

*Design and develop data processing systems suited to the largest spectrum of High Performance Computing applications, targeting the Petaflops range.
Anticipate the programming tools and features needed to obtain efficient applications*

- in such systems.

Contact

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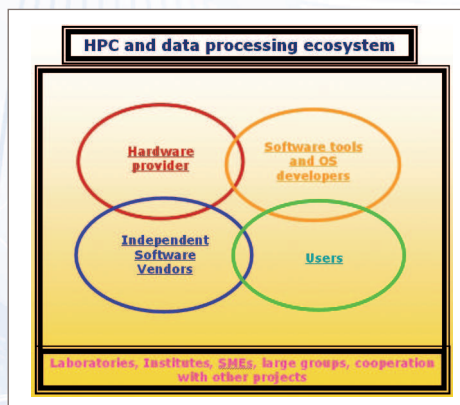


PROJECT PLANS & DELIVERABLES

- Anticipate the end-users needs and integrate them into the design of the hardware architecture of future computing systems with more than 100,000 computing cores
- Provide a server's prototype for data processing centres, HPC, large online applications, and validate the adaptations needed for selected software applications
- Optimise OS, libraries and tools for this future server's architectures
- Address grand challenges at the Petaflops scale
- Validate the hardware architecture with adaptations to the expected parallelism level
- Cooperate with HPC projects

MAJOR PHASES OF THE PROJECT

- Hardware architecture, integration and performances --> technological options --> prototype
- Basic tools (OS, libraries,...) + performance improvement tools (threads management, adaptive optimisation)
- Applications: simulation codes, management of large databases, multimedia data processing (life science, entertainment)



STATUS

Project started on 1st September 2007, in last phase

CLUSTER RELATED PROJECTS

IOLS, EHPOC, CARRIOCAS, MEDIATIC

PARTNERS

MAJORS CORPORATIONS

BULL, CS, DASSAULT AVIATION, EDF, ESI

SMEs

CAPS ENTREPRISE, EURODECISION, MEDIT, RESONATE MP4

ACADEMICS

CEA, ECOLE CENTRALE PARIS, INSTITUT FRANÇAIS DU PÉT-ROLE, INRIA, INT-ARTEMIS, UNIVERSITÉ D'EVRY, UNIVERSITÉ DE PARIS-SUD, UNIVERSITÉ DE VERSAILLES SAINT-QUENTIN

Coordinator: BULL SAS

Duration: 23 months

Total budget: 13,5 M€

Financement : 5 M€ - FUI