

UNIVERSITY OF MINNESOTA COMPUTER CENTER  
Deadstart Systems Newsletter

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NOTICE OF CHANGES TO THE SYSTEM

Kevin Matthews installed a change to ROUTE which causes it to ignore any EC=A6 parameters. The reason for this change is because UCC no longer provides a A6-type print train at Lauderdale. Some people (mostly staff) habitually stated EC=A6 because this printer was quite a bit faster than the printers with A9-trains.

Andy Hastings converted all modsets having anything to do with interactive processing to the 531 level of NOS. This work is the final step before starting to run the PSR531 network products: NAM, CCP, IAF and ultimately, TIELINE.

Paul Thompson installed Kevin's proposed change to PFM wherein a new bit, no-update-after-access, will be honored for all PFM calls from system origin (see DSN 7,17 p. 107).

PROPOSED CHANGES TO THE SYSTEM

USERS/DSD ala DSDJ - by B. E. Blasing

I would like to add the ability to our familiar program USERS/DSD to read a deadstart dump tape instead of the running system. This ability is useful because USERS/DSD has nicer interactive interface than DSDI and also has more displays DSDI. A D parameter would be added to DSD to indicate than you want to read the dump file instead of running system. Thus:

DSDI(D=BUZZ)  
DSD(D=BUZZ)

would prepare a dump on file BUZZ and start up DSD reading it.

SYSTEM MAINTENANCE: People and Procedures

Last Weeks Systems Group Meeting - by T. W. Lanzatella

Before discussing proposals, TWL brought up a couple topics related to Cray support:

- a) The format of Cray jobs has been changed so that a NOS job and USER card are not required to be the first two lines of the job.
- b) We cannot use the US option on the Cray job command to pass job routing information between the Cyber and the Cray. The US field is used by the permanent file system to partially qualify names. Our only option now is to expand the header which prefixes all dataset transfers between the Cyber and Cray. We are reluctant to adopt this solution because it means we will have to modify the Cray system.

The following proposals were discussed:

- a) The program COUNTU was unanimously accepted (see DSN 7,18 p. 106). Phil Kachelmyer suggested an ability for COUNTU to place the number of lines counted into an R-register. We agreed that this was a good change. ABM will check with J. Miner.
- b) We decided not to get rid of LINK loader (see DSN 7,18 p. 107). Instead, we will purchase MECC's version of LINK and someone will present a proposal which discusses the differences between the new and old version.

Larry Liddiards discussion topic on paper size was taken up. Two points he immediately brought up were, a) that some printers must be either 6 or 8 LPI and, b) that this change will save almost 20% in paper.

Question: is the paper really cheaper? A possible printer solution is to change all over to 8LPI. A consequence of this would be 30% increase in density for printer plots; and unless we institute a special form, we will not have any more letter-sized paper. ABM felt that 8½ inch paper would be bad for writeups. This discussion was shelved at this point until the next meeting where someone will bring examples of 6 and 8 LPI writeups on various printers.

Marisa Riviere led a discussion on policy related to product set changes. Product set packages include such things as FTN, Record Manager, Cobol, and MNF. Hence forth, these packages cannot be changed unless a proposal or discussion topic appears in the DSN first. Marisa then drew a diagram showing why this policy is necessary.

The current situation is that Steve Reisman wants to change Cobol and Sort/merge and Tony Gerber wants to change M77. Unfortunately, to change these means that Marisa must change SYSLIB, FILE, FTN, FTN5, FORTRAN and COMPASS. Because of the extensive changes, Marisa won't be able to install these changes until 13 October; which is an unfortunate lapse in our policy of not changing major packages except between school sessions.

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Callprg and Library Tape News - by M. Riviere

On October 13, the major CDC compilers and libraries will be updated to the PSR 531 release level. The packages to be changed are: COBOL, CB5LIB, COBOL5, CB5LIB, FILE, SYMPL, SYMLIB, SORTMRG, SRTLIB, AAMLIB, BAMLIB, BPT8LIB, FTN, FORTRAN, FTN5, FTN5LIB and SYSLIB. The change is due, mainly to a request by Steve Reisman; with the exception of the FORTRAN products, which I am replacing, and SYSLIB which is a common result of the combined installation.

A description of the upgrading of Steve's products is on WRITEUP,PRODUCT. As this writeup describes, the current products will be available as past ones and the PSR level 460 product set (that is, the one compatible with MNF and M77 which are now past type) will be available as fetch Callprg packages.

A similar set up will be made with FTN and its libraries. The 460 level compiler and libraries which are now past type Callprg products will be installed as fetch type Callprg entries. The current products will be available as past products. For FTN5, only the current version will be kept as past since we never had a 460 version of this compiler. The post-mortum dump facility of FTN and FTN5 will also be updated as part of the compiler update. Currently, users who access the future versions of FTN and FTN5 are unable to utilize the post-mortum dump analyzer. A description of these changes is available on the short writeup FTNNEWS.

The implementation of the 531 level compiler requires that the COMPASS assembler be updated to the same level. The COMPASS to compiler interface common deck, COMPCOM, was changed once more between our current level and the one to which we are planning to upgrade. The 531 update of COMPASS implies changes to MNF and M77 to allow them to continue to process combined FORTRAN-COMPASS source decks. Tony Gerber is working on these changes. In addition to the PSR level upgrade, Tony is also updating the system version of M77 with the version of the compiler which is now available as a future Callprg package. The writeup M77NEWS describes the changes. The replacement of M77 includes the updating of the libraries MSUIO and M77LIB and the M77 dump trace file ZZZZZ77.

In addition to the 531 level upgrade of his products, Steve is updating several other Callprg products to level 531 and he is moving these products to the Library Tape. This change will affect the Library Tape of each Cyber. Steve's products are: IXGEN, ESTMATE, MIPGEN, FLBLOK, FLSTAT, MIPDIS and COPY8P. Whether usage of these packages justifies their system residency has not been demonstrated. If they are not heavily used, they will be moved back to Callprg.

Also on October 13, Andy Mickel will install COUNTU as Callprg package on the three Cybers. A proposal for the change was presented by Andy in the previous issue of this DSN.

Another modification to take place on October 13 is the introduction of the fetch type package LOGIT, a logistic regression program on the C74/730 Callprg index. This addition is made by S. Yen. The LOGIT program is to be used by the Applied Statistics department.

The October 13 change of the CDC 531 level products and of the MNF and M77 compilers departs from the procedures that are usually followed for Callprg index and Library Tape modifications. (It was established that:

- a) Major products should be updated only during the quarter breaks and between summer sessions.
- b) All the Callprg and Library tape modifications, with the exception of a few ones concerning non-control statement callable entries, are to be announced in this DSN before they take place.

Lack of early notice for the previous DSN publication made these changes impossible to announce. We considered at the last Systems meeting the possibility of implementing the changes by September 26. That would allow us to remain consistent on making changes out of the school term. But the complexity of the changes, which involves the simultaneous updating of several products, did not allow it to take place. We agreed at that time that the choice of not postponing the updating until the end of the Fall quarter was a sensible one. This update benefits part of our users population and helps us to better coordinate the installation of a complete product set release. I hope that this will be the last exception that I feel forced to make on our procedures. I strongly request cooperation from everyone involved with this kind of change to follow a more organized path in the planning and requesting.

The next set of Callprg index and Library Tape modifications will take place on October 27. Requests for that date should be submitted no later than October 15, before noon.

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Cyber Deadstart Dump Analysis from 9/21 to 10/1 - by B. E. Blasing

The Busy Machine - Cyber 730

Wed., 9/23, 03:55

DD2010

The disk controllers on channels 32 and 33 began getting function timeouts. Several master clears and two deadstarts (L3 and L0) were needed to breath life into them. This is part of ongoing problems with channels 32 and 33.

Wed., 9/23, 08:40

No Dump

Same as 9/23, 03:55. Channel cables were moved from 32 and 33 to 24 and 25 to help isolate the problem, and a level 0 deadstart was performed.

Fri., 9/25, 08:40 - Same as 9/25, 08:40

No Dump

The Unbusy Machine - Cyber 74

No unscheduled deadstarts for the period.

MERITSS - Cyber 172

No unscheduled deadstarts.