TO: Distribution

FROM: Joan Archer

DATE: 13 May 75

RE: Multics Change Requests

Enclosed are copies of Multics Change Requests which were
approved from 16 April 75 to 30 April 75.

Multics Change Request

TITLE: Eliminate extra message in delete

AUTHOR: Steve Herbst

STATUS	DATE	
Written	04/15/75	
Status	A 04/29/75	
Expires	10/29/75	

- Coded in: [X] PL/I [ ] ALM [ ] other-
  explain in DETAILED PROPOSAL
- Planned for System MR_____
- Fixes Bug Number(s)_____
- Documented in MTB_____
- User/Operations-visible
  Interface change? [ ] yes [X] no
- Incompatible change? [ ] yes [X] no
- Performance: [ ] Better [X] Same
  [ ] Worse
- Replaces MCR_____

Category (Check One)	
	Lib. Maint. Tools
	Sys. Anal. Tools
	Sys. Prog. Tools
	355
	BOS
	Salvager
	Ring Zero
	Ring One
	SysDaemon/Admin.
	Runtime
X	User Cmmd/Subr.

DOCUMENTATION CHANGES

Document	Specify One or More
MPM (Vol, Sect.)	
PLMS (AN #)	
MOSN (Sect.)	
MPAM (Sect.)	
MSAM (Sect.)	
Info Segs	
Other (Name)	
None (Reason)	no change

Objections/Comments:

Use these headings: SUMMARY, REASONS, IMPLICATIONS, DETAILED PROPOSAL (Optional)

SUMMARY:

Prevent the delete command from printing the error
message:

"Segment foo not deleted"

after the user answers no to a query.

REASON:

This extra message occurs for an argument that does
not implement the star convention. The stars case
works correctly.

TITLE: Fix bug in delete_ AUTHOR: S. Herbst	STATUS	DATE

	STATUS	DATE
	Written	04/15/75
	Status	A 04/29/75
	Expires	10/29/75

- Coded in: [X] PL/I [ ] ALM [ ] other- explain in DETAILED PROPOSAL
- Planned for System MR _____
- Fixes Bug Number(s) _____
- Documented in MTB _____
- User/Operations-visible Interface change? [X] yes [ ] no
- Incompatible change? [ ] yes [X] no
- Performance: [ ] Better [X] Same [ ] Worse
- Replaces MCR _____

Category (Check One)

	Category
	Lib. Maint. Tools
	Sys. Anal. Tools
	Sys. Prog. Tools
	355
	BOS
	Salvager
	Ring Zero
	Ring One
	SysDaemon/Admin.
	Runtime
X	User Cmmd/Subr.

DOCUMENTATION CHANGES

Document	Specify One or More
MPM (Vol, Sect.)	
PLMS (AN #)	
MOSN (Sect.)	
MPAM (Sect.)	
MSAM (Sect.)	
Info Segs	
Other (Name)	
None (Reason)	no change

Objections/Comments:

Use these headings: SUMMARY, REASONS, IMPLICATIONS, DETAILED PROPOSAL (Optional)

SUMMARY:

Fix bug in delete_ that prevents an empty directory from being deleted if its safety switch is on.

REASONS:

A recent change (MCR 786) handles the case of an upgraded directory by calling hcs_$delentry_file before hcs_$del_dir_tree. The code checks for error_table_$fulldir as an acceptable error code but ignores the possibility of getting error_table_$safety_sw_on and passes this code back to the caller without taking further action.

Multics Change Request

TITLE: Pass order and changemode calls through card format DIMs.

AUTHOR: J. C. Whitmore

STATUS	DATE
Written	4/14/75
Status	A 04/29/75
Expires	10/29/75

-Coded in: [X] PL/I [X] ALM [ ] other-explain in DETAILED PROPOSAL

-Planned for System MR 2.2

-Fixes Bug Number(s) NA

-Documented in MTB NA

-User/Operations-visible Interface change? [X] yes [ ] no

-Incompatible change? [ ] yes [X] no

-Performance: [ ] Better [X] Same [ ] Worse

-Replaces MCR _____

Category (Check One)

	Lib. Maint. Tools
	Sys. Anal. Tools
	Sys. Prog. Tools
	355
	BOS
	Salvager
	Ring Zero
	Ring One
	SysDaemon/Admin.
X	Runtime
	User Cmmd/Subr.

DOCUMENTATION CHANGES

Document	Specify One or More
MPM (Vol, Sect.)	
PLMS (AN #)	
MOSN (Sect.)	
MPAM (Sect.)	
MSAM (Sect.)	
Info Segs	
Other (Name)	
None (Reason)	only the daemon cares

Objections/Comments:

Use these headings: SUMMARY, REASONS, IMPLICATIONS, DETAILED PROPOSAL (Optional)

SUMMARY: Add "order" and "changemode" entries in the raw_dim IOSIM which will be common to all card format dims (i.e., raw, viipunch, mcc and flipper). Since these dims are spliced between some stream (switch) and a card I/O stream (switch), the new entries will simply pass their arguments on to the stream (switch) to which they are attached.

Reasons: These dims do not implement order and changemode entries. Therefore, a stream name cannot be passed as an argument to a procedure which needs to order a "runout" without also supplying the name of the stream (switch) to which it is attached. Passing these calls through is a more general approach and will lead to cleaner code in the I/O daemon and card daemon.

Implications: The status codes returned from these entries will change. However, since they are not implemented, no one calls them. Only the Daemons care.

MCR 1128
Page I of I

Multics Change Request

TITLE: Change mail_errfiles for new mail

AUTHOR: S. Herbst

STATUS	DATE
Written	04/17/75
Status	A 04/29/75
Expires	10/29/75

-Coded in: [X] PL/I [ ] ALM [ ] other-
explain in DETAILED PROPOSAL

-Planned for System MR _____

-Fixes Bug Number(s) _____

-Documented in MTB _____

-User/Operations-visible
Interface change? [ ] yes [X] no

-Incompatible change? [ ] yes [X] no

-Performance: [ ] Better [S] Same
[ ] Worse

-Replaces MCR _____

Category (Check One)	
	Lib. Maint. Tools
	Sys. Anal. Tools
	Sys. Prog. Tools
	355
	BOS
	Salvager
	Ring Zero
	Ring One
X	SysDaemon/Admin.
	Runtime
	User Cmmd/Subr.

DOCUMENTATION CHANGES

Document	Specify One or More
MPM (Vol, Sect.)	
PLMS (AN #)	59
MOSN (Sect.)	
MPAM (Sect.)	
MSAM (Sect.)	
Info Segs	
Other (Name)	
None (Reason)	

Objections/Comments:

Use these headings: SUMMARY, REASONS, IMPLICATIONS, DETAILED PROPOSAL (Optional)

SUMMARY:

Change the program mail_errfiles, used by backup, to work
with new mailboxes (and old mailboxes).

REASON:

A new mail command is being installed and many users will
only have new ring 1 mailboxes that must be referenced by
special calls.

Multics Change Request

TITLE: Fix bugs in mexp

AUTHOR: Steve Webber

-Coded in: [X] PL/I [ ] ALM [ ] other-
explain in DETAILED PROPOSAL
-Planned for System MR _____
-Fixes Bug Number(s) unreported
-Documented in MTB _____
-User/Operations-visible
 Interface change? [ ] yes [X] no
-Incompatible change? [ ] yes [X] no
-Performance: [ ] Better [X] Same
 [ ] Worse
-Replaces MCR _____

Objections/Comments:

Category (Check One)	
	Lib. Maint. Tools
	Sys. Anal. Tools
X	Sys. Prog. Tools
	355
	BOS
	Salvager
	Ring Zero
	Ring One
	SysDaemon/Admin.
	Runtime
	User Cmnd/Subr.

STATUS	DATE
Written	04/17/75
Status	A 04/29/75
Expires	10/29/75

DOCUMENTATION CHANGES

Document	Specify One or More
MPM (Vol, Sect.)	
PLMS (AN #)	
MOSN (Sect.)	
MPAM (Sect.)	
MSAM (Sect.)	
Info Segs	
Other (Name)	
None (Reason)	no change

Use these headings: SUMMARY, REASONS, IMPLICATIONS, DETAILED PROPOSAL (Optional)

SUMMARY:

1. Change mexp to create its output segment (foo.alm) in the working directory by default.

2. Fix bug when an iteration list of the form:

&(--- &)

does not specify the argument to iterate over.

REASONS:

1. Standard Multics conventions default to the working directory.

2. Fix bug.

TITLE: Fix bug in illegal_procedure.		STATUS	DATE

AUTHOR: Steve Webber

		STATUS	DATE
		Written	04/17/75
		Status	A 04/29/75
		Expires	10/29/75

-Coded in: [X] PL/I [ ] ALM [ ] other- explain in DETAILED PROPOSAL	Category (Check One)
	Lib. Maint. Tools
-Planned for System MR	Sys. Anal. Tools
-Fixes Bug Number(s) unreported	Sys. Prog. Tools
-Documented in MTB	355
-User/Operations-visible	BOS
Interface change? [ ] yes [X] no	Salvager
-Incompatible change? [ ] yes [X] no	Ring Zero
-Performance: [ ] Better [X] Same	Ring One
[ ] Worse	SysDaemon/Admin.
-Replaces MCR	X Runtime
	User Cmmd/Subr.

DOCUMENTATION CHANGES

Document	Specify One or More
MPM (Vol, Sect.)	
PLMS (AN #)	
MOSN (Sect.)	
MPAM (Sect.)	
MSAM (Sect.)	
Info Segs	
Other (Name)	
None (Reason)	no change

Objections/Comments:

Use these headings: SUMMARY, REASONS, IMPLICATIONS, DETAILED PROPOSAL (Optional)

SUMMARY:

Change illegal_procedure so that it fetches the opcode
of interest from the SCU data it is given rather than
from the text as pointed to by the instruction counter
and procedure pointer register (also in the given machine
conditions).

REASONS:

The simulation of zero-length string moves does not work
if the EIS instruction being executed is invoked via an
XEC instruction.

Ver. 3		
741022	MULTICS CHANGE REQUEST	MCR 1131

TITLE: Fix bugs in cross_reference	**STATUS** | **DATE**
	Written | 04/14/75
AUTHOR: Paul Green	Status | A 04/29/75
	Expires | 10/14/75

Planned for System: not applicable
Fixes Bug Number(s):   not applicable
Documented in MTB: not applicable
Incompatible Change: no
User/Operations-visible Interface Change: no
Coded in: (■)PL/I ( )ALM ( )other-see below
Performance: ( )better (■)same ( )worse

CATEGORY (check one)
( )Lib. Maint. Tools
( )Sys. Anal. Tools
(■)Sys. Prog. Tools
( )355
( )BOS
( )Salvager
( )Ring Zero
( )Ring One
( )SysDaemon/Admin
( )Runtime
( )User Command/Subr

DOCUMENTATION CHANGES (specify one or more)
MPM (vol,sect)   MPAM (sect)
MOSN (sect)   MSAM (sect)
PLMs (AN#)
Info Segs
Other
None (reason) no change to documentation
OBJECTIONS/COMMENTS:

Headings are: SUMMARY, REASONS, IMPLICATIONS, DETAILED PROPOSAL (optional)

SUMMARY:
    Fix some bugs in the cross referencer accidentally introduced while
converting it to Version 2.

REASONS:
    Some errors which used to be non-fatal are now fatal (encountering
non-object segments in the library, etc).

IMPLICATIONS:
    The standard hardcore driving file (hard.crl) will be operable again.

DETAILED PROPOSAL:
    Fixes are coded and tested.

Multics Change Request

STATUS	**DATE**
Written	04/17/75
Status	A 04/29/75
Expires	10/29/75

TITLE: Change find_condition_info_ to get a pointer to signaller's argument list in a better way

AUTHOR: S. Webber

-Coded in: [x] PL/I [ ] ALM [ ] other-
 explain in DETAILED PROPOSAL
-Planned for System MR _____
-Fixes Bug Number(s) _____
-Documented in MTB _____
-User/Operations-visible
 Interface change? [ ] yes [X] no
-Incompatible change? [ ] yes [X] no
-Performance: [ ] Better [X] Same
 [ ] Worse
-Replaces MCR _____

Category (Check One)

Category
Lib. Maint. Tools
Sys. Anal. Tools
Sys. Prog. Tools
355
BOS
Salvager
Ring Zero
Ring One
SysDaemon/Admin.
Runtime
User Cmmd/Subr.

DOCUMENTATION CHANGES

Document	Specify One or More
MPM (Vol, Sect.)	
PLMS (AN #)	
MOSN (Sect.)	
MPAM (Sect.)	
MSAM (Sect.)	
Info Segs	
Other (Name)	
None (Reason)	no change

Objections/Comments:

Use these headings: SUMMARY, REASONS, IMPLICATIONS, DETAILED PROPOSAL (Optional)

SUMMARY:

Change find_condition_info_ to get a pointer to signaller's argument list by fetching the argument list pointer from the stack frame of the program signaller called rather than assuming the argument list is at 118 in the stack frame.

REASONS:

It is much easier to reformat signaller's stack frame when the need arises.

TITLE:	Filter access_class in append$create_branch_	STATUS	DATE
AUTHOR:	A. Kobziar	Written	04/09/75
		Status	A 04/29/75
		Expires	10/29/75

-Coded in: [X] PL/I [ ] ALM [ ] other- explain in DETAILED PROPOSAL
-Planned for System MR ___
-Fixes Bug Number(s) ___
-Documented in MTB ___
-User/Operations-visible Interface change? [ ] yes [X] no
-Incompatible change? [ ] yes [XX] no
-Performance: [ ] Better [X] Same [ ] Worse
-Replaces MCR   1118

Category (Check One)

	Category		
	Lib. Maint. Tools		
	Sys. Anal. Tools		
	Sys. Prog. Tools		
	355		
	BOS		
	Salvager		
X	Ring Zero		
	Ring One		
	SysDaemon/Admin.		
	Runtime		
	User Cmmd/Subr.		

DOCUMENTATION CHANGES

Document	Specify One or More
MPM (Vol, Sect.)	
PLMS (AN #)	
MOSN (Sect.)	
MPAM (Sect.)	
MSAM (Sect.)	
Info Segs	
Other (Name)	
None (Reason)	

Objections/Comments:

Use these headings: SUMMARY, REASONS, IMPLICATIONS, DETAILED PROPOSAL (Optional)

SUMMARY: Change append$create_branch_ to zero all illegal bits in an access class argument. This will be done by taking the logical "and" of the access_class and sys_info$access_class_ceiling.

Reasons: The access class is checked by aim_check for the correct value of the first 54 bits only. Any value in the last 18 bits is currently acceptable to create_branch_, but only 0 is acceptable to the salvager since it uses these bits for a validity check. If any of these bits are on, then the whole access class is assumed clobbered. Append should insure that the initial setting of these bits is 0.

Multics Change Request

TITLE: Fix bug in qedx regular expression matching

AUTHOR: M.A. Meer

STATUS	DATE	
Written	04/17/75	
Status	A 04/29/75	
Expires	10/29/75	

-Coded in: [X] PL/I [ ] ALM [ ] other-
 explain in DETAILED PROPOSAL
-Planned for System MR _____
-Fixes Bug Number(s) _____
-Documented in MTB _____
-User/Operations-visible
 Interface change? [ ] yes [X] no
-Incompatible change? [ ] yes [X] no
-Performance: [X] Better [ ] Same
  [ ] Worse
-Replaces MCR _____

Category (Check One)

	Lib. Maint. Tools
	Sys. Anal. Tools
	Sys. Prog. Tools
	355
	BOS
	Salvager
	Ring Zero
	Ring One
	SysDaemon/**Admin.**
	Runtime
X	User Cmmd/Subr.

DOCUMENTATION CHANGES

Document	Specify One or More
MPM (Vol, Sect.)	
PLMS (AN #) 67	
MOSN (Sect.)	
MPAM (Sect.)	
MSAM (Sect.)	
Info Segs	
Other (Name)	
None (Reason)	

Objections/Comments:

Use these headings: SUMMARY, REASONS, IMPLICATIONS, DETAILED PROPOSAL (Optional)

SUMMARY:

1)   Fix bug which caused error in regular expression
     matching using certain .* configurations.

2)   Update search_file_, the module involved, to EIS.

3)   Make search_file_ externally available by adding
     its name to bound_qedx_ and retaining it in the
     bind file.

Multics Change Request

TITLE:	Fix qedx bugs	STATUS	DATE

AUTHOR: M. A. Meer

		STATUS	DATE
		Written	04/17/75
		Status	A 04/29/75
		Expires	10/29/75

-Coded in: [X]PL/I [ ]ALM [ ]other-
explain in DETAILED PROPOSAL
-Planned for System MR _____
-Fixes Bug Number(s)_____
-Documented in MTB _____
-User/Operations-visible
  Interface change? [ ]yes [X]no
-Incompatible change? [ ]yes [X]no
-Performance: [X]Better [ ]Same
  [ ]Worse
-Replaces MCR_____

Category (Check One)	
Lib. Maint. Tools	
Sys. Anal. Tools	
Sys. Prog. Tools	
355	
BOS	
Salvager	
Ring Zero	
Ring One	
SysDaemon/Admin.	
Runtime	
X	User Cmmd/Subr.

DOCUMENTATION CHANGES

Document	Specify One or More
MPM (Vol, Sect.)	
PLMS (AN #)	
MOSN (Sect.)	
MPAM (Sect.)	
MSAM (Sect.)	
Info Segs	
Other (Name)	
None (Reason)	

Objections/Comments:

Use these headings: SUMMARY, REASONS, IMPLICATIONS, DETAILED PROPOSAL (Optional)

SUMMARY:

Fix the following bugs:

1)   out of bounds on large segment sometimes.

2)   fix error output which caused double
     printing of some errors.

3)   does not recognize & after escaped new
     line but does if space inserted after
     the new line.

Update to EIS qedx and edx_util_.

Multics Change Request

TITLE:	Resource Control Package

AUTHOR: B. Silver

STATUS	DATE
Written	04/17/75
Status	A 04/29/75
Expires	10/29/75

-Coded in: ☐PL/I ☐ALM ☐other- explain in DETAILED PROPOSAL	Category (Check One)	
		Lib. Maint. Tools
-Planned for System MR _____	X	Sys. Anal. Tools
-Fixes Bug Number(s) _____	X	Sys. Prog. Tools
-Documented in MTB ___184___		355
-User/Operations-visible		BOS
Interface change? ☒yes ☐no		Salvager
-Incompatible change?☐yes☒no	X	Ring Zero
-Performance: ☐Better☒Same	X	Ring One
☐ Worse	X	SysDaemon/Admin.
-Replaces MCR _____		Runtime
	X	User Cmnd/Subr.

DOCUMENTATION CHANGES

Document	Specify One or More
MPM (Vol, Sect.)	Commands
PLMS (AN #)	Supervisor I/O
MOSN (Sect.)	4.3.8.4, 6.2.2, 10.2.6.
MPAM (Sect.)	
MSAM (Sect.)	
Info Segs	tdcm_changes; RCP commands
Other (Name)	
None (Reason)	

Objections/Comments:

Use these headings: SUMMARY, REASONS, IMPLICATIONS, DETAILED PROPOSAL (Optional)

SUMMARY:

This MCR describes the complete installation procedure for
the initial implementation of the Resource Control Package.

REASONS: IMPLICATIONS: (See MTB 184)

DETAILED PROPOSAL:

Phase I - Install a dummy rcp_init and dummy RCP gates. These
          gates will support most of the RCP facilities. They
          will use existing ring Ø facilities.
Phase II - Update and install all of the required users of RCP.
           . all I/O modules that interface directly with IOI
           . T&D programs
           . answering service
           . RCP commands
Phase III - install the real RCP. pioi_, tape_attach and
            io_disk_attach will be deleted from ring Ø.
Phase IV - Delete any tools and answering service programs
           that were needed during Phase II but have become
           obsolete due to Phase III.

Ver. 3 741022	MULTICS CHANGE REQUEST	MCR 1138

TITLE: New version of system_control_		STATUS DATE
		Written 04/15/75
AUTHOR: VanVleck		Status A 04/29/76
		Expires 10/15/75

Planned for System: not applicable	
Fixes Bug Number(s): not applicable	CATEGORY (check one)
Documented in MTB: not applicable	( )Lib. Maint. Tools
Incompatible Change: no	( )Sys. Anal. Tools
User/Operations-visible Interface Change: no	( )Sys. Prog. Tools
Coded in: (■)PL/I ( )ALM ( )other-see below	( )355
Performance: ( )better (■)same ( )worse	( )BOS
	( )Salvager
DOCUMENTATION CHANGES (specify one or more)	( )Ring Zero
MPM (vol,sect) MPAM (sect)	( )Ring One
MOSN (sect) MSAM (sect)	(■)SysDaemon/Admin
PLMs (AN#) an66	( )Runtime
Info Segs	( )User Command/Subr
Other	

OBJECTIONS/COMMENTS:

Headings are: SUMMARY, REASONS, IMPLICATIONS, DETAILED PROPOSAL (optional)

Summary:

Split the current program system_control_ into seventeen smaller programs. Six of these programs need not be on the system tape; move them to bound_oprcons_.

Convert system_control_ to iox_.

Reasons:

The current system_control_ module is 1194 lines of source long. In addition, it includes the declarations of the answer table and the mc_anstbl, making it very difficult to change the format of these data bases. The convoluted flow of control within the program has caused confusing and disheartening bugs in the past and will no doubt do so in the future. The use of the obsolete ios_ interfaces must be eliminated; if system_control_ is converted, we can move a step closer to deleting ios_ from the system tape.

Implications:

No change to functions provided by system_control_. No measurable improvement in performance. Considerable improvement in reliability and maintainability.

Detailed Proposal:

Bound_system_control_ will consist of:
```
system_control_              main loop
sc_parse_                    command parse and lookup
sc_command_handlers_         command execution
sc_init_                     initialization
sc_admin_command_            admin command execution
sc_command                   command interface for ec's
sc_signal_handler_           error reporting
fln_admin_                   utility
kill_sc_process_             utility
find_communications_seg_     utility
```

The following programs will be added to bound_oprcons_:
```
mc_tty_                      tty input: executes commands
turn_on_mc_                  initialization
mc_write_                    utility
restart_mc_ttys_             error recovery
borrow_tty_from_mc_          admin mode support
return_tty_to_mc_            admin mode support
```

Minor changes will be made to the answering service to make as_$shutdown return an error code if a shutdown cannot be done because users are logged in.

An iox compatibility write-around has been provided for the oc_ dim already.

TITLE: Fix msf_manager_ to handle the root

AUTHOR: S. Herbst

STATUS	DATE	
Written	04/21/75	
Status	A 04/29/25	
Expires	10/29/25	

-Coded in: [X] PL/I [ ] ALM [ ] other-
 explain in DETAILED PROPOSAL
-Planned for System MR _____
-Fixes Bug Number(s) _____
-Documented in MTB _____
-User/Operations-visible
 Interface change? [ ] yes [X] no
-Incompatible change? [ ] yes [X] no
-Performance: [ ] Better [X] Same
 [ ] Worse
-Replaces MCR _____

Category (Check One)

	Category
	Lib. Maint. Tools
	Sys. Anal. Tools
	Sys. Prog. Tools
	355
	BOS
	Salvager
	Ring Zero
	Ring One
	SysDaemon/Admin.
	Runtime
X	User Cmmd/Subr.

DOCUMENTATION CHANGES

Document	Specify One or More
MPM (Vol, Sect.)	
PLMS (AN #)	
MOSN (Sect.)	
MPAM (Sect.)	
MSAM (Sect.)	
Info Segs	
Other (Name)	
None (Reason)	No interface change

Objections/Comments:

Use these headings: SUMMARY, REASONS, IMPLICATIONS, DETAILED PROPOSAL (Optional)

SUMMARY:

Fix bug in msf_manager_ causing it to work improperly
on MSF's off the root.

REASONS:

The concatenated pathname of the MSF directory, stored
in the file control block and used to reference components,
contains an extra ">" for an MSF off the root.

```
I Ver. 3                                              I
I 741022            MULTICS CHANGE REQUEST            I   MCR___1143_____
I                                                     I
I_____    I_____
I TITLE:   Fix locking bug in online installation     I_STATUS__I__DATE_____
I          tools.                                     I_Written_I__04/16/75_
I AUTHOR: P. Kelley                                   I_Status__I_A04/29/75_
I_____     I_Expires_I__10/16/75_
I Planned for System:   not applicable                I
I Fixes Bug Number(s):   ■                            I_CATEGORY_(check one)
I Documented in MTB:   not applicable                 I(■)Lib. Maint. Tools
I Incompatible Change:   no                           I( )Sys. Anal. Tools
I User/Operations-visible Interface Change:   no      I( )Sys. Prog. Tools
I Coded in: (■)PL/I ( )ALM ( )other-see below         I( )355
I Performance: (■)better ( )same ( )worse             I( )BOS
I_____     I( )Salvager
I_DOCUMENTATION_CHANGES_(specify_one_or_more)_____    I( )Ring Zero
I MPM (vol,sect)             MPAM (sect)               I( )Ring One
I MOSN (sect)                MSAM (sect)               I( )SysDaemon/Admin
I PLMs (AN#)      AN80 - (no changes necessary)        I( )Runtime
I Info Segs                                            I( )User Command/Subr
I Other                                               I
I_____     I_____
I OBJECTIONS/COMMENTS:                                I
I                                                     I
I                                                     I
I                                                     I
I_____
Headings are:  SUMMARY, REASONS, IMPLICATIONS, DETAILED PROPOSAL (optional)
```

Summary:
    There exists a locking bug in the installation tools such
that two lock segments are created when only one is needed. This
proposal will modify the locking program so that only one lock
segment is used.

    At this time a minor ACL setting bug in the same program
will also be fixed, allowing the installer access (if possible)
to the created Installations.log segment even if the initial ACL
put on the segment doesn't.

Multics Change Request

TITLE: Fix bugs in BASIC	
AUTHOR: Melanie Weaver	

STATUS	DATE
Written	04/23/75
Status	A 04/29/75
Expires	10/29/75

-Coded in: [X] PL/I [X] ALM [ ] other-
explain in DETAILED PROPOSAL
-Planned for System MR 2.2
-Fixes Bug Number(s) see below
-Documented in MTB _____
-User/Operations-visible
 Interface change? [ ] yes [X] no
-Incompatible change? [ ] yes [X] no
-Performance: [ ] Better [X] Same
 [ ] Worse
-Replaces MCR _____

Category (Check One)	
	Lib. Maint. Tools
	Sys. Anal. Tools
	Sys. Prog. Tools
	355
	BOS
	Salvager
	Ring Zero
	Ring One
	SysDaemon/Admin.
	Runtime
X	User Cmmd/Subr.

DOCUMENTATION CHANGES

Document	Specify One or More
MPM (Vol, Sect.)	
PLMS (AN #) 56	
MOSN (Sect.)	
MPAM (Sect.)	
MSAM (Sect.)	
Info Segs basic_status.info	
Other (Name)	
None (Reason)	

Objections/Comments:

Use these headings: SUMMARY, REASONS, IMPLICATIONS, DETAILED PROPOSAL (Optional)

SUMMARY:

Fix basic bugs 48, 49, 50, 51, 52, 53, 54, 55
and other unreported bugs.

Eliminate call to establish_cleanup_proc_.
Both the compiler and the runtime are involved.

REASONS:

Install cleaned-up version of basic for MR2.2

This file contains a list of all bugs in the Multics BASIC compiler.
Bugs marked with ! have been fixed in the installed basic.
Bugs marked with * have been fixed in the basic located in >ldd>exl>o.

```
056 next free number
055*75.04.04        global variables in user defined functions
                    sometimes addressed incorrectly after invocations
                    of math functions elsewhere in program
054*75.02.06        bad line at end of source segment causes looping
                    with confusing message
053*75.01.23        numerical constants with large negative exponents are
                    sometimes incorrectly picked up by compiler
052*75.01.23        mat linput reads only 1 line
051*75.01.23        mod(n,0) returns 0
050*75.01.23        basic program's any other handler should be reverted
                    before calling non-basic proedure
049*74.11.15        array redimensioning doesn't work if second
                    dim is an expression
048*74.11.15        dot product blows up
```

TITLE: Fix 2-process bug in msf_manager_$get_ptr

AUTHOR: S. Herbst

	STATUS	DATE
	Written	04/24/75
	Status	A 04/29/75
	Expires	10/29/75

-Coded in: [X] PL/I [ ] ALM [ ] other- explain in DETAILED PROPOSAL

-Planned for System MR _____

-Fixes Bug Number(s) _____

-Documented in MTB _____

-User/Operations-visible Interface change? [ ] yes [X] no

-Incompatible change? [ ] yes [X] no

-Performance: [ ] Better [ ] Same [X] Worse

-Replaces MCR _____

Category (Check One)

	Category
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DOCUMENTATION CHANGES

Document	Specify One or More
MPM (Vol, Sect.)	
PLMS (AN #)	
MOSN (Sect.)	
MPAM (Sect.)	
MSAM (Sect.)	

Objections/Comments:

Info Segs	
Other (Name)	
None (Reason)	no change

Use these headings: SUMMARY, REASONS, IMPLICATIONS, DETAILED PROPOSAL (Optional)

SUMMARY:

Make msf_manager_$get_ptr always try to initiate a component even when it is after the last known component.

REASONS:

A component added to an MSF by process 1 updates the number of components known to process 1 but does not change the number known to process 2. If process 2 asks msf_manager_ for a pointer to the new component it immediately returns the code error_table_$noentry because the component is after the last component known to process 2.

IMPLICATION:

Last get_ptr call takes longer.