Working on ciclad

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ciclad is an IPSL computing server located on the Jussieu campus in Paris, France.

Documentation

■http://ciclad-web.ipsl.jussieu.fr

■http://ciclad-web.ipsl.jussieu.fr/ciclad-utilisation.pdf

hotline: svp-ciclad_at_ipsl_dot_jussieu_dot_fr

The machines and file systems

The front-end machine can be accessed via the ciclad.jussieu.ipsl.fr IP.

Data files must be placed in /data/ or in the filesystem dedicated to your project.

Shared account

The repository for shared files are found in /ipslfs/igcmg/IGCM.

Read more: Repository for shared files and shared tools

Individual account

You must belong to the igcmg users' group.

Use following command to check to which groups you belong:

id -a

How to define your environment

Add the following line in your login file (e.g. /home/igcmg/.bashrc):

```
. /home/igcmg/.atlas_env_ciclad_ksh
```

This will set up ferret and fast tools.

To receive the end-of-job messages returned by the job itself (e.g. end of simulation, error,...) you must specify your email address in the file \${HOME}/.forward.

Compiling at CICLAD

When installing modipsl, the default compiler at CICLAD is set to ifort. In modipsl/util/AA_make.gdef this corresponds to the target ifort_CICLAD. The corresponding arch files for compiling with fcm are named arch-ifort_CICLAD.fcm and arch-ifort_CICLAD.path. To compile at CICLAD you need LMDZ5/trunk rev 2133 or later, ORCHIDEE/trunk rev 2375 or later. Other compilers exist at CICLAD but they have not been tested with all models.

Following forced configurations have been tested on CICLAD with the ifort compiler:

- NEMO forced mode
- ORCHIDEE offline
- LMDZ and LMDZOR forced mode (with configuration LMDZOR_v5.2 or LMDZ_v5)

The coupled model IPSLCM5 has not been compiled at CICLAD.

Example of job for a MPI executable

```
#PBS -S /bin/bash
#PBS -N job_mpi8
###PBS -q short
```

```
#PBS -j eo
#PBS -l nodes=1:ppn=8
#PBS -l walltime=00:15:00
#PBS -l mem=6gb
#PBS -l vmem=20gb

ulimit -s unlimited
module load netcdf4/4.2.1.1-ifort

# Go to directory where the job was launched
cd $PBS_O_WORKDIR

/usr/lib64/openmpi/1.4.5-ifort/bin/mpirun gcm.e > gcm.out 2>&1
```

The job is launched with **qsub** . Use "**qstat** -u login" to check the queue. Use **qdel** to cancel a job in queue or running.

libIGCM specificities on ciclad

libIGCM is not yet implemented for use at ciclad.