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NOTICE OF CHANGES TO THE SYSTEM

NOS Changes

Don Mears installed the following changes.

1) Program QAC was repaired so that EC = A9 type print files are not assigned to printers with -5 type print train.

2) Program submit was altered to abort if it encounters an illegal user command.

3) Program QAC was altered so as not to hang if it encounters garbage queue files. Now, if we could only find out where the garbage queue files are coming from.

4) Program ORF was corrected to release any disk channels before pausing.

5) Don added two new account file messages ZQAC and ZODV output by QAC and ODV. The messages will be used to help track down vanishing queue files.

6) The locally installed bit in the FNT entry which indicated deferred route status was removed. We will use instead a CDC bit indicating similar information.

7) Site validation code in ROUTE was moved to ODV.

8) Login processing in 1TD was altered to send a bell to the terminal immediately upon login. Similar code was removed from the PDP-11. This welcome change provides all users (particularly 2551 users) with an instant sense of system recognition.

9) Don repaired a system crashing error in TELEX. The error involved dropped pots and occurred whenever a SSJ= type job time limited. This error actually caused the 6400 to crash several times recently.

Tim Hoffmann installed the following changes.

1) Tim installed his proposed change to set bit 24 of the FILINFO block+1 for shared files (see DSN 4, 23 p. 189).

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

3) An argument processing error in DAYFILE wherein a terminator left off of a command containing a string like ABC would result in ARGUMENT ERROR was repaired. This item will be PSRed.

4) The ability to enable or disable clearing of CM by reading an out-of-range ECS address was added to DSD.

Brad Blasing installed a version of the PSR 477 CYBER loader which presets core to zero instead of negative indefinite.

Tim Salo applied the following enhancements to EXPORT.

1) The STAT command now displays all files on the C74 owned by a terminal.

2) The CPR command now changes print file queue priorities.

3) The DVT command now correctly diverts print files to Lauderdale.

KRONOS Changes

Last week's system was not installed due to critical problems introduced by MULTI which went undiscovered until near final system check-out. The next KRONOS system is identical to the one described in the last DSN in all respects except the following.

1) All MULTI code was deleted from JPL although the programs MULTI, SYSTASK, COMCMUU and COMCMUM remain on WPL.

2) Don Mears' fix for dropped pot problems described above was installed into TELEX.

3) Jeff Drummond altered DISPOSE to be legal if a user is validated. Previously, all non-SYOT DISPOSE commands were disallowed.

PROPOSED CHANGES TO THE SYSTEM

Note, Enter/Z - by J. Larsen

Because of the advent of NOS level 4 and because of the documentation in the manuals currently being distributed to the users and because with little effort now we can save conversion work later, I would propose that the program NOTE with the entry points NOTE and ENTER go into the system. Because the ENTER control card does the same as our current Z control card, I would further propose that in the program NOTE the ENTER and Z control cards be equated. By doing this we can delete the Z program from the system.

/////////

Let's Install CCL - by J. J. Drummond

I propose that we install the necessary code to support CCL (Cyber Control Language) on our NOS systems. This will include the following:

1) Changing our RECTYP modset so that CATALOG, LIBEDIT, and friends recognized PROC-type records.

2) Add the JCDW word to the control point to hold CCL-related information and alter ENQUIRE to display it.

3) Add the GETJCI/SETJCI functions (to CPM) and macros (to COMCCMD) which basically read and write the JCDW word.

Installation of these modifications will enable us to install CCL at some point in the future (possibly after we receive level 485).

These changes will be upward compatible with release 4.

/////////

What's In A Word? - B. E. Blasing

At PSR 460 and earlier, Cyber loader by default presets unused core to zero (unless otherwise specified via a LDSET(PRESET=xxx) or an internal LDSET table in the relocatable binary). At 472 and on, CDC changed the default presetting of core to what is known as DEBUG. It is:

    6000 0000 0004 0040 0000 + addr

This gives the user a better chance of a mode error if he uses uninitialized core. If used as a real number, it is an indefinite number (mode 4). If used as an integer, it is simply a big integer. If executed, it does a jump to 400000b+addr (mode 1).

I propose we adopt this as the default presetting under NOS. MNF and PASCAL already specify this in their binaries, so this would only affect FTN programs.

/////////

A New Account File Message - by T. W. Lanzatella

I propose to change the way in which a job run during delay time is indicated in the account file. This suggestion is prompted by the recent Executive Committee decision to extend lower charging rates to timesharing users who log in when lowrate hours are in effect.

The current method of indicating lowrate is to place a LOWRATE in the ABUN message issued by ACCFAM after the first user command in a batch job. A ABUN message is also issued for timesharing users by 1TA. Ordinarily we would simply change 1TA to add a LOWRATE to its ABUN message without a proposal. Unfortunately, there isn't

enough space left in 1TA to accommodate the change. There is, however, enough space to issue a new message. What's more, the symbol LOWRATE is no longer the official indication that a job is to be run during lowrate hours. The official symbol is P0 and the possibility of additional job categories like P1 or P2 is real.

Thus, I propose to add a new account file message to be used strictly for indicating job category information. The format of the message could be: ACAT,ᵇP0. Initially this message will be issued only if a job or timesharing session begins after lowrate hours are in effect. Programs ACCFAM and 1TA would be altered to issue the new message.

SYSTEM MAINTENANCE: People and Procedures

Cyber 74/172 Deadstart Dump Analysis from Monday, 18 December through Sunday, 6 January - by J. J. Drummond

Thursday, 21 December
_____

13:54 (DD14)   Cyber 74

DSP hung at EXPORT's Control Point. DN30 had an INPUT file system sector written over the first sector on the label track. DN15 had linkage errors.

Friday, 22 December
_____

14:07 (DD15)   Cyber 74

1R0 dropped out after a disk error and left an FNT entry interlocked. This occurred several more times over the next couple of days but did not cause the system to go down as we figured out how to clear the interlock manually. Attempts to flaw-out the offending track met with some problems at first.

Wednesday, 27 December
_____

00:50   Cyber 74

Channel 32 died. All I/O equipment was unavailable for the rest of the morning.

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6400 Deadstart Dump Analysis (12/21 - 1/7) - by R. A. Williams

Date	Description	Tape
781221	The system went down when power was applied to a 7054 disk controller to which a double density option was added. Apparently it reserved a drive, shutting off other access. The controller has been fixed.	Fixed
790102	1TA hung because a user was requesting an amount of time greater than validation limit following a time limit. TELEX was not processing this condition properly. The error existed in KRONOS and NOS. DWM found and fixed it.	Fixed

Date	Description	Tape
790102	The scopes went blank. While a continuing PP1 problem is subject, it has not been found.	N.A.
790106	1SJ and 1TA were hung but dump investigation shows 1SJ was never loaded.	DDT-17