

Wikiprint Book

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Table of Contents

Introduction	3
Documentation	3
Problems	4

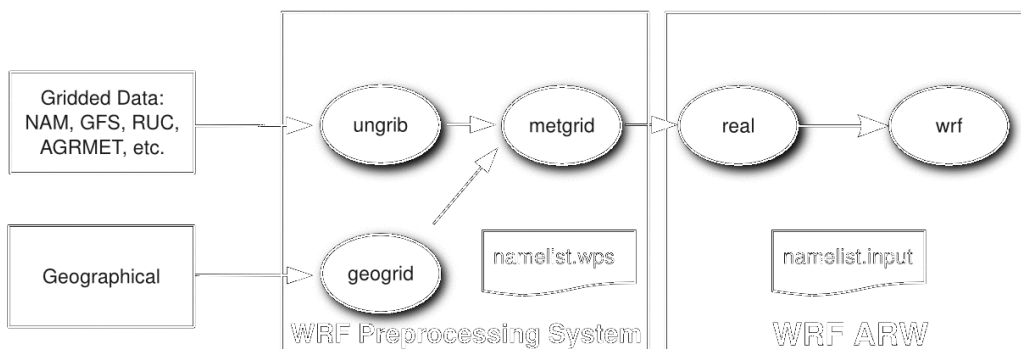
Introduction

WRF for GRID (WRF4G) is a framework for the execution and monitoring of the WRF Modelling System (see [?this presentation](#) for an introduction to WRF) in distributed computer resources (see this presentation). It provides a flexible and easy way of designing complex experiments involving many simulations (multiple start/end dates, multi-parametric simulations, long climate runs, ...). The monitor allows a precise control of the experiment's state, where broken simulations are automatically detected and relaunched at the next submission.

Given a list of DCIs that the user can access, WRF4G submits the experiment to them according to the experiment needs. Users can configure different DCIs such as local PCs, stand-alone servers, PBS or SGE clusters, etc; and use them concurrently to run different simulations of a WRF experiment. Output files are centrally stored regardless the DCIs used to run the simulations.

WRF4G separates the experiment design from the execution environment. To prepare an experiment, users are required to fill in two files: [experiment.wrf4g](#) which defines the WRF experiment, and [resources.wrf4g](#), where running environment and storage resources are configured. WRF4G provides a [command line interface](#) that allow the users to prepare, run and monitor their experiments.

The following picture shows the main WRF4G components (see the following [?presentation](#) for further information) and the interaction among them.



Documentation

- [Framework](#)
- [Installation Guide](#)
- Tutorials:
 - [How to run a simple experiment](#)
 - [Advanced tutorial](#)
 - [How to manage WRF4G errors](#)
 - [How to add new computing resources to WRF4G](#)
 - [How to add a new WRF geographical domain](#)
 - [How to reconfigure the features of an experiment](#)
 - [How to resubmit an experiment](#)

- [How to rerun a specific chunk of a realization](#)
- [How to use wrf4g_kill command](#)
- [Reforecast Tutorial](#)
- [Command Line Interface](#)
- [WRF Distributions](#)
- Configuration files:
 - Resources setup
 - [framework4g.conf](#)
 - Experiment setup
 - [experiment.wrf4g](#)
 - [resources.wrf4g](#)
- [FAQ](#)

Problems

If you have any problems, please [?send us a ticket!!](#)