September 7, 1971

To: F.J. Corbató
          C.T. Clingen
          J.W. Gintell

From: J.H. Saltzer

Subject: Information Availability Policy

After reading a variety of sources of information on software protection, and some discussion with the M.I.T. patent office, a tentative plan for protecting the Multics System is beginning to take shape in my mind. This plan is based on use of federal copyright and state "fair use" laws, taken together. Overall, the idea is to label everything in sight with a copyright notice, provide a briefing to any person receiving a copy of a program listing or document, and then relax. It appears that with this approach, we may safely provide single copies of anything to all comers at the cost of reproduction.

Since most legal precedents appear to be at best indirect, this plan is basically a proposal to provide legal innovation (but following in the footsteps of IBM). We may also rely, at least in the beginning, on the uncertainty of the situation to intimidate those who would misuse the information. Another argument is favor of this approach is that the existence of claimed copyrights provides a very convenient vehicle for licensing of Multics software. Finally, a copyright approach eliminates any need for release agreements for educational use, since blanket permission for such use can be given, without endangering the basic protection.

The detailed implementation of this proposal would go as follows:

1. All documentation which we wish to release with protection would be labeled with a copyright notice on every page. These presently include the Multics Programmers' Manual, the Subsystem Writers' Supplement, the Graphics Users' Supplement, the System Programmers' Supplement, and the Multics System Programmers' Manual. The copyright notice would read

"© Copyright 1971, Massachusetts Institute of Technology
All rights reserved"

2. Once each year, those manuals which were updated during that year would be registered with the copyright office.

3. All program source files would be modified at their time of installation in the system to include the comment
   /* Copyright 1971, Massachusetts Institute of Technology */
   at the beginning.

4. As soon as feasible, all programs presently in the system would be modified to contain the copyright notice. No listing could be released to satisfy a request unless the copyright notice has been affixed.

5. I see no reason to use IBM's recommended procedure of placing a copy of the copyright notice in the internal static variables of each procedure. If such a notice seems important, we could accomplish it by modifying the PL/I compiler to accept an option named "notice" which takes a character string argument providing the text of the notice. This option would insert the copyright notice in the symbol section of the compiled object segment and provide an inbound link definition with the name <notice>. Thus a typical procedure might begin:
   ```
   alpha:   procedure (arg1,arg2) options (notice("Copyright,1971
            Massachusetts Institute of Technology"));
   ```
   With this approach, a separate comment with a copyright notice would appear to be superfluous.

6. All magnetic tape copies of the system which are intended for removal to another site would have a label affixed, which contains the copyright notice. HISI would arrange to propagate this label to any further copies of such tapes which it makes.

7. Any listing or manual would be available, in a single copy, to any requestor, for the cost of reproduction. The use of such materials is the thing which the copyright controls.

8. A briefing note would be provided for recipients. (A copy is attached.) In general, it would warn of the implication of the copyright, and give blanket permission for use for purposes of

> M.I.T.
> The U. S. Government
> HISI

All use to the benefit of any other organization would require written permission. Obviously, the option of granting permission for commercial exploitation via a license is one possibility. As the draft briefing note explains, "use" includes copying, modifying, executing, interpreting, translating to another language, or even writing a new program to the same specifications.

9. The user is warned that he must propagate the copyright into any copies or modified versions he creates, thus continuing the protection, and preventing him from extending permission not already granted by M.I.T.

Overall, this plan has the appeal of simplicity, and it automatically separates the legitimate propagation of ideas from unfair exploitation of the programs. Your comments on the plan are invited.

September 7, 1971

To: Recipients of Copyrighted information about the Multics System

From: J. H. Saltzer

Subject: Implications of the Multics Copyright notices

All listings of the Multics system, and manuals describing Multics and its subsystems, include a standard copyright notice of the form:

© Copyright 1971, Massachusetts Institute of Technology
   All rights reserved.

That notice places certain responsibilities on the recipient of listings or manuals. For listings, the program in question may not be reproduced, copied, translated to or rewritten in other languages, translated into machine language, interpreted, or executed without prior permission from M.I.T. For manuals, duplication of the text or construction of programs which meet the specification of the text require prior permission from M.I.T.

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