Project gcc: How to use gcc-6.4.0 on Pythagoras Cluster

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Intoduction

The GNU Compiler Collection includes front ends for C, C++, Objective-C, Fortran, Ada, Go, and D, as well as libraries for these languages (libstdc++,...). GCC was originally written as the compiler for the GNU operating system. The GNU system was developed to be 100% free software, free in the sense that it respects the user's freedom.

User .bashrc modifications

The user should modify his/her .bashrc properly so as to use gcc-6.4.0. In home user directory edit .bashrc,

```
# vi .bachrc

==============================.bashrc==============================

# GCC-6.4.0 Paths

ThirdParty=/share/apps/OpenFOAM/ThirdParty-v2012/platforms/linux64

export PATH=${ThirdParty}/gcc-6.4.0/bin

export LD_LIBRARY_PATH=${ThirdParty}/ mpfr-4.1.0/lib:${ThirdParty}/ mpc-1.2.1/lib:${ThirdParty}/ gcc-6.4.0/lib:${ThirdParty}/ gcc-6.4.0/lib64:${ThirdParty}/ gmp-6.2.1/ lib:$LD_LIBRARY_PATH

export LIBRARY_PATH=${ThirdParty}/ gcc-6.4.0/lib:${ThirdParty}/ gcc-6.4.0/lib64:$LIBRARY_PATH

export C_INCLUDE_PATH=${ThirdParty}/ gcc-6.4.0/include: $C_INCLUDE_PATH

export CPLUS_INCLUDE_PATH=${ThirdParty}/ gcc-6.4.0/include:$CPLUS_INCLUDE_PATH

==============================end .bashrc==============================
```

The user is free to fill these paths with other libraries he may use. For example, if gmp is a library the user uses then he/she can add ${ThirdParty}/ gmp-6.2.1/ lib,

${ThirdParty}/ gmp-6.2.1/ include, ${ThirdParty}/ gmp-6.2.1/ include at the end of the gcc path followed by : in LIBRARY_PATH, C_INCLUDE, CPLUS_INCLUDE respectively. The paths above corresponds to the latest version of gmp and not the one that the system use. For any further more modifications be sure the right paths are given.