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Send all comments, criticisms and contributions to the editor: T. W. Lanzatella  
University Computer Center, 2520 Broadway Drive, Lauderdale, MN 55113  
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NOTICE OF CHANGES TO THE SYSTEM

NOS Changes

The following changes become effective on Thursday, 27 September.

Tom Lanzatella repaired a conversion error in RESEX which caused all LABEL commands containing the parameters PW (password) or CS (comment string) to fail.

Kevin Matthews repaired the following problems.

- 1) SUN processing was corrected so that a closed account can be specified.
- 2) A serious error in CMS wherein a DI device would sometimes be confused for a DK device was repaired.
- 3) Code was added to RDM to support the 885 disk. Program RDM is used during on-line reconfiguration of disk equipment.
- 4) A bug in multi-mainframe processing which caused spurious MISSING EFNT messages was fixed.

Don Mears installed the following changes.

- 1) Odd characters appearing in the UCLP messages were removed.
- 2) RECOVER command processing in TELEX was repaired.
- 3) Don removed some NAM support code in lRO which was interfering with the direct data transfer facility in TELEX/CIO. The problem caused certain programs, ie., DECLIST, to constantly rollin/rollout.

- 4) An error in IRI wherein a S-key during output of a job step which aborts causes the subsequent command to be ignored was corrected.
- 5) TELEX abnormal messages are now intensified.
- 6) QDUMP/QLOAD were altered to select dump tape track-type (currently NT).
- 7) A over-printing problem on the banner page was repaired.
- 8) All print files (at BC) will now skip to bottom of form after the dayfile has printed. This is so operators can see the last line of the dayfile without page-ejecting.
- 9) The lace card in punched decks which indicates bin will now reflect the bin card bin number.
- 10) Sense Switch 2 can now be used to deactivate the REQUEST I-DISPLAY messages which appear at the BATCHIO control point.
- 11) The UCCR cards read message will again appear on the BATCHIO dewriter.
- 12) A conversion error which broke the SUPIO B and H displays was repaired.
- 13) Program OPS was changed to suppress permanent file accounting messages for subsystems.

Tim Hoffmann installed the following changes.

- 1) SDM= processing was added to CHARGE - a proposed change.
- 2) The value of the RFL= entry in CHARGE was increased slightly to avoid MODE 1 errors.
- 3) The DELAY, UQXX. scheduling command was added - a proposed change.
- 4) Programs RELOAD and ARCLIST were changed to use user number PF.
- 5) LOADPF was corrected to load an empty file when it encounters one.
- 6) Program CHKPORT was converted to R4. This program is used to search for hung time-sharing terminals.

Jeff Drummond installed the following changes.

- 1) RESEX was altered so that all transient tape users who do not specify MT/NT on the LABEL command receive an informative message regarding the default track-type.
- 2) A check for CSTF access word bit in TAPES was corrected.
- 3) Documentation and coding standards were corrected in COMCGST and COMCGMS.
- 4) Several conversion errors in COMCFTE were corrected.

- 5) Password processing in SEND was generally reworked and now users COMCRSP to blank out secure parameters.

Brad Blasing installed the following changes.

- 1) Brad repaired a serious problem in TCOPY. The translation table used to convert from BCD to 63 character set-display code was incorrect. This is a CDC error.
- 2) Program MODUP was converted to PSR485.
- 3) Program LDRUSX was repaired to work with PASCAL 3.0.
- 4) CCL was altered so that REVERT unloads its scratch files when it reverts out of a CCL procedure. Also, scratch files are now NODROP'ed for the duration of the CCL procedure. Thus, the restrictions on the use of CLEAR, OLD or NEW within CCL procedure files are no longer true.

#### PROPOSED CHANGES TO THE SYSTEM

HOLLERITH CODE ERRORS - by T. W. Lanzatella

At NOS 1.3, BATCHIO was imbued with a new error checking ability. Whenever BATCHIO sees a card which contains a punch code which does not belong to the Hollerith set, the job is immediately aborted with the error HOLLERITH CODE ERROR RCxxx, CDyyy. This proposal is inspired by the plight of a user who recently confronted me. The users job, which had worked under R3, was now being rejected with a Hollerith code error on card 2423 (approximately). My only suggestion was to use a 1004 or an EXPORT site. I suggest that this code check be disabled or at least keyed off of a sense switch or, better yet, made into a non-fatal error.

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UNNECESSARY RERUNS REVISITED - by J. Larson

A long time ago in a systems meeting far, far away the subject of avoiding unnecessary reruns of EBR, CALCOMP, COMLOT and DICOMED tapes was discussed. The unnecessary reruns occur when a user runs a job that mounts a tape for one of those off-line output devices and fails to actually create a new file on the tape. The tape is subsequently processed and the output file of the previous user who successfully wrote on that tape comes out. As I recall, the outcome of the previous discussion was that these tapes could be scratch labeled prior to their being reused. The preferred solution would be to have the system (or the packages that generate these output tapes) write EOF's at the beginning of the tape as soon as it is mounted. Operations hereby requests that the preferred solution be discussed and implemented if feasible.

#### SYSTEM MAINTENANCE: People and Procedures

Last week's System Group Meeting - by T. W. Lanzatella

The following proposals were discussed.

- 1) John Larsen's proposal to institute a user number TEXT to be used for certain text files on LIBRARY was rejected (see DSN 5, 17 p. 138). We felt that this was not a good way to deal with the problem of organizing the files on LIBRARY. We suggested that the problem should be solved with better documentation and personal administration.
- 2) Margaret Tarbet's proposal to install a macro to return the sign-on user number was rejected (see DSN 5, 17 p. 139). The sign-on user number is currently available in the CPA and can be read using the ICPA fortran subroutine or by calling CPM function 111B directly to read the CPA (see NOSTEXT).
- 3) Earl Schleske's proposal to install a CALLPRG program which communicates with TERAk computers was approved (see DSN 5, 17 p. 139).
- 4) Tim Hoffmann's proposal to add a UQM scheduling option was approved (see DSN 5, 17 p. 139).
- 5) Tim's proposal to have CPUMTR check the value of word 0 and ZERL for zero value was rejected.
- 6) Tim's proposal for a delay input queue was approved.
- 7) Tim's suggestion to install SDM= processing into CHARGE was accepted.

Larry Liddiard then took the floor and discussed the following topics.

- 1) Responsibility for the operations group has been handed to Steve Nachtsheim.
- 2) We are not going to have another system upgrade next summer.
- 3) Some general areas where the systems group must spend time are:
  - a) Stabilizing R4
  - b) Documentation (catch up)
  - c) Commonality of Operating Systems

Larry also mentioned that the VIM Conference and Local Networking Conference are coming up.

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Cyber 74/172 Deadstart Dump Analysis from Friday, 7 September through Sunday, 23 September - by K. C. Matthews

Note: On 19 September, we began using 9-track deadstart dump tapes. The new tape VSN are DD2001, DD2002, etc. One common pool of dump tapes is now used for both the Cyber 74 and the Cyber 172.

Friday, 7 September

08:50 (DD16) Cyber 74  
 1CJ hung trying to issue a system request (TDAM) to MAGNET. MAGNET was out to lunch and not listening. This problem has occurred previously and is not yet

resolved. Usually by the time 1CJ hangs, the cause of MAGNET's grief has vanished.

09:01 (DD32)

Cyber 74

In trying to recover from the previous MAGNET problems, word 20 in the control point area of a job was accidentally zeroed. This confuses the system badly, and a level 0 deadstart was eventually required.

Monday, 10 September

12:50 (DD37)

Cyber 74

After an hour of trying to fix a problem with removable packs, I had hung the system so that a level zero deadstart was required. The problem has been more or less fixed by now.

Friday, 14 September

12:51 (DD40)

Cyber 74

The system hung. The message "PP HUNG -" was displayed, but no PP name. Investigation showed that if the system sector is bad on a rollin file, this happens. We will probably never know how the system sector was wrecked in this case. But a volunteer is needed to fix 1RI so that abort is a little more graceful when a system sector is bad.

Monday, 17 September

15:54 (DD 1)

Cyber 74

LMT hung processing a tape write to a 607 unit. During the preceding few days, we had had many channel hangs in 607 processing. Since the 607's are all gone, this dump is not being analyzed.

Tuesday, 18 September

08:46 (DD-2)

Pack SHA, our shared I/O gueue device was full. When one job with a track limit on that device was dropped, 1RO hung rolling in another job. It hung trying to drop a track on a different equipment - that is, not SHA. I don't know why.

Wednesday, 19 September

11:21 (DD 3)

Cyber 74

An input job for the 172 was still in the Cyber 74 gueue. Forcing it to run on the 74 was allowed. (It shouldn't have been. This is a breech in our MMF code). So the job ran on both machines. When the input file was dropped by a job on the 172, 1CJ hung.

12:00 (DD 2001)

Cyber 74

Another removable pack problem. After the previous deadstart, the Cyber 74 thought it had a DK (full track pack) mounted on the shared removable drive. This should be o.k. if the drive is removable. The system was hung in attempts to get around the DK. This problem is not yet fixed, but will be soon.

Thursday, 20 September

11:08 (DD2005)

Cyber 172

A PPU program destroyed itself when the new on-line diagnostics were being used. A level 3 deadstart was required.

Friday, 21 September

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10:40 (DD2002)

Cyber 74

ICJ hung dropping tracks belonging to an input file on pack SHA. The tracks were in use by an output file on the 172. This is bad news, especially since we have no clue as to why each file had the same track.

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TELEX and TELEX PDP-11 Dump Analysis (9/10 - 9/20) - by D. W. Mears

9/17 15:55 ITA hung with MXFM after getting an unrecovered disk error on SALV74. The MXFM was cleared from its output register.

9/17 16:30 All TELEX ports were hung. When TELEX was stopped ITA hung with a MXFM. We had to rewrite the bad sector on the SALV74 file, add a missing EOI sector to the SALV74 file and clear the interlocks in the SALV74 FST entry in order to get TELEX running again. It looks like there may be an error in the ITA disk error processing for SALVARE files.

Plotter PDP-11 Crash Analysis (9/10 - 9/20) - by D. W. Mears

There were no plotter crashes during this period.