

DISCLAIMER

This document was prepared as an account of work sponsored by the United States Government. While this document is believed to contain correct information, neither the United States Government nor any agency thereof, nor the Regents of the University of California, nor any of their employees, makes any warranty, express or implied, or assumes any legal responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by its trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof, or the Regents of the University of California. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof or the Regents of the University of California.

PUB-429

For Reference

Not to be taken from this room

RECEIVED

SEP 6 1985

PUBLIC

LBL LIBRARY

LBL

COMPUTING
NEWSLETTER

Volume 22, Number 8
August 1985

TABLE OF CONTENTS

Names and Numbers to Know	2
The Cluster is Mustered	3
TeX is Up on the Cluster	3
File Transfer Between CSA2 and UCBCMSA	4
Backing Up Your NMFEC Data	5
Workstation News	6
RT-11 News	9
FOCUS is On the Cluster	10
1985 Version of SPIRES Now Available on UCBCMSA	10
The Cluster Configuration - July 1985	11
Future Support of Graphics Software	12
PIC and IDEAL	12
OFF-hours Access to the I/O Area & User Terminal Room	13
Computing Services' Tape Management Procedures	13
The User Printers	14
SPSS-X Release 2.1 for VAX/VMS	14

"Life is thirst."
(... Leonard Michaels)

PUB-429 8-85/1300

Newsletter Closing Date is Friday, August 16, 1985 . . . and no later.
Address all communications for the Newsletter to Maggie Morley, Editor,
50B/1245 (415) 486-5529; or to login **mam** on UX4

LBL COMPUTING NEWSLETTER

PUB-429

NAMES & NUMBERS TO KNOW

From on-site, dial <xxxx> From off-site, dial (415) 486-<xxxx> From FTS line, dial 451-<xxxx>

COMPUTING DIVISION
Head: Leroy Kerth (LTKerth)7474 50B - 2232

OFFICE OF COMPUTING RESOURCES
Head: Ken Wiley (KGWiley)7083 50B - 2258

COMPUTING SERVICES
Head: Marv Atchley (FMAtchley)5455 50B - 2239A
Central Office5871,2 50B - 2239
Guest Cards & Parking Permits5947 50B - 2239

COMPUTING SERVICES
User Resources
Group Leader: Jerry Borges (JTBorges)5568 50F - 144
Accounting6310 50B - 4224B
Library/ Document Sales5529 50B - 1245
Math Libraries6166 50F - 145
Graphics6945 50F - 126
HELP DESK5981 50B - 1272

COMPUTING SERVICES
Computer Facilities & Networks
Group Leader: Sandy Merola (AXMerola)4389 50B - 2239B
Operations Area6211 50B - 1215
Connecting a Remote Terminal (ACMills)7444 50B - 2249A
Bldg 90 RJE5450 90 - 3136
Terminal or Port Repair (PGMurray)5354 50B - 2259
Sticky Label Service4786 50B - 2262
Network Coordinator (WDJaquith)4388 50B - 1232

COMPUTING SERVICES
VMS System
Group Leader: Wayne Graves (WRGraves)7035 50F - 144
NMC System Manager5234 50B - 2245
VMS Cluster Manager (RBallen)6203 50B - 2245

COMPUTING SERVICES
UNIX System
Group Leader: Dave Cleveland (DHCleveland)5336 50F - 115
UX4/ UX5/ UX6 UX7 System Manager5176 50F - 120

COMPUTING SERVICES
Applications Group
Head: John Colonias (JSColonias)6019 50B - 2262B

DEVELCON IDENTIS

COMPUTER	DEVELCON DIRECTORY NAME
VAX 11/ 780 (UNIX4)	UX4
VAX 11/ 750 (UNIX5)	UX5
VAX 11/ 750 (UNIX6)	UX6
VAX 11/ 780 (UNIX7)	UX7
[VAX 8600's (GENERIC).....]	CSA
VAX 8600 (VMS)	CSA1
VAX 8600 (VMS)	CSA2
VAX 8600 (VMS)	CSA3
VAX 8600 (VMS)	CSA4
VAX 8600 (VMS)	CSA5
VAX 11/ 780 (VMS)	NMC
VAX 11/ 780 (VMS)	IGM
IBM 3081 (UCB)	CCDB

LOCAL TYMNET ACCESS NUMBERS

Oakland	430-2900	Vallejo	707-557-0333
Walnut Creek	938-9550	Concord	682-3851
Pleasanton	462-8900	Fremont	490-7366
San Francisco	974-1300	Antioch	778-3420

Operating Hours

All machines are available 24 hours daily.

With these exceptions.

UX2 - PDP 11/ 70	Thurs 8/ 20	12:30 to 6 AM*
UX4 - VAX 11/ 780	Mon 8/ 26	12:30 to 6 AM*
UX5 - VAX 11/ 750	Mon 9/ 02	12:30 to 8 AM*
UX6 - VAX 11/ 750	Fri 9/ 09	12:30 to 8 AM*
UX7 - VAX11/ 780	Mon 8/ 05	12:30 to 8 AM*
CSA1 -VAX 8600.....		
CSA2 -VAX 8600.....		
CSA3 -VAX 8600.....		
CSA4 -VAX 8600.....		
CSA5 -VAX 8600.....		
IGM - VAX 11/ 780.....	Mon 9/ 26	12:30 to 8 AM*
NMC - VAX 11/ 780	Mon 8/ 12	12:30 to 8 AM*
DICOMED - PDP 11/ 34.....	Sun 6/ 02	8:30 AM to 4 PM

* Subject to Additional Maintenance Periods

Dial-up Access Numbers

- All Machines - 300 BPS 486-4959
- o All machines - 1200 BPS 486-4979
- RECC : 110 BPS 486-6351
- RECC - 300 BPS 486-5752
- RECC - 300 BPS 486-6041
- RECC - 300 BPS 486-6661
- o VA-3400 & 212A are equivalent

THE CLUSTER IS MUSTERED

Marv Atchley

The five VAX 8600's have arrived and are in the final stages of assembly. Four of the CPU's are up and running; we expect the fifth CPU and all peripherals to be operational by the first week of August.

We'll be undergoing acceptance testing soon after that (in early August).

The special graphics hardware and software and the second MFE connection will be moved from the IGM to CSA. The IGM will be shut down shortly thereafter, but not before the end of August.

The ACAL has been shut down and the hardware has been divided among the LBL research groups who initially funded it.

Forward comments and questions to me (atchley@ux4, x5455).

TEX UP ON THE CLUSTER

Carmen Chan

TEX is now available on all VAX/VMS 8600 Computing Services machines (CSA1, CSA2, CSA3, CSA4, & CSA5).

TEX is a Computer Typesetting System, designed and implemented by Donald Knuth, Professor of Computer Science at Stanford University. It is intended for the creation of beautiful books – and especially for books that contain a lot of mathematics.

TEX processes an input file containing the text of a document with interspersed commands that describe how the text should be formatted. It produces two files as output, a Device Independent (DVI) file that contains commands for a hypothetical typesetting machine, and a "log file" that contains summary information and diagnostic messages for any error discovered in the input file.

Currently, the Imagen is the only output device for **TEX** (DVI) file. To send a (DVI) file to the imagen, type

```
$ lpr -P ip2 -d filename.dvi
```

Following is a listing of the **TEX** and its utility commands :

COMMAND	DESCRIPTION
bibtex	Program to compile a bibliography for a LaTeX document from information in a bibliographic database.
dvitype	Program to convert DVI files to readable form.
latex	Version of TEX with LPLAIN format preloaded.
patgen	Program to generate hyphenation tables.
pltotf	Program to convert property list files into equivalent TFM files.
pooltype	Program to convert string pool files created by TANGLE into a more symbolic format.
tangle	Program to convert a WEB file to a PASCAL file.
tex	Version of TEX with PLAIN format preloaded.
tftopl	Program to convert TFM files into equivalent property list files.
weave	Program to convert a WEB file to a TEX file.

The above commands are installed as DCL commands. To use one of them just type its name and then the input file. For example :

```
$ latex filename
```

The main user documentation for **TEX**, "The **TEX** BOOK", the "La**TEX** Manual" and the other Utility User Guides are also available from the Computer Center Library (50B-1245, x5529).

For more information, type :

```
$ help tex <cr>
```

or contact the **HELP DESK** x5981).

"If you can keep your head when all about you

Are losing theirs and blaming it on you . . .

Then perhaps you don't understand the situation."

FILE TRANSFER BETWEEN CSA2 AND UCBCMSA

William Jaquith

You can now send files back and forth between LBL and the Berkeley campus -- using the BITNET connection. JNET, vendor software from Joiner Associates has been installed on CSA2 (only). This software allows a VAX/VMS computer to look like a node on an IBM RSCS (Remote Spooling Communications Subsystem) network. This RSCS link has been established to the Berkeley campus IBM 3081 (UCBCMSA.)

We'll briefly describe how to use this file transfer capability. On-line help describing the commands "brend" for BITNET send and "breceive" for BITNET receive, is available on the CSA2 machine. On-line help is also available on UCBCMSA. We'll also describe how to print a file from UCBCMSA on the Computing Services laser printers.

Lawrence Berkeley Lab will be known as "LBL" to the BITNET network. This means that mail and files transferred on the BITNET will go to the CSA2 computer. We'll publish more information about using the BITNET from LBL in future Newsletter articles.

SENDING from UCBCMSA:

Use the IBM command "sendfile". The CSA2 8600 is known as "LBL" to the campus and to the BITNET.

sendfile <filename> <filetype> to <userid> at lbl

RECEIVING at CSA2:

When logging in on CSA2, you will see the message
"type BRECEIVE to process new network files".

Type "breceive" to get into the BITNET (JNET) subsystem. The prompt is "BRECEIVE>".

To get help at the DCL level, type

"help breceive".

To get help in breceive, type

"help".

If you type "receive *" in breceive, all files are copied into your current directory.

```
$Csa2 breceive
BRECEIVE> help
BRECEIVE> receive *
```

SENDING from CSA2:

Use the command "brend/file" to send files from CSA2 to UCBCMSA. To get help at the DCL level type "help brend".

To send file "practice.lis" from CSA2, type

```
$Csa2 brend/file practice.lis to userid@ucbcmsa
```

RECEIVING on UCBCMSA

Use rdrlst or rl when receiving files on UCBCMSA. Use "help" on UCBCMSA for more information.

PRINTING files from UCBCMSA:

Use the

"print" < filename >

command to print your BITNET file on Computing Services' laser printers. You can use the following commands in an interactive session to print files:

```
CP SPOOL PRINT NET
CP TAG DEV PRT LBL PRT
```

To print the file called "information list", type

"print" < information list >

This file will be printed on the laser printers in the Computing Services I/O area. The title (cover) page will read "BITNET," "filename," and "filetype". The output will be put into the box marked BITNET. You will have to claim your output by file name.

You can also create an exec file using these CP commands so that you do not have to enter these commands every time you want to dispose to the Laser Printers. The "lpr" command is an example of an exec file that contains these commands.

Forward comments and questions to me (jake at csa, x4388).

"Why be a man when you can be a success."
... Bertolt Brecht

BACKING UP YOUR NMFEEC DATA

Sandy Merola

NMFEEC (The National Magnetic Fusion Energy Computer Center), recently underwent a security audit, with these arresting findings:

- (1) Sufficient backups of critical user data probably don't exist;
- (2) A criteria to define "critical" user data does not exist;
- (3) The quantity of critical user data needs to be

properly estimated;

- (4) The location at which these backups would occur (LBL or NMFEEC) needs to be determined.

Here at LBL, we need to be sure that our collective point of view is fully represented and affects the planning process at NMFEEC. If you were not able to attend the local LBL-NMFEEC users' meeting we held on July 31, (See the article in the June LBL Computing Newsletter), you can still send us your comments (Please!) on the following questions. We hope to represent the needs of LBL users appropriately at the NMFEEC Computer Users' Advisory Committee (CUAC) in August. Send me your responses through either Laboratory mail (50B/2239), or electronic mail (merola@ux6 or csa1::merola.)

On the definition of critical data: do you feel that critical user data consists of

critical copies of source codes	
irreproducible experimental data	
Other* (describe)	

On the quantity of critical data:

What quantity of critical user data do you currently store at NMFEEC?	
Do you expect these storage requirements to change by a large factor in the near future?	
Comments	

On the backup and storage of critical data:

Does your critical data originate here at LBL?	
If so, do you have any strong arguments favoring one site over the other (LBL or NMFEEC) for backup & storage of critical data?	
Comments:	

* (Critical data would not include output data which is simply a result of computation)

THE WORKSTATION SCENE

WORKSTATION NEWS

• NEWS FROM LOTUS LAND

Users who don't want to wait until the new versions of *Lotus* and *Symphony* appear in the fall will find some of the information in the June issue of *Lotus* magazine useful. Listed in its *Software Review* section are several programs that enhance the ability of *Lotus* and *Symphony* to exchange data with one another and also to accept data from other programs.

- *Strip 1-2-3* is an economical way to transfer *Symphony* files to *Lotus 1-2-3*. The Fall upgrades from **Lotus Corp.** will also permit this. **Cost: \$29.95**
- *ConvertaCalc* is designed for those of you out in CPM and Wang world -- with *VisiCalc*, *MultiPlan*, *SuperCalc*, or *DIF* files -- to enter the *Lotus* and *Symphony* world. With this package, you can transfer your old spreadsheets to *Lotus 1-2-3* and *Symphony* datafiles. **Cost: \$245.00**
- *DataPrep* lets you move your *dBaseII/III* files into *1-2-3* or *Symphony* files. It lets you extract and convert ASCII files to *1-2-3*, *Symphony*, *dBaseII/III* and *DIF* formats; export spreadsheet and *dBase* data to ASCII files; and execute a spread sheet exchange among *Lotus 1-2-3*, *Symphony*, and *dBase*. The package includes on-line help and other good things. \0 **Cost: \$195.00**

NOTA BENE: Members of the Workstation Group do not endorse the use of these programs (because we have not used them). We only pass the information along for those who may be interested. For more info, contact

123 Strip
Philbrick Software
15 Central Way, Suite 12
Kirkland, Washington 98033

ConvertaCalc
Micro Decisions Systems
P.O. Box 1392
Pittsburgh, Pa. 15230

DataPrep
CDI Systems
2803 Butterfield Rd.
Oak Brook, Ill. 60521

[22.8.1].....

• SITE LICENSE

LBL has negotiated with CDEX for a U. C. System-wide site license for computer-aided instruction for the IBM PC. The license allows unlimited copies to be made of both the program diskettes and the printed documentation for each program. The Workstation Group will be distributing this material from the **HELP DESK** in the Computer Center. Call Dan Van Zile (x5589 or x5981) to arrange for a loan of the material so that you can make copies. Loans will be for 24 hours only. If you would like to order the materials directly from the vendor, send a purchase requisition to LBL Purchasing. The requisition should reference the UC agreement number 900/BE/047/00 with:

Cdex Corporation
1885 Lundy Avenue
San Jose, Ca. 95131
Attn: Ruth Whitted (408) 263-0430

The following programs are covered in the agreement and are available through either mechanism (costs are for direct ordering only):

- How to use your IBM PC\$ 7.50
- Training for PC DOS\$19.00
- Teach yourself **Lotus 1-2-3**\$ 7.50
- Advanced Training for **Lotus 1-2-3**\$ 7.50
- How to use the IBM PC/AT\$ 5.50
- Training for **dBaseII**\$ 7.50

[22.8.2].....

• PC-FOCUS IS UP ON THE PC-AT

Russ Montello of Data Processing Services reports that *PC FOCUS*, Version 1.5, is up and running on the IBM PC-AT. This installation requires the use of an activator disk. For more info on *PC Focus* upgrades, contact Bert Albrecht (x5527).

LATE BULLETIN: Several copies of the new Version (V1.5) of *FOCUS* have arrived and have been distributed. It has been discovered that some copies of the documentation are incorrect (they apply to NCR systems and not IBM). Check Page 2.01 of the Binder Inserts. If it discusses "NCR" and "Northstar" installations, you have the incorrect documentation. Contact Bert to get the correct copy.

[22.8.3].....

• **CAMPUS IBM PC USER GROUP MEETING**

The University campus IBM PC User Group meets regularly on the second and fourth Wednesdays of the month at 5:30 PM at 10 Evans Hall. The next meeting is on August 14. The speaker is announced a few days before the meeting. Call Mike Morearty (643-3457) for more details.

[22.8.4].....

• **HEY THERE, RBASE USERS !**

The Workstation Group needs to hear from you. What is your opinion of this program? Forward ALL comments (Aye, Nay, or Ho-hum) about Rbase 4000 to Buck Koonce, (x5937) if you feel like sharing your experience with this product.

[22.8.5].....

• **IBM PC USERS WITH HARD-DISK SYSTEMS, PLEASE NOTE . . .**

PARK YOUR HEADS !

The read/write heads on your hard disk will "land" on the surface of the disk when your PC is powered off. If you don't command those heads to PARK (i.e., to access a non-data area of the disk) they will land on the data surface you last accessed. For optimum reliability we recommend that you ALWAYS command the heads to go to the "parking-zone" of the disk before powering down the system.

IBM provides a utility -- called SHUTDOWN.EXE -- that automatically positions the heads to the "parking-zone". This utility can be found on the diagnostic disk supplied with your AT system. There is no way to make the program run automatically when the system is powered down.

We encourage users to try to develop the good habit of parking heads by copying SHUTDOWN.EXE into the root directory on the hard disk and renaming it "BYE.EXE". Then, before turning off the power simply log-off the PC by typing "BYE". For those of you planning to purchase an AT, help is on the way. See the next item.

[22.8.6].....

• **NEW DISK DRIVES FOR THE IBM PC-AT**

On July 1, Control Data Corporation announced a new 32 Mbyte model of their Winchester Disk units for the IBM PC-AT. The new model uses the standard IBM software for formatting the disk. The laboratory's price (\$950) is comparable to the price we are currently paying for 32 Mbyte CMI drives.

The CDC drives **AUTOMATICALLY PARK THE HEADS** when the system is powered down.

They are equipped with a mechanical locking mechanism for safe shipment of the unit, and use servo voice coil technology for positioning the read/write heads. This technology provides a faster access time than the CMI drive; however, we doubt that it will be apparent in most applications.

The Workstation Group now recommends the 32 Mbyte CDC disk for the IBM PC-AT.

As of July 15 we have not received any of the fifteen units that have been ordered (we have been quoted a 4 week delivery date but our local CDC rep is trying to improve on the delivery).

Contact Mark Vega in Purchasing (x4595) for information on scheduled delivery time. We will give you a progress report in next month's newsletter. For additional information contact Workstation group member R. LaPierre (x4692).

[22.8.7].....

• **TAPE BACKUP FOR THE PC**

The Workstation Group has ordered a tape backup unit from Hewlett Packard for evaluation. We were impressed by the price/performance-specification of this newly announced product. The unit is not the fastest backup unit around, but it is one of the few that provides 50 per cent data-redundancy recording. This permits reconstruction of the original file in case of a defect or error in reading the tape. Another interesting feature: the tape backup unit, in an emergency, can act as a hard disk. (It's a bit slower, of course, but who's complaining).

We hope to have a unit in-house to report on in next month's newsletter. In the meantime you can call Workstation group members R. LaPierre (x4692) or Dan Van Zile (x5589) to find out what is happening on the tape backup front.

[22.8.8].....

• **SOFTWARE RATINGS**

The Workstation Group subscribes to a monthly RATINGS NEWSLETTER which regularly publishes the results of comprehensive testing & evaluation of the more popular programs in a selected category. (For example, last December's issue evaluated Integrated Productivity Programs in a 113-page layout with evaluations of *Framework*, *Enable*, and *Symphony*. If you wish to see how your favorite software package is ranked by the "experts", you may check the RATINGS NEWSLETTER out (on short-term loan) from the Computing Services Library (contact Maggie Morley

50B/1245A, x5529).

[22.8.9].....

• VT100 TERMINAL EMULATOR
FOR THE IBM PC

The Workstation Group has a copy of PC-VT, a user-supported software package that emulates DEC VT100 and VT102 video terminals.

This package has received good reviews as a full emulation of the VT100 terminals. In addition PC-VT also provides a Hayes-compatible dialing directory, XMODEM file transfer protocol, and the capability to run DOS functions or other programs without terminating PC-VT or disconnecting from the host. PC-VT can echo all displayed characters to a printer thereby producing a hard copy record of your terminal session. The program comes with a very polished documentation package (about 100 pages long).

For a copy of this program disk, contact Workstation Group member Dan Van Zile (x5589).

The Workstation Group will continue to support VTERM II, a VT100 emulator. (It's available from LLNL PC Stores for about \$80.)

We like the concept of "freeware" (non-licensed software supplied by the developer) that permits you to try out the package, sending in a "suggested donation" if you find it useful.

[22.8.10].....

• HP LASERJET PRINTER

Hewlett Packard has loaned the Workstation Group an HP LaserJet Printer with three font-cartridges. It is available for demonstration and evaluation. Many commercial word-processing programs now support this printer. (We use an updated *Volkswriter DeLuxe*, V 2.1). We will gladly give you a demonstration and show how to print out your *Volkswriter DeLuxe* Word Processing text and *Lotus* worksheets with it. To arrange a demonstration, contact Richard LaPierre, (x4692).

[22.8.11].....

• SECURITY DEVICE FOR YOUR MACINTOSH

Workstation Group members have been evaluating security devices for the Apple Macintosh. The most promising one, we find, is the "TOSH", by DOSS Industries. (Approx. cost: \$110.00). We have a unit on hand for short-term trial and evaluation. Contact Dan Van Zile (50B/1245, x5589 or x5981) for more details.

[22.8.12].....

• TIPS ON DISKETTE STORAGE

(Extracted from the MIAMI UNIVERSITY IBM PC USER GROUP NEWSLETTER).

The following good advice is worth taking:

- Do NOT close the drive doors after removing a

diskette. This can cause the plastic on the read heads to chip, resulting in diskettes being scratched and destroyed. When leaving the PC, leave the disk drive doors open. If the PC is being moved, insert an old diskette or the card-board insert shipped with the PC to reduce the chance of damage.

- Be careful about inserting the diskette into the drive. Be sure you have it fully inserted before closing the drive door. If the diskette is not fully inserted, you can mash the disk and lose your data. Hub rings help guard against this.
- Beware of disk-head alignment problems. If you can read your data on "Drive A", but encounter problems reading it on "Drive B" (i.e., some other drive), you're in trouble. You may get garbled data or a DOS error message like "DISK READ ERROR, ABORT, RETRY, IGNORE."

For further technical assistance, contact LBL's RTSG support (x6411).

[22.8.13].....

• WORDSTAR DOCUMENTS
ON THE HP LASERJET

Wordstar 3.X users can now utilize all of the capabilities of the HP LaserJet if they use a software package (called *POLARIS PRINTMERGE*) available from Polaris Software, Inc. (cost: ~ \$99). Sandy Sampson and Gayle Milligan of the Building Ventilation and Indoor Air Quality Group are very satisfied users of this application software. It allows easy selection of various fonts and has a robust page-layout specification. (It even allows you to draw boxes of various line widths which can serve as borders on the page). The package also contains instructions for generating *Lotus 1-2-3* spreadsheet files which can then be edited by *Wordstar*.

Sandy and/or Gayle, (x6591), will be glad to answer questions you *Wordstar 3.X* users might have about this Polaris product.

[22.8.14].....

• BRIGHTENING YOUR ENHANCED GRAPHICS

Jack Zelver forwards some more good stuff.

IBM's Enhanced Graphics Adapter (EGA) is a vast improvement over the standard color adapters. It's much easier on the eyes, and makes long hours in front of the PC much more pleasant.

If, however, your room lighting is bright, or the wall behind you reflects lots of light, you may want a brighter screen to look at as you work. The EGA allows for this with many of the programs you might use, as well as with PC-DOS itself. The following basic program will generate two commands, "bright.com" and "blue.com" which increase the brightness of the color display when used with the EGA.

"Bright.com" initializes the EGA to write with higher intensity white with an amber cast over a black background. The normal color of the screen is low-intensity white. "Blue.com" generates bright yellow on a dark blue background, which is excellent for eliminating distracting reflections. Both programs yield sufficient brightness for even the most brilliant and reflective offices. You may, in fact, need to pull out your contrast knob and reduce the contrast after executing "blue" or "bright".

Unfortunately, programs which use their own graphics drivers, such as *Lotus* or *Symphony*, will reset the EGA and use their own colors. But when you return to DOS, simply typing "blue" or "bright" will restore the screen's brightness. Batch files could be used to do this automatically if desired.

The following basic program will generate both "blue.com" and "bright.com" simply by being run once. Then you need only copy the programs to your DOS directory and each time you type "bright" or "blue", the EGA will respond by changing the colors of your screen. Neither program will erase what is already on the screen; only the colors are changed.

Copies of "bright.com" and "blue.com" are available at the HELP DESK for those who don't wish to use the basic program.

```

100 REM Enhanced Graphics Brighteners
110 REM   LBL 7/85 JSZelver
120 '
130 OPEN "blue.com" FOR OUTPUT AS #1
140 READ N
150 IF N=99 THEN 180
160 PRINT #1, CHR$(N);
170 GOTO 140
180 CLOSE #1
190 '
200 DATA 184,0,16,187,7,54
210 DATA 205,16,184,0,16,187
220 DATA 0,1,205,16,205,32
230 DATA 99
240 '
250 OPEN "bright.com" FOR OUTPUT AS #1
    
```

```

260 READ N
270 IF N=999 THEN 300
280 PRINT #1, CHR$(N);
290 GOTO 260
300 CLOSE #1
310 '
320 DATA 184,0,16,187,7,55
330 DATA 205,16,184,0,16,187
340 DATA 0,0,205,16,205,32
350 DATA 999
360 END
    
```

[22.8.15]

• REMINDER TO FOCUS USERS

Julie Jones of Purchasing forwards this tickler

If you bought your maintenance contract (EMS) at the same time you bought your copy of *P.C. FOCUS* in 1984, your maintenance contract either has or will expire and you should issue a requisition to "renew". Current rate is \$180. per year.

If you aren't sure of the status of your maintenance contract, call Julie Jones, (x4583) with the purchase order number and the date of receipt of your *PC FOCUS* (assuming you know it) and your activator disk number (registration number).

[22.8.16]

• QBUS CORNER

- (1) Engineering Change (ECO) to MICRO-PDP11 disk controller RQDX1:

DEC has corrected several problems with the RQDX1 disk controller (M8639 board) for the MICRO-PDP11 and MICRO-PDP11/73. To get your board upgraded, contact Joe Love or Oliver Jones at x6411 and ask for the M8639-R0003 ECO. If the PROM's at E105 and E106 are 23-265E5 and 23-264E5, the board is already upgraded.

- (2) Engineering Change (ECO) to MICRO-PDP11 CPU board LSI11/23-PLUS:

DEC has corrected several problems with the bootstrap code on the LSI11/23-PLUS CPU board (KDF11-BE ==> KDF11-BF) for the MICRO-PDP11. To get your board upgraded, contact Joe Love or Oliver Jones (x6411) and ask for the KDF11B-R0004 ECO. If the PROM's at E126 and E127 are 23-183E4-00 and 23-184E4-00, the board is already upgraded.

.....from Randy Michelson

[22.8.17]

• RT-11 NEWS

- (1) RT-11 USERS' GROUP MEETINGS

The RT-11 USERS' Group meets for lunch the first Thursday of each month at noon in the Bldg. 46A conference room. The current chairperson, Jon Aymon, is looking for a volunteer to take over as chairman of this group.

For more information, contact Jon Aymon, ($\times 5237$ or IGM::AETHRED).

(2) GPIB SOFTWARE UPDATE

By the time you read this, the latest release of the National Instruments GPIB software, Rev D.9, should be available from Randy Michelson, ($\times 6411$) (RTSGVX::RANDY or RANDY@RTSG). This release fixes some of the bugs involving timeout support in Rev. D.8, but it has not been fully tested yet.

.....From Randy Michelson

[22.8.18].....

FOCUS ON THE CLUSTER

Bert Albrecht

FOCUS, a fourth-generation language and Data Base Management system, has been ordered for the VAX 8600 Cluster. A *beta* test release for VMS Version 4.1 has been installed and is available for a three-month evaluation period.

In connection with this, Data Processing Services is developing some menu-driven software to give Division Administrators access to some of the databases they will be using (finance management, manpower analysis and job order processing).

For more info, contact me ($\times 5527$ or $\times 6280$).

1985 VERSION OF SPIRES NOW AVAILABLE ON UCBCMSA

Allan Konrad

The LBL version of the 1985 edition of SPIRES, Stanford University's database management system, was installed and made available to users as of 13 July 1985. Several new capabilities and enhancements are available with this version, including:

- Indirect searching (phantom indexes)
- Elements within phantom structures may now be set
- PRISM is available for preparing applications interfaces for non-programmers
- Goal records can serve as their own index records
- Immediate indexing now implemented for goal-index records
- Easier report formatting with Report Definer

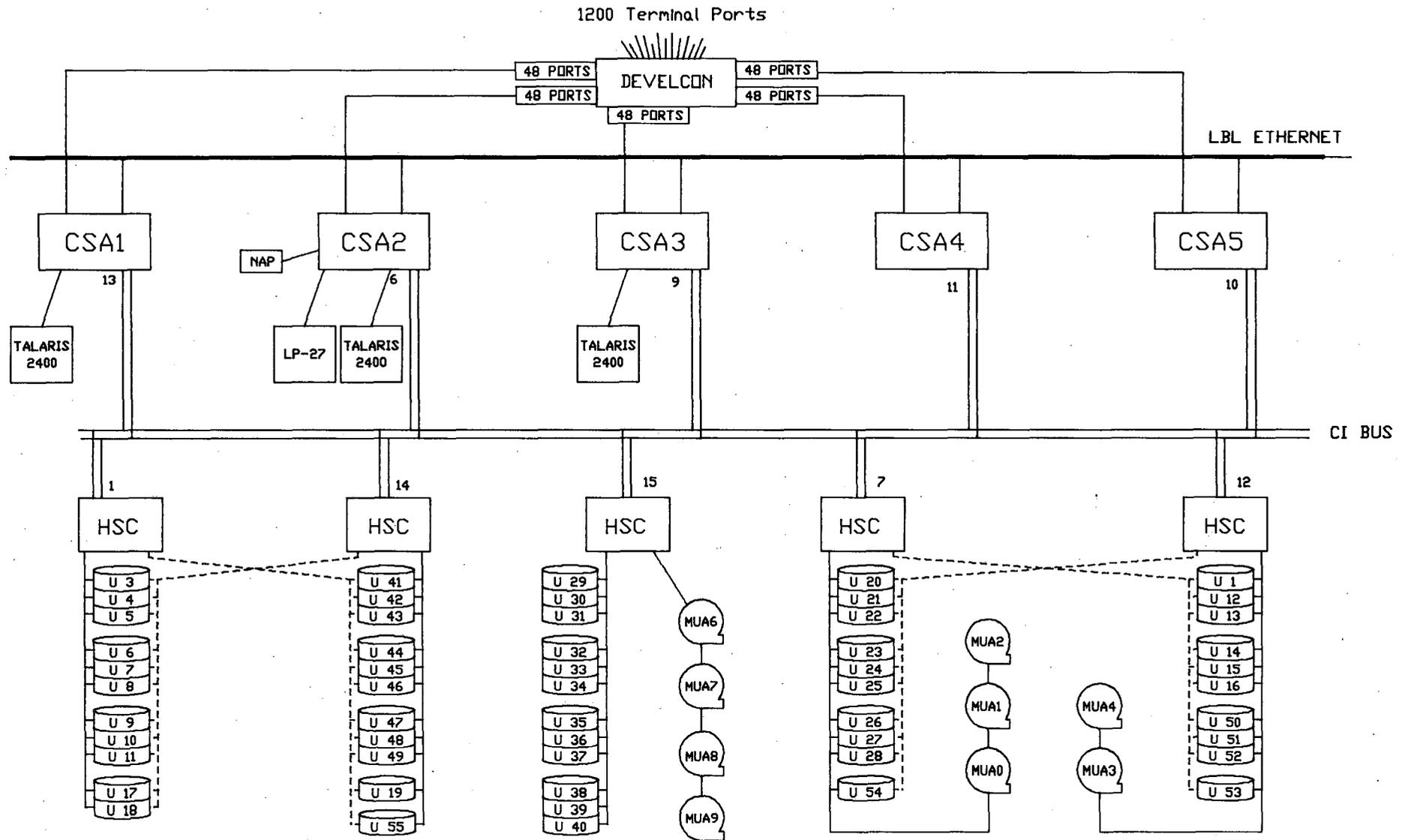
- Improved efficiency for processing for simultaneously shared databases
- Updated documentation
- Full Screen Definer (coming in the Autumn)

In addition, the following networking changes will affect SPIRES users. Some of the items below may not yet be implemented by the time this newsletter is distributed.

- Computing Services has provided four new CCDB ports, for a total of 16, for access to UCBCMSA (Campus IBM 3083)
- Demise of B-Gate (used in old LPR and LPRCC execs) for printing regular-size paper.
- Demise of CDC 6000's for printing adhesive labels and forwarding files to UNIX.
- New VAX 8600 (CSA2) is now a BITNET node, enabling VMS users access to BITNET services and local VMS service to be accessible to SPIRES users. These services do/will include:
 - Laser printers for paper output (8 1/2" \times 11"),
 - adhesive labels,
 - forwarding files to other systems such as UNIX.

The SPIRES system disk to which all LBL SPIRES users are LINKed automatically will store new CMS EXECs, which use the same names as existing EXECs that may now reside on your 191-A disk. Any such EXEC should be erased so that the new EXECs will be used by default. When these commands become available, a SPIRES logon announcement will be displayed when you enter SPIRES and a Newsletter article describing the syntax of the commands will be published.

Questions about CCDB port availability, the Talaris laser printers should be addressed to the Central Facility Help Desk, ($\times 5981$). Questions about the command language (LPR, etc.) should be addressed to me (**konrad at UCBCMSA, $\times 5458$**).



COMPUTING SERVICES
 DEC 8600 Cluster 7/25/85 fma
 logical diagram

FUTURE SUPPORT OF GRAPHICS SOFTWARE

Jerry Borges

The Computing Division is considering phasing out support for Precision Visuals (PVI) products. This is in response to the recent recommendation of CSAC's Software Subcommittee.

If you are a user of the PVI suite of programs (**DI-3000, Grafmaker, Contouring**), on the central cluster, and/or if you feel that continued support of these products is vital to your future plans, please contact your CSAC representative.

The following is an excerpt from the Software Subcommittees's report:

"Graphic software from ISSCO and Precision Visuals represents 30 per cent of the current software budget, as well as significant support cost. Since the software survey showed that both of these groups of software enjoy relatively wide use, this cost may be appropriate. However, there are other issues to be addressed here, namely the considerable overlap in the function of these two groups and the adoption of graphics standards.

"The following are the subcommittee's recommendations:

- (1) The laboratory should adopt the GKS standard and support software that is consistent with this standard. ISSCO is expected to have GKS software for VMS in the near future. There will be no additional cost for this beyond that which has already been paid for DISSPLA. This is likely to be the most convenient way to support GKS on a wide variety of devices.
- (2) The ISSCO products should continue to be supported. The ISSCO products in current use are at a level that is not in conflict with GKS. The software survey indicates wide use of these products. DISSPLA is in wide use throughout the national laboratory system.
- (3) Support for the Precision Visuals products should be phased out. DI-3000 is at a level which is in direct conflict with GKS. Although these products have relatively wide use, users should be encouraged to replace applications with appropriate ISSCO products. Divisions which continue to require DI-3000 have the option of assuming the maintenance fee."

For more information, contact me (jtborges@ux4, x5588).

PIC and IDEAL

Carmen Chan

PIC and IDEAL, graphics languages for Typesetting, are now available on the Computer Center VAX/UNIX machines.

PIC is a *ditroff* preprocessor for drawing simple pictures on a typesetter. The basic objects in PIC are boxes, circles, ellipses, lines, arrows, arcs, spline curves, and text. These may be placed anywhere, at positions specified absolutely or in terms of previous objects.

IDEAL is another *ditroff* preprocessor for drawing pictures on a typesetter. IDEAL programs define pictures by means of a system of simultaneous equations in the significant points of the picture and a set of drawing instructions to be carried out with respect to those points. IDEAL solves the system of equations, then draws the picture using the points so determined.

Following are commands for using PIC or IDEAL with *ditroff* and *-ms* macros:

pic filename | ditroff -Pvp -ms

or

ideal filename | ditroff -Pvp -ms

Currently, the Versatec is the only supported output device; the Imagen laser printer will be available in the near future.

If you use some other *ditroff* preprocessors, such as EQN, TBL, and REFER, you can pipe the output of PIC or IDEAL to the EQN, TBL and REFER preprocessors.

The **PIC User's Manual** and **IDEAL User's Manual** are available from the Computer Center Library (50B-1245, x5529). For more information, contact Bob Rendler (ren@ux4, x5629).

"It is sometimes expedient
to forget who we are."

... Publilius Syrus (c. 42 B.C.)

OFF-HOUR ACCESS TO THE I/O AREA & USER TERMINAL ROOM

Sandy Merola

Access to the Computing Services' I/O Area and the User Terminal Room is now restricted when there is no operator on duty.

There will be no operator on duty --

- (1) on weekends from Saturday at 8 PM through Sunday at 6 AM,
- (2) on all LBL holidays,
- (3) on any shift (evening, night, weekend) when the scheduled operator is not present due to sickness or vacation.

On those occasions, users who need to use the equipment in these rooms (the Talaris printers, user tape drives, user terminals, etc.) may gain access via card key. Card key registration forms are available from Lisa Long, (50B-2239, x5947).

Users accessing these rooms via cardkey must not violate the security of these areas. Doors must not be left open.

COMPUTING SERVICES' TAPE MANAGEMENT PROCEDURES

Marv Atchley
Sandy Merola

On July 1, we inaugurated the "temporary" Tape Management program that we had announced in the June Newsletter. Features are:

- A NEW TAPE LIBRARY
- THREE NEW TAPE DRIVES (user-managed)
- A STAGED TAPE-HANGING SERVICE (operator-managed)
- AN INSTANT TAPE-HANGING SERVICE (operator-managed).

Some further explanation.

- (1) The NEW TAPE LIBRARY is presently located in Bldg. 50B, Rm. 1275 to facilitate the speedy handling of operator "tape-hang" requests. Assuming this Tape Library doesn't grow beyond reasonable expectations, Rm. 1275 will be its permanent home.
 - (2) The three announced NEW USER TAPE DRIVES and the four user control terminals are now in place.
 - (3) The OPERATOR-MANAGED STAGED TAPE-HANGING SERVICE is not yet implemented. Currently, we're providing a "best effort" tape hanging service. The Operator On Duty will take care of GSS and standard VMS tape requests as quickly as other priorities allow. (He's going to be busy!)
- If the requested tape is located in the NEW TAPE LIBRARY, we expect to be able to hang that tape within a couple of hours after the user request has been initiated via VMS.
- If the requested tape is NOT located in the NEW TAPE LIBRARY, we'll need to find the tape and enter it in the tape library -- during Monday through Friday day shift only. Then we'll hang it. We respectfully suggest that you enter your tape in the NEW TAPE LIBRARY before generating an Operator Tape Hang Request.
- (4) You can request the OPERATOR-PROVIDED INSTANT TAPE-HANG SERVICE via phone (x6211) or at the I/O counter. There will be a charge of a \$50 (fifty dollars) for each tape-hang. The requested tape must reside in the NEW TAPE LIBRARY or it must be hand-delivered to the Operator at the I/O counter.

Forward comments and questions to me (merola@ux6, x4389)

THE USER PRINTERS

Marv Atchley
Sandy Merola

Two Talaris Laser Printers, installed exclusively for USER MANAGEMENT, are now available full-time in the I/O Area.

Here are user operating procedures for the two User-Printers.

These two printers, as we said, are to be operated by the users. Users are expected to fill the input paper trays and to remove & file printer output. There are no operators available to perform these tasks. The Computing Services operator will maintain the toner level and call in maintenance technicians as needed.

INPUT PAPER

- (1) The input paper tray must be replenished when it is empty. Users waiting for disposal of their output should check the input paper supply and replenish when low.
- (2) Instructions which explain how to load paper in the printers are posted on top of the printer. The large input basket should be loaded with white paper. The smaller tray should be loaded with colored paper (used to separate print jobs).
- (3) Be careful when inserting the input paper; the print image should be appropriately aligned on the page.

OUTPUT PAPER

Users must remove output from the printer.

- Individual print jobs are separated by a piece of colored paper for ease of identification.
- Each print job must be secured with either
 - (1) a regular staple (for output up to [about] 1/8" thick)
 - (2) a large staple (for output of about 1/2" thick),
 - (3) a rubber band for larger jobs.

File these secured jobs into the appropriate user output bins (against the east wall) alphabetically on a user name basis.

- On MFE output, the user name is the first word following the word "MFENET."
- On all other UserPrinter output, the user name is the first large word on the job header page.

Users who are averse to filing others' printout may send their output to an operator-managed Talaris printer using the "PRINT/Q=OP" command. We

will charge twice the user-print cost for this service.

Users who require old-style impact printing can route their output using the "PRINT/Q=LP" command. This is also a UserPrinter. Please ask the operator for paper-loading instructions.

SPSS-X RELEASE 2.1 FOR VAX/VMS

Elon Close

The SPSS-X Information Analysis System is now installed on the Computing Services VAX 8600 cluster. It can be accessed by logging onto CSA2 and typing

\$ SPSSX <cr>

Then to access on-line information, type

INFO

If you need additional information, you can order off-line documentation (as indicated in the INFO OVERVIEW section of SPSS-X) from the Computing Services Library, (50B/1245, x5529). SPSS-X is proprietary and is presently licensed for the CSA2 CPU only.

For more info, contact me (erclib@UX4, x6166).

YES I would like to receive the Computing Newsletter

NAME.....

FIRM.....

CITY
STATE.....
ZIP

PHONE.....

COMMENTS.....

.....
.....
.....

Return to:Newsletter - MS 50B, Rm 1245
Lawrence Berkeley Laboratory - University of California
Berkeley, CA 94720
Attention: NL MAILING LIST

PUB-429 8-85/ 1300
Prepared for the U.S. Department of Energy under Contract DE-AC03-76SF00098

Lawrence Berkeley Laboratory is an equal opportunity employer

LAWRENCE BERKELEY LABORATORY IS LOCATED IN THE HILLS ABOVE THE U.C. BERKELEY CAMPUS.
THE (CHOCOLATE-COLORED) BUILDING 50 COMPLEX IS LOCATED ACROSS FROM THE (RED & WHITE SHUTTLE) BUS STOP.
YOU CAN GET A FREE RIDE TO THE LAB ON THE SHUTTLE BUS : PICKUP POINT
IS AT SHATTUCK & CENTER IN DOWNTOWN BERKELEY.

The Computing Newsletter, published monthly, provides much useful current information to our users and is mailed to them free, upon request.

Lawrence Berkeley Laboratory
Computer Center Library
MS 50B, Rm. 1245
University of California
Berkeley CA 94720