

UNIVERSITY OF MINNESOTA COMPUTER CENTER
Deadstart Systems Newsletter

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NOTICE OF CHANGES TO THE SYSTEM

NOS Changes

Tom Lanzatella installed the long awaited date stamp for the accounting group. The date stamp is a new account file message with the format: SIDT, YY/MM/DD. This message is issued after the first account card of all batch jobs and at the beginning of all timesharing sessions.

Steve Reisman installed his proposal change to SFP which adds a new overlay which processes FIN requests (file information). This code comes from the stock PSR 477 system (see DSN 4, 23 p. 190).

Kevin Matthews installed a new version of ODV. This version treats large punch files specially thus providing operations with control over when they punch.

Don Mears installed the following changes.

- 1) Don repaired an unspecified error in dayfile equipment assignment in 1CJ.
- 2) Page accounting in BATCHIO was repaired for overprinted lines.
- 3) Program 1AJ was altered to issue a warning to users about the change to 029 as default keypunch mode.
- 4) Program QREC was repaired so that files with zero FNT entries are not recovered.
- 5) Plot file processing was altered slightly in 1CD in order to save space.
- 6) Program OVJ was corrected to properly handle the default keypunch mode.

7) Programs IMPORT and DMP8090 were altered to set default keypunch mode to 029 and to dump to a 580 rather than a 501 respectively.

Bill Sackett installed code from PSR summary 482 which fixes an error in CPUMTR wherein X3 was wrecked during ECS parity error processing.

Jeff Drummond modified programs 1TA, OVJ, CPM and MODVAL in order to install password hashing. Jeff also installed a new common deck COMPHPW which contains the password hashing algorithms. Additionally, Jeff altered the way the field length is calculated for runs under the PASCAL subsystem. Previously, 55K was always the scheduled FL. Now the PASCAL subsystem works like all other subsystems with a base FL which is incremented according to the size of the input file.

Steve Collins installed his proposed UC= option to all permanent file commands (see DSN 4, 17, p. 138 and DSN 4, 18, p. 146). Steve also installed his proposed changes to NOTICE/NOTIFY which provides the ability to turn off batch origin access (see DSN 4, 14, p.111).

Tim Hoffmann installed his proposed change to include the original file name of a routed file on the banner page (see DSN 4, 23, p. 189).

Marisa Riviere changed MFEBR to correspond with the new 63 character set.

Brad Blasing installed the PSR 477 version of the Cyber Loader.

Tim Salo added system queue file totals to the SUPIO job displays, fixed several errors in EXPORT and installed a new common deck COMSIHS.

KRONOS Changes

Bill Sackett installed MULTI (see DSN 4, 23, p. 189). To this end, four new MPL decks were installed; COMCMUM, COMCMUU, MULTI and SYSTASK. Bill also installed his proposed change to TELEX which causes a short version of PFILES to be used for PF commands entered without options. The short version of PFILES is called TSPFM and is a new deck on MPL. Additionally, Bill changed TELEX so that LDC is no longer used (see DSN 4, 23, p. 189). And last but not least, Bill repaired a long standing error in PFILES wherein a command CHANGE(lfn/SS=XXX) would fail if the UCW was zero.

Tom Lanzatella resurrected the KRONOS change which changed SRU accounting messages at logoff to indicate CP time instead.

Steve Collins installed his UC option mentioned above and the batch turn-off option in NOTICE/NOTIFY mentioned above.

PROPOSED CHANGES TO THE SYSTEM

Compass Release 4 - by B. E. Blasing and J. J. Drummond

We propose to install the release 4 Compass assembler into our current NOS system. At release 4 several bugs have been fixed including the limitation of only 256 USE blocks which has caused problems in assembling DSD in the past. At the same time, we would like to remove 2 local mods to Compass that are not too useful. The first is the default for the 'X' control card option (used for setting external text for the XTEXT pseudo-op). They currently are:

| | | | |
|---------|---|-------|---------|
| omitted | - | X=OPL | assumed |
| X | - | X=OPL | assumed |
| X=1fn | | X=1fn | |

We want to change it back to:

| | | | |
|---------|---|---------|---------|
| omitted | - | X=OLDPL | assumed |
| X | - | X=OPL | assumed |
| X=1fn | | X=1fn | |

The second mod is the version number that appears at the top of every page of a Compass listing. It currently is "3.nnnnn" where nnnnn is the Jdate of when Compass was last assembled. We want to change it back to "3.5-476" for example, to be consistent with other products.

SYSTEM MAINTENANCE: People and Procedures

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

- 1) The following proposals were rejected or accepted.
 - a) Tim Hoffmann's proposals to add a shared device bit to the data returned by FILINFO and to include the local name of a routed print file on the banner page were accepted (see DSN 4, 23, p. 189).
 - b) Bill Sackett's proposal to install MULTI under KRONOS was accepted (see DSN 4, 23, p. 189).
 - c) Bill Sackett's proposal to install a short version of PFILES was accepted (see DSN 4, 23, p. 190).
 - d) Bill Sackett's proposal to alter error processing in PFM when an illegal password or illegal user number is specified was rejected as too restrictive.
 - e) Bill Sackett's proposal to remove the LDC call from TELEX was approved (see DSN 4, 23, p. 190).
 - f) Steve Reisman's proposal to install the FIN processor from R4 of NOS into SFP was approved (see DSN 4, 23, p. 190).
- 2) Don Mears gave a brief review of the proceedings at the DECUS conference which he attended in San Francisco.
- 3) Larry Liddiard reviewed some recent security problems. The conclusion was that we must increase the general staff awareness of security.

Callprg and Library Tape News - M. Riviere

The following Callprg and Library Tape modifications took place on December 22.

J. Strait replaced the current versions of PASCAL and its library on the Library Tape with future versions and moved the current versions to Past as CALLPRG packages.

This change took place on the Cybers and on the CDC 6400. The PASCAL compiler and its library, however, are not identical in the 6400 and the Cybers.

Bill Sackett replaced BASIC MNF, TSF, and MNFCLIB and introduced two new libraries, MINNLIB and B33LIB to be used by MNF and BASIC programs, respectively. These changes took place only on the 6400 Library Tape.

The replacement of the BASIC compiler made BASIC Version 3 to be available as current. The BASIC 3 associated library is B33LIB. The BASIC 2 library, SYSMISC was left on the System since it is also used by ALGOL programs. The current BASIC compiler (up to December 22) became available as PAST, BASIC through Callprg.

The introduction of MINNLIB has the purpose of making the loading of MNF programs to be more efficient. MINNLIB contains the less commonly used FORTRAN routines that were available until December 22 from MNFCLIB, that is, MNFCLIB is now considerably shorter and its frequency of use will be greater than the one of MINNLIB.

These changes were announced by B. Sackett in December, '78, UCC Newsletter.

A possible replacement of FORTRAN, MNFCLIB and/or MSUIO may be taking place soon in order to fix a problem concerning duplicate entry points appearing at load time. The problem started December 15, when those libraries were replaced with their future versions.

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

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RJE Front-End Changes - by Elie May

Two significant modifications have been made to the RJE front-end software. The first change was the periodic running of equipment diagnostics, and status and error logging.

The second modification is related to the 026 - 029 change. After translation of input data in the front-end, SUPIO did not have sufficient information to correctly process certain special characters. Consequently, the full processing -- data translation, EOR, EOF (EOR-17 level), and EOI translation, and decompression -- were moved to the front-end. This simplifies SUPIO's software and reduces system overhead.

Previously, in 026 > and % symbols in column one were EOR and EOI respectively. In 029 the same was true of ^ and =. In order to distinguish between an actual EOR or EOI and an equivalent symbol in column one of a data card, the following criteria are used: EOR or EOF symbol in column one and

1. Rest of the card is blank.
2. 26 or 29 in columns 79 and 80.
3. EOR or EOI symbol also in column 80 (for card punch compatibility).
4. EOR with 17 in columns 2 and 3 and any of the conditions 1 through 3 above.

Any other punches will result in normal data card translation.

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NOS Release 4 Manuals - by M. Frisch

At the request of Larry Liddiard and Dick Hotchkiss, I checked with CDC about NOS

Release 4 manuals when Release 5 comes out. After talking with Amy Koepke, I found we mostly would need about 500 copies of the NOS Volume 1 manual and the NOS Timesharing manual. CDC told me that the NOS manual would probably be completely replaced by a new edition at Release 5. They print anywhere from 3000 to 7500 copies of a manual at each press run. Presently, April, 1979, is their best guess when we have to make up our order. However, if we call in March, they will be able to give us more accurate information. Note that although Volume 2 of NOS is needed by UCC, only staff members require any sizable number of copies, probably less than 100.

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Packages on UN=LIBRARY - by M. J. Frisch

| <u>FILENAME</u> | <u>RESIDENCE</u> | <u>ACTION</u> |
|-----------------|------------------|---|
| ANALYZE | 172 | Should be moved or made private. |
| APLB | 172,74,64 | A binary file that should be moved elsewhere or deleted. |
| APLCVRT | 64 | A procedure file with \$RFL,57700. Delete. |
| APLCVIB | 64 | Called by APLCVRT, FL TOO SHORT FOR PROGRAM (Is a binary) Delete. |
| APLOLD | 64 | A binary file identical to APLT. Delete or move. |
| APLT | 172,74,64 | A binary of APL*CYBER with small character set problems. Delete or move to UN=APLO or APL1 or CALLPRG |
| BALUBS | 172,74 | A data file for a short course with no apparent purpose. Delete. |
| BANDIT | 74,172 | Should be moved to UN=GAME. |
| BASIC21 | 64 | Describes differences between BASIC 2.0 and BASIC 2.1. Should be deleted or moved to WRITEUP. 73/12/15. |
| BIGPAL | SPL | Should be moved or made private. |
| BRL | 172,74 | Should be fixed -- IF (EOF,1) ... |
| CALLIB | 64 | Should be moved to UN=CAI or to CALLPRG; relocatable. |
| CAT | 64 | Should be deleted. Notice saying "Use CATLSYS." |
| CHAR21 | 64 | Should be deleted; describes differences between KRONOS 2.0 and KRONOS 2.1 character sets. 73/12/12. |
| CLINFIT | 64,74,172 | Replace MERITSS copy with that on CYBERS. |
| COMET | 64 | Should be archived. Program for comet Kohoutek for years 1973 or 1974 only. |
| COMPLEX5 | 64 | Should be corrected for character set. |
| COMP21 | 64 | Should be deleted; out of date. 73/12/13. |
| CONF | 64 | Should be deleted; out of date. 75/05/10. |
| DEPCAL | 64,74,172 | Replace CYBER copies with that on MERITSS. |
| FORT | 64 | Should be deleted; out of date; character set errors |
| HIDSK | 64 | Should be moved to UN=GAME. Hide and Seek. |
| INFO | 64 | Should be deleted; out of date. Data base for old INFORM program. |
| KRON21 | 64 | Should be deleted; out of date; describes KRONOS 2.0 to KRONOS 2.1 conversion. 73/12/15. |
| LIBLIST | 64,74,172 | Should be updated to reflect actions taken upon the rest of these files. |
| LONGIT | 64 | Should be corrected for the character set. |
| MASTERS | 64,172,74 | Should be corrected for the character set and possibly moved to UN=GAME. COMPASS source. MERITSS copy needs character set conversion. |
| MNF | 64 | Should be deleted. SCOPE 2.0 6600 FORTRAN 1974. |

| | | |
|---------|------------|---|
| MNFFUT | 64 | Should be deleted. Ancient version. |
| MNFLIB | 64 | Should be deleted. Ancient version. |
| MUAMEET | 64 | Should be deleted. 1975 MUA meeting notice. |
| MULFI | 64,74, 172 | Replace CYBER copies with that on MERITSS. |
| NOTE | 64 | Should be deleted. Notice saying "Use SYSNOTE." 77/10/07. |
| OMNITAB | 64,172,74 | Should be moved to CALLPRG. Is binary and on the Cybers is execute-only. |
| OVHOUSE | 64 | Should be changed to have MNF subsystem. |
| PAGES | 64 | Should be corrected; outdated instructions. Mentions LRUN command. |
| PAL | 172,SPL | Should be moved to CALLPRG. Binary of PDPMC (assembler?) |
| PASCAL | 64 | Should be deleted. 75/09/21. Version of binary. |
| PASCEX | 64 | Should be corrected for character set. (PASVERT) |
| PFOC | 74,172 | Should be deleted. Is WRITEUP,DUMPPF. |
| PFSTIM | 172 | Should be deleted. STIMULATOR script. |
| PHONES | 64 | Should be deleted; describes phone rotary conversion performed 75/09/17. |
| PLOTXY | 64,74,172 | Replace CYBER copies with that on MERITSS. |
| POLUT | 64,74,172 | Replace CYBER copies with that on MERITSS. |
| PROCPAC | 64 | Should be moved to UN=WRITEUP. |
| PSCINFO | 64 | Should be deleted; out of date. October, 1975. |
| PSCLIB | 64 | Should be deleted; binary; 75/09/21. |
| RANDB | 64 | Should be deleted; binary; unknown purpose. |
| RANDOM | 64 | Should be deleted; binary; unknown purpose. |
| RASEQ | 64,74,172 | Replace MERITSS copy with that on CYBERS. |
| REFORMS | 64,74,172 | Should be deleted; obsolete; says "Use X,REFORM." |
| RESIDAP | 64 | Should be changed to have MNF subsystem. |
| RESIDH | 64 | Should be changed to have MNF subsystem. |
| RESIDWC | 64 | Should be changed to have MNF subsystem. |
| ROOTBW | 64,74,172 | Replace CYBER copies with that on MERITSS. |
| RWEXIT | 64 | Should be made private. 75/09/23. ??? |
| SIRHELP | 74,172 | A HELP file. See XEDITI. |
| SKIS | 64 | Should be corrected for TYPOS and mention of Univac 1106. |
| SNOINFO | 64 | Should be moved to UN=WRITEUP. |
| SPELL | 64,74,172 | Should be moved to CALLPRG; binary. If source can be found, should correct character set. |
| STOICH | 64 | Should be corrected for character set. |
| SYSDATA | 64 | Should be deleted or updated and moved to WRITEUP. Badly out of date. |
| SYSDOWN | 64 | See SYSDATA. |
| SYSNOTE | 64 | See SYSDATA. |
| SYSWARN | 64 | See SYSDATA. |
| TABIN | 74,172 | Fix, 6400 copy works. |
| TAPE99 | 64,74,172 | Needs character set conversion. |
| TYPEINF | 64,74,172 | Should be deleted unless needed by TYPESET. (TYPESET has no HELP command, so this file is not used by TYPESET.) |
| TYPESET | 64,74,172 | Should be deleted since on CALLPRG. |
| T5OX | 64,74,172 | Should be changed for the character set. |
| VIKINGS | 74,172 | Should be moved to UN=GAME. |
| VPGEN | 64 | Should be changed to have MNF subsystem. |
| XEDBUGS | 64 | Should be deleted. States that there are no bugs. |
| XEDI64 | 64,74,172 | Should be deleted; uppercase only copy of XEDIT writeup. Already available via WRITEUP. |
| XEDITI | 64,74,172 | A HELP file referenced by XEDIT. Should these files be |

| | | |
|---------|--------|--|
| | | on UN=LIBRARY, or UN=WRITEUP, or where? |
| XMTWARN | 64 | Should be deleted since XMIT no longer exists. |
| X217INF | 64 | Should be deleted; old XEDIT documentation. |
| X217I64 | 64 | Should be deleted; old XEDIT documentation. |
| YEDIT | 74,172 | Should be deleted. XEDIT 2.1.2. |
| ZZZZS1 | 74,172 | Should be deleted; PW=MJF. |
| ZZZZS2 | 74,172 | Should be deleted; PW=MJF. |

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Cyber 74/172 Deadstart Dump Analysis from Friday, 8 December through Sunday, 17 December - by K. C. Matthews

Monday, 11 December

18:57 (DD10)

Cyber 172

PP program QAC hung at the BATCHIO control point. Analysis by Don Mears showed that QAC hung in an odd loop if a file with some strange characteristics appeared in the queue. We don't know where the bad file came from, but Don is fixing QAC so that it won't hang in the future.

19:57 (DD11)

Cyber 172

Same problem as above.

Tuesday, December 12

14:19 (DD12)

Cyber 74

CPUMTR stopped with a CPU error exit. The error stop was at the address where CPUMTR normally begins to process requests from PPU's. There was no bad code in core at that point, however. Similar problems have occurred in the past (2 or 3 times in as many years). In those cases a user CPU program had stopped with an error exit at the same time a PPU was trying to exchange jump CPUMTR. In this most recent case, it was impossible to find the current user job exchange package. No further resolution of the problem appears likely.

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6400 Deadstart Dump Analysis (11/20 - 12/20) - by R. A. Williams

Date Description

Tape

There were no unscheduled deadstarts during the period.