

TO: Distribution
FROM: Peter B. Kelley
DATE: May 27, 1976
SUBJECT: Installation of MSS 28.5

The hardcore system MSS 28.5 was installed on Wed., May 12, 1976. This system includes: the ability to demount logical volumes, fixes in AIM auditing, salvager, shutdown, and RPV creepage. It allows the examination of VTOCe's via phcs_; adds the "-pvname" option to the dumper. The system libraries were updated on Thurs., May 13, 1976. MSS 28.5a, installed on Thursday, May 13, 1976, fixes bugs introduced in MSS 28.5 and fixes RPV creepage. MSS 28.5b, installed on Mon., May 17, 1976, fixes a bug affecting I/O disk usage. The system libraries were updated on Thurs., May 13 for MSS 28.5a and on Mon., for MSS 28.5b.

I. System Change Log

Change MCR	Change
# 1597 1822,1826,1634,1834,1835,1846,1765,1635,1637,1840, 1669-72,1847-48	Adds the ability to demount logical volumes; fixes bugs in AIM auditing, salvager, shutdown, and RPV creepage. Allows VTOCE examination via phcs_; adds -pvname option to the dumper, disk systems starting with drives other than 1.
# 1598 1672	Changed convert_authorization_ to only accept a blank access class string if either the long or short names for level 0 are blank.
# 1599 1669,1670,1671	Changes to audit only bona fide access violations; access denials on directories to be audited properly, and only changes to system privileges to be audited.
# 1600 1712	Implement the io_call order in tty_.
# 1601 1793	Corrects isot fault handling.

Multics Project internal documentation. Not to be reproduced or distributed outside the Multics Project.

I. System Change Log (continued)

<u>Change MCR</u>	<u>Change</u>
-------------------	---------------

- # 1602 1791 Fixes bug in put_field_.
- # 1603 1811 Improves hcs_\$make_seg interface.
- # 1604 1875 Fixes bugs introduced in 28.5.
- # 1605 ---- Fixes bug affecting I/O disk usage.

II. Segment Change Log

<u>Segment Name</u>	<u>Bound Segment</u>	<u>Change #</u>
activate.pl1	bound_system_faults	R 1597
admin_gate_.mexp	-	R 1597
append.pl1	bound_file_system	R 1597, 1599
backup_load.pl1	bound_reloader_	R 1597
bk_arg_reader_.pl1	bound_reloader_	R 1597
convert_authorization_.pl1	-	R 1597, 1598
create_vtoce.pl1	bound_vtoc_man	R 1597
del_dir_tree.pl1	bound_file_system	R 1597, 1599
delentry.pl1	bound_file_system	R 1597, 1599
delete_pd_records.pl1	bound_process_creation	R 1597
delete_segs.pl1	bound_tc_wired	R 1597
delete_vtoce.pl1	bound_vtoc_man	R 1597
demount_pv.pl1	bound_disk_util	A 1597
dir_control_error.pl1	bound_system_faults	R 1597, 1599
disk_control.pl1	bound_page_control	R 1597
error_table_.et	-	R 1597
find_entry.pl1	bound_system_faults	R 1597, 1599
flagbox_mgr.pl1	bound_active_1	A 1597
free_store.alm	bound_page_control	R 1597
fs_unload_disk_interrupt.pl1	bound_disk_util_wired	A 1597
fsout.pl1	bound_disk_util_wired	D 1597
fsout_vol.pl1	bound_disk_util	A 1597
fsout_vol.pl1	bound_disk_util_wired	D 1597
get.pathname_.pl1	bound_system_faults	R 1597, 1599
get_pvtx.pl1	bound_vtoc_man	R 1597
hphcs_.mexp	-	R 1597
init_empty_root.pl1	bound_temp_1	R 1597
init_pvt.pl1	bound_temp_1	R 1597
init_root_dir.pl1	bound_temp_2	R 1597
init_vtoc_man.pl1	bound_temp_2	R 1597
initializer_gate_.mexp	-	R 1597
initiate.pl1	bound_system_faults	R 1597, 1599
lol_usurp_channels.pl1	bound_iom_active	R 1605

II. Segment Change Log (continued)

<u>Segment Name</u>	<u>Bound Segment</u>	<u>Change #</u>
isot_fault_handler_.pl1	bound_sss_wired_	R 1601
logical_volume_manager.pl1	bound_disk_util	R 1597
make_sdw.pl1	bound_init_1	R 1597
make_seg.pl1	bound_file_system	R 1603
make_segs_paged.pl1	bound_temp_1	R 1597
make_segs_paged.pl1	bound_temp_1	R 1597, 1604
pc.pl1	bound_page_control	R 1597
pc.pl1	bound_page_control	R 1597, 1604
phcs_.mexp	-	R 1597
protection_audit_.pl1	bound_system_faults	R 1597, 1599
put_field_.alm	bound_sss_wired_	R 1602
rcp_.mexp	-	R 1597
rcp_attach_lv_.pl1	bound_rcp_	A 1597
rcp_check_attach_lv_.pl1	bound_rcp_	A 1597
rcp_copy_.pl1	bound_rcp_	R 1597
rcp_detach_lv_.pl1	bound_rcp_	A 1597
rcp_lv_.pl1	bound_rcp_	A 1597
rcp_reconfigure_.pl1	bound_rcp_	R 1597
read_disk.pl1	bound_disk_util	A 1597
read_disk.pl1	bound_disk_util_wired	D 1597
reclassify.pl1	bound_priv_procs	R 1597
ring_0_peek.pl1	bound_file_system	R 1597
salv_activator.pl1	bound_salvager	R 1597
salv_check_map.pl1	bound_salvager	R 1597
salv_clean_ast.pl1	bound_salvager	D 1597
salv_data.cds	-	R 1597
salv_truncate.pl1	bound_salvager	R 1597, 1599
segment_mover.pl1	bound_system_faults	R 1597
segment_mover.pl1	bound_system_faults	R 1597, 1604
set.pl1	bound_file_system	R 1597
set_privileges.pl1	bound_priv_procs	R 1597, 1599
shutdown.pl1	bound_file_system	R 1597
star_.pl1	bound_file_system	R 1597
status_.pl1	bound_system_faults	R 1597
stop_cpu.pl1	bound_process_creation	R 1597
sum.pl1	bound_system_faults	R 1597, 1599
truncate.pl1	bound_file_system	R 1597
truncate_vtoc.e.pl1	bound_vtoc_man	R 1597
tty_.pl1	bound_lox_	R 1600
tty_io_call_control_.pl1	bound_lox_	A 1600
update_vtoc.e.pl1	bound_vtoc_man	R 1597
verify_lock.pl1	bound_file_system	R 1597
vtoc_attributes.pl1	bound_system_faults	R 1597
vtoc_interrupt.pl1	bound_disk_util_wired	R 1597
vtoc_man.pl1	bound_vtoc_man	R 1597
wirea_shutdown.pl1	bound_tc_wired	R 1597

II. Segment Change Log (continued)

Segment Name	Bound Segment	Change #
--------------	---------------	----------

Include Files

disk_pack.incl.pl1	R	1597
fs_vol_label.incl.alm	R	1597
fs_vol_label.incl.pl1	R	1597
fsdct.incl.alm	O	1597
io_call_info.incl.pl1	A	1600
lot.incl.pl1	R	1601
null_addresses.incl.pl1	R	1604
plio2_ps.incl.alm	R	1602
plio2_ps.incl.pl1	R	1502
pv_holdt.incl.pl1	A	1597
rcp_list_info.incl.pl1	R	1597
rcp_lv_info.incl.pl1	A	1597
salv_data.incl.pl1	R	1597
sle.incl.pl1	R	1597
sst.incl.pl1	R	1597
vtoc_buffer.incl.pl1	R	1597

Bindfiles

bound_active_1.bind	R	1597
bound_disk_util.bind	R	1597
bound_disk_util_wired.bind	R	1597
bound_file_system.bind	R	1597
bound_iox_.bind	R	1600
bound_page_control.bind	R	1597
bound_rcp_.bind	R	1597
bound_salvager.bind	R	1597
bound_system_faults.bind	R	1597
bound_tc_wired.bind	R	1597
bound_vtoc_man.bind	R	1597
bound_vtoc_man.bind	R	1597, 1604

III. Bound Segment Change Log

Bound Segment	Change
bound_active_1	added: flagbox_mgr
bound_disk_util	added: demount_pv read_disk fsout_voi replaced: logical_volume_manager

III. Bound Segment Change Log (continued)

<u>Bound Segment</u>	<u>Change</u>
bound_disk_util_wired	added: fs_unload_disk_interrupt replaced: vtoc_interrupt deleted: read_disk fsout fsout_vol
bound_file_system	replaced: del_dir_tree delentry truncate append make_seg set star_ verify_lock ring_0_peek shutdown
bound_init_1	replaced: make_sdw
bound_iom_active	replaced: loi_usurp_channels
bound_iox_	added: tty_lo_call_control_ replaced: tty_
bound_page_control	replaced: free_store pc disk_control
bound_priv_procs	replaced: reclassify set_privileges
bound_process_creation	replaced: stop_cpu delete_pa_records
bound_rpc_	added: rpc_check_attach_lv_ rpc_attach_lv_ rpc_lv_ rpc_detach_lv_ rpc_copy_ rpc_reconfigure_
bound_reloader_	replaced: backup_load bk_arg_reader_
bound_salvager	replaced: salv_check_map salv_truncate salv_activator

III. Bound Segment Change Log (continued)

Bound SegmentChange

deleted: salv_clean_ast

III. Bound Segment Change Log (continued)

<u>Bound Segment</u>	<u>Change</u>
bound_sss_wired_	replaced: put_field_isot_fault_handler_
bound_system_faults	replaced: sum activate find_entry get.pathname_ initiate status_ vtoc_attributes dir_control_error protection_audit_ segment_mover
bound_tc_wired	replaced: wired_shutdown delete_segs
bound_temp_1	replaced: init_pvt make_segs_paged init_empty_root
bound_temp_2	replaced: init_root_dir init_vtoc_man
bound_vtoc_man	replaced: vtoc_man update_vtoce create_vtoce delete_vtoce truncate_vtoce get_pvtx