

Wikiprint Book

Title: WRF configuration

Subject: TracMeteo - WRF4G2.0/WRFAPP

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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.