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# The Origin of the "MIT License"

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**The "MIT License"** has become a popular way of releasing copyrighted computer programs for others to use without requiring signatures or a license fee. The quoted words refer to a group of software licenses that have common ancestry and guiding principles but varying wordings. There has been some recent discussion about the origin of the "MIT License,"[1] but that discussion has been inconclusive because authoritative historical documentation has been missing or hard to find. This note provides some of that history and documentation. Being composed 35 years after the events involved, it relies primarily on my often-flaky recollections but it also offers some relevant supporting documentation found in my files and in online archives.

In the fall of 1983, the Computer Systems Research (CSR) Group of the MIT Laboratory for Computer Science (MIT–LCS)[2] had developed several pieces of network software that were generating outside interest and requests for both information and copies of the code. One of these pieces was David Clark's[3] BCPL implementation of a TCP/IP stack for the Xerox Alto, intended to demonstrate that TCP/IP implementations could be small, fast, and usable in an engineering workstation or a personal computer. Descended from that starting point were a translation of the BCPL code into the C language by Larry Allen[4] for use on the Digital Equipment PDP-11 and, led by Wayne Gramlich,[5] a TCP/IP implementation with network applications for the IBM Personal Computer (PC/IP)[6] by John Romkey,[7] David Bridgham,[8] Karl Wright,[9] Don Gillies,[10] and Louis Konopelski.[11] Separately, Noel Chiappa[12] developed a multiprotocol network routing system, known as the C-Gateway, for the Digital Equipment LSI-11, for which Liza Martin[13] implemented the External Gateway Protocol (EGP).[14]

Because the requests were coming from both university researchers and commercial organizations, there was an ongoing discussion within the group about what conditions should accompany distribution of these materials. The option of attaching a copyright notice to software and its documentation had recently been clarified by Congress and the U.S. Copyright Office. But that option raised a further question: if copyrighted, should MIT require a written contract and impose a license fee? The group's primary goal was to influence the way networking was done, and it seemed likely that licensing revenue would

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TO: Robert E. Sullivan and Sibley P. Reppert

FROM: Jerome H. Saltzer

SUBJ: Copyright notice to appear on programs for which license fees are not required but for which publicity for M.I.T. as the source of the programs is desired

DATE: 10 January 1983

Here is some suggested wording for a notice to appear on programs for which widespread distribution without individual licenses is desired. The wording follows the lines I discussed with Sib on the phone today. This wording is quite similar to the blanket permission for non-commercial uses that appears at the foot of every article appearing in the Communications of the ACM. For your reference a copy is attached.

Please let me know your reaction to this approach.

Suggested copyright and permission notice:

(C) 1984 Massachusetts Institute of Technology

Permission to use, copy, modify, distribute and sell this program for any purpose and without fee is hereby granted, provided that this copyright and permission notice appear on all copies and supporting documentation, the name of M.I.T. not be used in any advertising or publicity pertaining to distribution or sale of the program, and notice is given that copying and distribution is by permission of M.I.T.

xc: D.D. Clark
M.L. Dertouzos

Enclosure (1)

1/12
Copy:
Karen Kepfe
619-722

**Figure 1.** Memorandum of January 10, 1984 (misdated 1983) to attorneys, proposing suggested wording for a copyright and permission notice. The cited enclosure is shown in Figure 2.

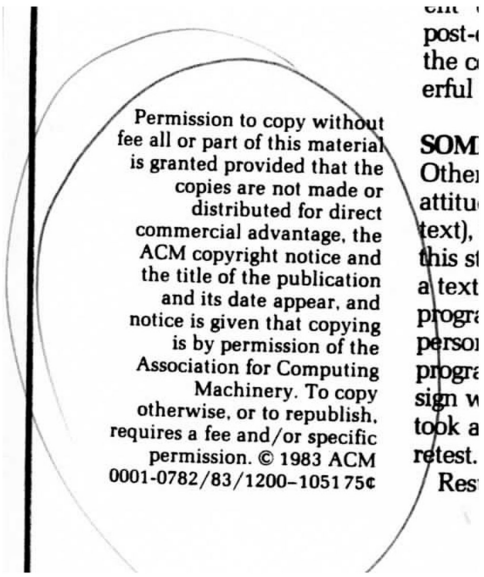


**Figure 2.** Enclosure accompanying the letter of Figure 1, illustrating an example copyright and permission notice used by the ACM.

not amount to much. Anecdotal experience of other software groups at MIT–LCS also suggested that much time would be spent with attorneys preparing and then negotiating licensing agreements. Based on these considerations, we concluded that it would be better to give the software away with a copyright notice that identified where it came from and did not require any signatures.

Larry Allen and I began conversations with attorneys Bob Sullivan[15] and Sib Reppert[16] of the Boston law firm that at the time was handling intellectual property matters for MIT–LCS. In January 1984, Larry and I drafted proposed wording based on the idea of copyrighting the software but including with the copyright notice a permission notice that allowed anyone to use it for free. The wording borrowed ideas and phrases that had been used in the research group's previous restricted distribution notices and it also borrowed from the copyright and permission notice that the Association for Computing Machinery had recently begun attaching to articles in its publications. Figure 1[17] is a memorandum to the attorneys presenting the draft wording and Figure 2[18] is an excerpt from an attachment to that memorandum, a page from a then-recent issue of the *Communications of the ACM* that exhibits their copyright and permission notice wording. The attorneys soon responded favorably, and on January 25, 1984, we sent an announcement describing the change in permission policy to about 25 recipients of the June 1, 1983 "please do not distribute any further" version of PC/IP.

There were four guiding principles underlying this copyright and permission notice:

1. Permission is granted for any purpose, including commercial use.
2. Neither signed agreement nor license fee is required.
3. Permission is subject to three restrictions:
- Any redistribution must credit MIT.
- Any redistribution must include the same copyright and permission notice.
- Promotional use of MIT's name is restricted.
4. The software is provided "as-is" without warranty.

Discussion over the next few days refined the wording, omitting the word "sale" since it was redundant with the words "any purpose" and slightly relaxing the restriction on promotional use of MIT's name. The refined wording was first

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Permission to use, copy, modify, and distribute this program
for any purpose and without fee is hereby granted, provided
that this copyright and permission notice appear on all copies
and supporting documentation, the name of M.I.T. not be used
in advertising or publicity pertaining to distribution of the
program without specific prior permission, and notice be given
in supporting documentation that copying and distribution is
by permission of M.I.T.  M.I.T. makes no representations about
the suitability of this software for any purpose.  It is pro-
vided "as is" without express or implied warranty.                */
```

**Figure 3.** Copyright notice for C language programs first used in the February 1, 1984 distribution of PC/IP and the distributions later that year of the C-Gateway and EGP for the LSI-11.

used for the February 1, 1984 distribution of PC/IP. Figure 3[19] is a copy of the include.h file used for C-language programs that made up PC/IP and the EGP implementation for the C-Gateway. This version of the notice is probably the first one that would be appropriate to identify as the "MIT License." Previous software distributions by the research group had used copyright notices with one or more elements based on the same guiding principles, but this seems to be the first one that combined all four principles in a single license.

In the fall of 1985, the question arose of how to license the X Window System[20] that was being developed by Jim Gettys[21] and Bob Scheifler[22] for MIT Project Athena.[23] In discussions parallel to those of two years earlier, they had noticed that proprietary licensing of early versions of the X Window System was becoming a hassle both for them and for prospective recipients and had the potential of interfering with widespread adoption. There were significant contributions made by early adopters, but that only made it more apparent that it was important to minimize the licensing friction. They also noted that there were similar competing window system projects going on at both Sun Microsystems and Carnegie Mellon University and both were requiring a signed license. The conclusion was that the X Window System might be more influential if adopting it could be simpler.

A new group of attorneys went over the wording of the PC/IP copyright and permission notices and added several words of the kind beloved by attorneys while maintaining the four guiding principles. For the specific purpose of assuring X Window System recipients about a potential concern, they also added a sentence that the software did not include anything licensed as part of the Unix system. The reworded license of Figure 4[24] was first applied to the X Window System Version 10 Release 3 in February, 1986. This wording could be thought of as the second version of the "MIT License."

Many more versions of this license have since been adapted with minor wording changes by organizations at MIT and elsewhere, including all of the software developed by Project Athena. The term "MIT License" has been used both specifically to refer to the X10R3 license and generically to identify almost any permissive free software license that has this ancestry and is based on the same four principles.[25]

As it turned out, the licensing strategy had the desired effect: the goal of influence was realized. PC/IP became the basis for a dozen or so commercial networking stacks for the IBM Personal Computer. The X Window System became the standard window system for Unix and Linux and is running on millions of systems today. Project Athena's Kerberos authentication system[26] is included in many computer system distributions, notably including Microsoft Windows, Apple macOS, most versions of Unix and Linux, and IBM z/OS.

Furthermore, the good will that was gained from free distribution of these software packages led to the flow back of both funding and software applications that support research and education at MIT. The cash flow has dwarfed the forgone revenue stream that likely would have come from licensing for a fee, and even that sum has been dwarfed by the value of the applications that became available. A lesson is that it

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notice appear in all copies and that both that copyright
notice and this permission notice appear in supporting
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this software for any purpose.  It is provided "as is"
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This software is not subject to any license of the American
Telephone and Telegraph Company or of the Regents of the
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*/
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**Figure 4.** Copyright notice for C language programs first used in the X10R3 release of 22 February 1986 of the X Window System.

can be important to look past the prospect of licensing for a fee, which may bring in a few dollars, and instead see the opportunity that opens if you give the software away. The potential reward can be orders of magnitude larger.

## ACKNOWLEDGMENTS

Larry Allen, Noel Chiappa, David Clark, Jim Gettys, and John Romkey offered helpful comments that filled in historical details that I had forgotten, gotten wrong, or never knew. Any remaining errors are mine.

## REFERENCES/ENDNOTES

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19. Scan of printout from a dot matrix printer. Source: Prof. Saltzer's files, crate #20, folder "PC/IP Licensing." A digital version is also in file /usr/Martin/sysnet/export/utils/notice.h, file size 669 bytes, last modified date 27 January 1984. Source: J. N. Chiappa, 21 May 1985 backup tape of the MIT–LCS–CSR PDP-11/45, Accessed: 4 May 2020.
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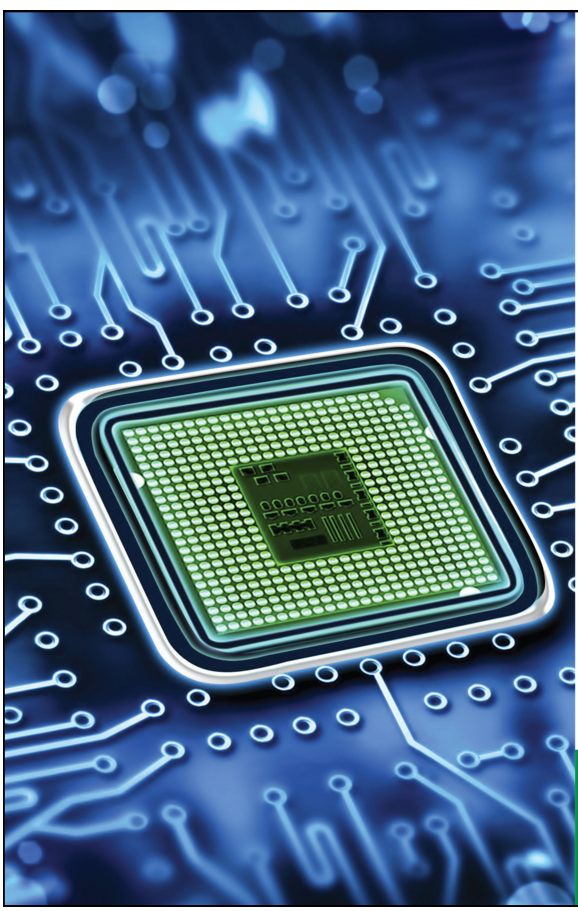

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