

SG6 - HPC

TD2-3/Lab-2: Overview

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Distributed computing: development & deployment on PC cluster

Part 1: Deployment & *batch* submissions

- **Input:** a distributed and multithreaded code of dense matrix product on a ring of processes (MPI + OpenMP + OpenBLAS – Lang C)
- **Execution** of small size distributed computations (interactive mode)
- **Learning of:**
 - **deployment** of large size distributed computations
 - **batch submission**
- **Performance** measurement and analysis

Part 2: Implementation & deployment

- **Input:** a dense matrix product algorithm on a 2D grid of processes
- **Learning of:**
 - **implementation** of an MPI code in Python3
(Lang Python3 + numpy python lib + Openblas)
 - **deployment strategy design & batch submission**
- **Performance** measurement and analysis

