Quick Guide for Installing ParaDiS v2.2.6 on Ubuntu 9.04

April 27, 2009

William Cash
Stanford University
wcash at stanford dot edu

In order to install ParaDiS v2.2.6 on a single-processor desktop installation of Ubuntu 9.04 (Jaunty Jackalope) with GCC, I had to perform some tasks in addition to those outlined in the installation guide. Refer to `http://micro.stanford.edu/wiki/M01_How_to_Obtain_and_Run_ParaDiS` for detailed installation instructions.

1. Obtain a free account at `http://paradis.stanford.edu` and download the source files `pub-ParaDiS1.v2.2.6.tar.gz`

2. Ubuntu does not install any of the basic libraries for C/C++. If you haven't done so previously, run the command `$sudo apt-get install build-essential` to install the basic GCC libraries such as `stdio.h`.

3. Ubuntu also lacks the X11 development libraries that are required to render the output window. Install `libx11-dev` along with all its dependent packages. Run the command `$sudo apt-get install libx11-dev` or use the Synaptic Package Manager.

4. Extract the source code.

5. `makefile.sys` must be altered to called the GCC compilers instead of Intel. Under the instructions for linux system type, substitute the following parameters: 'CC_ SERIAL.linux = cc', 'CPP_ SERIAL.linux = c++'. If you have the Intel compiler suite and wish to use it, no changes are necessary.

6. In `makefile.setup` set 'SYS = linux' and 'MODE = SERIAL'

7. Try to make paradis by running `$make paradis` in the base directory. If you receive an error about `gmake` not being found, run the command `$sudo ln -s make /usr/bin/gmake` to create a symbolic link that executes `make` when `gmake` is called.

8. Compile and run a sample input deck.

Note for old version 2.2: For me, the compilation failed due to errors in `ReadRestart.c` because of voids being redeclared as static voids. Simply edit the file to remove `static` before the functions `FreeNodeLists()` and `AssignNodesToDomains()`.