WRF configuration

To use WRF through WRF4G2, you need to configure the app variable in the experiment.wrf4g file. By default, WRF4G2 provides a bundle with all you need to simulate a WRF experiment, which is configured as follows :

```
app = wrf_all_in_one | bundle | /home/user/wrf4g/repository/apps/WRF/WRFbin-3.4.1_r2265_gfortran.tar.gz
```

This bundle can be used on x86_64 Linux systems, and contains binaries, libraries and configuration files for WRF-3.4.1 build against gfortran-4.4.7, openmpi-1.4.3 and netcdf-4.1.3, which are included in the bundle too (hence, all in one).

> This configuration is quite useful, because you do not need to *install* WRF on every computing resource.

However, if you'd like to use your own WRF, installed on your machine or on a cluster, you can do so by updating the app variable. There are several ways to configure this variable depending on your WRF configuration. Let's see some examples:

> Using ?module command:

```
app = wps | command | module load wps/4.5.1
     wrf | command | module load wrf/4.5.1
```

> We assume that each command is configuring other pieces of software, such as openmpi, netcdf and so on.
>
> Using PATH and LD_LIBRARY_PATH environment variables:

```
app = netcdf_bin | command | PATH=/home/user/netcdf-4.1.3/bin/:$PATH
     netcdf_lib | command | LD_LIBRARY_PATH=/home/user/netcdf-4.1.3/lib/:$LD_LIBRARY_PATH
     wrf_bin    | command | PATH=/home/user/WRF4.5.1/:$PATH
```

- If WRF is already configured and readily accessible (i.e. in the search path) on your system, you do not need to use the app variable.

> As you might have probably noticed, we didn't mention heavy input files required by some WRF configurations (e.g. CAM_ABS_DATA, CAM_AEROPT_DATA, co2_trans, etc). In order to make these available for a specific WRF experiment, it is highly recommended to create a directory tree under the wrf4g_files directory for that experiment.