# PLAFRIM: UserCharter - (Rev. V2 - septembre 2015).

#### Introduction

The following charter must be approved by the user candidate in order to have the account submission accepted.

If the charter changes, a message will be communicated on the mailing list. So, you are responsible to take note of the possible future versions on the PlaFRIM web site and to respect them.

# Principles.

PLAFRIM is a scientific instrument designed to support experiment-driven research in all areas of applied mathematics related to modeling and high performance computing.

It is a shared tool, used by many people with different and varying needs. The administrators pursue the following objectives, the main one being the first of this list:

- 1. Make the tool available to experiments involving a significant number of nodes. To make this possible, reservation fragmentation must be avoided as much as possible.
- 2. Keep the platform available for the development of experiments during the day. Therefore, reservations using all the nodes available during work hours should be avoided in general.

### Glossary.

You can use the platform with two different modes: submissions and reservations.

- **Submission**: you submit an experiment when you let the scheduler decide when to run it.
- **Reservation**: when you make a reservation, you gain usage of the platform at the time you explicitly specified. You will then need to launch your experiment interactively.

You should take into account job size when you plan an experiment.

• **Job size**: the size of a job is defined by the cpu time usable by the job: (nb nodes) \* (nb procs) \* (nb cores) \* (job walltime). A 2 hours job using 32 bi-processor dual core nodes has a size of 256h.

#### Good usage rules (All users).

- 1. Please try to plan large scale experiments during night-time or holidays.
- 2. Between 09:00 and 19:00 (local time of the cluster) during working days, you should not use more than the equivalent of 5 hours on all the cores of the cluster during a given day (e.g. on a 68 bi-processor (quadri cores) cluster, you should not use more than 5\*2\*4\*68 = 2720h between 09:00 and 19:00 CEST for a potential amount of 5440h during this period). Extending an overnight reservation to include this daily quota is considered rude, as you already had your fair share of platform usage with the overnight reservation.
- 3. You should not have more than 3 reservations in advance, because it kills down resource usage. Please optimize and submit jobs instead.

- 4. You should not have job that last more than 72h outside week-end, even for a small amount of nodes, as this increases fragmentation of the platform.
- 5. You must **mention PLAFRIM in all publications** presenting results, contents obtained or derived from the usage of PLAFRIM. The **official acknowledgment** (see the Faq for any update <a href="http://www.plafrim.fr/en/community/faq-en/">http://www.plafrim.fr/en/community/faq-en/</a>) to use in your publication is

Acknowledgment: Experiments presented in this paper were carried out using the PLAFRIM experimental testbed, being developed under the Inria PlaFRIM development action with support from Bordeaux INP, LABRI and IMB and other entities: Conseil Régional d'Aquitaine, Université de Bordeaux and CNRS (and ANR in accordance to the programme d'investissements d'Avenir (see http://www.plafrim.fr/).

# Monitoring.

Platform usage is actively monitored by PLAFRIM staff. In case of unconformable use, your account will be locked. Unconformable use includes users whose user report is insufficiently filled with regard to their resource usage, as well as endangering the platform does not meet the minimum safety rules, including a robust (**none empty and 15 characters minimum**) choice of passphrase.

### Mailing Lists.

As a PLAFRIM user you are automatically subscribed to the PLAFRIM users' mailing lists. The traffic is not very high, so please keep an eye on those emails as they may contain important information.