

9/15/72

INTRODUCTION FOR MULTICS DEMONSTRATION TAPE

2 min. 45 sec.

About ten years ago, Project MAC was formed as an M.I.T. interdepartmental research laboratory with a charter to explore the mechanisms and consequences of interaction between men and computers. One of the many activities undertaken by Project MAC was the development of a computer system which is easy to use. This goal of ease of use was quickly recognized to encompass many subgoals, including ability to use the computer without leaving the office, and ability to share programs and data bases with other members of the same intellectual community. Thus it was necessary to develop a computer system which concentrated on remote, interactive access and a shared file storage system. This development proceeded in two steps. First, an already existing system named CTSS and using the IBM 7094 computer was installed and heavily modified. Experience with that system indicated two things: first, the fundamental ideas were workable. Second, in order to respond to the rapidly expanding expectations of users of such a system, one must be prepared to evolve and expand. On the other hand, it was clear that evolution and expansion are fundamental considerations in system design which cannot be added later.

Therefore, a second step was undertaken: the development of a prototype computer utility, known as Multics, which was to have the requisite properties of evolvability and expandability, as well as providing an environment for interactive use and a shared file system. Project MAC joined with the General Electric Company and the Bell Telephone Laboratories in the engineering of this new system. A series of papers presented at the 1965 Fall Joint Computer Conference set out the ambitious goals for the Multics system, and some thirty other more recent papers, theses, and books describe lessons learned while constructing the system.

Now, technical papers can explain details, but they cannot replace hands-on experience with the use of such a complex and versatile system. The original goal, to make a computer system easy to use, is simpler to demonstrate than it is to explain. For this reason we have today a demonstration of several of the features of the Multics system. In order to make the demonstration as realistic as possible, no special arrangements have been made to modify the response time of the computer system. At the same time as our demonstration is taking place, Multics is in production use by the M.I.T. community. Therefore, any delays which we observe are typical of those normally encountered by users of the system.

Now, for the demonstration itself, I am going to turn the floor over to David Clark, a graduate student member of the Computer System Research Division of Project MAC, who will describe and explain what is happening. He will be assisted by Sze-Ping Kuo, another graduate student, at the typewriter keyboard.

9/15/72

Acknowledgement

#1

The Multics system was developed in a cooperative study among Honeywell Information Systems Incorporated (formerly the Computer department of the General Electric Company), the Bell Telephone Laboratories, and M.I.T. Project MAC, with support of the Advanced Research Projects Agency and the Office of Naval Research.

9/15/72

Acknowledgement

#2

Today's demonstration was performed with the cooperation of the M.I.T. Department of Electrical Engineering, the M.I.T. Information Processing Center, and M.I.T. Project MAC. Parts of the demonstration were developed by the Cambridge Information Systems Laboratory of Honeywell.

9/15/72

Acknowledgement

#3

Copyright 1972 by the MASSACHUSETTS INSTITUTE OF TECHNOLOGY

VIDEOTAPED BY THE M.I.T. CENTER FOR ADVANCED ENGINEERING STUDY.