

S.P. Schneider, Purdue AAE, 9 Jan. 2002

Introduction to Using FORTRAN on ECN PC's

There are two main FORTRAN compilers on the ECN system. The old approach is to use the Unix compiler, f77. I no longer use this system. Instead, I use Compaq Visual Fortran on my PC, since it's easier to use. This file gives some introductory information on how to get started using this software on the ECN PC's.

To find the program, follow

start -> programs -> ecn software -> compaq visual fortran 6 ->
developer studio.

For help, follow

start -> programs -> ecn software -> compaq visual fortran 6 ->
compaq visual fortran help

You cannot get help by clicking on Help from inside the program.

This is due to a complex situation involving the use of a non Microsoft program (that used to be owned by Microsoft), operated from inside a system set up and automated by ECN

Once in the program, to start working with a code, follow

file -> new -> fortran console application

and enter a project name in the box (I used 'test' for this example)

leave the box 'create new workspace' checked

make sure the location is on a disk that you have write access to

create an empty project, click OK

Then in the left pane, click on File View, click on 'test files',

you can see 'source files', 'header files', 'resource files'

These should all be empty at this point

To add source files, click

project -> add to project -> files, and add files

Now if you click on 'source files' in the left pane, you should see

your files, and you should be able to click on them, and see them shown in the main pane.

Under Build, you can compile, build into executables, and execute

There are some things you need to set before doing so.

Critically, follow

project -> settings

and open the debug pane

set 'working directory' to one that you want and have write access to.

This is where the code will look for input files, and where it will write output files. The source files don't need to be here, because you add them to the project explicitly, and the location on the disk comes from when you add them.

also, I advise opening the 'fortran' pane, and looking at the category

'floating point'. Set 'floating point exception handling' to 0 from the '3*' default. This will cause the code to error out on divide by zeros, rather than continuing with NaN. This makes debugging easier.