POP
Performance Optimisation and Productivity

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 2 levels of free services

Parallel Application Performance Assessment

- Primary service
- Identify performance issues of customer code (at customer site)
- If needed identify the root causes of the issues found and qualify and quantify approaches to address them (recommendations)
- Combines former Performance Audit (**?**) and Plan (**!**)
- Small to medium effort (1-3 months)

Proof-of-Concept (✓)

- Follow-up service
- Experiments and mock-up tests for customer codes
- Kernel extraction, parallelisation, mini-apps experiments to demonstrate the actual benefits of proposed optimisations
- Larger effort (3-6 months)

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

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

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