Benchmarking Working Group

HS14 Preparation: Current Status

Manfred Alef (KIT), Michele Michelotto (INFN-PD)

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Benchmark candidates:

➔ HS14:

- Successor of SPEC CPU2006

- Open source benchmarks like Geant4

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Benchmark candidates:

➔ "HS14 light":

- Quick estimate of performance of assigned job slot

    - WLCG Machine / Job Features Task Force proposes to use $MACHINEFEATURES/hs06 file

        ✔ No problem on bare metal, but possibly unavailable in virtual environments / clouds

    - Any suggestions?

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Selection of assessment tools:

➔ Collection of representative HEP/WLCG applications

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Compiler flags:

➔ Current benchmark HS06 is based on mandatory
   set of compiler flags:
   `-O2 -fPIC -pthread    -m32`

➔ Waiting for reply from WLCG Architects Forum for proposal of
   optimization flags to be used with HS14

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Current list of volunteers:

- Manfred Alef, Michele Michelotto (chairmen)
- VO representatives:
  - Alice: Peter Hristov, Costin Grigoras
  - Atlas: Alessandro Di Salvo, Franco Brasolin
  - CMS: Gabriele Benelli
  - LHCB: Ben Couturier
- Other:
  - Martin Bly
  - Ian Gable
  - Fotis Georgatos
  - Andrew McNab
  - Liviu Valsan
  - Romain Wartel

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