TO: Distribution

FROM: Peter B. Kelley

DATE: July 29, 1974

SUBJECT: Installation of MSS 23.14 & MSS 23.14a

The hardcore system MSS 23.14a was installed at 0800 on July 29, 1974. This system includes: installation of the cache software for Multics; moving the history registers and associative memory data from the pds to the prds; improvement of several error table messages referring to the I/O switch; and, several bug fixes. The system libraries were updated at 1430 on Tuesday, July 30, 1974.

### I. System Change Log

## Chna MCR Change

- **#** 1331 212,373,590
  - Installs the cache software for Multics; fixes several bugs, and, moves the history registers from the pds to the prds.
- # 1332 380 Improves several error table messages referring to the I/O switch.
- # 1333 Fixes crawl-out in privileged\_mode\_ut and fixes lockup problem. (Both were bugs in MSS 23.14 which was pulled.)

#### II. Segment Change Log

Seament Mame	Bound Seament	Chang
activate_segs.pl1 bootstrap1.alm	bound_process_creation	R 13 R 13
error_tableet	•	R 13
fim.alm	•	R 13
li.alm	•	R 13

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# II. Segment Change Log (continued)

Segment Name	Bound Segment	Change #
init_processor.aim	bound_init_1	R 1331,1333 R 1331
initialize_faults.pl1	bound_init_1	R 1331
make_sdw.pl1	bound_page_control	R 1331,1333
page_fault.alm pc.pl1	bound_page_control	R 1331
pds.aim		R 1331
prds.alm	-	R 1331
privileged_mode_ut.aim	bound_priv_1	R 1331,1333
pxss.alm	•	R 1331
ring_0_peek.pl1	bound_file_system	R 1331
scas_init.pl1	bound_temp_1	R 1331
scs.alm	•	R 1331
seg_fault.pl1	bound_system_faults	R 1331
setfaults.pl1	bound_system_faults	R 1331
tc_data.alm	•	R 1331
wired_fim.atm	•	R 1331
Include Eiles		
ast.incl.alm		R 1331
ast.incl.pl1		R 1331
cache_mode_reg.incl.alm		A 1331
sdw.incl.alm		R 1331
sdw.incl.pl1		R 1331
site.incl.alm		R 1331 R 1331
site.incl.pl1		K 1331
Bindfiles		
bound_priv_1.bind		R 1331

## III. Bound Segment Change Log

Bound Segment	Change	
bound_temp_1	replaced:	scas_init
bound_file_system	replaced:	ring_0_pee<
bound_priv_1	replaced:	privileged_mode_ut
bound_page_control	replaced:	page_fault pc
bound_init_1	replaced:	initialize_faults make_sdw

### III. Bound Segment Change Log (continued)

Bound Segment

Change

bound\_process\_creation

replaced: activate\_segs

bound\_system\_faults

replaced: seg\_fault setfaults

### IV. Header Change Log

# 1331 The header was modified to change the access for return\_to\_ring\_D\_ to "read, execute". The access for bound\_page\_control, emergency\_shutdown, ii, fim, wired\_fim, and restart\_fault was changed to "read, execute, privileged". The keyword "cache" was added to the antry prds. The "cur\_length" attribute of prds was changed to 3072.