

## NetCDF, G++ and so on...

1. Install VirtualBox (<https://www.virtualbox.org/wiki/Downloads>) -> Gives Virtual Box application
2. Install Vagrant (<http://www.vagrantup.com/downloads.html>) -> gives vagrant command in terminal
3. Create new folder and copy your C++ project there.
4. Go to this folder and run: `vagrant init ubuntu/trusty64` (should create the Vagrantfile)
5. `vagrant up` (should download the box from ubuntu cloud and soon after start up the machine -> may take soooome time)
6. `vagrant ssh` (you should be now in vagrant machine, so here you can do whatever you like)
7. `cd /vagrant/` - shared folder. In here all the C++ files should be listed
  1. `sudo apt-get update`
  2. `sudo apt-get install doxygen` (for documentation)  
`sudo apt-get install graphviz` (for using dot in command line -> for drawing graphs needed by doxygen)
  3. `sudo apt-get install g++`  
`sudo apt-get install netcdf-bin` (gives `nc-config --libs` command, don't know if needed)  
`sudo apt-get install libnetcdf-dev`
  1. `head code/Makefile` (to see exactly which command will make later on invoke.)
  2. `ld -lnetcdf --verbose` (to check if the netcdf lib exists in system)
  3. `ld -lnetcdf_c++ --verbose` (to check if netcdf\_c++ lib exist in system)
  4. `doxygen Doxyfile` (by default create documentation in html folder inside docs folder)
  5. `make clean`

6. `make dos-tem` (links everything and created the DOSTEM executable)
7. `cp config/sitecontrol_eq.txt config/sitecontrol.txt` (DOSTEM needs it by default)
8. `./code/DOSTEM` and the computation begins...