

To: MTB Distribution
From: Jim Garrison
Date: 09/07/82
Subject: Dispersal of MPM Manual Contents

Comments on this MTB are invited by entering transactions in the System M forum >udd>Pubs>mtgs>outline

or sending mail to Garrison.Pubs on System M

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or c/o MS Z-30

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PURPOSE

This MTB proposes to account for the relocation of information contained in the following manuals:

Subsystem Writer's Guide (AK92)

Peripheral I/O (AX49)

Communications I/O (CC92)

RCP User's Guide (CT38)

which are being eliminated as part of the restructuring of the MPM set detailed in MTB 594. The general premise in MTB 594 as regards the above-listed manuals is to dismantle them by placing all commands in the MPM Commands, all subroutines and I/O modules in the MPM Subroutines, and much of the text that remains, in the Ref Guide. Your comments are invited as to the feasibility and appropriateness of the proposed dispersal of information.

INTRODUCTION

Each of the affected manuals is outlined below by section/appendix title, number of pages, and the intended destination manual for that section/appendix (the RCP User's Guide digresses somewhat from this format). The section seems a sufficiently detailed level at which to consider the manipulation of predetermined topics, but those who are unfamiliar with a given topic may wish to refer to the contents in the existing manual, to shed some light on the appropriateness of the information vis-a-vis its new home. Also below, the Ref Guide is outlined to reflect the results of the restructuring and other considerations.

Right now, information in the existing manuals is presumed relevant, so the first step is to find a new home for it, and reaching a consensus on that issue is the purpose of this MTB. If it can be determined at this point, however, that blocks of information are irrelevant or obsolete, we would obviously be in a better position to proceed with the next step, ensuring accuracy of information and performing MR 10.1 updates to the newly structured manuals. So if you are aware that treatment of a given topic is outdated or unnecessary, please advise pronto.

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SOLUTION

Subsystem Writers' Guide

The provisos and disclaimers in the preface about users writing their own subsystems and sacrificing Multics facilities in so doing, would appear in some form under concepts & characteristics in the Ref Guide, together with cross-references to the dispersed information germane to subsystem writing.

SECTION	TITLE	PAGES	NEW LOCATION
Section 1	-- Multics Standard Object Segment	(35 pages)	-- becomes a major subsection of a new appendix on subsystem writing in the Ref Guide.
Section 2	-- Standard Execution Environment	(18 pages)	-- becomes a major subsection of a new appendix on subsystem writing in the Ref Guide.
Section 3	-- Subsystem Programming Environment	(5 pages)	-- becomes a major subsection of a new appendix on subsystem writing in the Ref Guide.
Section 4	-- Implementation of Input/Output Modules	(11 pages)	-- becomes a new appendix in the Subroutines manual, with a cross-reference from subsystem writing narrative in Ref Guide.
Section 5	-- Reference to Commands and Subroutines by Function	(8 pages)	-- the commands and subroutines used in subsystem writing are categorized by function in Sections 2 and 1 respectively of the MPM Commands and MPM Subroutines.
Section 6	-- Commands	(69 pages)	-- are dispersed alphabetically in the MPM Commands.
Section 7	-- Subroutine Descriptions	(214 pages)	-- are dispersed alphabetically in the MPM Subroutines.
Section 8	-- Data Base Descriptions	(5 pages)	-- would presumably be lodged with other subsystem-writing-specific information in the Ref Guide, though there might be a more logical place having to do with other system data base descriptions

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Appendix A -- Approved Control Arguments -- has already been moved to the Standard System Designer's Notebook.

Appendix B -- Symbol Table Organization (16 pages) -- would seem to be a fitting candidate for relocation in some PL/I documentation or perhaps the above-mentioned SDN.

Peripheral I/O

The information dispersed from this manual will have to be treated in compliance with the new tape I/O facility, which apparently will be phased in over several releases.

SECTION	TITLE	PAGES	NEW LOCATION
Section 1	Introduction (1+ pages)		basically just describes the organization and intent of the manual, so it would probably disappear, except possibly the reference numbers to standards institute papers.
Section 2	Peripheral I/O Facilities (11 pages)		consists of information related to the RCP and IOI (make that 10 pages on the RCP and one paragraph on the IOI). The information on the RCP is duplicated either in the MAM Resource Control or in the RCP User's Guide (the latter document is also being eliminated, see below) so the bulk of this information will probably wind up in the MAM Resource Control.
Section 3	Multics Standard Tape Format (7 pages)		is effectively a duplication of Appendix F in the Ref Guide, Standard Magnetic Tape Format.
Section 4	Commands (33 pages)		are dispersed alphabetically in the MPM Commands.
Section 5	I/O Modules (83 pages)		are dispersed alphabetically in the MPM Subroutines.
Section 6	Programming Examples (18 pages)		deals specifically with writing out and reading in tape segments. If this information is factual and necessary, the Introduction to Multics Programming manual (AG90) may be an appropriate alternative document.

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Communications I/O

This manual consists primarily of commands, subroutines, and I/O modules. In keeping with the philosophy of MTB 594, these entities are more easily identifiable as part of the commands and subroutines manuals.

SECTION	TITLE	PAGES	NEW LOCATION
Section 1	-- Overview of Multics Communications System	(1+ pages)	-- sketches MCS from the perspective of the terminal and could be assumed into other communications documentation or the Ref Guide, as appropriate.
Section 2	-- Use of Terminals on Multics	(21 pages)	-- and
Section 3	-- Terminal Types	(22 pages)	-- apparently were formerly the substance of Appendix B in the Ref Guide, so, in a quick and dirty about face, back they go.
Section 4	-- Commands	(13 pages)	-- are dispersed alphabetically in the MPM Commands.
Section 5	-- Subroutines	(16 pages)	-- are dispersed alphabetically in the MPM Subroutines.
Section 6	-- Input/Output Modules	(76 pages)	-- are dispersed alphabetically in the MPM Subroutines.
Appendix A	-- Names of Communications Channels	(1+ pages)	-- is moved to communications documentation or Ref Guide, as appropriate.
Appendix B	-- Printer Modes and Control Orders	(4 pages)	-- are associated with the remote_teleprinter_ and remote_printer_ I/O modules, so could probably be documented somewhere in the MPM Subroutines, as part of the respective module write-ups.

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RCP User's Guide

Much of this manual is currently duplicated either in the MAM Resource Control (CC74) or in Peripheral I/O (AX49). Much of the rest of it appeared in the pre-9.0 version of CC74. A breakdown, this time by subsection within section, appears below. I move that whatever does not currently appear in CC74 be deposited there, with the exception of the User Commands and User Subroutines sections.

Section 1 -- Introduction (14 pages)

Overview of the Resource Management Facility
Reservation, Assignment, and Attachment --

is duplicated in the current CC74.

Summary of Resource Management Facility Actions
Acquisition --

appeared in pre-9.0 CC74.

Resource Reservation
Device Assignment
Device Attachment --

is duplicated in AX49.

Resource Naming Conventions
Device Names
Volume Names --

appears in slightly different form in CC74 and AX49.

Access Control
Access Control Segments
Access Control Ranges
RCP Effective Access
Manipulating Effective Access --

is duplicated in CC74.

Acquiring Resources
Acquisition to the System Pool
Acquisition by User
Acquisition Upon Registration --

may or may not be original as it appears in this manual.

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Sites Not Enabling Resource Management
Device Limits
I/O Workspaces --

appears in the 10.0 AX49.

Glossary --

appeared in pre-9.0 CC74.

Section 2 -- How to Use Resource Management (2 pages)

User's Guide to Tapes at Sample Site
Tape Registration
Acquisition of Tapes
Access Control --

may or may not be original as it appears in this manual.

Section 3 -- Administrative and User Interfaces (3 pages)

Administrative Data Bases and Interfaces --

is duplicated in CC74.

User Interfaces
Acquiring and Using Resources --

appeared in pre-9.0 CC74.

Naming Rules for Attributes --

is duplicated in CC74.

User Manipulation of Registries --

appeared in pre-9.0 CC74.

Section 4 -- User Commands (22 pages) -- are dispersed alphabetically in the MPM Commands.

Section 5 -- User Subroutines (20 pages) -- are dispersed alphabetically in the MPM Subroutines.

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MPM Reference Guide

Listed below is a recap by section/appendix and present page count of what becomes of the Ref Guide. Note that appendix identifiers are used as they would appear in the next edition of the manual; i.e., what is Appendix C in the current edition becomes Appendix B, and so forth. Some topics within this manual seem to be potential candidates for relocation in other manuals; suggestions/questions accompany these topics.

As for new material, a description of new tape I/O would seem warranted, and an entire section will probably be devoted to describing how to employ the new subsystem utility (ssu) to write interactive subsystems. Some thought is also being given to including a section on data management in anticipation of providing an overview of the new data management software in 10.2; the first version of this section (10.1) would contain a description of vfile (if one can be drugged up).

Section 1 -- Multics Concepts and Characteristics (24 pages)

Section 2 -- Multics Storage System (13 pages)

Section 3 -- Naming and Command Language (19 pages)

Section 4 -- Multics Programming Environment (14 pages)

Section 5 -- Input and Output Facilities (26 pages)

Section 6 -- Access Control (21 pages)

Section 7 -- Handling Unusual Occurrences (54 pages) Can this (or portions of it) be moved to Error Codes or some other such manual?

Section 8 -- Backup (3 pages)

Section 9 -- Administrative Controls (6 pages)

Appendix A -- Use of Terminals on Multics/Terminal Types (43 pages) -- This information (returning from Communications I/O) includes the Multics character sets that form the contents of the currently existing Appendix A in the Ref Guide.

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Appendix B -- Punched-Card Input and Output (22 pages) -- Does this topic (and Appendix G as well) warrant coverage here in the Ref Guide, or could this information be moved to the Bulk I/O (or some other) manual?

Appendix C -- Standard Data Types (14 pages)

Appendix D -- List of Names with Special Meanings (6 pages)

Appendix E -- Standard Magnetic Tape Format (7 pages)

Appendix F -- Standard Checksum (1 page) Is this still relevant; it refers to a Honeywell 6180 computer?

Appendix G -- Returned Output Control Records (4 pages) See Appendix B, above.

Appendix H -- Writing Subsystems in Multics <must distinguish between these and interactive subsystems written using ssu_> (58 pages) -- Basically, this appendix comprises the first three sections from the SWG with some unifying text and appropriate references to where the rest of the information exists. Alternatives include: separate into three appendixes; place any or all three in another more suitable manual (an SDN perhaps?); conclude that someone writing a subsystem doesn't require (some or all of) this information.

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