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BKY Newsletter Vol 18 No 8

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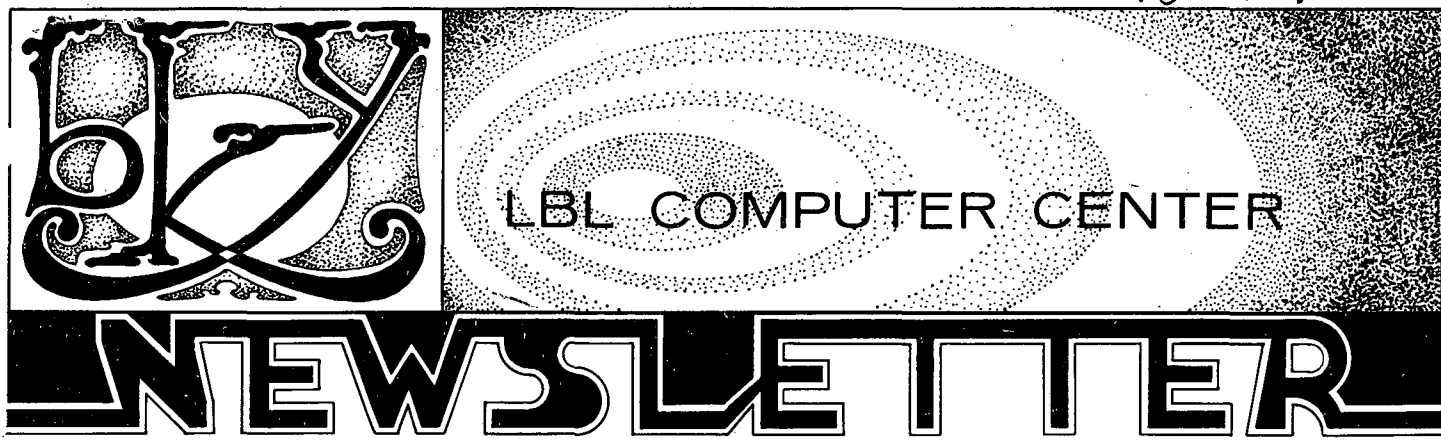
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Address all communications for the Newsletter to Maggie Morley, Editor, 50B/1245A, (415) 486-5529.

The deadline for submitting VOX POP entries and other contributions for the September Newsletter is Monday, August 17, 1981.

For Reference

Not to be taken from this room

INTRODUCING DGate - THE DECNET GATEWAY

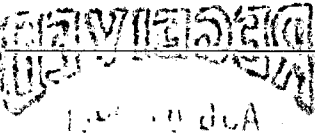
If you are using either the RSX11m or the VMS operating system, you should know about DGate. DGate is BKY's DECNET gateway (or interface) to the Hyperchannel network. Our VAXes use DGate to connect to the Hyperchannel, and if you are using either of the systems mentioned above, you can use DGate to access the CDC 6000's and 7600. (We do not currently support the RT operating system.)

DGate is useful if you want to edit and create files on your own machine, then send them to the 6000's/7600 for processing. You can get your output back on your own machine.

Presently, our utilities treat DGate as a station for RJE (remote job entry) to the 6000's and 7600 only. In the future, you will be able to access other BKY machines that are connected to the Hyperchannel. We are working on a way for DGate to provide various network services, so that you will be able to dispose files to COM (the computer output on microfiche device) and to the printer, and read and write on GSS tapes.

For information on connecting your hardware to DGate, and on the cost of the connection, contact Sig Rogers, x6713. For information on the software available on DGate, contact -

John Wood, x5972



RT-11 NEWS

Because of the presidential freeze on publications (Policy and Procedure Memo Vol. VII No. 29), publication of the LBL RT-11 user newsletter has been postponed. For information on any of the following subjects, contact Randy Michelson, Bldg. 46a, Rm. 1150, x6411, between 1 and 5 p.m. on Monday through Friday.

- (1) The K52-H19 document (courtesy of Joel Ryan) is available. It is a 5-page writeup on using the K52 screen editor from an H19 terminal.
- (2) The NETCOM card-cage support bracket drawing (courtesy of Joe Katz) is available; the bracket will safely support card cage vertically for debugging.
- (3) The RT-11 Version 4.0 10-hour (10 lesson) videotape course from LLL (courtesy of Mike I. Green and Joe Katz) is available in Bldg. 41. It is designed for inexperienced users. Keys must be signed out.
- (4) The RT-11 support guidelines memo (courtesy of Frank Robben, Joe Katz, et al.) is available; it outlines what support services are available and how they are funded.
- (5) The RT-11 user committee is seeking volunteers from each division.
- (6) LLL has added two LSI-11 modules to stock: TCU-50D battery calendar clock (\$260) and 128 KW RAM (about \$1,500). Both are dual-width.
- (7) To get on the mailing list for RT-11 information, please send me your name, LBL address, and phone number.
- (8) If you wish to exchange hardware, contact me (LSI-11/PDP-11 flea market coordinator) at x6411. Items already available include 2x KD11-HD, KD11-HA, and several nearly new RK05 cartridges.

Randy Michelson, x6411

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UNIX VERSION 7 ON THE WAY

During the next several months, we will be converting the LBL Computer Center UNIX systems, UNX1 and UNX3, from Version 6 to Version 7. The conversion will make our UNIX systems compatible with TID UNIX (UNIX2) and with the UNIX systems on the U.C. Berkeley campus and elsewhere.

With Version 7, we will be able to make system changes, and exchange locally written utility programs with campus. We also anticipate some improvement in system response, though this will probably not be noticeable immediately. Version 7 contains bug fixes in the editors and other programs, a better debugger, and new utility programs. Also, larger files and file systems will be allowed under Version 7.

A certain amount of user inconvenience is unavoidable in a change of this magnitude. In order to prepare you for some of the changes you will encounter on the new system, we have written several 'help' articles, which we will update as needed. The articles are -

help v7 Contains introductory information on Version 7.

help v7 convert Long article listing the changes that we currently know about. This will be updated as more changes become known.

help v7 news Lists additions to the article 'help v7 convert' (the latest addition appears first). This will allow you to keep up-to-date without reading through the long article.

We have copied the Version 7 manual to UNX1 and UNX3. To see a Version 7 manual entry, type 'v7man <entry>'; for example, for Version 7 tset, type 'v7man tset'.

If you have questions, comments or suggestions about Version 7, please send them via UNIX mail to unx3:huff or unx3:alan.

Bob Hoffmann, x6382

THE DICOMED - A STATUS REPORT

It has been awhile since our last report on our Dicomed processor. The Dicomed is a state-of-the-art machine that can produce color and black-and-white film output in vector and raster modes.

We can now produce 35mm movies and slides in color or black-and-white; 16mm movies; 4x5 color sheet film; color or black-and-white Polaroid prints; and 48x and 24x microfiche (with certain restrictions). You can use GRAFPAC, the graphics package available on the various machines at BKY, to produce graphics files for the Dicomed.

Eventually, we will be able to produce fiche listings from tapes originating on both CDC and DEC machines. New features in GRAFPAC will enable you to use the raster mode of the Dicomed to produce, for example, pictures with dark lines on a light background. See the February, 1981 issue of the Newsletter for more details.

We expect to change over to an upgraded version of the software system in the near future. We are working to eliminate several bugs, incorporate the accounting procedures, and smooth out the operator interface with the system. We also plan to implement a more straightforward way for you to request Dicomed processing.

We are investigating the possibility of attaching the Dicomed computer to the Hyperchannel. We must weigh the advantages - user convenience and decreased file handling by operators - against the possibility of adverse impact on the network. We will also consider moving the Dicomed from its current residence, a PDP 11/34 with full cache memory, to a more powerful computer, in order to increase processing speed.

We heartily encourage you to use the Dicomed and to let us know if you experience problems of any kind. Forms for submitting Dicomed jobs are available at the I/O counter, Bldg. 50b, Rm. 1215. Documentation on using the Dicomed with graphics is in the WRITEUPS subset GRAFPAC. If you have questions, contact the consultants at x5981, or -

Doug Brainard, x6380
or Barbara Britton, x6379

VAX UPDATE

Hardware Link Between VAXes And CDC Machines

Recent software changes on our VAXes have greatly improved the performance of the link to the CDC 6000's and 7600. You will notice this improvement both in establishing your initial connection, and in the reliability of long file transfers.

You can use the link not only to connect to the CDC complex, but also to send files between the VAXes and the UNIX machines. Contact Uzi Arkadir at x5194 or David Gok at x5124 for details on how to do this.

If you use one of CSAM's VAXes, you can now submit jobs to the CDC machines over the link; you can then claim your output files. You can also do direct file transfers with Computer Center VAXes.

Software News

GRAFPAC and the IMSL and NAG libraries are now available on the VAXes. The WRITEUPS subset GRAFPAC will soon contain documentation on using GRAFPAC on the VAXes (watch BKYNEWS to find out when the writeup is updated). For information on IMSL and NAG, contact Uzi Arkadir, x5194.

A utility to allow easy routing of files to the Dicomed color film output processor is also now available; you can type HELP DICOMED online for more information.

Also now on the VAXes, but not supported by the Computer Center, are the CERN 'Hbook' and 'Hplot' histogramming packages. The command HELP HBOOK provides further information.

VAX Classes In August

There is still room in the VAX classes to be held on Mondays and Wednesdays, August 10, 12, 17, and 19, from 10 a.m. to noon in the Computer Center Training Room (Bldg. 50a, Rm. 1116). To register for these classes, contact Lisa Long, x5947.

Response time on the VAXes remains excellent. Disk storage is still free.

John Dilworth, x6088

PRODUCTION VERSION OF SPIRES * AVAILABLE

The production version of the SPIRES Database Management System is now available for use on the UCB campus IBM-4341 machine. See the April, 1981 Newsletter, pages 3-4, for preliminary information on using SPIRES. That article also contains references to pertinent documentation on using the 4341. If you have questions, contact -

Jerry Borges, x5568
or Joyce Johnston, x5630

* SPIRES is a registered trademark of Stanford University.

CALCOMP PLOTTERS TO RETIRE

The Computer Center will be retiring its four CalComp plotters from BKY beginning October 1, 1981. These plotters are obsolescent and expensive to repair, and require an inordinate amount of operator intervention. Their use has dropped significantly since the availability of BKY's Varian plotter, which can plot more quickly and efficiently than the CalComps. If you are still using these plotters, converting to the Varian should be a fairly simple task. We expect that the retirement of the CalComps will have minimal impact on users.

We will disconnect two of the plotters on October 1, and the other two on April 1, 1982. In next month's Newsletter we will give you more specifics on how to convert to the Varian. If you have questions, you may contact me at x6204.

Joan Franz

ACM SPEAKERS' PROGRAM

The speakers' program for the Golden Gate Chapter of the ACM (Association for Computing Machinery) for the remainder of 1981 is as follows -

August 20

"Local Networks" - Fred Rounds, NASA Ames Research Center

September 17

"Word Processing: Who Needs It?" - Dave Gomberg, Lumbuckles

October 15

"Practical Applications of Software Science" - Chuck Smith, IBM Santa Teresa Laboratory

November 19

"Programmer Productivity in the Next Three Years -- A Pragmatic Approach" - John Hiles, Amdahl Corporation

December 17

"Programming In Calculus" - Frank Pfeiffer, Memorex Corporation

For further information on any of these events, and for reservations, please contact Joanne Stewart at (415) 428-5257. The ACM also solicits your suggestions for topics and/or speakers for 1982.

INTERNAL DOCUMENTATION ON MICROFICHES

Sets of microfiches containing the entire Writeups and Handbook libraries are available at the Computer Center Library (50B/1245A). The documents are printed in alphabetical order, according to the name. The cost (\$1.25 for 48x, \$4.25 for 24x [larger print]) is charged to your Computer Center account.

You may arrange to have such sets replaced automatically every few months (i.e., when enough significant changes are generated). If you are receiving regular updates, please notify me of any account number change, or you will be dropped from the list at the time of the change.

Maggie Morley, x5529

NOTE FROM THE EXPEDITERS

- (1) If you are getting itemized reports of computer charges from the Expediters, you should give written notification of any ACCOUNT NUMBER and/or site-code change.
- (2) NAMES Accounting Tapes from the Expediters, created after 1 December 1979, are GSS tapes in the ATL. You must use the control card --

GETTAPE,filename=week,tape#.

or

GETTAPE,filename=month,tape#.

- (3) The form required to enter tapes into the tape library is available from the PSS disks as follows --

LIBCOPY,EXPLIB,OUT/RR,USER.

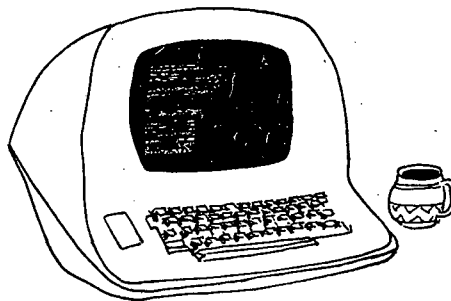
DISPOSE,OUT=PR,DT=I,PA=1F. ... (Use 'PA=1F' at BKY only)

Irene Bernal, x6205

COMPUTER CENTER SEMINARS

The Computer Center offers seminars giving an overview of the BKY operation. We hope to establish a series of regular semi-weekly sessions featuring in-depth discussions of any facets of the system you wish covered, whether you are an inexperienced user or an old hand. If you wish to attend one of these sessions, you MUST make an appointment beforehand. Contact -

Joyce Rybandt, x6229



BKY INTERACTIVE RESPONSE MEASUREMENTS

During June, we took samples to study the traffic through the BKY concentrator, RECC. We measured all interactive responses during the periods sampled. The units measured are transactions executed with NETED, POE, LIBCOPY, and LIBRITE. We define an interactive transaction as one line of input, together with all output lines which result from that input line. One or more computer delays are associated with each transaction. The delay tallied is the longest one observed.

The table shows the number of delays exceeding certain thresholds that were observed for frequently-used verbs. The samples show the number of transactions, and the number of delays exceeding threshold values, normalized to one hour's experience with the verb.

INTERACTIVE RESPONSE SUMMARY, JUNE 1981

Verb	Machine	Trans/hr	Transactions Per Hour With Delays >				
			3 sec	10 sec	30 sec	100 sec	300 sec
NETED	B	296	90	32	8.3	1.4	0.04
	C	157	81	29	9.1	1.5	0.00
POE	B	267	72	31	8.5	1.4	0.07
	C	155	66	30	9.5	2.3	0.50
LIBCOPY	B	68	50	27	8.3	1.1	0.38
	C	59	42	27	7.7	1.0	0.00
LIBRITE	B	61	50	36	12.6	1.8	0.00
	C	72	57	47	24.9	2.5	0.00

Fred Garland, x6728

COMPUTER CENTER STATISTICS

SYSTEM PERFORMANCE IN JUNE	7600	6600	6400	UNIX1	UNIX3	VMS1	VMS2	PHYS
System Availability	94.99%	97.74%	94.35%	99.92%	99.91%	99.07%	93.41%	99.86%
Median Service Interval (hrs)	16.37	95.55	59.28	200.47	359.67	73.13	41.15	359.50

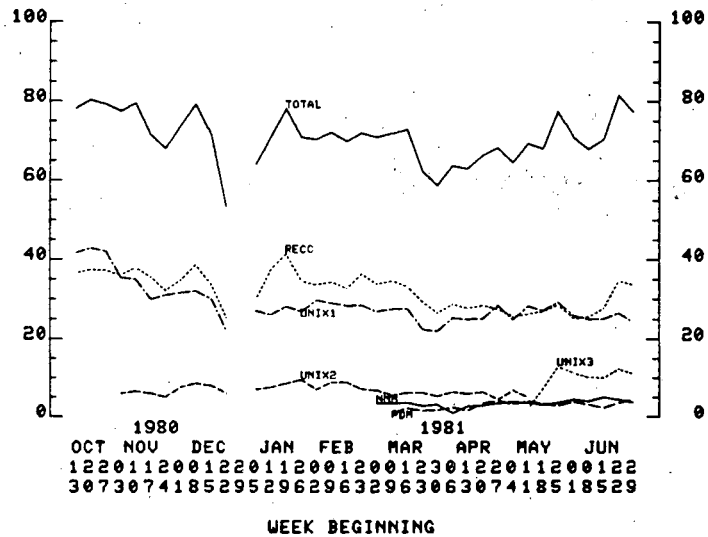
Jobs Processed: 55,869 on 7600; 25,669 on 6000's; 81,538 total

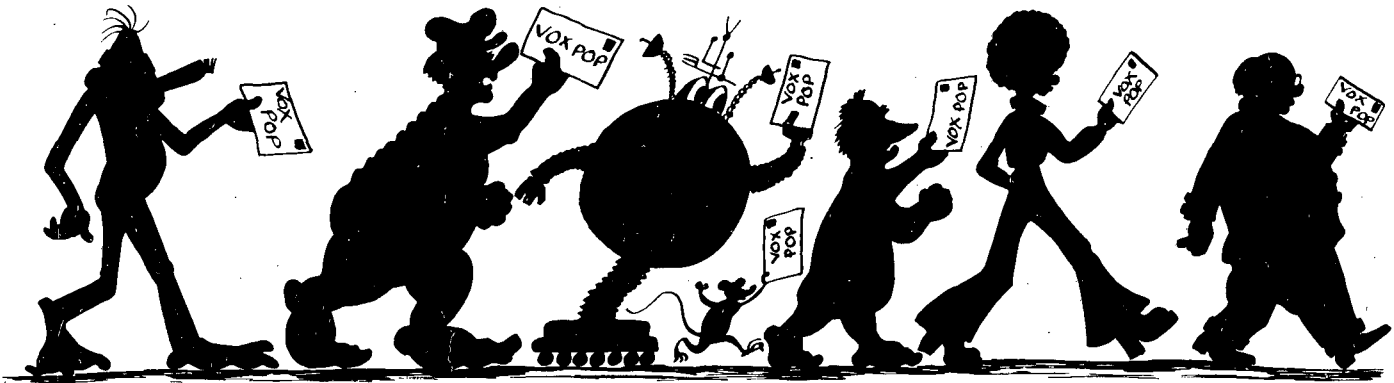
7600 TURNAROUND TIME	20 min	2 hrs	4 hrs
% of RUSH jobs returned	91.29	98.95	99.50
% of ALL jobs returned	80.49	91.47	94.07
% returned, CU limit = 100	89.36	96.29	97.52
% returned, CU limit = 500	77.70	91.37	94.24
% returned, CU limit ≥ 1000	29.31	55.88	66.05

INTERACTIVE STATISTICS

LBL COMPUTER CENTER
PERFORMANCE MEASURES

INTERACTIVE TERMINAL ACTIVITY

AVERAGE NUMBER OF TERMINALS CONNECTED
SAMPLED AT HOURLY INTERVALS, PRIME USE PERIODS, WORKDAYS



VOX POP

I'd like to have use of a public telephone nearby (closer, that is, than the one up in the lobby, 4th floor of Bldg. 50a). It's inconvenient to make long distance outside calls after hours and on weekends when I can't arrange for charging through the LBL operator.

Ma Bell expects a minimum level of cash income from a public telephone - which would probably not be generated here. If your official calls are charged to your own company and are not too frequent or lengthy, ask the shift supervisor at the I/O counter - we have one line that can be used. (Marv Atchley)

Often I will find the AJ terminal in use, with no one around, and no way to know when it will be available. How about putting a sign-up sheet next to the AJ for those who plan to be away from the terminal, with spaces for name, room, and extension? This system was used for the 1401 and worked very well. It is not only a courtesy to other users; it allows users to be contacted if something goes wrong.

Will do. (Marv Atchley)

Could you please display examples of the SAME plot as produced by the different types of plot devices? Perhaps this could be put on a wall on the first floor.

After discussing the usefulness of doing this, we have concluded that what is needed is a plot for each device showing various line thicknesses, dash patterns, curves, hardware characters and their attributes, etc. If anyone is interested in doing or helping to devise such a program, please contact me. (Nancy Johnston, x5986)

I use GRAPHG to make a graph. GRAPHG calls TITLEG to draw the labels. I get IDDS ERROR No. 57 from IDDS, which says that there was not enough room to plot the main title, so TITLEG moved it away from the x-axis. Various solutions are then recommended, but my point is this: GRAPHG sets various default parameters to take the burden off the user; it should NOT set up these parameters to produce error messages. In the default case, one would expect the system to produce plots without error messages.

This will mean reducing the default size of the plot. If nobody objects, we will make this change the next time we update the IDDS library. (Nancy Johnston)

I've just received my 48x microfiche of WRITEUPS and HANDBOOK. It would be nice for us IDDS users (who by necessity use the documentation a lot) if the IDDS subset were contained on two sheets of fiche, rather than being stretched across three. If the beginning of IDDS were delayed until sheet 7, then the whole subset would fit easily on sheets 7 and 8, and the table of contents would be on the same sheet as most of the subset. This would greatly decrease the amount of fiche switching. Incidentally, I appreciate this improvement in film quality and contrast in the recent edition, as well as the white backing on the title strip.

Done and done. In your next set of microfiches the IDDS writeup will be contained on two sheets, beginning on sheet 7. (David Gok)

Send your questions and comments to -

VOX POP
c/o Computer Center Library
Bldg. 50B, Rm. 1245a
Lawrence Berkeley Laboratory
Berkeley, California 94720

There is a suggestion box for VOX POP entries. It is located to the right of the doorway that leads into the Key punch Room, Bldg. 50B, Rm. 1232a. (This room is inside the Ready Room, 50B/1232.)

You can also send VOX POP entries (as well as any other Newsletter correspondence) via UNIX mail to login name **nam** on any of the Computer Center UNIX systems.

Maggie Morley, x5529

THE WANT ADS

Can anyone tell me where I might find a program to calculate molecular stretching amplitudes? I want to incorporate it into some other software on a Nicolet 1180. Please contact Ray Brusasco, c/o Neil Bartlett, Materials and Molecular Research Division, Bldg. 22, Rm. 534, U. C. Campus.

Computer Center Library
Bldg. 50B, Rm. 1245A
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One Cyclotron Road
Berkeley, CA 94720

