TO: Distribution

FROM: Grace Ackerman-Lewis

DATE: February 13, 1976

SUBJECT: Installation of MSS 27.6

        The hardcore system MSS 27.6 was installed on Tuesday,
January 20, 1976 at 08:55. This system includes: a new gate
entry in hcs_; the addition of new syserr features to hardcore,
including error_code_expansion and a new logging mechanism; the
removal of all combined_link: no; statements from the hardcore
header in preparation for the new mst_generator; a modification
to the disk DIM to prevent it from searching queues when not
needed; new error_table_ entries; a change so that retrievals of
directories will now attempt to move quota to a retrieved
directory; fixes for several bugs in RCP; a change to cause all
I/O errors detected by iol_ to be logged in the syserr log; a
faster version of tty_write. The system libraries were updated
on Tuesday, January 20, 1976 at 14:44.

                    I. System Change Log

Chng MCR   **Change**

1539 1362 Install the hardcore portion of the new syserr
            features, including binary data in log, error code
            expansion and new logging mechanism.

1540 1571 Modify the disk DIM to eliminate searching queues
            when not needed.

1541 1503 Add a new error_table_ entry for no working dir.

1542 1542 Change so that retrievals of directories will now
            attempt to move quota to a retrieved directory.

1543 1517 Fix several bugs in RCP. 1) Unassign a device that
            was attached and explicitly assigned. 2) Unload tape
            when write ring is correct. 3) Interpret special tape
            status in a better way. 4) Ignore tape drive
            characteristics when a specific drive is requested.
            5) Support 400 model tape drives.

I. System Change Log (continued)

Chng MCR   Change

\# 1544 1523 Make a change to log in the syserr log all I/O errors
         that are detected by iol_.

\# 1545 1537 Speed up tty_write

\# 1546 1581 Install a new gate entry, hcs_$star_dir_list, which
         returns only items that will be stored in directories
         under the new storage system.

\# 1547 - Recompile all hardcore gates with the new include file
         gate_macros.incl.pl1.

II. Segment Change Log

Segment Name	Bound Segment	Change #
absentee_real_init_admin_.pl1	bound_command_loop_	R 1547
admin_gate_.mexp	-	R 1547
audit_gate_.mexp	-	R 1547
backup_load_dir_list.pl1	bound_reloader_	R 1542
bk_input.pl1	bound_reloader_	R 1542
copy_on_write_handler.pl1	bound_command_loop_	A 1542
disk_control.pl1	bound_page_control	R 1540
disk_init.pl1	bound_temp_1	R 1540
dn355.pl1	bound_355_wired	R 1545
dn355_messages.alm	bound_355_wired	R 1545
error_table_.et	-	R 1541
expand_path_.pl1	-	R 1541
hcs_.mexp	-	R 1547
hphcs_.mexp	-	R 1547
init_hardcore_gates.pl1	bound_temp_2	R 1539
iol_.mexp	-	R 1547
iol_assign_dte.pl1	bound_iom_active	R 1544
iol_interrupt.pl1	bound_iom_wired	R 1544
iol_set.pl1	bound_iom_active	R 1544
makestack.pl1	bound_file_system	R 1541
net_.mexp	-	R 1547
netp_.mexp	-	R 1547
oc_data_init.pl1	bound_temp_1	R 1539
ocdcm_.pl1	bound_error_wired	R 1539
parity_fault.pl1	bound_error_active	R 1539
phcs_.mexp	-	R 1547
rcp_.mexp	-	R 1547
rcp_check_attach_.pl1	bound_rcp_	R 1543
rcp_device_info_.pl1	bound_rcp_	R 1543

II. Segment Change Log (continued)

Segment Name	Bound Segment	Change #
rcp_priv_.mexp	-	R 1547
rcp_sys_.mexp	-	R 1547
rcp_tape_.pl1	bound_rcp_	R 1543
rcp_unassign_.pl1	bound_rcp_	R 1543
restart_fault.alm	-	R 1543
ring1_syserr.pl1	bound_error_active	D 1539
star_.pl1	bound_file_system	R 1546
syserr.alm	bound_error_wired	R 1539
syserr_copy_paged.pl1	bound_error_active	A 1539
syserr_data.alm	-	R 1539
syserr_log_check.pl1	bound_error_active	A 1539
syserr_log_copy.pl1	bound_file_system	R 1539
syserr_log_init.pl1	bound_temp_1	R 1539
syserr_logger.pl1	bound_error_wired	R 1539
syserr_real.pl1	bound_error_wired	R 1539
system_privilege_.mexp	-	R 1547
tty_.pl1	bound_iox_	R 1545
tty_ctl.mexp	bound_tty_active	D 1545
tty_free.pl1	bound_355_wired	R 1545
tty_index.pl1	bound_tty_active	R 1545
tty_init.pl1	bound_io_init	R 1545
tty_lock.pl1	bound_355_wired	R 1545
tty_read.pl1	bound_tty_active	R 1545
tty_tables.mexp	bound_tty_active	A 1545
tty_tn1200_edit_.pl1	bound_command_loop_	D 1545
tty_util_.alm	bound_tty_active	A 1545
tty_write.pl1	bound_tty_active	R 1545
user_real_init_admin_.pl1	bound_command_loop_	R 1546

Include Files

dn355_data.incl.pl1		R 1545
dn355_mailbox.incl.pl1		R 1545
dskdcl.incl.pl1		R 1540
gate_macros.incl.mexp		R 1547
oc_data.incl.pl1		R 1539
syserr_actions.incl.pl1		A 1539
syserr_data.incl.pl1		R 1539
syserr_log.incl.pl1		R 1539
syserr_msg_iol.incl.pl1		A 1544
syserr_msg_parity.incl.pl1		A 1539
tty.incl.pl1		R 1545
tty_convert.incl.pl1		A 1545
wired_iol_data.incl.pl1		R 1544

Bindfiles

bound_command_loop_.bind	R 1545

II. Segment Change Log (continued)

Segment Name	Bound Segment	Change #
bound_error_active.bind		R 1539
bound_error_wired.bind		R 1539
bound_file_system.bind		R 1539
bound_iom_active.bind		R 1544
bound_tty_active.bind		R 1545

III. Bound Segment Change Log

Bound Segment	Change	
bound_iom_active	replaced:	iol_assign_dte
		iol_set
bound_iom_wired	replaced:	iol_interrupt
bound_rcp_	replaced:	rcp_check_attach_
		rcp_tape_
		rcp_unassign_
		rcp_device_info_
bound_reloader_	replaced:	backup_load_dir_list
		bk_input
bound_page_control	replaced:	disk_control
bound_file_system	replaced:	makestack
		star_
		syserr_log_copy
bound_error_active	added:	syserr_copy_paged
		syserr_log_check
	replaced:	parity_fault
	deleted:	ring1_syserr
bound_temp_1	replaced:	disk_init
		oc_data_init
		syserr_log_init
bound_error_wired	replaced:	ocdcm_
		syserr
		syserr_logger
		syserr_real
bound_command_loop_	added:	copy_on_write_handler
	replaced:	user_real_init_admin_
		daemon_real_init_admin_

III. Bound Segment Change Log (continued)

Bound Segment	Change	
	deleted:	absentee_real_init_admin_ tty_tn1200_edit_
bound_iox_	replaced:	tty_
bound_io_init	replaced:	tty_init
bound_355_wired	replaced:	dn355 dn355_messages tty_free tty_lock
bound_tty_active	added:	tty_tables tty_util_
	replaced:	tty_write tty_read tty_index
	deleted:	tty_ctl
bound_temp_2	replaced:	init_hardcore_gates

IV. Header Change Log

The hardcore header was changed to: remove all "combined_link: no;" statements; to delete the name ring1_syserr from, and add the names syserr_copy_paged and syserr_log_check to bound_error_active; to change the current length of (d191_seg, e191_seg, d190_seg, e190_seg, & d181_seg) from 368 to 400;; to add the names tty_tables and tty_util_ to, and delete the name tti_ctl from, bound_tty_active; to add the segments tty_tables and tty_util_ and delete the segment tty_ctl.