Repository for shared files and shared tools

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The necessary files to properly use the IPSL tools and models are located on shared spaces in the various computing centers.

Those shared spaces are located on specific accounts or space:

- TGCC : **igcmg**. shared space.
- IDRIS : **rpsl/commun**.
- IPSL (ciclad/climserv) : **igcmg**. Owner M.-A. Foujols.
- LSCE (obelix) : **igcmg**. Owner O. Marti.

If you need to add or modify a file on these spaces, contact the group Plateforme.

1. Common tools

1.1. General environment

On the `$WORK` of each common account you will find a directory MachineEnvironment with one subdirectory by Computing Centers. In each of them there are files to help you to properly setup the environment which will allow you to use the IPSL models and tools on this specific Computing Center. Read the web page of a specific computing center to know how install your environment

- [TGCC](#)
- [IDRIS](#)
- [LSCE](#)
- [IPSL(Ciclad)](#)

1.2. Rebuild

When the model is in parallel mode and the parallel I/O are not activated (working without XIOS server), the outputs are truncated into different files (one per MPI process), each of them only containing part of the computation domain. The rebuild phase allows to reconstruct the complete file covering the whole domain.

The rebuild tools are used by the IPSL models in the post-processing phase. The rebuild can also be done interactively.

Tools are stored :

- at irene :
- at obelix :
- at jean zay :

1.3. Post processing tools

The fast and atlas tools used by the post processing are also stored on a shared space. Others files required by fast and atlas are stored in database directory.

- At TGCC:
- At IDRIS:

2. Repository for shared files

2.1. IGCM directory

The files needed to run the models (initial conditions, boundary conditions, forcings) are stored in IGCM directory at shared accounts. The shared accounts from the different computing centres are regularly synchronized. The synchronization procedure between different computing centers is done manually on demand. The `IGCM` tree exists at TGCC, at IDRIS, at IPSL and at LSCE(part of IGCM only). The `IGCM` directory is located in the storage spaces of each computing centers.

This common directory is defined by `libIGCM_sys` : variable `R_IN`.

- At TGCC : R_IN = workdir of the igcmg project
- At IDRIS : R_IN = commun part workdir of the psl project

- At LSCE, obelix : `R_IN=/home/orchideeshare/igcmg/IGCM`
- At IPSL : `R_IN=/prodigfs/ipslfs/igcmg/IGCM`
- There is also an access available on the web : ■https://vesg.ipsl.upmc.fr/thredds/catalog/IPSLFS/igcmg/IGCM/catalog.html

In IGCM, the following sub directories exist:

- `IGCM/ATM` -> input files for the atmospheric model LMDZ
- `IGCM/SRF` -> input files for the land surface model ORCHIDEE. The forcing files for ORCHIDEE offline are found in IGCM/SRF/METEO
- `IGCM/CHM` -> input files for the chemistry model INCA
- `IGCM/OCE` -> input files for the ocean system NEMO (OPA, LIM, PISCES)
- `IGCM/CPL` -> input files for the coupler OASIS
- `IGCM/RESTART` -> restart files for some reference simulations

2.1.1. The IGCM/RESTART directory

The `IGCM/RESTART` directory contains the model initial states for a few important experiments.

2.2. limit.nc and files for nudge mode

You can find here some information on these files.