

To: MTB Distribution

From: Jim Batts

Date: 07/30/82

Subject: Restructuring the MPM Manuals

Comments on this MTB will be greatly appreciated. Please send comments to:

The System M forum >udd>Pubs>mtgs>reorg

or

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## INTRODUCTION

This MTB describes a proposal for reorganizing the information in the MPM manuals (MPM Reference Guide, MPM Commands and Active Functions, MPM Subroutines, MPM Subsystem Writer's Guide, MPM Peripheral I/O, MPM Communications I/O, System Programming Tools, and the RCP User's Guide). The reorganization is designed to improve users' ability to easily locate information.

## BACKGROUND AND STATEMENT OF THE PROBLEM

For the past several months we in documentation have surveyed the Multics community (both internal people and customers) to determine a reasonable way to reduce the size of the Commands manual (currently running at around 900 pages). The thrust of this activity was to find an acceptable methodology for splitting the Commands manual into several smaller volumes. This idea was universally rejected. In fact, the survey revealed a strong dislike for dealing with multiple manuals. Those surveyed indicated that their prime interest was in reducing look-up time for the tools they needed. Thus, they preferred the packaging of commands in an encyclopedic reference work, rather than split among multiple documents.

With the knowledge that users' main interest was in reducing look-up time and that they preferred to deal with as few manuals as possible, we began looking at the commands - and indeed all the information in the MPM set - in a different perspective. With this new objective in mind, an analysis of the MPM set revealed the following problems:

1. Commands are split among the Commands manual, the Tools manual, the Subsystem Writer's Guide, and, to some extent, Communications I/O, Peripheral I/O, and RCP User's Guide. Further compounding the problem is that the Tools manual and the Subsystem Writer's Guide lack a clearly-defined organizational philosophy. These two manuals do not correlate sufficiently well either with a specific software area or with a discrete user function. Individual users have a great deal of difficulty in trying to determine if an individual command is in Tools, the SWG, or (to a lesser extent) Commands.
2. Subroutines are scattered in Subroutines, Tools, the Subsystem Writer's Guide, and, to some extent, Peripheral I/O and Communications I/O. Users have a severe problem with subroutine look-up. Given the manual titles and the name of a subroutine, it is impossible for a user to "know" that the documentation is located in Subroutines, Tools, or the SWG.

3. The Peripheral I/O manual is misnamed. Tape (and to some extent disk) I/O is the only subject covered.
4. The information in the RCP User's Guide is not sufficiently independent to warrant a separate manual.

### PROPOSED SOLUTION

The proposed solution to the problems cited above is to eliminate the Peripheral I/O manual, the Communications I/O manual, the Tools manual, the Subsystem Writer's Guide, and the RCP User's Guide. All commands would be placed in the Commands manual; all subroutines (including I/O modules) would be placed in the Subroutines manual; all reference text would be placed in the Reference Guide. Additionally, we would create a new manual - the "High-Frequency Commands" manual - into which we would place a selected subset of the most-used commands.

Listed below on the left is the current MPM set; on the right is the proposed set. The page count for individual manuals is also listed. (The page count for the proposed new manuals is based on the estimated number of new pages required to accommodate the added information.)

- |  |                                   |
|--|-----------------------------------|
| 1. MPM Reference 326                   | 1. MPM Reference 459              |
| 2. MPM Commands 827                    | 2. MPM Commands 1003              |
| 3. MPM Subroutines 350                 | 3. MPM Subroutines 925            |
| 4. MPM Subsystem Writer's Guide<br>546 | 4. High-Frequency Commands (200?) |
| 5. MPM Peripheral I/O 162              |                                   |
| 6. MPM Communications I/O 170          |                                   |
| 7. System Programming Tools 376        |                                   |
| 8. RCP User's Guide 72                 |                                   |

### ADVANTAGES

1. The entire MPM set is reduced from eight manuals to four. Additionally, the individual manuals themselves will reflect a more clearly-defined organizational philosophy. Users will thus be able to locate information more easily.

2. The reorganized set makes future decisions about what-goes-where easier. Thus, we position ourselves to handle future growth with less thrashing.
3. The release of a high-frequency commands manual gives sites an additional option with respect to the purchase of command documentation. Sites can isolate subsets of their user base that can get along with the less comprehensive (and less expensive) High-Frequency Commands manual.

#### WHY DO THIS NOW?

1. We must do something with the Commands manual. Soon (perhaps in MR10.1) the Commands manual will grow too large to be contained in a single binder. It seems unreasonable to create a two-volume commands manual and still have command subsets in Tools and the SWG. With users rejecting the idea of splitting the Commands manual into smaller documents, we are locked into the large document. So, we might as well go all the way...
2. There are major software enhancements coming along that will keep the MPM manuals in a state of change whatever we decide to do about this proposal. These software enhancements include (a) video replacing tty as our standard terminal support software (heavily impacting Communications I/O), (b) the release of new tape I/O software (heavily impacting Peripheral I/O), and (c) the release of new file system software to replace vfile\_ (heavily impacting MPM Reference Guide).

#### SUPPORTING RESEARCH

The credibility of this proposal is heavily based on the belief that, faced with the choice, users will reject the packaging of information in multiple manuals in favor of a single, comprehensive document. This belief is based on the following research:

1. In Multics Task Report-184 Karen MacKenzie summarized discussion on MTB-576 (Splitting Up the Commands Manual) by noting "People feel that the encyclopedic aspect of the (Commands) manual is its strongest asset, and recommended that commands be added to the manual, not deleted from it."
2. Jackie Leshner at the National Security Agency also reviewed MTB-576 and stated that "...5 out of 6 people prefer the encyclopedic or reference book approach."
3. In a field trip to Renaissance Computing in Cambridge MA, members of the documentation unit asked Emily Funk, Program Manager, if she found the current Commands manual to

be cumbersome. Emily replied that she liked the packaging of commands in an encyclopedic reference work. Emily had herself prepared a three-volume reference document containing Multics commands and site-developed commands arranged in alphabetical order.

4. In conversation with users at HLSUA Forum XXXIV (Las Vegas) Jim Batts found no support for splitting the commands into multiple manuals.
5. In a report summing up the Multics Documentation Survey (W. D. Martin/R. R. Nowicki, May 23, 1979) it was noted that "Consolidation of the number of documents required for reference purposes is desired."

The specifics of the proposed consolidation of the MPM manuals are also rooted in previous user proposals.

1. In a design review of MTB-576 (Splitting Up the Commands Manual) the MIT representatives made a proposal for MPM consolidation very similar to this proposal.
2. In a letter to John Minniti (previous documentation manager) on October 20, 1980, Mr. Daniel Beeghly of Ford Motor Company stated that "I do not find it objectionable to look in one manual per category to find an item, but looking all over everywhere is a wasteless drag. I have reorganized my own MPM manuals as follows: all commands in one manual, all subroutines except device\_switches in one manual, device\_switches in one manual, all general information in one reference manual..."