Contribution ID: **24**   Type: **not specified**

Parallel Computing Workshop

Thursday, 29 March 2012 16:00 (1h 30m)

Description of the Work

90 minutes workshop about Parallel Computing in the EGI infrastructure, including use of MPI, OpenMP, and GPGPUs.
Discussion of success stories and techniques for an efficient use of resources.

Conclusions

The workshop will allow users to make an efficient use of the infrastructure for executing parallel applications using several technologies.

Impact

This workshop provides users with the needed notions for execution parallel jobs in the EGI infrastructure.
The topics covered will include:
* description and submission of parallel jobs: techniques for successful submission of jobs.
* execution of MPI applications using gLite, ARC and Unicore middleware stacks
* other parallel applications: OpenMP and hybrid MPI/OpenMP,
* use of GPGPUs in EGI's infrastructure
* successful stories and adopted solutions
The workshop will also allow users to provide feedback on the current level of support for parallel applications.

Overview (For the conference guide)

The execution of parallel applications is common in several scientific disciplines. The EGI Infrastructure offers a platform to execute parallel applications using a wide range of technologies and paradigms such as message passing with MPI, shared memory programming with OpenMPI, or GPGPU programming. This workshop will introduce users on how to effectively use the grid infrastructure and how to address the common issues that may rise during the execution of their applications with examples from successful stories and adopted solutions.

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Session Classification: Making DCIs Work for You

Track Classification: Users and communities