

TO: Distribution
 FROM: Peter B. Kelley
 DATE: April 2, 1976
 SUBJECT: Installation of MSS 28.2

The hardcore system MSS 28.2 was installed at 7:09 on Thursday, April 1, 1976. There are many NSS-related bug fixes in this system. They include: a fix to allow delentry to delete a bad directory; a fix in append to free vtoce's where makeknown fails trying to initialize a new directory; a fix to terminate_proc so that it calls verify_lock unconditionally; a fix for multi-cpu systems so that they don't loop unnecessarily on the page table lock; a fix that zeroes the page on a RWS error; and, bug fixes in the segment mover, PD reconfiguration, boundfault and directory quotas. The sub_err_ program for use by subroutines wishing to indicate errors was added. There was a change to los_ to use the referencing_dir search rule to find an I/O module. The entry points \$attach_name and \$attach_ptr were added to lox_. The segment ncp_lo_ was re-compiled to obtain the proper listing. The libraries were updated at 13:33 on Thurs., April 1, 1976.

I. System Change Log

Chng MCR

Change

- # 1573 1612,1633,1713,1714,1721,1731,1720,1747
 NSS-related bug fixes including: dir quota; deletion of a bad dir; fix to terminate_proc; a fix to the segment mover; fix to the boundfault bug; fix looping on the page table lock; and fix bugs in salvager and append.
- # 1574 1536 Add the sub_err_ subroutine for use by subroutines which wish to indicate errors.
- # 1575 1297 Change to los_ to pass a pointer referencing_dir search rule to find an I/O module.
- # 1576 1297,1444 Implement the new entry points \$attach_name and \$attach_ptr in lox_.

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I. System Change Log (continued)

Chng MCRChange

1577 1406,1421

Fix several bugs in the file_ IOSIM.

1578 1572 Allow the use of a 4 mega-word SCU with Multics.

1579 ---- re-compile only

II. Segment Change Log

| <u>Segment Name</u> | <u>Bound Segment</u> | <u>Change #</u> |
|----------------------------|------------------------|-----------------|
| accept_fs_disk.pl1 | bound_disk_util | R 1573 |
| append.pl1 | bound_file_system | R 1573 |
| attach_ioname.pl1 | bound_iox_ | D 1576 |
| attach_name.pl1 | bound_iox_ | A 1576 |
| boundfault.pl1 | bound_system_faults | R 1573 |
| check_vtoce_branch.pl1 | bound_salvager | R 1573 |
| com_err_.pl1 | bound_error_handlers_ | R 1574 |
| default_error_handler_.pl1 | bound_error_handlers_ | R 1574 |
| delentry.pl1 | bound_file_system | R 1573 |
| delete_pd_records.pl1 | bound_process_creation | R 1573 |
| dir_dump.pl1 | bound_salvager | R 1573 |
| file.pl1 | bound_fsm_ | R 1577 |
| file_util.pl1 | bound_fsm_ | R 1577 |
| init_pvt.pl1 | bound_temp_1 | R 1573 |
| interpret_info_struct_.pl1 | bound_error_handlers_ | R 1574 |
| ios_.pl1 | bound_command_loop_ | R 1575 |
| message_table_.mt | bound_error_handlers_ | R 1574 |
| ncp_io_.pl1 | bound_network0_ | R 1579 |
| page_fault.alm | bound_page_control | R 1573 |
| pc.pl1 | bound_page_control | R 1573 |
| pd_util.alm | bound_page_control | R 1573 |
| privileged_mode_ut.alm | bound_priv_1 | R 1573 |
| pxss.alm | - | R 1573 |
| quota.pl1 | bound_file_system | R 1573 |
| salv_check_map.pl1 | bound_salvager | R 1573 |
| salv_data.alm | - | R 1573 |
| salv_delete_names.pl1 | bound_salvager | R 1573 |
| salv_truncate.pl1 | bound_salvager | R 1573 |
| salvage_directory.pl1 | bound_salvager | R 1573 |
| salvage_entry.pl1 | bound_salvager | R 1573 |
| salvage_pv.pl1 | bound_salvager | R 1573 |
| scas_init.pl1 | bound_temp_1 | R 1578 |
| segment_mover.pl1 | bound_system_faults | R 1573 |
| sub_err_.pl1 | bound_error_handlers_ | A 1574 |

II. Segment Change Log (continued)

| <u>Segment Name</u> | <u>Bound Segment</u> | <u>Change #</u> |
|---------------------------|----------------------|-----------------|
| terminate_proc.pl1 | bound_error_active | R 1573 |
| vm_vio.pl1 | bound_salvager | R 1573 |
| wired_plm.pl1 | bound_tc_wired | R 1573 |
| wired_shutdown.pl1 | bound_tc_wired | R 1573 |
| Include Files | | |
| aste.incl.alm | | R 1573 |
| page_info.incl.alm | | R 1573 |
| pdmap_header.incl.pl1 | | R 1573 |
| salv_data.incl.pl1 | | R 1573 |
| scr.incl.pl1 | | R 1578 |
| sst.incl.alm | | R 1573 |
| Bindfiles | | |
| bound_error_handlers.bind | | R 1574 |
| bound_iox.bind | | R 1576 |
| bound_page_control.bind | | R 1573 |
| bound_tc_wired.bind | | R 1573 |

III. Bound Segment Change Log

| <u>Bound Segment</u> | <u>Change</u> |
|------------------------|--|
| bound_network0_ | replaced: ncp_io_ |
| bound_page_control | replaced: page_fault pd_util pc |
| bound_process_creation | replaced: delete_pd_records |
| bound_system_faults | replaced: boundfault segment_mover |
| bound_priv_1 | replaced: privileged_mode_ut |
| bound_salvager | replaced: salvage_entry salv_check_map salvage_directory salv_truncate salv_delete_names dir_dump check_vtoce_branch salvage_pv vm_vio |

III. Bound Segment Change Log (continued)

| <u>Bound Segment</u> | <u>Change</u> |
|-----------------------|---|
| bound_error_active | replaced: terminate_proc |
| bound_tc_wired | replaced: wired_plm wired_shutdown |
| bound_disk_util | replaced: accept_fs_disk |
| bound_file_system | replaced: delentry quota append |
| bound_error_handlers_ | added: sub_err_ replaced: com_err_ default_error_handler_ message_table_ interpret_info_struct_ |
| bound_temp_1 | replaced: scas_init init_pvt |
| bound_fsm_ | replaced: file file_util |
| bound_iox_ | added: attach_name deleted: attach_lname |
| bound_command_loop_ | replaced: ios_ |

IV. Header Change Log

The hardcore header was changed to delete the names vtoc_seg0 through vtoc_seg7 and to add the name sub_err_ to the segment bound_error_handlers_.