PATC Systems workshop: Programming ARM based Prototypes

Objectives

- Get a comprehensive view of the architecture of the heterogeneous ARM-based platforms deployed in the framework of the Mont-Blanc project, including ARM multicore clusters based on mobile and server technology.
- Understand the challenges associated with large-scale HPC simulations.
- Understand the basic concepts of architectural simulations and introduce the MUlti-scale Simulation Architecture (MUSA), developed within Mont-Blanc 3 for the simulation of next-generation HPC architectures.
- Hands-on and study of a use case using MUSA. Tools for architectural simulation that include a complete software stack for performing architectural simulations at scale of thousands of cores will be made available.

Requirements

- Standard HPC users, with some knowledge in computer architecture (recommended, but not required).
- BSc (or higher) degree in science or engineering with basic knowledge in parallel computing.
- There will be a hands-on session, therefore attendees should bring their own laptop.
Academic Staff

Barcelona Supercomputing Center on behalf of the Mont-Blanc 3 consortium.

- Adriá Armejach - post-doc at the Barcelona Supercomputing Center (BSC).
- Marc Casas - senior researcher at the Barcelona Supercomputing Center (BSC).
- Miquel Moreto - senior researcher at the Barcelona Supercomputing Center (BSC).
- Filippo Mantovani - post-doc at the Barcelona Supercomputing Center (BSC).

Materials

INTELLECTUAL PROPERTY RIGHTS NOTICE:

- The User may only download, make and retain a copy of the materials for his/her use for non-commercial and research purposes.

- The User may not commercially use the material, unless has been granted prior written consent by the Licensor to do so; and cannot remove, obscure or modify copyright notices, text acknowledging or other means of identification or disclaimers as they appear.

- For further details, please contact BSC?CNS patc [at] bsc [dot] es

Further information

All PATC Courses at BSC do not charge fees.
NOTE: PLEASE BRING YOUR OWN LAPTOP.

http://montblanc-project.eu/

Recommended Accommodation: Please follow the link for map of some local hotels.

CONTACT US for further details about MSc, PhD, Post Doc studies, exchanges and collaboration in education and training with BSC.
For further details about Postgraduate Studies in UPC - Barcelona School of Informatics (FiB), visit the website.

Sponsors: BSC and PRACE 4IP project are funding the PATC @ BSC training events.
If you want to learn more about PRACE Project, visit the [website](https://www.bsc.es/ca/education/training/patc-courses/patc-systems-workshop-programming-arm-based-prototypes).

Barcelona Supercomputing Center - Centro Nacional de Supercomputación