

MULTICS
SOFTWARE RELEASE BULLETIN
RELEASE MR12.3

PREPARED BY:
MULTICS SUPPORT

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Worldwide
Information
Systems

Bull 

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CONTENTS

		Page
Section 1	Introduction	1-1
Section 2	Highlights of MR12.3	2-1
	Software Change Proposals	2-1
Section 3	Contents of MR12.3	3-1
	Communications System Software	3-1
	Commands	3-1
	Languages	3-2
	C Language	3-2
	PL/1	3-2
	EMACS, Version 12.9	3-3
	MOWSE	3-3
	WSTERM	3-3
	EDITORS	3-4
Section 4	Incompatible Changes	4-0
	Operating System Software	4-0
	ALM Version 6.4	4-0
	OPERATING SYSTEM SOFTWARE	4-0
	Commands	4-0
Appendix A	Commands and Subroutines	A-1
	New Commands	A-1
Appendix B	Multics Priced Software Products	B-1
	Operating System Software	B-1
	Operating System Software Extensions	B-1
	Communications Software	B-1
	Programming Language Software	B-1
	Operating System Utilities and Tools	B-2
	Data Management Software	B-2
	Applications Software	B-2
Appendix C	Documentation Changes	C-1
	Current Multics Documentation Status	C-1
	12.1 Documentation	C-1



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SECTION 1

INTRODUCTION

Multics Release 12.3 (MR12.3) is a complete release and assumes the prior installation of MR12.2. That is, the library tapes are self-supporting and do not require any other information to run Multics.

This document includes descriptions of features included in Multics Release MR12.3.

A separate document, Software Installation Bulletin (SIB), is supplied with the release tapes. The SIB describes the contents of the release tapes and includes procedures for installation of MR12.3.

Additional documentation, including a list of bugs fixed in MR12.3, is provided with the release tapes, either as printable segments on the tape (in a special directory >doc>MR12.3), or as paper copy.

Following is a summary of the remaining of sections in this document.

Section 2
summarizes important highlights

Section 3
describes significant software changes

Section 4
describes incompatible changes

Appendix A
contains a partial list of new commands, active functions, and subroutines

Appendix B

contains a list of Priced Software Products. These items are available only through contractual actions with a Bull H N sales representative

Appendix C

describes the associated documentation

SECTION 2

HIGHLIGHTS OF MR12.3

This section contains a brief summary of the most important items in this release. Refer to Section 3 for a more detailed description.

A brief description of known bugs fixed in this release is available in the segment >doc>MR12.3>TRs_fixed_in_MR12.3.

SOFTWARE CHANGE PROPOSALS

- There were no Software Change Proposals (SCP) submitted for release MR12.3.

SECTION 3

CONTENTS OF MR12.3

COMMUNICATIONS SYSTEM SOFTWARE

Commands

1. Modified the system command to use the process date_time format rather than the concatenation of the process_date and time format for all keywords starting with date_time_**.
2. Added the capability to specify starnames as input to the dsmla command. The dsmla command will now display aliases associated with the specified name as well as the specified name itself.
3. Modified the listing of memos created with a -repeat_when_processed memo control_argument. The change (in the flags description) is from per_process to repeat_when_processed.
4. When copying a non-empty mailbox along with its max_length characteristic, the copy would prematurely terminate with an error of "The requested action was not performed". This is being changed to allow the copy to continue. The consequences are that under this condition, the max_length of the target of the copy will keep the default max_length from when it was created, as opposed to the expected value from the source. The following commands and subroutines will be affected copy, move, copy_dir, move_dir, copy_, copy_seg_ and copy_dir_.
5. Added the gate entry mail_table_priv_\$delete_alias_case_ins to permit case-insensitive alias deletions by the update_mail_table_entry command.

6.
 1. Modified the display format for `display_volume_log` to print at 79 characters per line. Also the ability to display the disk label of the volume presented in the volog is added through the `-label`, `-no_label` and `-all` control arguments.
 2. Modified display format of `display_pvolog` to print in columnized output of 79 characters per line.
 3. Changed the `set_volume_log` command to allow the setting of the number of consolidated and incremental reload groups through the `-incr_sets` and `-cons_sets` control arguments.
 4. Enhanced the purging mechanism to provide better control over reload groups.
 5. Removed the `-incr_skip_count` argument for the volume dumper commands. The new `-purge_volume_log` (`-pvl`) control argument is now used instead. Please use the `set_volume_log` command to establish the correct reload groups for your site. Please type: "help set_volume_log" for details.

LANGUAGES

C Language

- A- 1. Modified the `C_compile` command's control argument `-table` (`-tb`) so it will no longer cause the generation of a linkage editor listing, use the `-list` (`-ls`) control argument instead. The `C_compile` command now finds the default C runtime library using standard search rules.
- A- 2. Modified the C runtime system and the execution family of routines to properly set their return values. This value contains information about nonstandard operation of the child process.

PL/1

- B- 1. Added the `-version` (default) and `-no_default` control arguments to the PL/1 Compiler.
- B- 2. Modified the PL/1 Compiler to generate warnings when an options (constant) variable occurs on the LHS of an assignment statement.

- B- 3. Modified the PL/1 Compiler to allow use of the named constants as replication factors.

EMACS, Version 12.9

- C- 1. 1. Modified f (rmail-forward) to forward the current message to an address (list) that will be prompted for. A numeric argument will allow the user to enter redistribution comments via a comments buffer.
2. Modified x (rmail-toggle-seen) to toggle the seen switch on the current message. This switch is displayed to the user as the minor mode "Seen" and will be turned on immediately a message is brought into the RMAIL buffer to be displayed.
3. Modified ? (rmail-help) to display brief information about each of the RMAIL mode (additionally the reply and comment buffers) requests that are available.
4. Modified q (rmail-quit) is being modified to only question a user quitting when no rmail commands have been entered between the arrival of new mail and requesting of rmail-quit.
- C- 2. Modified emacs -line_length NN control argument so that NN will be expected to describe the useable number of columns on the screen. The value of NN used to be required to be one greater than the screen capability.

MOWSE

- D- 1. Added the control order get_event_channel to mowse_io so that programs which require the use of a foreground data event channel, such as dial_out, may request the identification of the ipc_event channel.

WSTERM

E- 1.

1. A new keyboard input routine will be added which will allow some EMACS-like editing capabilities on keyboard input before sending a line to the host.
2. Input going to and coming from the host will be trapped by WSTERM to allow the data to be stored to a file and/or printed as it is being displayed.
3. Lines of input will be saved in a circular buffer each time they are entered to allow them to be retrieved later.

EDITORS

F- 1.

Modified qedx to allow whitespaces between the "q" request and the NL character.

SECTION 4

INCOMPATIBLE CHANGES

OPERATING SYSTEM SOFTWARE

ALM Version 6.4

- A- 1. This version of the assembler contains a new pseudo-op "error", several bug fixes, and discontinuation of the obsolete "followon" pseudo-op. It's use will now incur a B error. The "error" pseudo-op causes the fatal error flag to be set which results in the "Translation failed." message being issued at the end of the assembly. "-nsb" will now be accepted as an abbreviation for "-no_symbols". The assembler will now prevent itself from being invoked recursively.

OPERATING SYSTEM SOFTWARE

Commands

- B- 1. The `-incr_skip_count` argument for the volume dumper commands has been removed. The new `-purge_volume_log (-pvl)` is now used instead.

APPENDIX A

COMMANDS AND SUBROUTINES

This is a partial listing of new commands for MR12.3. There are no new subroutines for MR12.3. A brief description of the command functionality is included. Refer to info segments or the appropriate manuals for more information.

NEW COMMANDS

There are no new commands or subroutines for MR12.3.

APPENDIX B

MULTICS PRICED SOFTWARE PRODUCTS

PRODUCT NUMBER	TITLE
<u>OPERATING SYSTEM SOFTWARE</u>	
SGS6800	Multics Operating System EXEC (see Note 1 below)
SGS6801	GCOS (III) Timesharing Environment Facility
SGS6803	FAST/DFAST (Fast Access System for Timesharing)
SGS6804	GCOS (III) Batch Environment Facility (see Note 1)
<u>OPERATING SYSTEM SOFTWARE EXTENSIONS</u>	
SGC6823	Inter Multics File Transfer Facility
SGE6800	Multics System Software Extensions (see Note 4)
SGE6802	Remote Job Entry Facility
<u>COMMUNICATIONS SOFTWARE</u>	
SGC6800	Multics Communications System (Multics CS)
SGC6801	Autocall Support Option to Multics CS
SGC6802	3270 Support Option to Multics CS
SGC6803	Basic Bisync Support Option to Multics CS
SGC6804	G115 Support Option to Multics CS
SGC6805	File Transfer Facility
SGC6807	Multics HASP Facility
SGC6822	Multics Communications Support for X.25
SGC6827	Personal Computer Support Facility
SGC6828	Multics Online Workstation Environment
<u>PROGRAMMING LANGUAGE SOFTWARE</u>	
SGL6801	FORTTRAN Compiler and Runtime Facility
SGL6802	Basic Compiler and Runtime Facility

SGL6803 COBOL-74 Compiler and Runtime Facility
SGL6805 MRPG (Report Generator) Facility
SGL6806 APL (Version 5.02)
SGL6807 Pascal Compiler and Runtime Facility
SGL6808 C Compiler and Runtime

OPERATING SYSTEM UTILITIES AND TOOLS

SGD6806 Executive Mail System
SGD6807 Format Document Facility
SGU6800 WORDPRO Comprehensive Facility
SGU6801 SORT/MERGE Facility
SGU6803 LISTER Facility
SGU6804 SPEEDTYPE Facility
SGU6805 Dictionary Tools
SGU6807 Extended Mail Facility
SGU6820 Compose Facility
SGU6833 TED (Text Editor)
SGU6834 Emacs Text Processing Facility
SGU6835 Offline Page Printing System Support Facility

DATA MANAGEMENT SOFTWARE

SGC6824 Multics Forum Facility
SGD6800 MRDS (Multics Relational Data Store)
SGD6801 LINUS (Logical Inquiry and Update System)
SGC6826 Multics Executive Forum Facility

APPLICATIONS SOFTWARE

AGS6801 Timesharing Library (see Note 3)
AGS6802 ISTAT (Interactive Statistics) (see Note 3)
AGS6803 Graphics Facility
AGS6805 SCICONIC Mathematical Programming Package
AGS6806 SCICONIC Matrix Generator Facility
SGH6801 Simplified Computing and Filing Facility
SGH6802 TEXTO Document Management System and
LOGOTEL User Interface for TEXTO
SGH6804 MegaCalc Spread Sheet Package

Notes:

1. Licensed for use without separate charge to users acquiring a central processor system from Bull H N.
2. Class II - Maintained only.
3. Class III - Unsupported.

4. Required for normal Multics operation and to support any additional separately priced software products.

APPENDIX C

DOCUMENTATION CHANGES

CURRENT MULTICS DOCUMENTATION STATUS

A complete list of manuals (including current availability status) is provided in >doc>info>manuals.info. Subsequent to this release a SiteSA may obtain an updated list of available manuals at >doc>info>manuals.info on System M.

12.1 Documentation

There are no new or updated publications to support MR12.3. Updates to manuals are provided by errata info files found in >doc>info. Shown below are the errata, with add name, which have been created for MR12.3.

errata.ak50.info
 Sys_Admin_Procedures_manual.info
errata.am81.info
 Sys_Maintenance_Proc_manual.info
errata.am82.info
 Basic_manual.info
errata.at58.info
 Fortran_manual.info
errata.az49.info
 LINUS.info
errata.cj52.info
 EMACS_Ext_Writers_Guide.info
errata.gb58.info
 Common_Commands_manual.info

For the convenience of new user sites, a complete list of Multics manuals, is provided below. For information about how to order manuals, type "help order_manuals," on your system.

AG90 Introduction to Programming on Multics
AG91 Multics Programmer's Reference Manual
AG92 Multics Commands and Active Functions
AG93 Multics Subroutines and Input/Output Modules
AG94 Multics PL/I Language Specification
AK50 Multics System Administration Procedures
AK51 Multics Project Administrator's Guide
AK95 Multics APL User's Guide
AL39 Multics Processor Manual
AM81 Multics System Maintenance Procedures
AM82 Multics BASIC
AM83 Multics PL/I Reference Manual
AN05 Multics GCOS Environment Simulator
AN50 Guide to Multics Manuals
AS40 Multics Graphics System
AS43 Multics COBOL User's Guide
AS44 Multics COBOL Reference Manual
AT58 Multics FORTRAN Manual
AT59 Multics DFAST Subsystem User's Guide
AU25 Multics FAST Subsystem Reference Guide
AU77 Multics Online Test and Diagnostics Reference Manual
AW17 Multics Commands and Active Functions Quick Reference Guide
AW32 Multics SORT/MERGE
AW53 Multics Relational Data Store Reference Manual
AZ49 Multics Logical Inquiry and Update System Reference Manual
AZ98 Multics WORDPRO Reference Manual
CC69 Multics Report Program Generator Reference Manual
CC70 Multics FORTRAN User's Guide
CC75 Multics Communications Administration
CG40 Multics qedx Text Editor User's Guide
CH23 Multics Extended Mail System User's Guide
CH24 New User's Introduction to Multics--Part I
CH25 New User's Introduction to Multics--Part II
CH26 Multics Error Messages: Primer and Reference Manual
CH27 Emacs Text Editor User's Guide
CJ52 Multics Emacs Extension Writer's Guide
CJ97 Multics Page Processing System Utility Manual
CP31 Level 68 Introduction to Emacs Text Editor
CP50 Multics Text Editor (Ted) Reference Manual
CP51 Multics Menu Creation Facilities
CX20 Fundamentals of Multics Executive Mail
CX72 Executive Mail Editing Operations (Reference Card)
CY73 Inter-Multics File Transfer Facility Reference Guide
CY74 Multics Forum Interactive Meeting System User's Guide
DJ18 Guide to Multics WORDPRO for New Users
DU06 Fundamentals of Multics Forum Interactive Meeting System
DW19 Multics MegaCalc User's Guide

DX71 Fundamentals of Multics Executive Forum
GB58 Multics Common Commands
GB59 DPS 6/Multics Satellite 6M Reference Manual
GB60 Multics HASP Service and Utility Manual
GB61 Operator's Guide to Multics
GB62 Multics Pascal User's Guide
GB63 Multics Report Writer Reference Manual
GB64 Multics Administration, Maintenance, and Operations Cmds
GB65 Multics/Personal Computer File Transmission Facilities
GB66 Multics On-Line Work Station End User's Guide
GL71 Multics Simplified Computing and Filing Facility
GN08 Multics Emacs Reference Card
HH07 Multics C Compiler User's Guide



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