

Benchmarking track: Introduction

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What is benchmarking?

- Quantitative evaluation
 - Processing performance
 - Integer
 - Floating-point
 - Storage performance
 - Throughput
 - Transactions
 - Power consumption
 - Air flow
 - ...
 - ...

Why benchmarking?

- Express requirements
- Help decide what to buy
 - Compare different competing solutions on equal grounds
- Determine how much you have got
 - Compare with contractual constraints (e.g. MOUs)
- Academic interest
- ...

How benchmarking?

- “Industry-standard” tools and procedures
- “Industry-standard” tools, adapted procedures
- Home-grown developments

Current Focus

- Processing performance of worker nodes
 - Example: LCG MOUs talk about
 - Petabytes of disk (“easy”)
 - Petabytes of tape (“easy”)
 - Performance of worker nodes (not that easy)
- Long history of performance benchmarks
- More recently (5...10 years), SPEC widely used

Track agenda

1. Michele Michelotto:
Migrating to SPECint2006
2. Manfred Aef:
CPU benchmarking at GridKA
3. Helge Meinhard:
Topics around benchmarking at CERN
4. Don Holmgren:
Performance of Lattice QCD codes