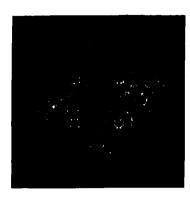# Compiling Version 8 of Icon for the Amiga

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http://www.cs.arizona.edu/icon/docs/ipd129.html

This document presents in brief the state of the Amiga Icon implementation. In addition to providing enough information for those wishing to compile Amiga Icon, this document will hopefully provide encouragement for those wishing to make (and submit) improvements to this public domain effort. This document is in addition to the document on porting Icon [1] (tr90-5.doc on the distribution diskette), and it assumes information contained in that document.

Icon is written in C. Amiga Icon Version 8 was created using Aztec C Version 3.6a. Previous versions of Amiga Icon were created using the Lattice C compiler. Although the current implementation compiles and runs under Lattice C version 5.0.4, the iconx compiled by the Lattice compiler has problems with co-expressions. If you find and fix the problem, please send us your changes and we will incorporate them and distribute them in a future release.

The Amiga source distribution of Icon is organized along the lines of the classical Icon hierarchy [1]. You will need to select a root directory for the Icon sources and then create subdirectories named src, src/h, src/icont, src/iconx, src/manxicont, src/manxiconx, test, test/stand, test/suite1, and test/suite2 from this root directory.

The Icon sources are distributed in an Arc archive to save space and reduce the cost of distribution. A noncommerical utility capable only of extracting archived files is included and used during the installation process. To unpack the archive you will need well over a megabyte of free space on your hard disk; to compile it you will need closer to 2 megabytes.

After creating an appropriate directory to serve as root for the Icon hierarchy on your hard disk, you should execute the command:

```
execute df0:installsrc
```

assuming the Icon source disk is in floppy drive 0 and the current directory is at the root of the Icon hierarchy on the hard disk. Installation is automatic.

Since a single set of sources was made to accommodate both the Lattice and Aztec C compilers, additional directories were added to accommodate alternate makefiles and compiled object

code. In particular, the makefiles found in the usual Icon src/iconx and src/icont directories are those for use with Lattice C. The makefiles for use with Aztec C will be unpacked in the src/manxiconx and src/manxicont directories respectively. These makefiles refer to the sources in /icont and /iconx (that's ../icont and ../iconx in UNIX notation), so no copying of the sources is required.

To actually compile Icon you need to run make in one of the icont directories (src/manxicont or src/icont), followed by running make in one of the iconx directories. Note once again that only Version 3.6a of the Aztec C compiler has created a validated Icon implementation with these sources. Lattice C Version 5.0.4 builds iconx with NoCoexpr defined. Earlier versions and other compilers are not available to us and are therefore not supported. Remember to set up your AmigaDOS environment for whichever C compiler you are using before trying to run make

Please report any problems or improvements to:

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References

1. R. E. Griswold, *Transporting Version 8 of Icon*, The Univ. of Arizona Tech. Rep. 90-5, 1990.

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