

TO: Distribution  
FROM: Peter B. Kelley  
DATE: June 21, 1976  
SUBJECT: Installation of MSS 28.8

MSS 28.8 was installed on Wednesday, June 18, 1976. Included in this system are: ring 1 support for the list\_mdir command; support for nonconsecutive I/O disk drives; improvements in logging of IOI errors; support for polling and recording of MOS memory EDAC errors; support for future salvager improvements by setting new error recovery items in directory header, entry, link, and vtoce structures; improved ESD handling of vtoce entries queued for writing at time of a crash; improved handling to make vtoce write errors nonfatal; a fix to have the "stringsize" condition signalled for EIS move instructions with a zero-length target, rather than illegal procedure fault; fixes for minor bugs in init\_printer, backup\_util and scs\_init; fixes for minor bugs in MDC software, release\_area\_, and Entry Model Console software; fix auditing messages and error\_table\_codes for several directory control access errors; a fix to stop auditing no\_write\_permission faults for copy-on-write segments; fix IOI bug which can cause fatal error when I/O disk is detached; fix crawlout from 'salvage\_vol -check\_dir'; fix linker to signal 'linkage\_error correctly for \*system links; fix bug causing fault during syserr log copy initialization when no log partition is defined; fix bug preventing online\_salvager from unlocking the directory it has salvaged. The system libraries were updated on June 17, 1976 at 1420.

#### I. System Change Log

##### Chng MGR

##### Change

- # 1625 1955 allow non-consecutive disk drives to be defined as user disk drives.
- 1771 cause IOI error logging to be more selective and efficient. Change ocdcm\_ and disk\_control to log information in the same format.
- 1770 modify pxss to do MOS memory polling.
- 1826 implement the ring 1 interface of list\_mdir, and fix some mdc bugs.

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## I. System Change Log (continued)

## Chng MCR

## Change

1899 fix operator console bugs that appear when a system uses an Entry Mode Console (EMC).

1886, 1902 auditing messages and error\_table\_codes for several directory control access errors will be computed properly.

1885 fix bug in loi\_usurp\_channels.

1966 fix bug which may occur when volume salvaging with the -check\_dir option.

1931 fix linker to signal linkage\_error corectly for \*system links and not to allow a negative metering bin number.

1850 fix bug causes automatic syserr log copying to die when syserr logging is disabled.

1971 fix bug in verify\_lock causing online salvager not to unlock directories.

---- fix bug in release\_area\_ not saving enough information resulting in a null pointer reference.

1925, 1924, 1931, 1649, 1916, 1939 Recompile programs which haven't been recently modified to take advantage of recent compiler improvements. Also, changes were made to fill in the new salvager data items in directory and VTOCE, add an entry to the vtoc\_man to requeue all operations at ESD time, make VTOC write errors non-fatal, and fix stringsize signalling on zero-length moves. foo

## II. Segment Change Log

Segment Name	Bound Segment	Change #
acc_name_.pl1	bound_system_faults	R 1625
acl.pl1	bound_file_system	R 1625
acl_.pl1	bound_file_system	R 1625
admin_gate_.mexp	-	R 1625
append.pl1	bound_file_system	R 1625
asd_.pl1	bound_file_system	R 1625
backup_util.pl1	bound_reloader_	R 1625
check_mdcs_.pl1	bound_mdir_control	D 1625
check_vtoce_branch.pl1	bound_salvager	R 1625
chname.pl1	bound_file_system	R 1625
dc_pack.pl1	bound_file_system	R 1625
define_area_.pl1	bound_sss_active_	R 1625
delentry.pl1	bound_file_system	R 1625
dir_control_error.pl1	bound_system_faults	R 1625

## II. Segment Change Log (continued)

<u>Segment Name</u>	<u>Bound Segment</u>	<u>Change #</u>
error_table_.et	-	R 1625
ex_acl.pl1	bound_mseg_prim	R 1625
fm.mexp	-	R 1625
hphcs_.mexp	-	R 1625
illegal_procedure.pl1	bound_error_wired	R 1625
init_printer_.pl1	bound_printer_util_	R 1625
init_sst_name_seg.pl1	bound_temp_2	R 1625
lobm.pl1	bound_lom_wired	R 1625
loi_assign_dte.pl1	bound_lom_active	R 1625
loi_getwork.pl1	bound_lom_wired	R 1625
loi_log_status.pl1	bound_lom_wired	R 1625
loi_set.pl1	bound_lom_active	R 1625
loi_usurp_channels.pl1	bound_lom_active	R 1625
link_snap.pl1	bound_system_faults	R 1625
mdc_.mexp	-	R 1625
mdc_check_mdcs_.pl1	bound_mdir_control	A 1625
mdc_create_.pl1	bound_mdir_control	R 1625
mdc_lock_.pl1	bound_mdir_control	R 1625
mdc_parse_acct_.pl1	bound_mdir_control	A 1625
mdc_priv_.mexp	-	R 1625
mdc_repair_.pl1	bound_mdir_control	R 1625
mdc_set_.pl1	bound_mdir_control	R 1625
mdc_set_path_.pl1	bound_mdir_control	A 1625
mdc_status_.pl1	bound_mdir_control	A 1625
mdc_util_.pl1	bound_mdir_control	R 1625
mdcs_util_.pl1	bound_mdir_control	R 1625
meter_disk.alm	bound_page_control	R 1625
mos_memory_check.pl1	bound_error_wired	A 1625
oc_data.alm	-	R 1625
oc_data_init.pl1	bound_temp_1	R 1625
oc_trans_input_.pl1	bound_oc_	R 1625
ocdcm_.pl1	bound_error_wired	R 1625
ocdim_.pl1	bound_oc_	R 1625
pc_config.pl1	bound_page_control	R 1625
phcs_.mexp	-	R 1625
protection_audit_.pl1	bound_system_faults	R 1625
pxss.alm	-	R 1625
quota.pl1	bound_file_system	R 1625
rcp_check_attach_.pl1	bound_rcp_	R 1625
rcp_init.pl1	bound_io_init	R 1625
rcp_init_tape_survey.pl1	bound_io_init	R 1625
reclassify.pl1	bound_priv_procs	R 1625
reconfig.pl1	bound_process_creation	R 1625
salv_rebuild_acl.pl1	bound_salvager	R 1625
salv_rebuild_directory.pl1	bound_salvager	R 1625
salv_rebuild_names.pl1	bound_salvager	R 1625
scs_init.pl1	bound_temp_1	R 1625
seg_fault.pl1	bound_system_faults	R 1625

## II. Segment Change Log (continued)

<u>Segment Name</u>	<u>Bound Segment</u>	<u>Change #</u>
syserr_log_copy.pl1	bound_file_system	R 1625
syserr_real.pl1	bound_error_wired	R 1625
tc_data.alm	-	R 1625
uid_path_util.pl1	bound_system_faults	R 1625
verify_lock.pl1	bound_file_system	R 1625
vtoc_interrupt.pl1	bound_disk_util_wired	R 1625
vtoc_man.pl1	bound_vtoc_man	R 1625
wire_proc.pl1	bound_active_1	R 1625
wired_shutdown.pl1	bound_tc_wired	R 1625
<b>Include Files</b>		
fs_types.incl.pl1		A 1625
lo_syserr_msg.incl.pl1		R 1625
loi_syserr_msg.incl.pl1		D 1625
mc.incl.pl1		R 1625
mdc_status_args.incl.pl1		A 1625
mdc_status_info.incl.pl1		A 1625
mcs.incl.pl1		R 1625
scr.incl.pl1		R 1625
vtoc_buffer.incl.pl1		R 1625
wired_loi_data.incl.pl1		R 1625
<b>Bindfiles</b>		
bound_error_wired.bind		R 1625
bound_lom_active.bind		R 1625
bound_lom_wired.bind		R 1625
bound_mdir_control.bind		R 1625
bound_system_faults.bind		R 1625
bound_vtoc_man.bind		R 1625

## III. Bound Segment Change Log

<u>Bound Segment</u>	<u>Change</u>
bound_active_1	replaced: wire_proc
bound_disk_util_wired	replaced: vtoc_interrupt
bound_error_wired	added: nos_memory_check replaced: illegal_procedure ocdcm_ syserr_real

## III. Bound Segment Change Log (continued)

<u>Bound Segment</u>	<u>Change</u>
bound_file_system	replaced: delentry quota append acl asd_ acl_ chname dc_pack verify_lock syserr_log_copy
bound_io_init	replaced: rcp_init rcp_init_tape_survey
bound_iom_active	replaced: loi_assign_dte loi_usurp_channels loi_set
bound_iom_wired	replaced: loi_log_status loi_getwork lobm
bound_mdir_control	added: mdc_check_mdcs_ mdc_parse_acct_ mdc_set_path_ mdc_status_ replaced: mdcs_util_ mdc_create_ mdc_set_ mdc_repair_ mdc_lock_ mdc_util_ deleted: check_mdcs_
bound_mseg_prim	replaced: ex_acl
bound_oc_	replaced: ocdim_ oc_trans_input_
bound_page_control	replaced: meter_disk pc_contig
bound_printer_util_	replaced: init_printer_
bound_priv_procs	replaced: reclassify
bound_process_creation	replaced: reconfig

## III. Bound Segment Change Log (continued)

<u>Bound Segment</u>	<u>Change</u>
bound_rcp_	replaced: rcp_check_attach_
bound_reloader_	replaced: backup_util
bound_salvager	replaced: salv_rebuild_acl salv_rebuild_names salv_rebuild_directory check_vtoco_branch
bound_system_faults	replaced: acc_name_ seg_fault link_snap dir_control_error protection_audit_ uld_path_util
bound_tc_wired	replaced: wired_shutdown
bound_temp_1	replaced: scs_init oc_data_init
bound_temp_2	replaced: init_sst_name_seg
bound_vtoc_man	replaced: vtoc_man
bound_sss_active_	replaced: define_area_