

Re: Installing g95 on OS X

Source: <http://coding.derkeiler.com/Archive/Fortran/comp.lang.fortran/2004-10/0763.html>

From: Dave Seaman (*dseaman_at_no.such.host*)

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On Tue, 19 Oct 2004 20:52:29 GMT, Gordon Sande wrote:

> *Dave Seaman wrote:*

>>>>*Maybe I just need another cup of coffee, but after 20+*
>>>>*years of unix development(?), why is it so hard to*
>>>>*install a \$%^&ing compiler?*

>>>*Good question!*

>> *Agreed. But not all compilers require such fiddling. Commercial-quality*
>> *compilers tend to come with fancy installers that make the process*
>> *painless.*

> *Painless is exactly what I have observed for several things that*
> *I have installed on Mac Os X that are clearly Unix (as well as Mac).*
> *fink/gfortran did not make it into that company.*

Agreed. I was thinking more of CodeWarrior. Compilers tend to be more complicated to install than most other products.

>>>*I followed the recipe given for gfortran and found*

>>>>*0. I can only sudo fink ... from my admin account and not my*
>>>>*user account. Probably a good thing in the large except*
>>>>*I though the sudo/password fuss was intended to avoid*
>>>>*the the extra fuss.*

>> *Using the 'sudo' command gives you root privileges. Do you want everyone*
>> *on your machine to have root privileges? Maybe you have no other users*
>> *to worry about, but the whole idea is that user accounts are for those*
>> *who have only user privileges and no admin or root privileges.*

> *SUDO requires that the sysadmin set up files so that the user gives his*
> *account/password and proceeds. Mac Os X authentication asks for an*
> *admin account/password and then proceeds. Much slicker. SUDO wants*
> *someone to vouch for the user in advance and then for the user to*
> *give a good account of himself. I have the impression that the usual*
> *hack is to preapprove everyone for everything. Mac Os X authenticate*

- > *wants to hear about an admin account/password on the spot. Less*
- > *intrusive and less prone to the global bypass. SUDO makes sense*
- > *for admin of 100 user machines as in time shared Unices of yore.*
- > *Makes much less sense for a single user desktop microcomputer*
- > *where admin/user is more to prevent accidents.*

You have a point, but perhaps that's part of what Apple had in mind when they implemented fast user switching in Panther. I just run everything on an admin account, since that is what I am used to in the Unix environment, and therefore it is not a problem.

- >>> *I needed to fiddle a low level file because FINK was*
- >>> *not set to use UNSTABLE packages "out of the box".*
- >>> *The fix was in the FAQ under "Why doesn't it work"!*
- >>> *And there was some sort of problem with the path*
- >>> *settings for fink so it was /sw/bin/fink instead of*
- >>> *just fink.*

By that last statement I take it you mean that /sw/bin was not in your PATH. But it should be, starting the first time you open a new Terminal window after installing fink. Either that, or something went wrong with the fink installation. The stable/unstable business has nothing to do with that at all.

- >> *If fink fixed up your shell initialization to add /sw/bin to your PATH,*
- >> *which it should do by default, then all you need to do is open a new*
- >> *Terminal window and then use the fink command. It will work from that*
- >> *point on. The fink installer should have checked for that and printed a*
- >> *message about your shell initialization.*

- > *fink "out of the box" uses STABLE. One has to fiddle some file to get*
- > *it to look at UNSTABLE. Since gfortran is UNSTABLE one seems to be*
- > *told that it is not ready for prime time. The fink recipe as given*
- > *was for use with UNSTABLE and not as it arrives.*

That has nothing to do with what I was talking about. I also use UNSTABLE, but my paths are fine. I use "fink", not "/sw/bin/fink". Is that the path problem you mean, or is there something else?

- > *The fink installation*
- > *reports that it is having trouble with paths which seems a bit curious*
- > *as it only has to deal with the Apple supplied Unix. Apple changed its*
- > *mind about the default shell so other aspects of account configuration*
- > *have undoubtedly changed and the path problem goes with the territory.*

When did you see this message about a "path problem"? Was it during the fink installation, or was it later on when you tried to use a fink command?

Fink looks at your shell startup file and attempts to patch it during the installation in order set up your environment appropriately. Mine has

the statement

```
if [ -f /sw/bin/init.sh ]
then
  ./sw/bin/init.sh
fi
```

which works in any of the Bourne-style shells (basically, anything other than csh or tcsh). If fink successfully patched your startup file like this, then you only need to open a new Terminal window in order to have /sw/bin and /sw/sbin in your PATH. If you don't see a statement like that, you will need to add it manually. See the fink documentation for instructions.

```
>>>2. The results have some sort of conflict between the Apple's
>>> supplied X11 and the older do-it-yourself X11. The fixes
>>> suggested in the diagnostics appear to do nothing. Why
>>> does a compiler require X11?
```

```
>> The compiler doesn't require X11, but some fink packages depend on X11.
>> You can't get fink to build those packages unless you have X11 installed
>> and configured as fink expects. Other fink packages are not affected.
```

```
>>> Why does having the Apple
>>> supplied Aqua compatible X11 grind things to a halt?
```

```
>> It's been a while since I looked at this, but I think you just need to
>> install the X11 SDK from the system install disks (it's an optional
>> install) and fink should be happy.
```

```
> Open Office plays nicely with Apple's X11. Why do the other
> folks get upset with it? You are right that one has to install
> it separately and that is exactly what fink/gfortran was so unhappy
> to find. Installing the Aqua X11 is a double click and authenticate
> painless exercise. Likewise Xcode. etc
```

Install what separately? Do you mean the optional X11 SDK from the Apple installation disks? If you installed that, then I don't know what the problem is, since I installed using "sudo fink install gfortran" and it installed successfully. There were no complaints about Apple's X11. Try the following command:

```
[gemini:dseaman] $ fink list system-xfree86
Information about 3921 packages read in 1 seconds.
i system-xfree86 2:4.3-2 [placeholder for user installed x11]
i system-xfree... 2:4.3-2 [placeholder for user installed x11 devel...
i system-xfree... 2:4.3-2 [placeholder for user installed x11 share...
```

If you don't see the three letter "i"'s in column 2, indicating that those three packages are installed, then perhaps your Apple packages are not properly installed.

[gemini:dseaman] \$ fink describe system-xfree86
Information about 3921 packages read in 1 seconds.

system-xfree86-4.3-2: [placeholder for user installed x11]

This package represents a pre-existing installation of X11 on your system that is not installed through Fink.

.
If it shows as not installed, you likely need to install the X11User and/or X11SDK packages from Apple, or a similarly-compatible version. For more information, please see the FAQ entry on X11 installation at:

.
<http://fink.sourceforge.net/faq/usage-packages.php#apple-x11-wants-xfree86>

.
Web site: <http://fink.sourceforge.net/faq/usage-general.php#virtpackage>

>>> *(I am sure that if I wanted to be a full time sysadmin
>>> the answer would be interesting but ...). Apple's slick
>>> X11 arrived circa Os X.3 and the fink scripts are probably
>>> older so I will have to wait for the fixes to work their way
>>> through the system.*

>>>*So now I do not have gfortran and I am reinforced in the notion
>>>that if and only if I fiddled full with Unix/Open Software/etc
>>>would I be able to get it to work. I will leave the explanation
>>>of why a compiler needs X11 as one of the great mysteries of the
>>>universe. It is clear that fink has a lot of ingenuity behind it
>>>as does gfortran, but at the end of the session all I have is a
>>>lot of wasted disk space that I may get around to clearing out.*

>> *Some fink packages require X11 and some do not. That's a feature of the
>> individual packages, not of fink or of the compiler. If a program
>> expects to display things in X windows when you run it, then it's going
>> to need access to X11 headers and libraries when you build it.*

> *The fink installation scripts for gfortran are the things that want
> an X11 and object to the existing one supplied by Apple. Net result
> is that after
> "sudo fink install gfortran"
> there is no gfortran after the reams and reams of compilations of
> various X11 pieces. The only reason that makes sense to me fo the X11
> stuff is that someone is trying to be helpful and it has backfired
> badly. Perhaps gfortran only works for versions of Mac Os X that are
> earlier than the version that came preinstalled. Not a helpful
> situation.*

Fink gets finicky sometimes. I had a package that repeatedly failed to update on one Mac, although it was fine on another. I finally deleted

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that package and rebuilt from scratch, and it succeeded.

All I can say is that "sudo fink install gfortran" worked without a hitch for me, and I use Apple's X11. Look at your fink output from the commands I listed above and see what looks different.

You might also try the following:

```
sudo fink selfupdate
sudo fink update-all
```

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Dave Seaman

Judge Yohn's mistakes revealed in Mumia Abu-Jamal ruling.

<http://www.commoncouragepress.com/index.cfm?action=book&bookid=228>