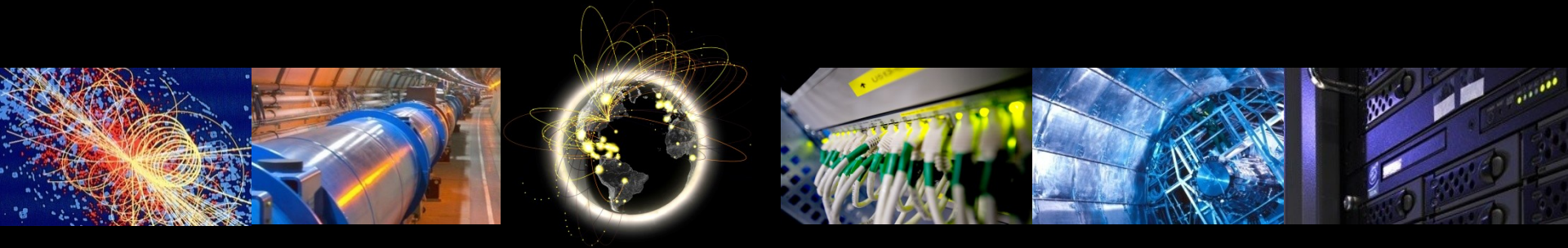
CERN

Overview

- ## To Cache Or Not To Cache
  - How the cache impacts on the service
  - What are the benefits on stability

- ## Tests performed on production-like hardware
- ## Non-Cached: lcg-bdii.cern.ch
  - Production DNS round-robin
- ## Cached: clcg-bdii.cern.ch
  - Dedicated test service with **4-day** cache enabled
  - Same hardware as any node of lcg-bdii.cern.ch

Content Dump (seconds)
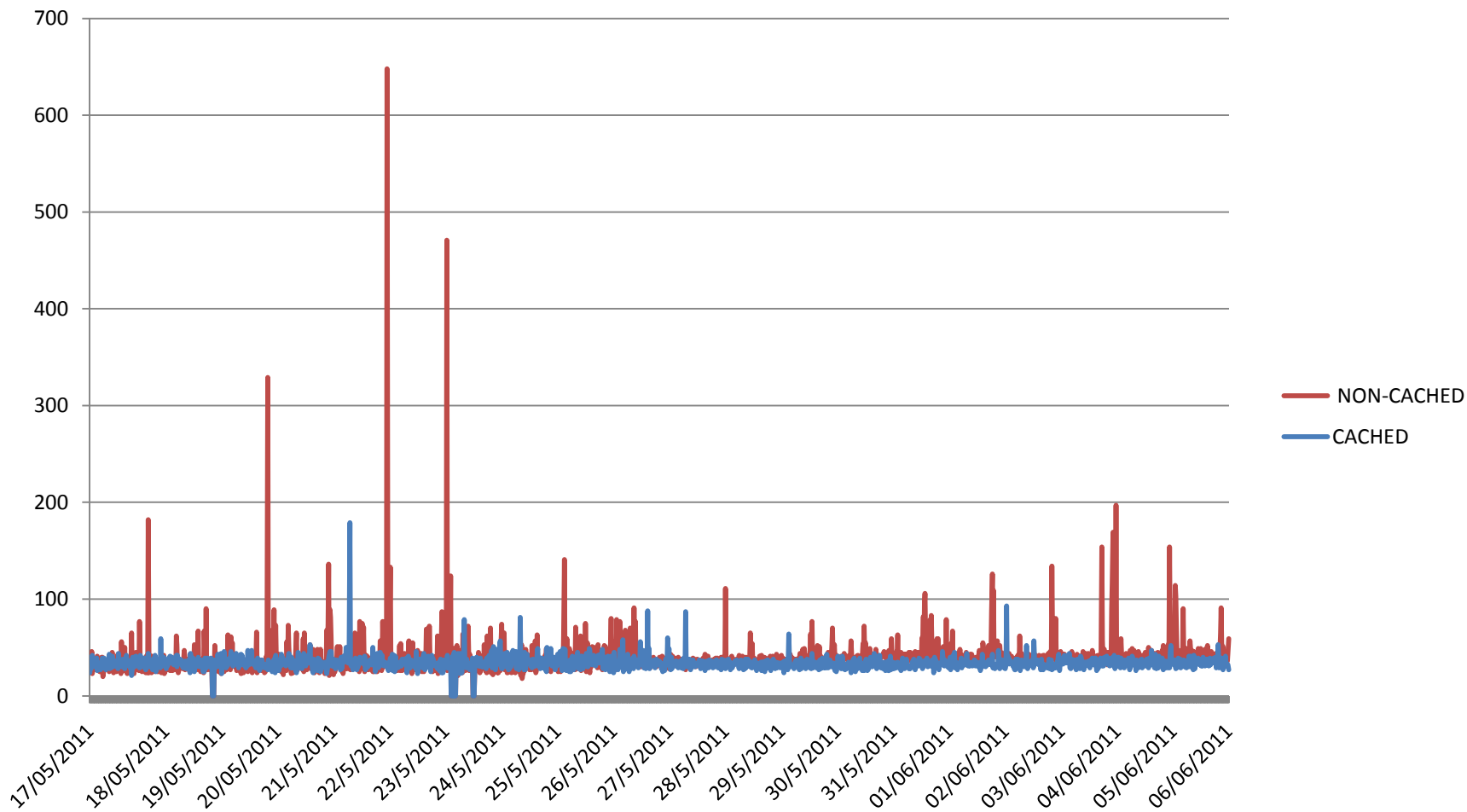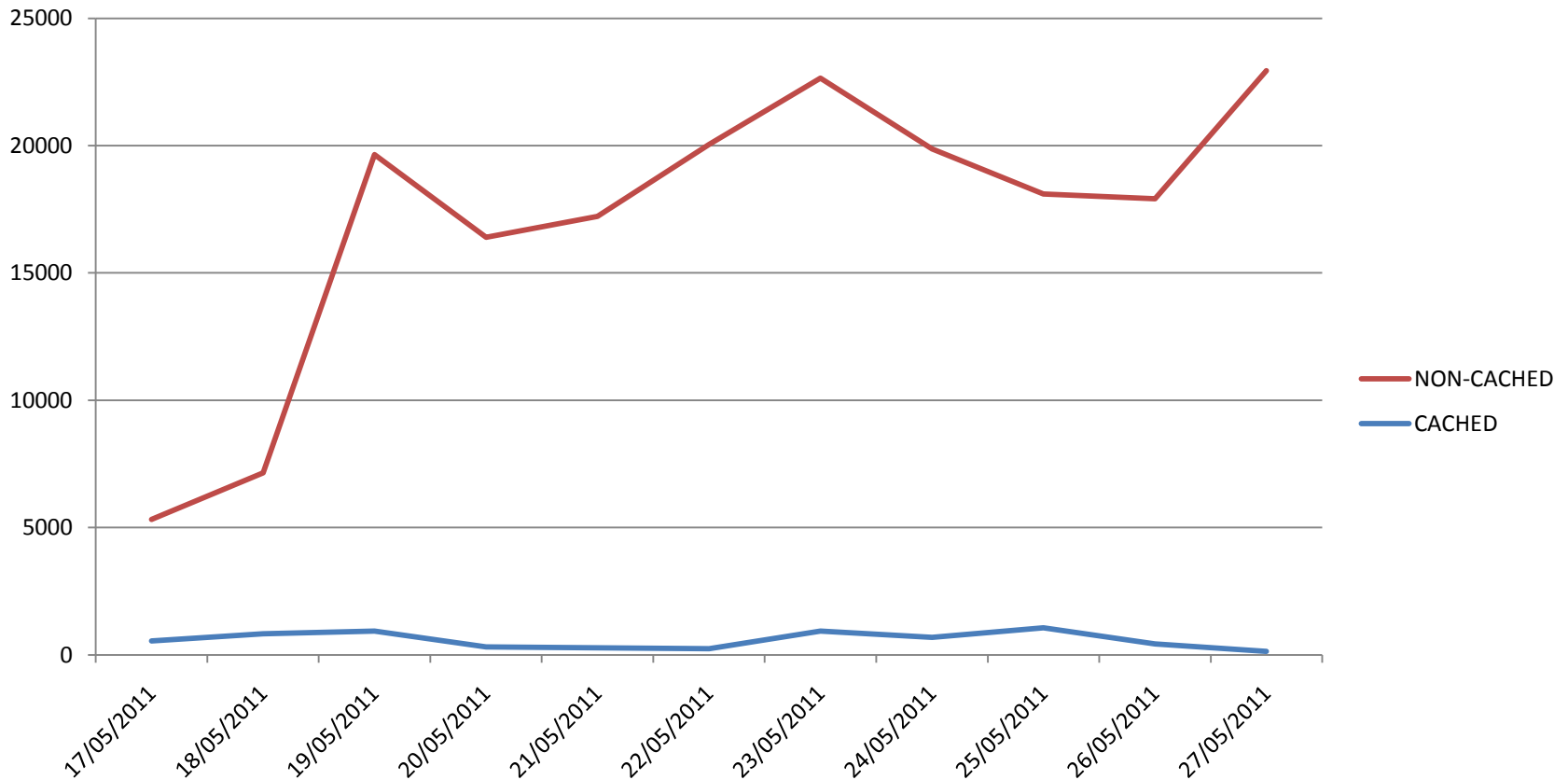

Average time: 5.4 seconds faster

Total Objects
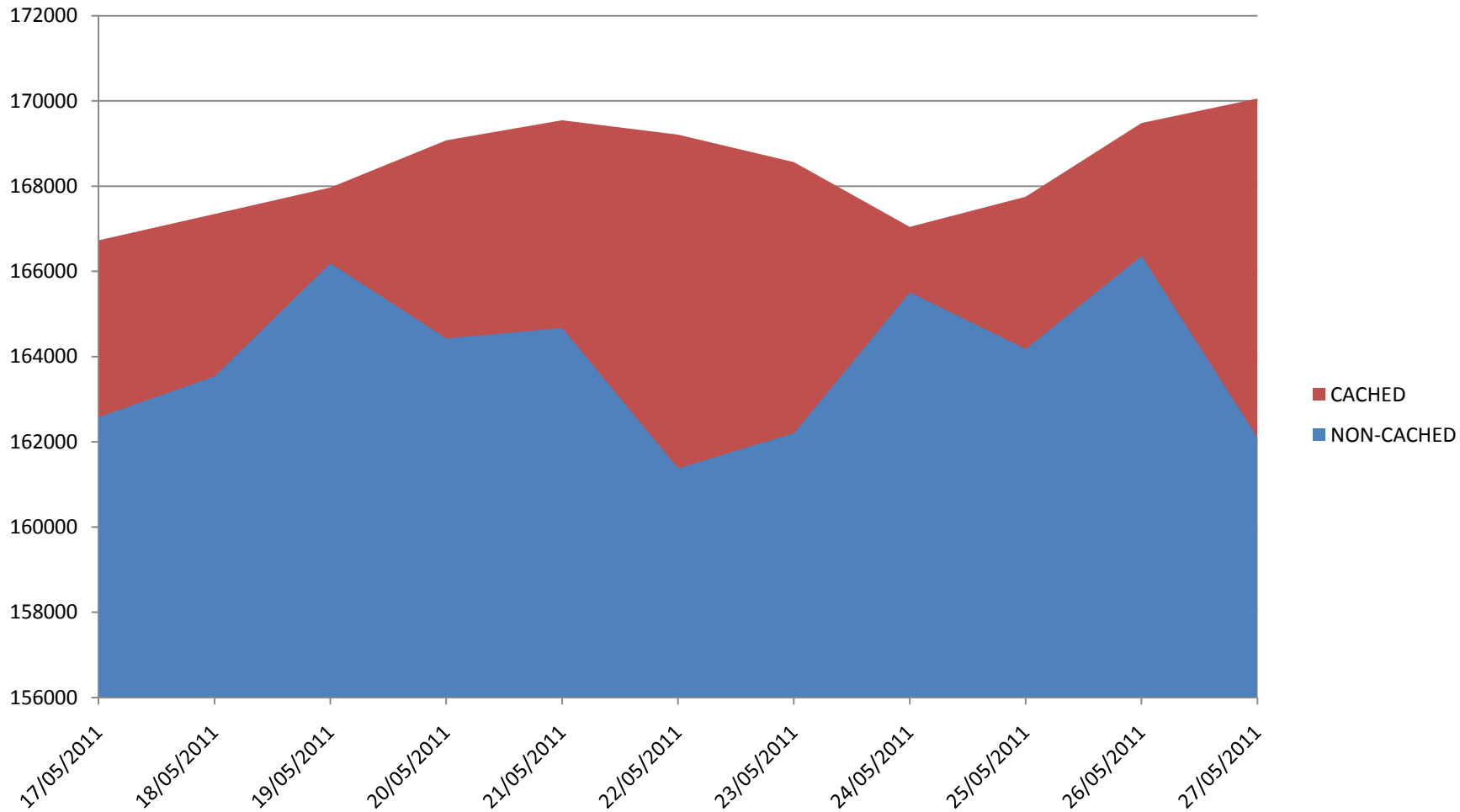
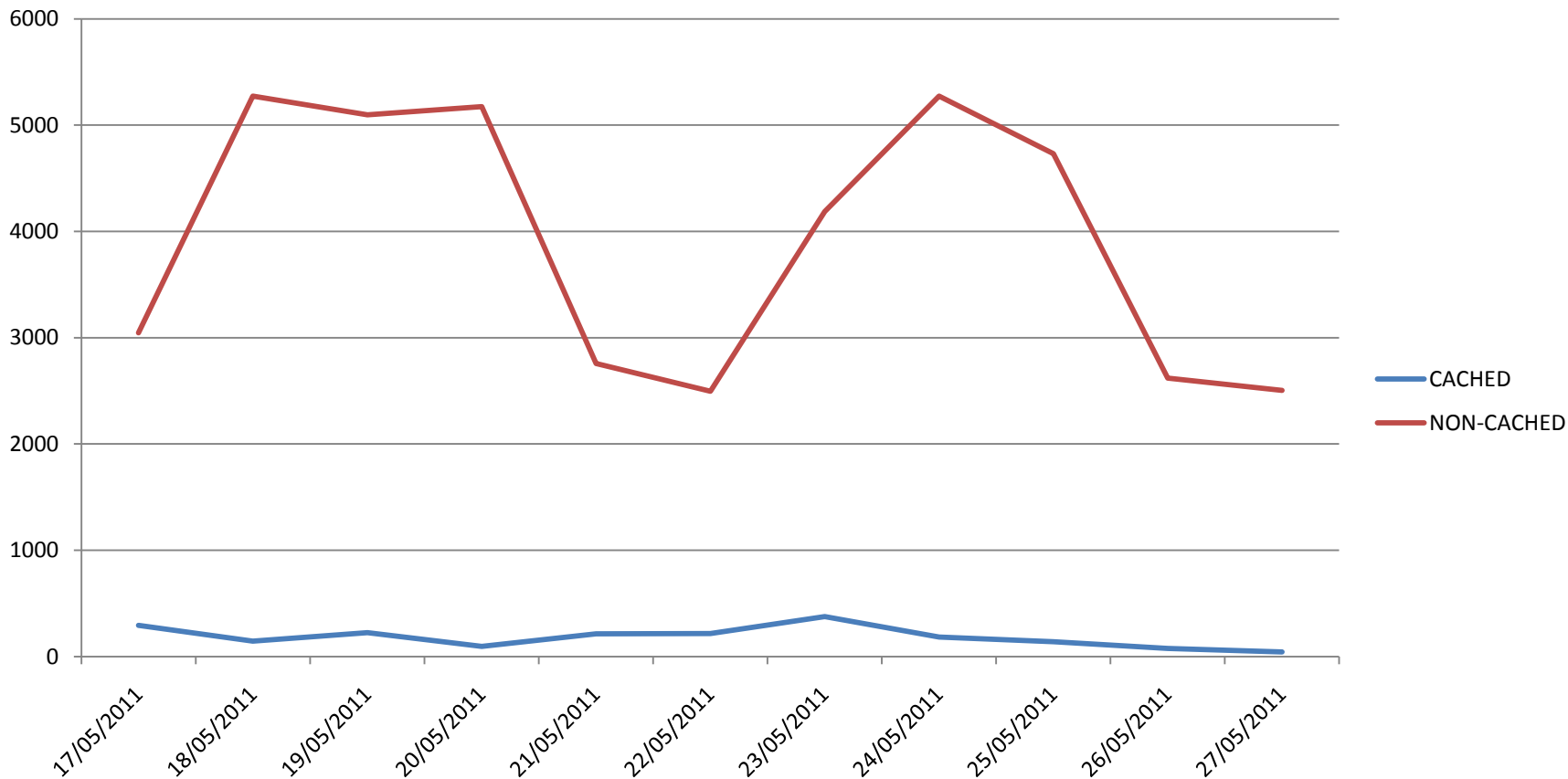Average overhead: 3% (4500 objects)

Objects Added/Removed

All objects

Legend: NON-CACHED, CACHED

Average improvement: 46X

Objects Added/Removed

No GlueLocationLocalID

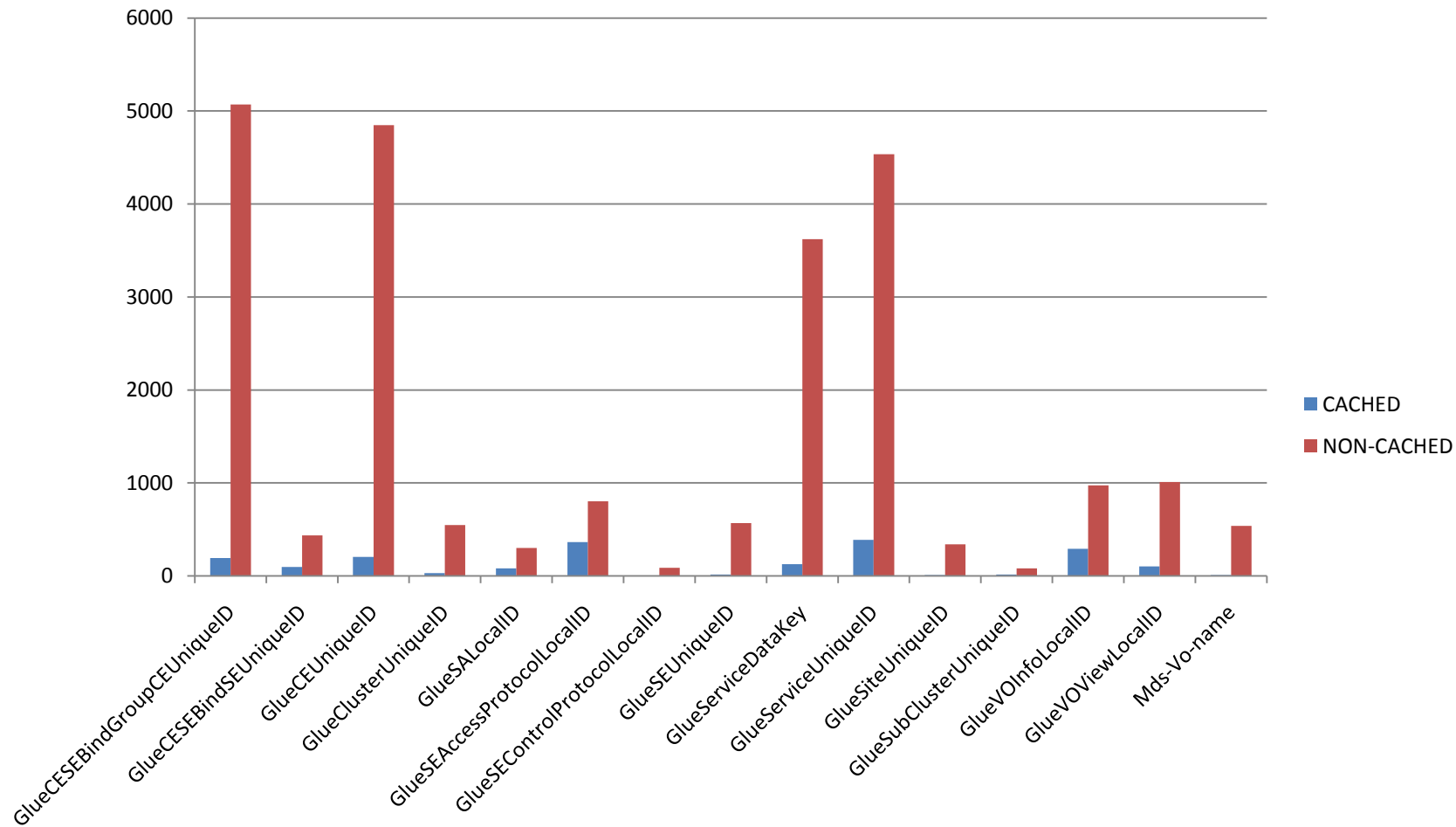Chart legend: CACHED (blue), NON-CACHED (red). X-axis dates from 17/05/2011 to 27/05/2011. Y-axis from 0 to 6000.

Average improvement: 28X

Added/Removed per type

No GlueLocationLocalID

Conclusions

- No query performance degradation

- Small size overhead (3% in object number)

- Stability highly improved (28X – 46X)

- Ready for Prime Time!

- Next steps
  - Functional testing by experiments
  - Introduce it to the lcg-bdii DNS round-robin
  - Cache enabled by default in production