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NOTICE OF CHANGES TO THE SYSTEM

NOS Changes

Larry Ozga installed his proposed change to ACCFAM which imposes a SRU limit on all batch jobs at beginning of job. The limit will be the minimum of the default for the origin type and the users validated limit. Currently, both of these values are infinite, hence this change will have no effect on users (see DSN 4, 20 p. 168).

Kevin Matthews repaired program OUT so that queue files which are released have a queue priority high enough that they print. Kevin also removed from CIO the code which causes a file to be released to the proper queue after a close-unload. The code didn't work and CDC will be removing it in the future. Additionally, program ODV was altered so that oversized queue files bound for West Bank are diverted.

Don Mears added code to LTA which causes a new account file message to be sent to the account file after login. The new message indicates line speed and has the format: ABSP, BBBB. where BBBB is the baud rate. Don also added programs IMPORT, DMP8090, COM8ASM and COM8PPD to WPLNOS. These routines comprise the IMPORT package which runs on the 8090 at Exp. Eng.

Tim Hoffmann installed the following changes.

- 1) CPUMTR was altered to use the CMU if present for storage moves if two CPU's are present. This change assumes that if two CPU's are present then two CMU's are also present, hence this change is not intended for use on a CYBER 70 type mainframe where it is possible to have two CPU's and only one CMU.

- 2) The PASSWOR command was altered to use CMUC rather than CSTF to validate the command form PASSWOR(,NEWPP/UN=...).
- 3) The STATUS and ENQUIRE (OP=B) reports were altered to include MID.
- 4) Most notably, Tim enhanced our local utility DUMPPF to be able to process CDC type PFDUMP tapes. This is a significant feature being that the PFU utilities are truly the horrors of NOS.

Jeff Drummond changed the way the SECOND command is processed. A primary file will now be sorted before its type is changed to local. Jeff also reinstalled all of the console games. The major change is that these games are now identical under both NOS and KRONOS.

Tim Salo rewrote B and H display processing in SUPIO and rewrote central to remote message processing in EXPORT.

KRONOS Changes

Bill Sackett contributed the following changes.

- 1) The default field length for the PASCAL subsystem was reduced from 55K to 52K.
- 2) CP time accumulation was altered to not use the SO multiplier which is used when accumulating the CP contribution to SRU's.
- 3) The default channels used by the stimulator on the 6400 were made current.

Tim Hoffmann installed changes to PASSWOR, STATUS, ENQUIRE and DUMPPF as above.

PROPOSED CHANGES TO THE SYSTEM

TWO PROPOSALS - by T. J. Hoffmann

- 1) At Dan Germann's request, I propose to have FILINFO set, in its request block +1, bit 24 for a file on a shared device.
- 2) After a request from a few users, I propose to place the file name of routed print files on the banner page. This would help in identifying listings since their banner name is always the user index hash. The name would go below the machine ID and to the right of the bin card site.

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PROPOSED CHANGES TO KRONOS - by W. T. Sackett

- 1) Implementation of MECC MULTI on the MERITSS system MULTI, described in DSN Vol. 4, 18, for suitable applications concentrates a number of terminals into one rolling job allowing those terminals to essentially impact the system as if they were entering data in TEXT MODE. In running user tasks at subcontrol points MULTI offers a way to control the impact of frequently run programs by limiting the type and rate of RA+1 requests and the amount of system resources used. Initial candidates for MULTI on MERITSS are TALK and COMBAT. Typically, last year at this time there would be 15 - 20 jobs

running these two programs, a message transfer program and a game, during peak use time with significant impact on other users simply because of limited system resources. With two MULTI tasks running and rolling essentially as MTOT jobs the impact of these 20 users upon the rest of the system would be minimal. The possibility of running the Minnesota Instructional Language programs under MULTI will also be investigated (typically a large number of users accessing the same data base, another good MULTI application). Extensive documentation exists for MULTI at MECC (Once logged into the system type: MULTI,HELP. and follow the prompts) which can be used with little change for MERITSS. Since MERITSS and MECC are both KRONOS systems, the required system modifications from MECC fit into MERITSS with little change required and consequently with few problems expected since they've been ironed out at MECC. An ENABLE/DISABLE, MULTI addition will be made for MERITSS.

- 2) TSPFM as proposed in DSN Vol. 3, 8. This is a short (3 sectors) version of PFILES which TELEX uses to process the majority of PFM control card requests made of it. The proposal was rejected pending further study in DSN Vol. 3, 9. Running our usual STIMULATOR session with and without the TSPFM mods found the average response time (as measured via DEMUX data supplied by the STIMULATOR) to drop from 11.8 seconds to 10.2 seconds--13%! The session was chosen to reflect the same control card balance as is typically found in our production system. The large percentage of PFILES requests to total control cards (about 20%) plus a little luck in the normal deviation of the response time probably explains the result. But the real reason for wanting TSPFM is that by replacing PFILES by it on ECS we get 2000 words of ECS for other use.
- 3) PFMSEC - a modset currently being used on the MECC system. The intent of this modset is to lessen the impact on the system of people trying to guess file passwords and generate lists of valid account numbers. Any time PFM encounters an illegal password or a nonexistent alternate account in a request, the job issuing the request is unconditionally aborted without error exit.

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Proposed Modifications to NOS and KRONOS - by W. T. Sackett

I propose to remove the LDC call to BASIC and have TELEX issue the BASIC control card directly. BASIC is the last compiler to be called with LDC on MERITSS (with MNF replacing TSRUN). In November 1978 on MERITSS, TELEX called LDC 53,000 times. This was 5% of all control card calls issued that month. LDC has been kludged up to deal with PAST, CURRENT and FUTURE versions and TERM,TTY and TTYD versions of BASIC. Allowing TELEX to issue the control card and CALLPRG to make the appropriate files available is cleaner. The arrival of BASIC 3.3 which doesn't have BASIC's the overlay that LDC calls, would mean additional kludges would be necessary to allow concurrent use of BASIC 2.1 and BASIC 3.3. The simpler route was to have TELEX issue the BASIC control card and modify BASIC 2.1 to ignore the AS parameter BASIC 3 gets when the terminal is in ASCII mode.

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FIN Under NOS at R3 - by S. A. Reisman

I would like to install the File Information Processor (FIN) from Release 4. This is an additional overlay to SFP and it is used to map NOS/BE FIN functions to NOS CPM and LFM requests. I have made slight mods so that FIN uses our SETJCR and GETJCR instead of the new SETJCI and GETJCI.

This code plus the installation of the Release 4 loader appears to be all the mods needed for me to install the future versions of my products.

SYSTEM MAINTENANCE: People and Procedures

Last Week's Systems Group Meeting - by T. W. Lanzatella

In my absence Larry Liddiard prepared the following minutes.

- 1) All items in Tom Lanzatella's proposal "For the Record" were accepted (see DSN 4, 22, p. 182).
- 2) Andy Mickel's proposal to formalize many of the PASCAL software tools was accepted (see DSN 4, 22 p. 182).
- 3) During the discussion of the System Strategy Committee minutes, two additional advantages for moving to NOS at R4 were brought up.
 - a) On-line disk reconfiguration would be possible.
 - b) The products COBOL5, DMS170 and SORT/MERGE are superior at R4.
- 4) Larry mentioned that monthly reports may be reinstated in order to effect a unified staff rating and evaluation scheme.
- 5) Security during system time is again a problem. Staff should not leave the system in DEBUG mode unnecessarily. We may consider allowing only hard-wired terminal access during system time.
- 6) Only one System Group meeting will be held in December on the 14th.

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CALLPRG and Library Tape News - by M. Riviere

On December 7, B. Sackett replaced the future version of BASIC on the 6400 with a new version. The new version is BASIC 3.3.

On December 12, the Callprg Index had the following modifications:

L. Ozga moved his conversion packages from his account number to the Callprg account number.

J. Drummond introduced the 477 version of Compass as a future package.

Following his Pascal Software Tools article in the last DSN, A. Mickel reorganized some of his existing index entries and added new ones. Andy made SPRUCE and COMPARE control card callable, introduced a new control card callable package, PRETTY and two new FETCH type packages, ANALYZE and AUGMENT. The modifications took place on the CYBERS and on the 6400 indices.

The end of the quarter modifications will be taking place on December 15. These modifications will consist of the replacement of System versions of MNF, TSF and

their associated libraries MSUIO and MNFCLIB with their future versions. Also the FORTRAN library will be updated with the one offered now as FUTURE, FORTRAN.

The next Callprg index and Library Tape modifications after December 15 will be taking place on January 2. Please send requests to T. Lanzatella on or before December 22.

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Cyber 74/172 Deadstart Dump Analysis from Friday, 17 November to Thursday, 7 December - by K. C. Matthews

Friday, 17 November

08:33 Cyber 172
Deadstart required because DN 67 failed on the 172. Some suspicious cards had been transferred into that disk drive in an attempt to isolate a problem.

Monday, 20 November

02:10 (DD-3) Cyber 74
CIO hung. The reasons have not been determined. The dump is available if someone cares to investigate.

Tuesday, 21 November

13:17 (DD-4)
1CJ hung while attempting to drop a file. The problem was that the ORF (resource file update) PP overlay was called when not required. We cannot yet say why this happened.

Wednesday, 22 November

10:18 Cyber 74
BATCHIO hung on channel 7. Attempts to disconnect channel 7 failed. A level 3 was required.

Monday, 27 November

02:43 DD-6
PP program 1RI hung dropping tracks on one permanent file device. Deadstarting was unsuccessful. The label track on the device had somehow been destroyed. Track 0 had been dropped by something in the system. Fortunately, this device has no catalog tracks, so the whole device could be recovered from the extra label kept at the end of the disk.

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6400 Deadstart Dump Analysis - by R. A. Williams

<u>Date</u>	<u>Description</u>	<u>Tape</u>
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There were no unscheduled deadstarts during the period.