POP

Performance Optimisation and Productivity

Contact: Prof. Jesús Labarta
Email: pop@bsc.es
URL: www.pop-coe.eu

Interested in ...

... an independent performance assessment of your application?
... an estimate of potential performance gains and identification of the techniques to get them?
... guidance/help on how to implement those techniques?

The EU POP Centre of Excellence provides 3 levels of free services

? Application Performance Audit

- Primary service
- Identify performance issues of customer code (at customer site)
- Small effort (< 1 month)

! Application Performance Plan

- Follow-up on the audit service
- Identifies the root causes of the issues found and qualifies and quantifies approaches to address them
- Longer effort (1-3 months)

✔ Proof-of-Concept

- Experiments and mock-up tests for customer codes
- Kernel extraction, parallelisation, mini-apps experiments to show effect of proposed optimisations
- 6 months effort

A team with

- Excellence in performance tools and tuning
- Excellence in programming models and practices
- Research and development background AND
- proven commitment in application to real academic and industrial use cases

Target customers

Code developers

- Assessment of detailed actual behaviour
- Suggestion of most productive directions to refactor code

Users

- Assessment of achieved performance in specific production conditions
- Possible improvements modifying environment setup
- Evidence to interact with code provider

Infrastructure operators

- Assessment of achieved performance in production conditions
- Possible improvements from modifying environment setup
- Information for computer time allocation processes
- Training of support staff

Vendors

- Benchmarking
- Customer support
- System dimensioning/design

Barcelona Supercomputing Center
Centro Nacional de Supercomputación

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Ter@tec

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