Working at IDRIS

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See: ■http://www.idris.fr/eng

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- Find more information about IDRIS on ■http://www.idris.fr/eng/ and about the Jean-Zay machine here : ■http://www.idris.fr/eng/jean-zay/
- Connection to IDRIS is possible with ssh command from a registered machine. All forms are available here : ■http://www.idris.fr/eng/forms/index-forms.html
- The Jean-Zay machine at IDRIS can be used for our configurations. **It supports the model execution and post processing.**
- Note: the software ■the Tina software installed at IDRIS gives access to hourly, daily and weekly backups of your $HOME files.

It is important to take the time to install a comfortable and efficient environment.

- We recommend to follow the example of the rpsl035 login's environment which is in bash. Don't use the default .bash_profile but use instead the ~rpsl035/.bash_login file. Copy this file to your home and remove the default .bash_profile.

```
ryyy999@ada: rm $HOME/.bash_profile
ryyy999@ada: cp ~rpsl035/.bash_login $HOME/.
```

- The .bash_login file sources the file /smphome/rech/psl/rpsl035/.atlas_env_ada_intel_2013_0_bash which loads libraries and post processing tools needed on our platform such as:

```
module load netcdf (currently netcdf/seq/4.1.3 in interactive mode)
module load ferret/6.85
module load nco/4.4.6
module load cdo/1.6.5
```

- Avoid messages displayed when connecting on Ada and Ergon. Do the following tests:
  - Make sure that the command rsh ergon pwd returns a unique line with the HOME on Ada.

```
ryyy999@ada: rsh ergon pwd
/arch/home/rech/yyy/ryyy999
```

  Make sure the copy of a file using rcp works properly in the two directions. The following test transfers the file **a** containing the date:

```
ryyy999@ada: date > a ; rcp a ergon:
```

- Transfers Ada/Ergon must be done with mfget/mfput.

  For esgf/thredds access, use the command mfdods on Ergon. This creates the link (24h after the first time) visible here : ■http://prodn.idris.fr/thredds/catalog/ipsl_public/catalog.html

```
# Export a file:
ryyy999@ergon: mfdods my_file -d pub/ryyy999/my_dir

# Once the access activated, you must do the following to destroy a file:
ryyy999@ada: mfdods -r /u/DODS/pub/ryyy999/my_dir/my_file
```

4. Accounting

Since 2016, usage of computing time and quotas are printed at beginning of each new session.

```
*************************************************************************
* Consommation du projet  XXXXX - groupe : XXX                         *
```

```
* ada       :        10231 h   (  34.10% de l'allocation )          *
* HOME      :         5394 Mio ( 95%)   - Inodes -    17787 ( 11%)  *
* WORKDIR   :        11018 Gio ( 50%)   - Inodes -  2831719 ( 80%)  *
* Ergon     :       188700 Gio ( 55%)   - Inodes -  6177427 ( 88%)  *
********************************************************************
```

To know the computing time used by your group (updated once a day):

```
plab999@ada:~> cpt
```

5. Things to know about file systems

5.1. WORK ($WORK)

- The $WORK Jean-Zay is large and permanent but it is not backed up.
- The $WORK Jean-Zay can be extended (20 To for the group for example). The project investigator can ask an extension on the IDRIS's extranet.
  See: ■http://www.idris.fr/extranet.html or directly from an authorized IP : ■https://extranet.idris.fr/.

5.2. SCRATCH ($SCRATCH)

- The $SCRATCH is a semi-permanent space with a 30-day file lifespan, not backep-up
- Very large quotas per project

5.3. JOBSCRATCH ($JOBSCRATCH)

  is the temporary execution directory specific to batch jobs

- The $JOBSCRATCH is created automatically when a batch job starts and, therefore, is unique to each job
- It is destroyed automatically at the end of the job. Therefore, it is necessary to manually copy the important files onto another disk space (the WORK or the SCRATCH) before the end of the job.

5.4. STORE ($STORE)

- The $STORE has to be used for archiving big files
- can be extended (300 To for the group for example). The project investigator can ask an extension on the IDRIS's extranet. See:
  ■http://www.idris.fr/extranet.html or directly from an authorized IP : ■https://extranet.idris.fr/.

5.5. Quotas

To check the used space and the size of the HOME, WORK and STORE:

```
# Quota HOME
ryyy999@jean-zay: idrquota -m

# Quota WORKDIR
ryyy999@jean-zay: idrquota -w

# Quota STORE
ryyy999@jean-zay: idrquota -s
```

5.6. Access

Since january 2017, access to other is prohibited. On Ada, you had to use idracl to give specific access. On Jean-Zay things are in progress ....
Documentation : ????

In case of problems, please contact the IDRIS' assistance.

6. Simulation outputs

Final simulation outputs are stored on Jean-Zay $STORE space in `IGCM_OUT` directories.

The IDRIS's esgf/thredds server is not yet documented for Jean-Zay machine.

7. About Password

At IDRIS, you have a unique password for all computers. Password have to be changed one time per year. The command to change your password is `passwd` . You receive a mail 2 weeks before password expiration.

8. The IDRIS's machines

Ada and Adapp are not up anymore.

- [Ada](#) for computing part
- [Adapp](#) for post-processing part
- [Jean Zay](#) for computing part (working version)