Subject: C compilers; request for info Posted by Anonymous on Sat, 29 Nov 1986 16:38:20 GMT View Forum Message <> Reply to Message

Originally posted by: 4526P@NAVPGS.BITNET (Lt. Scott A. Norton, USN)

Article-I.D.: ulowell.795 Posted: Sat Nov 29 11:38:20 1986 Date-Received: Sun, 30-Nov-86 19:32:47 EST Sender: page@ulowell.UUCP Organization: USN Lines: 18

I am planning to get a C compiler, and would appreciate your comments and suggestions on which compiler I should buy. In particular:

- a. comparative efficiency of object code produced (time and space)
- b. Completeness of the implementation (I know C is not standardized...)
- c. Known bugs.
- d. Compatability with public domain C programs. (It looks like most of these are Lattice dialect...)
- d. Should I get the "Developer's version," "Personal version," or what? I am not planning to be a developer and write DeLuxe Paint, but I am a proficient 68000 assembly programmer, and it seems you must buy an upscale version to get the assembler.

Please send comments to: BITnet: 4526P@NAVPGS ARPAnet: 4526P%NAVPGS.BITNET@wiscvm.wisc.edu Tks/ Scott Norton.

Disclaimer: "My friend Lenny, he just ain't too smart." (- Of Mice and Men)

Subject: Re: C compilers; request for info Posted by Anonymous on Sun, 30 Nov 1986 17:43:26 GMT View Forum Message <> Reply to Message

Originally posted by: chiu@princeton.UUCP (Kenneth Chiu)

Article-I.D.: princeto.1992 Posted: Sun Nov 30 12:43:26 1986 Date-Received: Sun, 30-Nov-86 20:43:29 EST References: Reply-To: chiu@princeton.UUCP (Kenneth Chiu) Organization: Princeton University Computer Science Department Lines: 10

In article 4526P@NAVPGS.BITNET (Lt. Scott A. Norton, USN) writes:

- > I am not planning to be a developer and write DeLuxe Paint, but I am
- > a proficient 68000 assembly programmer, and it seems you must buy an
- > upscale version to get the assembler.

The Manx assembler is not directly compatible with the include files. This is a major headache if you want to write programs that interface with kernel.

Kenneth ChiuUUCP: princeton!chiuPrinceton University Computer Science DepartmentBITNET: 6031801@PUCC

Subject: Re: C compilers; request for info Posted by Anonymous on Mon, 01 Dec 1986 20:00:10 GMT View Forum Message <> Reply to Message

Originally posted by: cmcmanis@sun.uucp (Chuck McManis)

Article-I.D.: sun.9776 Posted: Mon Dec 1 15:00:10 1986 Date-Received: Tue, 2-Dec-86 02:07:14 EST References: Organization: Sun Microsystems, Inc. Lines: 54 Summary: C compiler answers

In article , 4526P@NAVPGS.BITNET (Lt. Scott A. Norton, USN) writes:

- > Please send comments to:
- > BITnet: 4526P@NAVPGS
- > ARPAnet: 4526P%NAVPGS.BITNET@wiscvm.wisc.edu
- > Tks/ Scott Norton.

I tried both of these addresses and they bombed, such are the vagaries of this hodge podge of networks...

Comments on the Lattice C compiler version 3.10

> a. comparative efficiency of object code produced (time and space)

Lattice has made great gains in this area, I would speculate that this is due to pressure put on them by Manx. Load modules that don't use printf are comparable now.

> b. Completeness of the implementation (I know C is not standardized...)

Lattice is going straight for the ANSI standard. This is probably a good thing, they don't seem to know which way to jump with the library yet but this version has lots of neat new functions, including support for the FFP routines and some new ieee routines.

> c. Known bugs.

I just found one in the *library* that causes file pointers to switch back from unbuffered to buffered. Luckily this version of the compiler comes with an Object Module Librarian so putting in the fix is easy.

- > d. Compatability with public domain C programs. (It looks like most
- > of these are Lattice dialect...)

Since Lattice comes with the developers package this is not unusual, it is also easier to port your programs back to to a PC this way (should you ever want to) Generally most stuff will compile on either compiler again the biggest problem is the libraries and the fact that the Amiga system calls really want 32 bit ints not 16 bit ones.

> d. Should I get the "Developer's version," "Personal version," or what?

A matter of personal preference, the cheapest version of Lattice (\$225) now, comes with the text utilities grep, files, splat, wc, etc and an assembler, and the Blink linker, and the compiler. Combined with microemacs and the Software Distilleries make program you have a pretty complete development environment.

In general for serious Assembly work you will probably want the MetaCompCo assembler (Scotts Valley, CA) or the DevPAC from the guys in britain.

[These are definitely my own opinions here!]

--Chuck McManis

uucp: {anywhere}!sun!cmcmanis BIX: cmcmanis ARPAnet: cmcmanis@sun.com These opinions are my own and no one elses, but you knew that didn't you.

Subject: Re: C compilers; request for info Posted by root on Thu, 04 Dec 1986 05:08:55 GMT View Forum Message <> Reply to Message

Article-I.D.: sbcs.248

Posted: Thu Dec 4 00:08:55 1986 Date-Received: Tue, 9-Dec-86 04:59:50 EST References: Organization: Computer Science Dept, SUNY@Stony Brook Lines: 18

[possible repost of this message - hit 'n' if you have seen it]

Chuck,

The C compiler I am using for my Amiga is not sooo bad - in fact it is made by your company. Seriously, the Sun C compiler produces good, correct code for either 68000/68010/68020's. All one has to do to use it is to rewrite a few multiply/divide routines, and get/write a C library (Manx commercial version comes with lib source, right?), and of course, cook up a format converter from a.out -> AmigaDOS executable. I have been doing development using a system similar to this for several months now, and am convinced that cross development is the only way to go for serious work. If memory serves, I believe I read somewhere that Amiga does their development using the (expensive) GreenHills compiler system that also runs on a SUN. Why suffer the slings and arrows of Manx, Lattice, etc if you have access to a Sun workstation?

Rick Spanbauer

Subject: Re: C compilers; request for info Posted by Anonymous on Thu, 04 Dec 1986 12:44:06 GMT View Forum Message <> Reply to Message

Originally posted by: john13@garfield.UUCP

Article-I.D.: garfield.3068 Posted: Thu Dec 4 07:44:06 1986 Date-Received: Fri, 5-Dec-86 09:43:49 EST References: Sender: perry@garfield.UUCP Reply-To: john13@garfield.UUCP (John Russell) Organization: Memorial U. of Nfld. C.S. Dept., St. John's Lines: 47 Summary:

In article cmcmanis@sun.uucp (Chuck McManis) writes: > In article , 4526P@NAVPGS.BITNET (Lt. Scott A. Norton, USN) writes: >> d. Compatability with public domain C programs. (It looks like most >> of these are Lattice dialect...)

>

> Since Lattice comes with the developers package this is not unusual, it

> is also easier to port your programs back to to a PC this way (should you

> ever want to) Generally most stuff will compile on either compiler again

> the biggest problem is the libraries and the fact that the Amiga system

> calls really want 32 bit ints not 16 bit ones.

On this point I must beg to differ, as I have *never* gotten any of the PD programs, from Amicus or Fish disks, or here off the net. All that I have tried have worked fine with Manx (I still try Lattice on a source every now and then just to make sure). Most older sources seem to have been broken by fixes made to bugs in the compiler; I can't say for sure, but you would think it would at least get past the include files without streams of errors!

Of Lattice's recent improvements I can't comment; a Lattice C ordered from the mainland that arrived here yesterday was still v3.03, so I'd check the version number before buying (although this might not be such a problem in the States).

One of the biggest advanages that Manx has, in my opinion, I very rarely see mentioned: this is Manx's use of pre-compiled symbol tables. For example, say you are compiling the VT100 source, composed of several modules. Each one would begin with several #includes, such as

#include

For each module to churn through these takes an eternity, and you can't put all of your include files in ram unless you have a meg or two. However, Manx only needs to read these in once, at which time it can save all the #defines, structure definitions, etc. When compiling subsequent modules that reference the symbols, you can have the symbol table loaded in almost instantaneously! The real beauty of this scheme is that it requires no change in the source code; any #includes that your program tries to perform will be disabled if the symbols are already present in memory.

Needless to say this results in a dramatic increase in speed. What is the fastest Lattice could compile and link a file that uses the intuition include files, without packing absolutely everything into ram? Manx, with only "cc" and the c.lib library, can do it in 35 seconds.

Hardly gives you time to put on the coffee, quite a change after Lattice :-)

John

Subject: Re: C compilers; request for info Posted by jones on Thu, 04 Dec 1986 18:47:22 GMT View Forum Message <> Reply to Message

Article-I.D.: dg_rtp.729 Posted: Thu Dec 4 13:47:22 1986 Date-Received: Fri, 5-Dec-86 10:38:42 EST References: Reply-To: jones@dg_rtp.UUCP (Greg Jones) Organization: Data General, RTP North Carolina Lines: 23

In article cmcmanis@sun.uucp (Chuck McManis) writes:

> > Comments on the Lattice C compiler version 3.10 > >> d. Should I get the "Developer's version," "Personal version," or what? > > A matter of personal preference, the cheapest version of Lattice (\$225) > now, comes with the text utilities grep, files, splat, wc, etc and an > assembler, and the Blink linker, and the compiler. Combined with microemacs > and the Software Distilleries make program you have a pretty complete > development environment. > > In general for serious Assembly work you will probably want the MetaCompCo > assembler (Scotts Valley, CA) or the DevPAC from the guys in britain. > I have the 3.10 lattice compiler and have found that an assembler is also included on the release. It is called asm, but I don't know how it compares to the one mentioned above. --

Greg Jones Data General, RTP, NC ...!seismo!mcnc!rti-sel!dg_rtp!jones

Subject: Re: C compilers; request for info Posted by grr on Wed, 10 Dec 1986 07:17:56 GMT View Forum Message <> Reply to Message

Article-I.D.: cbmvax.1077 Posted: Wed Dec 10 02:17:56 1986 Date-Received: Sun, 14-Dec-86 00:07:46 EST

References: Reply-To: grr@cbmvax.UUCP (George Robbins) Organization: Commodore Technology, West Chester, PA Lines: 23

In article root@sbcs.UUCP (Root) writes:

- > I have been doing
- > development using a system similar to this for several months now, and
- > am convinced that cross development is the only way to go for serious
- > work. If memory serves, I believe I read somewhere that Amiga
- > does their development using the (expensive) GreenHills compiler system
- > that also runs on a SUN. Why suffer the slings and arrows of Manx,
- > Lattice, etc if you have access to a Sun workstation?
- > Rick Spanbauer

What you say may be true, but there are some philosophical issues with cross development vs. native mode. Contemplate the effect on the state of Amiga CLI, Utilities and Development tools if Amiga had switched to native mode development somewere along the line...

Of course much of the code was written before there was an operating system or a fully functional chip set. The Sun setup also contains a hardware device to control and download to an amiga.

--

George Robbins - now working for, uucp: {ihnp4|seismo|rutgers}!cbmvax!grr but no way officially representing arpa: cbmvax!grr@seismo.css.GOV Commodore, Engineering Department fone: 215-431-9255 (only by moonlite)