

## using -ftracer stops buildworld at shutdown.c

*Source:* <http://unix.derkeiler.com/Mailing-Lists/FreeBSD/hackers/2005-07/0284.html>

---

*From:* jason henson ([jason\\_at\\_ec.rr.com](mailto:jason_at_ec.rr.com))

*Date:* 07/27/05

Date: Tue, 26 Jul 2005 18:46:55 -0400

To: [hackers@freebsd.org](mailto:hackers@freebsd.org)

Adding -ftracer to my make.conf causes problems with

/src/sbin/shutdown/shutdown.c

This is my make.conf settings

CPUTYPE=athlon-xp

CFLAGS=-O2 -pipe -ffast-math -funroll-loops -ftracer

COPTFLAGES=-O2 -pipe -funroll-loops -ffast-math -ftracer

Doing a little research I found these items:

-ftracer

Perform tail duplication to enlarge superblock size. This transformation simplifies the control flow of the function allowing other optimizations to do better job.

Why do I get "warning: variable (or argument) `blah' might be clobbered by `longjmp' or `vfork'" and how do I fix it?

When the C runtime executes a longjmp, the flow of control passes back to the last setjmp that was executed. In the process, the stack (which contains arguments and local variables) must be 'unwound', that is, returned to the exact same state that it was in when setjmp was executed.

Unfortunately, due to optimizations such as storing the value of a variable in a register instead of on the stack, the compiler cannot always guarantee that the stack will be restored precisely to its original state. Thus some local variables and/or arguments can be 'clobbered'.

To avoid this warning, the variables and/or arguments should be prevented from being optimized by declaring them as volatile.

So I sprinkled some volatiles around, but mostly got more errors that said "gcc volatile discards qualifiers from pointer target type" in the fprintf functions.

The error went away after I removed -ftracer, but from what I have read it would be advantageous to change the variable pf to be stored on the

## freebsd-hackers: using -ftracer stops buildworld at shutdown.c

stack and not in a register. That is if it is not stored on the stack.

I did a search of all the listed include files in shutdown.c and found no matches for pf.

Anyone one have any thoughts or insights on this? Am I completely off in left field?

Jason

====> sbin/shutdown (all)

```
cc -O2 -pipe -DNOPROFILE -ffast-math -ftracer -funroll-loops
-Wmarch=athlon-xp -Wsystem-headers -Werror -Wall -Wno-format-y2k -W
-Wno-unused-parameter -Wstrict-prototypes -Wmissing-prototypes
-Wpointer-arith -Wreturn-type -Wcast-qual -Wwrite-strings -Wswitch
-Wshadow -Wcast-align -Wunused-parameter -Wchar-subscripts -Winline
-Wnested-externs -Wredundant-decls -c /usr/src/sbin/shutdown/shutdown.c
/usr/src/sbin/shutdown/shutdown.c: In function `timewarn':
/usr/src/sbin/shutdown/shutdown.c:276: warning: variable 'pf' might be
clobbered by `longjmp' or `vfork'
*** Error code 1
```

Stop in /usr/src/sbin/shutdown.

\*\*\* Error code 1

Stop in /usr/src/sbin.

\*\*\* Error code 1

Stop in /usr/src.

\*\*\* Error code 1

Stop in /usr/src.

\*\*\* Error code 1

Stop in /usr/src.

---

freebsd-hackers@freebsd.org mailing list

<http://lists.freebsd.org/mailman/listinfo/freebsd-hackers>

To unsubscribe, send any mail to "freebsd-hackers-unsubscribe@freebsd.org"