

WRF configuration

To use WRF model in WRF4G2.0, you have to configure `app` variable in the [experiment.wrf4g](#) file. By default, WRF4G2.0 provides a bundle with all you need to simulate an WRF experiment, configure as follows :

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

This bundle is able to be used for any x86_64 Linux system, 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 include in the bundle too.

This configuration is quite usefully because you do not have to install WRF on any computing resources.

But, if you want to use your own WRF installed on your machine or on a cluster, you have to update the `app` variable. There are several ways to configure this variable depending on your WRF configuration system. In order to clarify that, we are going to write 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 softwares such as openmpi, netcdf and so on.

Using `PATH` and `LD_LIBRARY_PATH` shell variables:

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

- If WRF is already configured on your system, you do not have use `app` variable.

As you have probably noticed, we did not mention anything about WRF and WPS configuration files (e.g. `CAM_ABS_DATA`, `CAM_AEROPT_DATA`, `co2_trans`, etc). For that purpose, it is highly recommendable to create a tree directory file configuration under [wrf4g_files](#) directory.