

# Lawrence Berkeley National Laboratory

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## NAMES & NUMBERS TO KNOW

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

### INFORMATION & COMPUTING SCIENCES DIVISION

Director: Stewart Loken (SCLoken) .....7474    50B - 2232E  
Deputy: Sandy Merola (AXMerola) .....7440    50B - 2232C

### COMPUTING AND COMMUNICATIONS RESOURCES

Head: Ken Wiley (KGWiley) .....7083    50B - 2258E  
Office of Computing Resources:  
    Dave Stevens (DFStevens) .....7344    50B - 2258F  
LBLnet Manager: Sig Rogers (SGRogers) .....6713    50B - 2258G  
Telephone Services: Sam Gibson (FSGibson) 4234    80A - 103

### ADVANCED DEVELOPMENT PROJECTS

Head: Dennis Hall (DEHall).....6053    50B - 3238

### WORKSTATION GROUP

Group Leader: Richard LaPierre (RLLaPierre)....4692    50B - 2245  
Software Evaluation & Acquisition.....6858    50B - 2231

### COMPUTING SERVICES

Head: Marv Atchley (FMArchley).....5455    50F - 104  
Asst.Head: Serge Polevitzky (SIPolevitzky) ...4389    50F - 142  
Central Office.....5871    50F - 125

### VMS SYSTEM

Eric Beals (ERBeals) .....5351    50F - 143  
System Manager (GPJohnson) .....6211    50B - 1225

### UNIX SYSTEM

Dave Cleveland (DHCleveland) .....5336    50F - 115  
System Manager (RJCochran) .....5565    50F - 127

### DISTRIBUTED PRINTING

Bob Rendler (RERendler).....5629    50F - 119  
System Manager (RJCochran) .....5565    50F - 127

### USER RESOURCES

Jerry Borges (JTBorges) .....5568    50F - 144  
Accounting.....7008    50B - 1232A  
HELPDESK.....5981    50B - 1272  
Math Libraries .....4749    50F - 114  
Library/ Document Sales.....4242    50B - 1232B  
Opening a New Account (PSBean).....7008    50B - 1232A  
UNIX and Cluster  
    Software Evaluation & Acquisition.....5568    50F - 144

### COMPUTING FACILITIES

Connecting a Remote Terminal (ACHart)....7444    50F - 129  
Graphics .....6945    50F - 126  
Network Coordinator (WDJaquith) .....4388    50F - 109

### COMPUTING FACILITIES (Continued)

Operations Area .....6211    50B - 1215  
Develcon Problems & Terminal Repair  
    (PGMurray).....5354    50B - 2259

### COMPUTING APPLICATIONS

Applications Group  
Head: Jerry Borges (JTBorges).....5568    50F - 144

### CENTRAL ELECTRONIC MAIL FACILITY

FIRST INITIAL-MIDDLE INITIAL-LAST NAME is the standard recipient format in Lab-wide mailing address.

Examples: VMS: lbl::JASmith  
            UNIX: JASmith@lbl.gov  
            Software Tools: JASmith@lbl.gov

### DEVELCON

#### DEVELCON Access Names

[ VAX 8650's (GENERIC) .....CSA ]  
VAX 8650 (VMS) .....CSA1  
VAX 8650 (VMS) .....CSA2  
VAX 8650 (VMS) .....CSA3  
VAX 8650 (VMS) .....CSA4  
VAX 8650 (VMS) .....CSA5  
  
SUN-3 / 280 (UNIX1) .....UX1  
SUN-3 / 180 (UNIX3) .....UX3  
SUN-3 / 180 (ISD) .....ISD

#### Dial-up Access Numbers

All Machines - 300 BPS ..... 486-4959  
All Machines - 1200 BPS ..... 486-4979  
All Machines - 2400 BPS ..... 486-4969

#### Local TYMNET Access Numbers for DEVELCON

	1200 bps	2400 bps
Oakland	430-2900	633-1896
Walnut Creek/Concord	935-0370	935-1507
San Francisco	974-1300	543-0691
Santa Clara	408-980-8100	986-0646
Palo Alto	415-366-1092	361-8701
Vallejo	707-644-1192	
Antioch	754-8222	
Fremont	490-7366	
Pleasanton	462-2101	

MFE Consulting Number is ..... 422-1544

**Newsletter Closing Date is Tuesday, November 15, 1988**

Address all communications for the Newsletter to login [nooz@ux1.lbl.gov](mailto:nooz@ux1.lbl.gov).

**Editor: Maggie Morley**

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## SCHEDULES FOR COMPUTER CLASSES

IN THE TRAINING ROOM, BLDG. 50B, RM. 1237

or

IN THE BUILDING 50F CONFERENCE ROOM

Jerry Borges

The following computer classes are to be offered by Computing Services. There is no charge for these classes. To enroll, obtain your supervisor's approval

and then contact Pat Bean (x7008). If you have questions about what's being offered, or suggestions for other computer-oriented topics, contact Jerry Borges (x5568).

DATE	TIME	DESCRIPTION	INSTRUCTOR
November 16	10 AM - NOON	Electronic Mail: Survey	William Jaquith

## IN THE MAC TRAINING ROOM, BLDG. 50B, RM. 1229

Carole Casaretto

The following computer classes will be offered by the Workstation Group. There is no charge for these classes. To enroll, obtain your supervisor's approval and then contact Carole Casaretto, (x6858). Those classes with asterisks (\*) appended are already full.

Call Carole now to sign up for classes later in the year. For more information, see **THE WORKSTATION SCENE** in this Newsletter. If you have any questions regarding these classes or suggestions for other computer-oriented topics, contact Richard LaPierre (x4692).

DATE	TIME	DESCRIPTION	INSTRUCTOR
Nov. 8, 10, 15, 17	1-2:30 PM 3-4:30 PM	Beginning MS WORD 3.01*	Karla Savage, Tom Pope Claudia Madison, J. Wolslegel
Nov. 9, 11	1-2:30 PM	Basic Intro. to FileMaker*	Claudia Madison, C. Casaretto
Nov. 16	10-11 AM	Introduction to HyperCard	Bruce Burkhardt
Nov. 21, 23	10-11:30 AM	HyperCard -- Creating Cards and Stacks	Bruce Burkhardt
Nov. 30, Dec. 1, 2	10:30-12 noon	Introduction to MacDraw II*	Karla Savage, Carole Casaretto
Dec. 5, 7, 9	1-3 PM	Beginning EXCEL Spreadsheet*	Nancy Travis, A. Soulsburg
Jan. 10, 12, 17, 19	1-2:30 PM 3-4:30 PM	Beginning MS WORD 3.01	Karla Savage, T. Pope Claudia Madison, J. Wolslegel
Jan. 11, 13	1-2:30 PM	Basic Intro. to FileMaker*	Claudia Madison, C. Casaretto
Jan. 25, 27	1-3 PM	Beginning EXCEL Spreadsheet*	Claudia Madison, A. Soulsburg
Feb. 1, 2, 3	10:30-12 noon	Introduction to MacDraw II	Karla Savage, Carole Casaretto
Feb. 8, 10	1-2:30 PM	Basic Intro. to FileMaker	Claudia Madison, C. Casaretto
Feb. 27, March 1, 3	1-3 PM	Beginning EXCEL Spreadsheet	Nancy Travis, Carole Casaretto

# LBLnet NEWS

Bob Fink  
Sig Rogers

## A Shortage of Internet Numbers

LBLnet serves several user communities that employ different networking protocol suites; primarily Decnet, IBM PC (XNS) and TCP/IP. The TCP/IP protocols use an addressing scheme called Internet Addressing. The form of this that LBL uses consists of a hierarchy of network, subnetwork and host numbers. It is easy for users (up to 254) on the same subnet to communicate directly on the Ethernet; those on different subnets must communicate through Internetwork routers that interconnect different Ethernets.

The 128.3.254 subnet (the existing bridged LBLnet) of the LBL Internet is now out of host Internet Numbers to assign to new users. This only affects TCP/IP users; Decnet and IBM PC (XNS) network users are unaffected.

## Plans to Alleviate the Shortage

Until recently, all of LBLnet was a single subnet from the TCP/IP point of view. However, it has long been clear that 254 Internet Numbers would be too few for LBL's needs (each host needs a unique Internet Number) and that more subnets would have to be created. As discussed in past LBLnet News articles on LBLnet Phase II planning, routers will be added to LBLnet to alleviate the host Internet Number limitation and other related problems.

The first step was taken in July when a new Internet router was installed on LBLnet to create the first part of the Routed LBLnet to serve the Building 46 ALS user community. New subnets have also been added for Bevalac Control Systems (Buildings 51, 64 and 71) and Real Time Systems (Building 46A and 46 north).

The next step is to provide Routed LBLnet access to the remaining areas served by the existing Bridged LBLnet. Initially the focus is on the Building 50 and 90 complex where most of the users and computer systems are located. Building 55 is also being wired for Routed LBLnet access at this time.

The final step will occur with ICS (the new phone and data switching system) cutover when new fiber optic cables interconnect parts of the Laboratory not

now reached by LBLnet. At that time (early 1989) LBLnet staff will start to connect buildings to both the Bridged and Routed LBLnet.

## In the Interim

During this transition, users needing TCP/IP access will experience delays in getting Internet Numbers. In some cases a user will have to be connected to the Routed LBLnet, which will prohibit the use of Decnet and IBM PC (XNS) networking since the new Routed LBLnet currently supports only TCP/IP.

A program is currently underway to test the ability to operate multiple TCP/IP subnets over a single Ethernet. This is considered an interim solution until the Routed LBLnet is fully in place (including the possible support of Decnet in addition to TCP/IP). However, this test is not complete and will not solve all problems of interim access.

Users wanting more information about these issues, or wanting help in planning, should contact Bob Fink (x5692), Darren Griffiths (x6966), or attend any NAG Meeting (held every Thursday at 2:00 PM in the Bldg. 50F Conference Room).

## Network Contact Information

LBLnet new installations:

Ted Sopher, x4559 or x5354

LBLnet trouble calls: x5354

LBLnet comments or trouble reports:

lblnet@lbl

For Decnet administration:

William Jaquith, x4388

For Internet administration:

Darren Griffiths, x6966

For IBM PC and Macintosh network administration:

Richard LaPierre, x4692

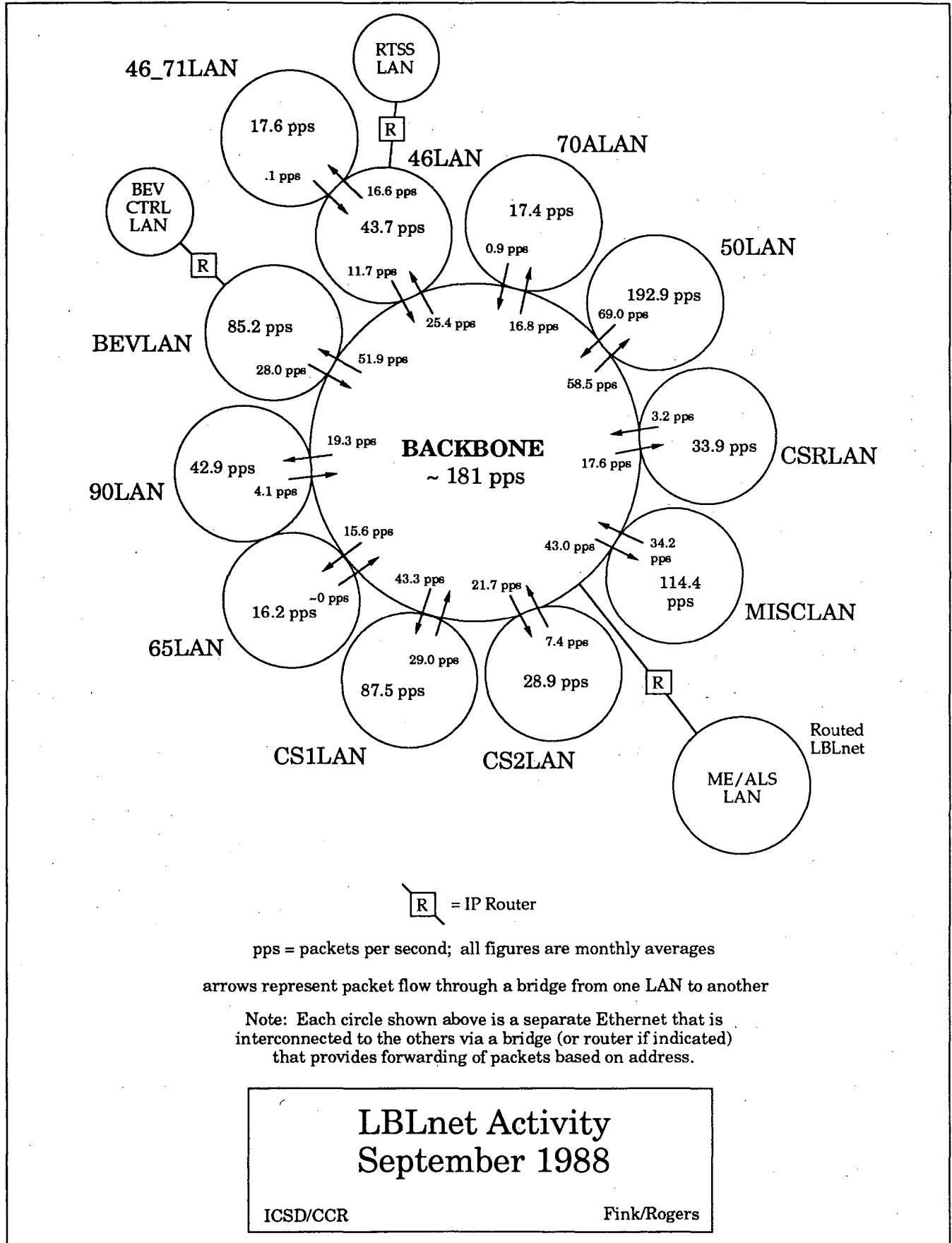
To contact the Network Advisory Group (NAG):  
nag@csam.lbl.gov

If you are in doubt about whom to call, call:

Bob Fink, x5692,

Serge Polevitzky, x4389,

Sig Rogers, x6713



# POSTMASTER'S CORNER

William Jaquith

This is the Postmaster's Corner. We'll answer frequently-asked Electronic Mail questions here. You can also get answers to your Electronic Mail questions by sending them to Postmaster or PostOffice on the CSA cluster.

Once a month, Computing Services offers a free Electronic Mail class to the LBL staff (See Pg. 3 of this Newsletter). At this class, we go over the VMS Mail utility, the Software Tools msg, and the UNIX Mail Utility.

This month I will describe tools in *msg* (Software Tools Utility) and VMS Mail that you should find useful.

## • postmn

The first tool is *postmn* -- for users of *msg*. Use it to query the system for the presence of mail. When you issue the command *postmn -hn* at the CSA> prompt, the system will examine the *msg* mail file (mymail.) to see if there are any new messages. The *headers* of all new MSG mail messages will be displayed on the screen. Here's an example (text in boldface is what you type):

```
CSA> postmn -hn
New Headers in default mail file
N 11 18-Oct-1988 kate@slacvm.bitnet New update
N 13 18-Oct-1988 james@cithex.hepnet ANL Visit
```

Some users put the command '*postmn -hn*' in their login.com files so that they see a review of all their new mail each time they log in.

You can issue the '*postmn*' command without the '*n*' (new) flag to see all the message headers. Use the command *man postmn* for more information about the '*postmn*' service.

## • headers and type commands

*msg* users may find the special sequences that are available with the '*headers*' and '*type*' commands helpful. When you are in *msg* and are at the <- prompt you can say *h* (for **headers**). *msg* will respond with the line '*headers (message sequence)*'. You can type a question mark (?) to see the valid responses. Responses that you may find of special interest are *f* (From), *s* (Subject), and *t* (Text).

If you have a number of messages and you are looking specifically for the messages from user 'Kate', you can issue the *h* (headers) command followed by *f* (from) and *msg* will look for all messages that are from user Kate and list those numbers on your screen. Similarly, the *s* sequence will find the specified Subject messages and the *t* sequence will look for the specified Text within the body of all the messages. Here's an example (text in bold face is what you type):

```
CSA> msg
<- h (message sequence) f (from string:) kate
41 18-Oct-1988 kate@slacvm.bitnet proposal
<- h (message sequence) t (text string:) Aspen
23 18-Jul-1988 james@fermi.hepnet some comments
28 18-Aug-1988 kris@mitlns.hepnet recent workshop
<- h (message sequence) s (subject string) snowmass
17-Aug-1988 jimg@slacvm.bitnet snowmass meet
20-Aug-1988 andyw@cithex.hepnet snowmass data
```

I went into *msg* and used the '*headers*' tool and the letter *f* to look for all mail from Kate. Then I queried the *headers* tool (with a *t*) for all mail messages (text) containing the word "Aspen". Then I queried the *headers* tool (with an *s*) to look for all headers containing the word 'Snowmass.'

## • VMS Mail: options of the 'select' command

I have recently used the VMS Mail command '*select*' with some of its options to help me keep up with my VMS Mail messages. The '*select*' command within VMS Mail helps me group messages. While not as powerful or convenient as the '*headers*' command in *msg*, the '*select*' command does help quite a bit. Now, to review all the mail I received in VMS Mail during the month of August, I typed the following:

```
CSA> mail
MAIL> select/since=1-aug-1988/before=1-sep-1988
%MAIL-I-SELECTED, 15 messages selected
```

I used the *select* command with the command qualifiers '*/before=*' and '*/since=*' to select out the 15 mail messages I received during the month of August (out of the 200 messages that I had in my MAIL folder). Now I could easily find those messages in which I had specific interest. While I have selected 15 mail messages, the 200 mail messages plus these selected 15 mail messages are still unchanged and available within my VMS Mail folder MAIL.

By default, the '*select*' command works on the MAIL folder. If you are interested in looking at messages in a different folder, you must specify that folder name on the command line. An example:

```
CSA> mail
MAIL> select/since=1-aug-1988/before=1-sep-1988
afts_experiment
```

Recall that VMS Mail has a '*search*' command which is very helpful.

Hermes  
Postmaster



# UNIX NEWS

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## UX1 and UX3

---

Dave Cleveland

### INTRODUCTION

A little over a year ago the Computing Services Department acquired two Sun UNIX systems, UX1 and UX3. These are time-sharing systems that provide interactive and batch UNIX services to several hundred LBL users. UX3 also supports a number of diskless Sun workstations. Because of the high degree of connectivity between the two systems, interactive users need only a login on UX1 or UX3 in order to log into either system.

### DIFFERENCES AND ANOMALIES

Although we have tried to make the few differences between UX1 and UX3 transparent to users, you should be aware of some characteristics of each

- In the first place, UX1 is a Sun-3/280 and is twice as fast as UX3 (a Sun-3/180). As a result, we have priced the CPU seconds on each in such a way that their cost on UX3 is only half of their cost on UX1.
- Secondly, we have chosen to offer certain software only on UX1. This includes *Macsyma*, and the *IMSL* and *NAG* mathematical libraries. Essentially, the policy is to put the more resource-intensive software on UX1 (which has the most memory and greatest CPU power). Of course if demand or usage warranted it, we would put all of the software on both systems.
- Thirdly, because Sun's Network File System (NFS) is used to permit either UX1 or UX3 to share its disk data with the other, there is a subtle difference between logging into each of the two systems from a remote host. This difference is most evident when using the remote login command `rlogin`. Normally, if you do not want to type your password every time you log in from a remote host, you would create a `.rhosts` file in your UX1 or UX3 login directory. In this `.rhosts` file you would insert lines in the format

`host-name login-name`

where the `host-name` is the name of the remote host and `login-name` is the name of the remote login. This works well when you log in from the remote host to wherever (UX1 or UX3) your login directory actually resides. However, it may not work when you `rlogin` to the system that your login directory is *not* on: you will still have to type a password unless the `read-by-others` (world read) permission of the `.rhosts` file

is turned on, and the `read-by-others` (world read) and `search-by-others` (world search) permissions of your login directory are turned on.

- Lastly, there is a potential problem with electronic mail that is associated with NFS. Electronic mail that is received on UX1 or UX3 can be forwarded to another host if you create a `.forward` file in your home directory (which is shared between UX1 and UX3). In this `.forward` file you may insert a line with a forwarding address in the format

`login-name@host-name`

The mailer of the system where your login directory actually resides, say UX1, will route all of your mail to that forwarding address. However, the mailer on the other system, in this case UX3, will not be able to read your `.forward` file unless its `read-by-others` (world read) permission is turned on, and your login directory's `read-by-others` (world read) and `search-by-others` (world search) permissions are turned on. Therefore, if you do not want to turn on those permissions, you should forward your mail to the system that your home directory is *not* on. Alternatively, request your associates to send your mail to only one specific system, either UX1 or UX3.

### REFERENCES

#### Type

- `help rates` .....to see all of the UNIX rates.
- `man rlogin` .....for a description of both the `.rlogin` command and the `.rhosts` file.
- `help permissions` ...for a full explanation of permissions on files and directories.
- `man chmod` .....for the syntax of setting the permissions of files and directories.
- `man mail` .....for a description of the `mail` command and the `.forward` file.

Forward accolades, brickbats, comments, gripes, and questions to me at x5336 or

VMS Mail: `lbl::DHCleveland`

Unix or  
Software Tools Mail `DHCleveland@lbl.gov`

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## DES ON THE SUN UNIX SYSTEMS

---

Dave Cleveland

The `des` command is provided on the Sun UNIX systems to protect sensitive data. `des` encrypts and decrypts the contents of files using the NBS Data Encryption Standard algorithm. Its default encryption mode is Cipher Block Chaining (CBC) which treats an entire file as a unit of encryption. CBC mode also ensures that regularities in clear data do not appear in the encrypted data. The command requires that you specify either the `-e` (for encrypt) or `-d` (for decrypt) option. It also requires an 8-byte key or password, but will pad shorter keys to 8 bytes. For maximum protection we recommend keys of 8 characters that are not real words, such as "wXy+4T3A". For example, if *sensitive* is a file in clear text, the `des` command

```
des -e sensitive secret
```

will encrypt the data in *sensitive* and write it to the file *secret* (after first prompting you for the key). To decrypt the data, simply reverse the process. For example, if *secret* is the encrypted data, the command

```
des -d secret clear
```

will decrypt the coded data in *secret* and write the clear text to the file *clear*, (after first prompting you for the same key).

You can specify the key as an argument to `des` by using the `-k key` option. For example, for the same key, "wXy+4T3A", these commands .

```
des -e -k wXy+4T3A sensitive secret
```

and

```
des -d -k wXy+4T3A secret clear
```

will produce the same results as the previous two commands. `des` immediately destroys the key argument at the beginning of its execution, so that the key will not be visible to users executing the `ps` command.

Normally, a warning message is printed if the `des` hardware is unavailable, since the software is much slower. On UX1, UX3, and ISD, the warning message has been suppressed in the shell script `/usr/local/des`. You may use the `/usr/bin/des` command directly if you prefer.

**CAVEAT:** as in the case of encrypted passwords, we cannot guarantee that an encrypted data file will not succumb to a brute-force cryptographic attack, if the attacker has sufficient computing power and sufficient time and patience.

### REFERENCE

For a full description of the `des` command as presented in its manual entry, type the command

```
man des
```

Forward accolades, brickbats, comments, gripes, and questions to me at x5336 or

VMS Mail:    Ibl::DHCleveland

Unix or  
Software Tools Mail    DHCleveland@lbl.gov

---

## SUN NEWS

---

Dave Cleveland

- ✓ **SUN 4/110TC GIVES 24-BIT TRUE COLOR** to Sun's SPARC Risc family of computers. This is ideal for graphics, animation, image processing and mapping where 16.7 million colors are important. At half of the price of competing 24-bit workstations (\$17,353 for 16" color, diskless or \$20,033 for 19" color) this machine has the added advantage of 7 MIP's of SPARC power.
- ✓ **SUN 386I WITH NEW VGA CARD** runs all MS-DOS graphics applications in up to four high-resolution color windows. While each of the four applications are running, you can cut and paste information between windows. This card costs \$600, takes up one slot, and allows VGA, EGA, CGA, MDA and Hercules emulation.
- ✓ **NEW GRAPHICS LIBRARIES FOR TAAC-1** Accelerator boards include Volume Rendering Toolkit and an Image Processing Library. This makes the programmable TAAC-1 boards even more powerful in several areas including medical applications, seismic imaging and complex scientific visualization.
- ✓ **INTERNATIONAL IMAGING'S SYSTEM 600** ports to Sun's TAAC graphics accelerator, giving it a powerful set of image-processing tools.
- ✓ **NEW BEGINNER GUIDE MANUALS** are available from Sun for new users who want a simple explanation of the tools available on Suns (\$75/set).
- ✓ **SPECIAL \$4000 OFF ON UPGRADES** from Sun 3/180 to 4/280 are available until October 31st. New upgrades are also available from Sun 3/110 to 4/110-8, -16, or -32 megabyte systems for the first time and 16 megabyte memory upgrades are shipping for 4/110. Sun now offers an upgrade for four 8 megabyte boards from a Sun 4/200 to one 32 megabyte board.
- ✓ **SUNUNIFY 3.0 / SUNSIMPLIFY 1.1** database products are now shipping. These support the Sun 386i, Sun 3 and Sun 4 family.
- ✓ **WORD PERFECT WORDPROCESSOR** now supports the Sun 386i, Sun 3 and Sun 4 family. Santa Cruz Operation announces a Lotus 1-2-3 workalike for the Sun 3 and Sun 4.
- ✓ **TOPOLOGIX SHIPS A PARALLEL-PROCESSING** add-in board for the Sun 3 or Sun 4 adding up to 80 MIPS to your system (\$24,900 / 20 MIP board).
- ✓ **SAS SYSTEM PORTS TO SUN** bringing an integrated data analysis, graphical presentations and statistical analysis environment to your Sun. This software has traditionally been run on large mainframe and minicomputers, but now it can be run on Suns for a fraction of the cost.

Forward accolades, brickbats, comments, gripes, and questions to me at x5336 or

VMS Mail: lbl::DHCleveland

Unix or  
Software Tools Mail      DHCleveland@lbl.gov

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## FOCUS NEWS

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Bert Albrecht

### → FOCUS USERS GROUP

The next FOCUS Users Group meeting will be from 1 to 4 PM Thursday, November 17, 1988 in the Bldg. 50B Training Room (Bldg. 50B, Rm. 1237). Agenda is as follows:

1. The meeting will open with general discussion about FOCUS applications at LBL.
2. Bruce Bagnoli will give us a preview of the presentation he'll give at the next NC FUSE meeting.
3. Bert Albrecht will share some new ideas on how to collect account numbers for reporting purposes.

### → LBL HOSTS NC FUSE MEETING

Lawrence Berkeley Lab is the host site for the next meeting of NC FUSE -- the Northern California Focus User's Group -- on December 17, 1988.

Meeting will begin with registration and coffee at 8:45 AM at the Bldg. 50 Auditorium. There will be presentations throughout the day (adjournment at 4 PM).

A formal agenda is available from Valerie Sherriffe (x4460) or me (x6280).

Forward comments and questions to me at x6280 or

VMS Mail:    ibl::HCAAlbrecht

Unix or        HCAAlbrecht@lbl.gov  
Software Tools Mail

# THE HELP DESK

---

## A NOTE ON THE VMS PRINT COMMAND

---

Martin Gelbaum

- **PRINT/DELETE IS SAFER**

Here's a typical VMS user problem: you issue the command

```
PRINT filename
```

to send the file to the Talaris. You then use the command

```
DELETE filename
```

to delete the file if you were led to believe the file had been printed, i.e., if the PRINT command returned a message like.

```
Job MYFILE (queue SYS$PRINT, entry 456)
started on CSA3$LCA0
```

If you then "deleted" it without making SURE the job was printed, and if, indeed, it was NOT printed, (this happens), it might be lost for good. (The VMS print utility does NOT make a copy of the file it prints: it reads from the very file you asked it to print).

Therefore, it's wise to let the system delete the file AFTER it prints it. Use the command

```
PRINT/DELETE filename
```

to print and then delete "filename". (It won't delete the file unless it really has been printed.)

- **NOTIFY IS NICE**

You may also want to use the qualifier "/NOTIFY" so that the print symbiont will send a message to your terminal (if you are logged in) to let you know when the job is completed.

Forward comments and questions to me at x4749 or

VMS Mail                      lbl::M\_Gelbaum

UNIX or  
Software Tools Mail:      M\_Gelbaum@lbl.gov

---

## READONLY IN VAX FORTRAN OPEN: A USEFUL PARAMETER

---

Martin Gelbaum

Sometimes a VAX FORTRAN OPEN Statement will not allow you to open a file to which you have READ access. This can occur when the permissions have been set so that you have READ access but do not have WRITE access to that file.

If that happens, you can go around the obstacle and open that file using the READONLY parameter on the VAX FORTRAN OPEN statement, which does let you READ an existing file, (but still won't let you WRITE to it).

For example, suppose your data file has protections SYSTEM:RWED, OWNER:R, GROUP, WORLD, i.e., the system can read it, you can read it (but can't write to it), and no one else can read it, etc.<sup>1</sup> The default VAX FORTRAN OPEN statement tries to access the file for both READ and WRITE. If you try to open it with OPEN(UNIT=12, file='file.data', STATUS='old')

the OPEN will fail; you'll get an "insufficient privilege or file protection violation" error. This is because OPEN, *by default*, tries to give read AND WRITE access to a file and you, the owner, do NOT have WRITE access to this file. However, if you use

```
OPEN(UNIT=12, file='file.data', STATUS='old',
      READONLY)
```

the FORTRAN statement uses the READONLY parameter and thus will OPEN the file.

For details and further references, see *Programming in VAX FORTRAN*, section 13.1.20.

Forward comments and questions to me at x4749 or

VMS Mail                      lbl::M\_Gelbaum

UNIX or  
Software Tools Mail:      M\_Gelbaum@lbl.gov

---

<sup>1</sup>The READONLY parameter has no effect on the protection specified for a file – i.e., it does NOT change the protection on the file the program opens; its main purpose is to allow a file to be read simultaneously by two or more programs.

# PHYSICS NEWS

Werner Koellner

## ● PHYSICS UTILITIES

Access to the Physics Utilities, including the CERN Library, and the PAW Library (Physics Analysis Workstation), is available, after executing the DCL command

```
@Physics$Manager:Setup_Phys
```

It is recommended that you include this line in your Login.Com file. When you type

```
help @physics_utilities
```

you'll see many of the utilities that are available. You can also type

```
help 'subtopic'
```

to get help on a particular utility directly.

## ● CERN LIBRARY

Object libraries are updated at unpredictable times. Changes are documented in the CERN Computer Newsletter, and sometimes also in the directory Cern\$Inform. In some cases, a previous version of an object library is available as xxxxx.OLD. The following Object Libraries have been updated recently:

```
GKSPACK_ATC....Version 1.02 (the GKS-ATC
                  Version of GKSPACK)
GRAFLIB5.....(with Version 5.04 of HPLOT)
HBOOK4 .....Version 4.04/01
HIGZ .....Version 1.04/05 (the MGKS
                  Version of HIGZ)
HIGZ_GRAL .....Version 1.04/05 (the
                  GKSGRAL Version of HIGZ,
                  renamed from HIGX.OLB)
HIGZ_ATC .....Version 1.04/05 (the ATC-GKS
                  Version of HIGZ renamed from
                  HIGX_ATC.OLB)
HPLOT5 .....Version 5.04/01
KUIP.....Version 1.42
KUIP_ATC.....Version 1.42 (the ATC-GKS
                  Version of KUIP)
PACKLIB4 .....(with Version 4.04 of HBOOK)
PAW .....Version 1.04/01
PAW_ATC.....Version 1.04/01 (the ATC-GKS
                  version of PAW)
SIGMA.....Version 1.00
```

Note: The following versions of the Graphics Interface HIGZ are now available for testing:

```
HIGZ_3D .....Version 1.04/05 (standard,
                  with 3-D graphics)
HIGZ_GDI.....Version 1.04/05 (standard,
                  with 3-D graphics,
                  Geant Drawing, and DI3000)
PHIGZ .....Version 1.04/05 (standard,
                  with 3-D, and calls to PHIGS,
                  instead of GKS)
```

## ● DISPLAY

Version 3.1 has been released. Improvements were made regarding the character sizes when multiple "windows" are used. The command CHSZ is now rarely necessary, as character sizes are adjusted automatically.

## ● GEANT

GEANT, a system of detector description and physics simulation tools, is available as part of the CERN Libraries. For novice users, a collection of sample programs is available. Version 3.12 is now the default (GEANT.OLB), while the former version has been renamed Cern\$Library:GEANT311.OLB. All link procedures and options files have been renamed accordingly. The libraries Cern\$Library:GHEISHA.OLB and GHEISHA7.OLB will be deleted shortly, since GHEISHA is now integrated with GEANT. Please type

**HELP GEANT**

for additional information.

- PAW

At LBL, the program PAW is available in both minimal-GKS and full GKS versions. The full GKS version, named PAW\_ATC, uses ATC-GKS, Version 3.0, and differs slightly from the corresponding version at CERN, primarily in the availability of workstations, and in their ID's. The current version allows you to invoke the array manipulation package SIGMA. Minimal SIGMA documentation is now available from the Computer Center Library (Bldg. 50B, Rm. 1232B, x4242). Graphics output may be directed simultaneously to a Metafile, which later can be processed via the preliminary program Paw\$Library:Metapaw.Exe, to direct the output to any available graphics device. Most recent improvements are documented in files Cern\$Inform:Paw.News\*. For a short while, the previous Version 2.5, of ATC-GKS, remains available. Type

**HELP PAW**

for additional information.

- EVANS & SUTHERLAND

The operating system, including the host-resident software, for the Evans & Sutherland PS390 3-D Workstation has been upgraded to Version 3A.V01. The host-resident software resides on SYS\_CALIGRAPH:[PSDIST.A3V01...]. A new keyboard has also been installed. The Graphics Interface DI3000, from PVI, has access to a driver for the PSE 390 (Setdrv PSE), which gives users full DI3000 graphics capabilities, particularly 3-D displays, on this workstation.

Forward comments and questions to me at x4389 or

VMS Mail    lbl::WOKoellner

UNIX or  
Software Tools Mail:    WOKoellner@lbl.gov

## NOTES FROM TROUBLE MAIL

Dana Conant, Computing Services

*Following are further examples of typical exchanges from our on-line UNIX and VMS trouble mail facilities.*

\*\*\*\*

### MESSAGE:

I would like to print my Microsoft *Word* files from my IBM PC on the cluster LaserWriters. I print a file from *Word*, transfer the file to CSA, and now want to print it. The file is in PostScript format. Should I use IMPRINT, LPR, MACPR, or something else to print the file?

### RESPONSE:

IMPRINT is not the right way. If the file uses the Apple Macintosh PostScript dictionary, use MACPR. If the file does use that dictionary, you should see the string "md begin" [the case is significant] in the first 20 lines or so of the file, after the beginning comments [the lines that start with %%].

If the file does not use the Apple Macintosh Dictionary, and if the first 11 characters of the file are

```
%!PS-Adobe-
```

LPR by itself will work. These 11 characters should all be on the first line, starting in column one. If the file does not use that dictionary and doesn't start with that special character sequence, try adding that line at the very beginning of the file and use LPR to print it.

\*\*\*\*

### MESSAGE:

Are you aware that owner files get deleted when one of your print commands gets used incorrectly? I intended to use rotated print as

```
imprint -pap25 -r filename
```

but mistyped and used

```
lpr -pap25 -r filename
```

The file was printed, not rotated, of course, and then deleted. The file was gone and could not be reprinted.

### RESPONSE:

The -r option is a standard option for the LPR command on all systems. The LPR documentation for the -r option reads

```
-r Remove the file upon completion of spooling
```

(Ed. note: The use of flags in UNIX is not consistent across commands.)

\*\*\*\*

### MESSAGE:

In the past, I've always landscaped reports on our Imagens by using the command

```
imprint -L -w132 -pip3 filename
```

This doesn't appear to be working today.

I also thought that the Imagens were responding to a Fortran control character for a new page recently. Now they are not.

What seems to be my problem? And did the Imagens ever respond correctly to a Fortran control character?

### RESPONSE:

Use:

```
imprint 'PipN -r -n filename
```

where "filename" is the name of your file, which has FORTRAN carriage control and needs to be in landscape mode. "-r" is for *rotate*, i.e. rotate from the default portrait mode; "-n" means to leave the header off each page. The file prints fine without the "-n" also. Imagen doesn't understand FORTRAN carriage control. We have always had to use a program to convert FORTRAN carriage control files before printing them.

\*\*\*\*

### MESSAGE:

Is there any way I can make LaTeX give me a superscript for bibliographic citations (produced by the /cite{} command) rather than e.g. [12]?

### RESPONSE:

The /cite command and its friends produce citations in a "canned" format. If this isn't satisfactory, you may be forced to use the BibTeX program, which lets you define the format used for citations.

\*\*\*\*

### MESSAGE:

Is it possible to allocate a temporary working space? I have 10000 blocks, but it is not enough to run a program I use which needs a large working space. I have no other need for 10000 blocks; I got it just to be able to run this program. If I can use a temporary working space or disk, I can reduce my block size by half at least.

### RESPONSE:

You are purchasing Never Backup USAGE disk space, which means that you are only charged for the disk space that you actually use. You do not pay if you are not storing any files.

For the other storage class, QUOTA, you are charged even if you do not use the space, but the space is guaranteed to be available when you request it.

\*\*\*\*

### MESSAGE:

In the last place I worked, the FINGER command would also read out additional user-supplied information if this was entered in a file FINGER.PLN in the default directory. Does the CSA FINGER utility search for a similar file?

### RESPONSE:

You can use the file

```
$PLN.LIS
```

in your home directory to supply such information about yourself. FINGER will read it.



\*\*\*\*

**MESSAGE:**

I have been sent messages from Computing Services people over the last few years using MSG. Since I prefer using "Mail" I have not become fully acquainted with the various functions in MSG. How do I delete old messages (or all messages) in the message storage file? The command "d" prompts for a message sequence. What is a message sequence? I've tried using the message number and the letter "A" for all, without avail.

**RESPONSE:**

Within MSG, type the letter "d", which elicits the prompt [message sequence], to which you answer with the letter "a" for all messages, or a number, e.g. 24, or a sequence of numbers, (such as 4-15). Then press the carriage return, type the letter "e" (for exit), and press the space-bar to confirm it. That should delete the indicated message sequence.

\*\*\*\*

**MESSAGE:**

Are the CSA4 modems used for dialout to other computers gone? (Re: "help dialout csa4\_modems"). I haven't been able to get them to work lately. I used them occasionally to transfer files from campus to THEORY.

**RESPONSE:**

TXJ1 and TXJ2 on CSA4 have been tested and work without problems. Note that because of potential misuse of these modems, you cannot do a SET HOST from THEORY and then dial out on these modems. The error in this case is "error activating image RTPAD."

I believe that your campus node should be able to send mail to USERNAME@lbl.gov, which may be an easier way for you to move text files back and forth.

\*\*\*\*

**MESSAGE:**

Someone has tried to log in to my account. I've gotten a message that there were 2 failures between my current login and my last login. They weren't by me. Should I inform you of this? Or is the system "hack-proof" for this sort of thing?

**RESPONSE:**

Thanks for the message. I'd like to suggest you change your password for added security. Of course, you should be the only person who knows your password.

We are monitoring the system very carefully and can find no evidence of breakins. However, please do inform us right away should you notice further problems of this nature.

\*\*\*\*

**MESSAGE:**

UX3 won't let me change my password. I get the error  
Not in passwd file

This may be because I have changed my name since I last changed my password, although I've no idea why

this would make a difference. Obviously, I am in the passwd file or I couldn't log on, and I do appear correctly by my new name when I do a  
finger @ux3

**RESPONSE:**

Use the following command to change your password for UX1 and UX3:

```
% ypasswd
```

It will change your password immediately on UX1 and UX3.

See HELP PASSWORD for more information.

\*\*\*\*

**MESSAGE:**

I noticed that when you change directory from one disk to another, it seems to redefine the logical sys\$disk to the current disk. Is this a VMS 4.7 bug or installation error?

**RESPONSE:**

According to the VAX/VMS Concepts Manual, page 4-4, section 4.3.1, "The Process Table," the process logical name SYS\$DISK is the "Default device established at login or changed by the SET DEFAULT command."

Thus, the behavior you describe is perfectly normal.

\*\*\*\*

**MESSAGE:**

Last week, the "u" command to get into Eunice on CSA didn't seem to work, though it does now. Any idea what might have been going on, or was it just random weirdness?

**RESPONSE:**

Sometimes a global section used by Eunice gets corrupted, thus denying access to it on one of the machines. This global section is local to a member of the cluster, such as CSA2; therefore, since you mention only CSA, we can't tell on which machine you were having the problem and whether this global section problem was the cause. If you supply the name of the machine on which you experienced the problem, the symptoms, and the date and time, we can give you better answers.

\*\*\*\*

*If you want wider distribution of your comments or questions, we encourage you to send them to trouble since it is seen by a wide range of people, including Divisional management.*

*To use trouble, enter the VMS, Software Tools, or UNIX mail system and send mail to the address*

```
trouble<cr>
```

*We won't, of course, include any user's name in the exchanges.  
.. Ed.*

# THE WORKSTATION SCENE

• [25.11.1].....

## WORKSTATION GROUP ELECTRONIC MAIL

Workstation Group members can now be reached from the VMS cluster or the Computing Division's UNIX machines by sending mail to

VMS Mail. lbl::WKSG

UNIX or

Software Tools Mail: WKSG@lbl.gov

We hope this alternative (to the telephone) will help users who have problems or who want to share helpful hints.

• [25.11.2].....

## WHERE WE'RE AT

The Workstation Laboratory, home of several Workstation Wizards as well as the Workstation Lending Library, is located at Bldg. 50B, Rm. 2231. It's open from 8 AM to 5 PM Monday through Friday. We're here to help; call us (x6858).

• [25.11.3].....

## SIGN UP FOR THE COMPUTING NEWSLETTER

We'd like to remind LBL employees who are owners or users of a PC or a Mac to sign up to receive the Laboratory's Computing Newsletter, which has a helpful Workstation Scene section, supported by the Information and Computing Sciences Division's Workstation Group. This section offers support and helpful hints for PC/Mac users. It's also a place to send questions and comments.

Contact Workstation Group member Maggie Morley (x5529) to add your name to the Newsletter Mailing List.

• [25.11.4].....

## HERE'S THE WORKSTATION GROUP

Did you know that there is a group of people at LBL who help with all kinds of microcomputer, local area network, telecommunications, and word processing questions and problems for NO CHARGE?

Yes, the Information and Computing Sciences Division's Workstation Group is ready to assist everyone in any of the above areas.

This group was formed in mid-1984, and has been promoting standardized solutions to office automation

problems while keeping up with new hardware and software that might be useful to Laboratory personnel.

- (1) We help you to evaluate the available office automation solutions and configure a system for you.
- (2) We operate a software lending library for evaluation purposes.
- (3) Each month in the Workstation Scene section of the LBL Computing Newsletter, we offer
  - new items and old ones that have been popular,
  - software reviews,
  - answer to users' questions, and
  - timely tips.
- (4) We stock Microsoft, Claris and Apple products and handle the distribution of their upgrades.
- (5) We have members from the Computing Services Department, so we keep up with the VMS and UNIX world on the 8650s and Sun machines.
- (6) We support and distribute terminal emulation and file transfer software that enables communications between micros and various mainframes.
- (7) We offer regular training (short courses) in the Mac Training Room (Bldg. 50B, Rm. 1229). (One-on-one assistance is also offered.) We also let you know what-all's available -- from free computer-aided training diskettes to information on the lowest cost and most comprehensive classroom training for Laboratory personnel.

Each member has a specialty, but feel free to call any of us with your problems.

- **Bruce Burkhart** -- The WKSG's self-ascribed 'bean counter,' Bruce handles the purchase and management of just about all WKSG hardware and software acquisitions, maintains the Software Lending Library, keeps the *HyperCard* HyperStack, and answers more telephone & in-person queries per running minute than any man alive. At the Mac Training Room, he teaches *HyperCard* (x6858).
- **Carole Casaretto** -- Ms. Casaretto is administrator of the Mac Training Room (she sets up all its machines very early every workday morning). She participates in the development of course material used in the Mac Training Room sessions, and is a resource for questions about *Word* and *FileMaker*. She schedules all courses given by the WKSG folks (Call Carole!) and is also a TA for many of them (x6858).

- Roy Kerth -- Tests and evaluates new hardware and software.
- Richard LaPierre -- WKSG's Fearless Leader. Richard orchestrates the activities of everyone else in the group and is primary contact with users/vendors. He's also the primary contact for connecting your PC or Mac to the LBLnet (x4692).
- Claudia Madison -- Claudia is responsible for program development for menu-driven administrative systems using IBM-PC's and Macs. She is also an expert in database management systems, text-formatting and word-processing. At the Mac Training Room, she teaches *Word*, *Excel* and *FileMaker* (x6858).
- Maggie Morley -- Edits the LBL Computing Newsletter, interfaces with WKSG in producing its monthly *Workstation Scene* therein (x5529).
- Bob Rendler -- Bob coordinates Kinetics FastPath installations with RTSS. He sets up distributed printing access for LaserWriters connected to localnets via FastPath gateways. Bob integrates those WKSG services relating to Unix. He is the central resource for problems involving distributed printing (x5629).
- Tom Pope -- Backs up Bruce on a part-time basis. He's a Mac kind of guy (x6858).
- Karla Savage -- As Technical Coordinator for Information Services, Karla brings a background in publishing and the nitty-gritty of production to the WKSG. She teaches *Word* and *MacDraw* and will answer your *troff* and typesetting questions as well (x6705).
- Nancy Travis -- Nancy handles local area network installation and administration; she assists users with file conversion & transfers. She has extensive knowledge in text-formatting systems, project management systems, and data base management systems. In the Mac Training Room, she teaches *Excel* *SpreadSheet* and *Charts*. (x6858).
- Dan Van Zile -- Tests and evaluates new hardware and software; trouble shoots and offers wholesome advice to users (x5589).

• [25.11.5].....

... *What's NeXT*

**NEXT COMPUTERS FOR LBL**

Lawrence Berkeley Laboratory is included in the University site-wide purchase agreement with NeXT Computer Inc. LBL will be able to purchase NeXT products at the academic prices.

Dennis Hall, of ICSD's Advanced Development Projects, is negotiating to obtain developer's status with NeXT and to obtain early shipment of a number of development systems. If you would like to participate in a development program, contact Dennis at x6053.

Richard LaPierre, of ICSD's WorkStation Group, is arranging to have a demo of NeXT products and will coordinate the acquisition of end-user systems, which are scheduled for shipment in mid-1989. For additional information, contact Richard at x4692.

• [25.11.6].....

**PC CONFIGURATION HINT**

... *Thanks to Russ Montello for the boot batch file*

Most IBM PC and PS/2 users are familiar with modifying the *autoexec.bat* and the *config.sys*. In some cases you may not have enough memory to load all the drivers for different programs or you may share a machine with someone else -- who may prefer a different configuration.

In the Workstation Lab we are constantly reconfiguring our computers in order to test different software. In the dim past, one person would frequently labor with the configuration only to find that another person had modified it the next day. At the insistence of our fearless leader, we agreed upon a convention that would preserve everybody's working environment while allowing users to quickly change the current configuration.

First, we assume that the *config.sys* and *autoexec.bat* files are temporary files and can be erased at any time. Instead of working with these files, we make changes in a template file with a special extension. For example, the files to boot up with 3Com 3+ drivers are named *autoexec.3co* and *config.3c* (both must have the same extension) and the files to boot up with only DOS for maximum memory are named *autoexec.dos* and *config.dos*. In the case of a shared machine, you can create these files using a user's initials as the extension.

We install a "warm" program (available at the lab) to do a warm boot of the computer. Then we add a short bat file named *boot.bat* which contains the following three lines:

```
copy autoexec.%1 *.bat
copy config.%1 *.sys
warm
```

Whenever you want to change the current configuration simply type "boot 3co" or "boot dos" using the desired file extension. The templates overwrite the current configuration files and the system is rebooted.

• [25.11.7].....

### CONUS COMES TO HYPERCARD

... From Faithful Correspondent Jeff Zalkind

Attention Travel Secretaries and Division Travel Coordinators: do you hate thumbing through your CONUS (CONTinental United States) guide looking for a particular city? Do you wish your CONUS guide was flexible, so you could add cities to your "frequent destination" list? Well wish no more...the Travel Info stack is here!

This stack combines all the daily lodging and per diem information of the CONUS guide with the speed and customizability of *HyperCard*. Whether or not you are an avid *HyperCard* user, this stack has something for you. The entire 1988 CONUS rate guide is included, with the accompanying notes for military travel, requesting higher per diems, and the definitions for city and county localities. Instructions for use of the stack are included, and a **Create Home Card Button** allows you to access the stack easily from within the *HyperCard* program. With the speed of the *HyperCard* Find command, you can locate per diem information, including higher maximum lodging rates (when appropriate), quickly and easily.

The stack is customizable, with lots of room to type in alternate, heavily used city names under the otherdefined location heading (for easier reference). Users can use the Findit button or the *HyperCard* Find... command to search the stack, whichever they find more convenient.

• [25.11.8].....

### THE VIRUS THREAT CONTINUES

Can you stand more information on Mac Viruses? Check out the article titled, *The Virus Threat*, in *MacWorld*, for November 1988. The history, identification, and eradication of viruses are covered in technical -- but readable -- detail.

And while we're on the subject, you should be aware that the SE's in the Mac Training Room (Bldg 50B, Rm 1229) are still experiencing virus contamination on a daily basis. At least 2-3 machines have the "nVIR" virus (benign) by the end of the day. Each day, at around 7:30 AM, all the machines are checked and cleaned up. *FullPaint* and *Cricket Graph* are found to be the most frequently contaminated programs on the MacSE's. Users bringing these two programs to the Mac Training Room should have them checked out in the Workstation Lab as soon as possible. Remember, when a contaminated program is launched, it contaminates the System files, which in turn contaminate other applications.

• [25.11.9].....

### MAC SYSTEM SOFTWARE UPDATE OFFER

Apple has designed a program to make it easy to obtain the new version (6.0.2) of the System Software and documentation. You are eligible for a free copy of the software if you have a Purchase Order for a MacPlus, MacSE, or MacII computer, dated between May 13 and November 21, 1988.

There are two ways to get this new software. *First*, pick up a coupon at the Workstation Lab, fill it out, and send it in with a copy of your Purchase Order. Or *second*, let us do it for you. Drop off a copy of your Purchase Order, machine serial number with a few other details at the WKSG Lab (Bldg 50B, Rm 2231) and we mail it in. Either way, you win.

Alternatively, you can purchase the complete package (disk and documentation) at the WKSG lab for \$32.

The Workstation Group is also a member of the *Apple Software Update Program*. This means all LBL users who have old versions are allowed to make copies of Apple's System software.. Documentation is not included with this. Note: Version 6.0.2 requires copying four floppies.

• [25.11.10].....

### EXCEL UPGRADE HINTS

... from Workstation member Nancy Travis

We were surprised to see the new Excel 1.5 "XL" icon revert to the old icon on some installations. When a new program is installed with the same name as an old program, but with a different icon, the current icon on the desktop will sometimes not be updated.

Besides confusing the user with what appears to be an old version of the program, the old icon confuses the program itself. If you attempt to open the application by clicking on a worksheet, the program will not be found. You can either open the program first and then select the worksheet, or you can rebuild the desktop and get rid of the obsolete icon.

To rebuild the desktop, re-boot your Mac while holding down the **shift**, **option**, and **command** keys. When you do this, you will be alerted:

**Are you sure you want the desktop rebuilt on the disk "xxx"?**

(This will take a few minutes).

Click OK and your new program icon will be correctly acknowledged.

• [25.11.11].....

**LBL FONTS FOR THE MAC ARE UPDATED**

... Based on an article printed in the April 1988 WORKSTATION SCENE

When you type text intermixed with symbols, do you get tired of switching fonts? Well, you don't have to anymore. Roy Kerth has reconstructed three PostScript fonts (called LBL fonts) that mix alpha-numeric characters with the most used symbols. Several characters not available in the standard symbol font have been added as well (for instance,

⌘ ⌘ ⌘ ⌘ † † † †

These font families are based on Palatino, Times and Helvetica.

There's a new version of the LBL fonts available at the WKSG lab. LBLfont users should stop by to pick up the upgrade. (Bring a stiffy).

• [25.11.12].....

**MAC PAGEMAKER 3.01 UPGRADE**

User's with Version 3.0 should upgrade to 3.01. Registered users should have received a notice by now. If not, call 206-628-2320 for update information.

PageMaker 3.01 supports the font enhancements in Apple System 6.0 and offers improved support for several MacDraw II capabilities, including rotated text and graphics, dashed lines, and additional line widths. A few minor problems have been fixed, including TIFF (Tagged Image File Format) files, which are no longer misnamed when transferred from the PC to Macintosh.

• [25.11.13].....

**HYPERCARD CORNER**

✓ **BMUG PD-ROM**

Our HyperCard inventory has grown by 500 stacks with the purchase of the Berkeley Macintosh User Group's (BMUG) Public Domain compact disk. This disk includes over 250 Megabytes of Public Domain software, ShareWare, and clip art. The WKSG has an Apple Compact Disk player in the lab, so if you'd like to inspect these programs, drop on by.(Bldg 50B, Rm 2231).

✓ **New Demo Disks**

*How to Buy the Right Monitor* is a HyperCard stack by Moniterm Monitors, Inc., and is obviously biased towards their products. However, the stack includes some basic large monitor information you can use. If you've been thinking about upgrading to a large monitor, check out this stack. It has great graphics too.

*Hypertext '87 Digest* is all about Hypertext. If you've wondered what Hypertext is all about, look into this stack. It's not *HyperCard* and it's not an Apple Application program - it's both!

*Interleaf Publisher Stack Demo* is poorly organized but does have some interesting card layouts. Although the Interleaf Publisher may be a good one, this stack doesn't do a very good job explaining the program. This stack was probably rushed for distribution for the Seybold Conference last month.

*OLDUVAI Products* presents the entire line of OLDUVAI software products for the Mac. This is a very nicely organized stack. It has super graphics, and is a good model for new *HyperCard* stack makers.

✓ **New Books and Articles**

Due soon, "Stack Design Guidelines," a new book from Addison-Wesley. It has received great reviews so far. This is a supplement to Apple's "Human Interface Guidelines" book, but is specific to *HyperCard* and contains more detail.

Into XCMD's? You're very brave! A new book, "XCMDs For *HyperCard*," by Gary Bond (MIS Press, 1988) specifically addresses HyperTalk's External Commands for *HyperCard* applications. It is one of the first to delve into the technical information on XCMD fundamentals.

• [25.11.14].....

**SCHOLAR'S WORKSTATION HAS MOVED**

... From the Berkeley Computing Bulletin, October 1988

The Scholar's Workstation (TSW) is a Berkeley campus resale outlet offering substantial discounts to the campus community on selected microcomputer hardware and software. Campus departmental offices, UC Berkeley faculty and staff who have permanent appointments of 50% or greater, and full-time students enrolled in degree-granting programs are eligible to make purchases. TSW's new location and business hours are

Banway Building, First Floor  
2111 Bancroft Way, Berkeley  
(between Fulton and Shattuck)  
Hours: 10 AM to 2 PM, Monday thru Thursday

Apple Macintosh products are currently offered, and other products will be offered soon. To ask about current offerings and prices, call (415) 642-8899.

• [25.11.15].....

**MACTURKEYFEST IS COMING**

*... From Mac Stalwart Bruce Burkhart*

Called **MacToberFest** last year, the Berkeley Macintosh Users Group (BMUG) get-together is a month late this year. The **MacTurkeyFest** will be held November 17th, 11 AM to 7 PM in the Pauley Ballroom on UCB Campus. Admission is free.

The user-oriented show will consist primarily of Mac hardware and software demonstrations by BMUG members and supporters. There will also be seminars and theme presentations by Special Interest Groups (SIG) throughout the day. This annual affair is co-hosted by Apple Corp, which will supply dozens of Mac computers for everyone to use. There will also be a door prize (a Mac computer) donated by Apple and lots of other prizes and refreshments.

There will be Third Party vendors too. This year BMUG will try to concentrate on East Bay and local area developers, although some well-known software names will certainly be there. Watch the Daily Californian, LBL Currents and other local publications for more information. See you there!

Of course, the weekly BMUG meeting comes together later this same evening at around 7:30 PM in the Physical Sciences Lecture (PSL) Hall on campus. A special guest (rumored to be from NeXT) will be there to speak to the BMUG faithful. See you there too!

• [25.11.16].....

### WORKSTATION SOFTWARE LENDING LIBRARY

The Macintosh and IBM PC software listed below can be borrowed for one week for evaluation. It is not to be copied!! The Workstation Group lets you keep these packages for one week at no charge. If not returned after the 8th day, there will be a \$100 charge plus the software cost recharged to your account. To check on the availability, or to make a software reservation, call the Workstation at x6858.

This list is also available on a *HyperCard* Stack, call WKSG at x6858.

APPLICATION CATEGORY	APPLE MACINTOSH	IBM PC-XT-AT
<b>Communications</b>	Kermit V0.8 Red Ryder V9.4 ** TOPS for the MAC V2.0 VersaTerm V3.2	** DECnet DOS V1.1 Kermit V2.30 PC-VT V8.4 ** TOPS for the PC V2.0
<b>Database Application Generators</b>	4th Dimension V1.04 * dBASE Mac V1.0 FileMaker Plus V2.1 * Reflex Plus V1.0	dBaseIII Plus QUATTRO R:BASE V2.1
<b>Demo Programs</b>	dBase MAC FoxBASE+/MAC FreeHand by Aldus Mystat/SYSTAT MacTeX MACspin MGM Station Cad MathType Reflex Plus by Borland SIMUL VersaCad (MAC SE only) WordPerfect * GeoQuery	GENIFER Galaxy V2.3 Javelin PLUS Lotus Agenda MiniTK Solver Spectra Calc Mystat/SYSTAT PageMaker V3.0 * MathCad
<b>Disk Backup Utilities</b>	DiskFit V1.4 FastBack V1.02 HFS Backup V2.02 Redux V1.0	BackEZ! V1.0
<b>Drafting</b>	* Generic CADD Level 1 MacDraft V1.2B 2/24/88 MiniCad V4.07	
<b>Drawing and Design</b>	Aldus FreeHand V1.0 Canvas V1.02m Cricket Draw V1.1 Cricket Graph V1.2 Cricket Presents V1.0 * Digital Darkroom V1.0 Fontographer V2.3.2 * Fontastic Plus V2.0.1 FullPaint V1.0 Haste V1.0 Illustrator 88 Image Studio V1.0	MS Show Partner MS Paintbrush V1.0 Harvard Graphics V2.1 HP Laser Plotter HP Drawing Gallery V1.0 HP Charting Gallery V1.0 Laser Combo V1.0 Lotus GraphWriter V1.0 Lotus Freelance V1.0 MS Chart V2.0

	LaserTalk V1.0 MacDraw II V1.0 MacPaint V2.0 Pict-O-Graph V1.0 * Pixel Paint V1.1 SuperPaint V1.0 TS Graph	
<b>Equation Generators</b>	Expressionist V1.12 MacEqn V2.1 MathWriter V1.3 MathType V1.04	T3 TRIAD V2.1
<b>Fonts</b>	Adobe Screen Font Library * LBL Fonts V1.0 6/18/88 Princeton Font 4.0L SciFonts V2.5	HP Soft Fonts: Letter Gothic Prestige Elite TmsRmn & Helvetica HP Cartridge Fonts: A,D,E,V,Z
<b>General Languages and Tools</b>	Aztec C Compiler V3.40B * Lightspeed C V3.01 MS Basic V1.0 MS Fortran V2.2 Turbo Pascal V1.0	MS Fortran V4.1 MS Basic Compiler V6.0 MS C Compiler V5.0 MS Quick Basic V3.0 MS Quick C V1.0 MS Macro Assembler Q-DOS II RM Fortran V2.0 Turbo Pascal V3.0 True Basic V2.0
<b>HyperCard</b>	* HyperCard V1.2.1 HyperDA V1.0 HyperTutor Reports! V1.0	
<b>Instructional</b>	Personal Training Systems: Audio Cassette & Disk "Learn Excel" (9 courses) "Learn HyperCard" (4 courses) "Learn PageMaker 3.0" (4 " ) "Learn Illustrator88" (4 courses) "Learn Word" (3 courses) FlipTrack Learning Systems: "How to use Word" (4 courses)	ATI Teach Yourself: Lotus 1-2-3 V2.0 Cdex Training Program: Lotus 1-2-3 V1.0a PC Tutor
<b>Mathematics/Statistics</b>	Mathematica Passage V(e) Parameter Manager Plus	TK Plus Solver
<b>Organizational Tools</b>	Acta V2.0 MacProject II More V1.1c Think 'n Time V1.0	GrandView V1.0 Harvard Project II TimeLine V3.0
<b>Presentation Graphics</b>	PowerPoint V2.0 Ready-Set-Show V1.0	



## Cricket Presents V1.0

Spreadsheets	Excel V1.5	Excel V2.0	
	* MacSQZ V1.5 101 Macro's for Excel	Lotus 1-2-3 V2.01: In Word V1.0	
	* Full Impact V1.0	Lotus HAL & Metro Learn & SpeedUp Funk Worksheet Util	
Technical Publishing/ Page Layout	* PageMaker V3.01	PageMaker V1.0a	
	PageMaker Templates V2.0 Quark XPress V1.1 Ready-Set-Go! V4a	Ventura Publisher V1.1	
Utilities	AnyText/AnyGraph V1.4	Carousel V1.0	
	Fedit Plus V1.0	Double DOS	
	MacZap	DW Laser V1.3B	
	PrintWorks for the MAC	MS Windows 2.03	
	QuicKeys V1.1	MS Windows/386	
	Sensible Grammar V1.1c	Norton Utilities V4.0	
	SideKick V2.0	Polaris Forms V1.0	
	SmartScrap & The Clipper	SideView V1.0	
	SuitCase V1.0	SoftWare Bridge V3.0	
	SuperGlue V1.0		
	SUM		
	Sentinel V2.0		
	Stepping Out V1.0		
	The NightWatch V1.0		
	Thunder! V1.0		
	Word Processing/Editors	MacWrite V5.0	DisplayWrite4 V1.0
		MindWrite V1.12	Lotus Manuscript V1.0
MS Word V3.02		MS Word V4.0	
FullWrite Pro V1.0		MS PageView V1.0	
Textures V1.01		Total Word V1.0	
WriteNow V1.0		WordPerfect V4.2	
* WordPerfect V1.0.1			

\* Update or New Listing

\*\* WKSG Lab Demo Only.



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## SIGN UP FOR THE NEWSLETTER

Attention LBL employees: If you use the Computer Center's UNIX or VMS system, or if you are an owner or user of a PC or a MAC, you should sign up to receive the Laboratory's Computing Newsletter. It contains useful information about our systems and has a helpful Workstation News section (supported by the Information and Computing Sciences Division's Workstation Group), offering support and helpful hints for PC users. This is also a place for you to send questions and comments. To add your name to the Newsletter Mailing List, contact Irene Partyka, x4242, or

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