From: Mark Jack <mark.a.jack@gmail.com>

Subject: Setting up MACs in 407A with MPICH2 and PETSc

Date: December 12, 2011 11:00:04 PM EST
To: David Brickler <dabrick47@gmail.com>
Cc: Adam Byrd <adam1.byrd@gmail.com>

5 Attachments, 363 KB



Hi David,

Sorry for the delay. It's been a long day with getting final grades and other things taken care of.

Adam Byrd did a quick write-up of the installation process to get the PETSc libraries properly installed on a MAC (or PC) at:

https://docs.google.com/document/d/1MpUYaHmLKutfAkmTkmtWM7nAZgVtNDdawtdimpWkmfM/edit?authkey=CNPqxO8K&pli=1

Or simply search under Google with 'Nanotorus simulation googledoc'.

The installation is listed there in detail for MAC OSX machines (or clusters) for a parallel PETSc installation that includes the additional packages like MUMPS and Parmetis.

A separate installation of PETSc (serial use) can be achieved without the MUMPS / Parmetis package.

The easiest way of getting it installed is after you installed MAC OSX Snow Leopard and the XTools / XCode package from the CD I gave you, the gfortran compiler (see website below) and the latest MPICH2 version you should be able to simply create the proper PETSc installations by running one of the scripts in the attached bin.zip folder. Don't forget to set the environment variables 'PETSC_ARCH' and 'PETSC_DIR' in your .bach_profile or .cshrc depending on your shell. The Google document is older and does not contain the latest information that is listed in the brief text file with installation instructions below. So use the latest info but you'll quickly figure it out.

I'll be on campus by 9 a.m. until 12:30 p.m. in Lab 419. I can let you into 407A where the 5 workstations are where it would be great if you could get MPICH2 and the two PETSC versions installed on each workstation as preparation for the Comp. Physics course in the spring.

I'll be around to give you a couple of pointers when you need any. But this saves me a lot of time if you could do it. I think the password under my login name is 'famuphysics'. Let me know if that does not work when you have to install stuff as superuser / root with 'su ...'.

Thanks.

Mark

Websites (you can find the source codes/binaries and additional installation documentation here):

GFortran MAC OSX Snow Leopard compiler gfortran-snwleo-intel-bin.tar.gz at: http://hpc.sourceforge.net/

MPICH2:

http://www.mcs.anl.gov/research/projects/mpich2/

PETSC petsc-3.1-p8.tar.gz at: http://www.mcs.anl.gov/petsc/download/index.html http://acts.nersc.gov/petsc/index.html

PARMETIS and MUMPS:

http://www.mcs.anl.gov/petsc/miscellaneous/external.html

BLAS, BLACS, LAPACK, SCALAPACK: http://acts.nersc.gov/scalapack/index.html http://www.netlib.org/scalapack/http://www.netlib.org/lapack/http://www.netlib.org/blacs/index.html http://www.netlib.org/blas/

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PETSC Test Files.zip (6.4 KB)

