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L B L COMPUTING NEWSLETTER

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For Reference

Not to be taken from this room



DECEMBER

1987

100-429

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 DIVI	SION	COMPUTING FACILITIES (Con	tinued)	
Acting Head: Sandy Merola (AXMerola)7440	50B - 2232C	Operations Area	6211	50B - 1215
•		Develcon Problems & Terminal	Repair	
COMPUTING AND COMMUNICATIONS RESOU	RCES	(РСМиттау)	5354	50B - 2259
Head: Ken Wiley (KGWiley)7083	50B - 2258E			
Office of Computing Resources:		COMPUTING APPLICATIONS		
Dave Stevens (DFStevens)7344	50B - 2258F	Applications Group		
	50B - 2258G	Head: Jerry Borges (JTBorges)	5568	50F - 144
Telephone Services: Sam Gibson (FSGibson) .4234	80A - 103	CENTRAL ELECTRONIC MAIL	FACILITY	
ADVANCED DEVELOPMENT PROJECTS		FIRST INITIAL-MIDDLE INITIAL-LAST N	AME is the stand	ard
Head: Dennis Hall (DEHall)60535	OB - 3238	recipient format in Lab-wide mail	ing address.	
		Examples: VMS: lbl::JASmith	Ū	
WORKSTATION GROUP		UNIX: JASmith@lbl.	gov	
Group Leader: Richard LaPierre (RLLaPierre)4692	50F - 112B	Software Tools: JASmith@lbl.	gov	
Software Evaluation & Acquisition6858 5	0B - 2265	DEVELCON	•	
COMPUTING SERVICES		DEVELCON Access Names		
Head: Marv Atchley (FMAtchley)5455 5	OB - 2245	[VAX 8650's (GENERIC)		CSA Ì
	0B - 2239B			•
Central Office5871,2	50B - 2239	VAX 8650 (VMS)		
		VAX 8650 (VMS)		
VMS SYSTEM	•	VAX 8650 (VMS)		
	0F - 143	VAX 8650 (VMS)		
System Manager (GPJohnson)6211 5	0B - 1225	VAX 8650 (VMS)	•••••••••••••••••••••••••••••••••••••••	
UNIX SYSTEM		SUN-3 / 280 (UNIX1)		
Dave Cleveland (DHCleveland)5336 5	0F - 115	SUN-3 / 180 (UNIX3)		UX3
System Manager (RJCochran)5565 50				
0 4,		Dial-up Access Numbers		
DISTRIBUTED PRINTING		All Machines - 300 BPS	186	4050
Bob Rendler (RERendler)56295	0F - 119	All Machines - 1200 BPS		
	0F - 127	All Machines - 2400 BPS		
USER RESOURCES				
	0F - 144	Local TYMNET Access Numbers	for DEVELCON	N .
	0B - 1232A		1200 bps	2400 bps
•	0B - 1272	Oakland	430-2900	633-1896
	0F - 114	Walnut Creek/Concord	935-0370	935-1507
	0B - 1232C	San Francisco	974-1300	543-0691
	0B - 1232B	Santa Clara	408-980-8100	986-0646
UNIX and Cluster	00 - 12020	Palo Alto	415-366-1092	361-8701
	0F - 144	Vallejo	707-644-1192	
Continue Livatuation of Acquisition	VI: - 144	Antioch	754-8222	
COMPUTING FACILITIES		Fremont	490-7366	
	0B - 2249A	Pleasanton	462-2101	
	0F - 126			100 4544
	0F - 128 0F - 109	MFE Consulting Number is		422-1544
TACEMOLY COOLUMNISTON (AAD)admin)	VF - 103			

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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. With the exception of the FOCUS sessions, there is no charge for these classes. To enroll,

obtain your supervisor's approval and then contact Pat Bean (×7008). If you have questions about what's being offered, or suggestions for other computer-oriented topics, contact Jerry Borges (×5568).

DATE	TIME	DESCRIPTION	INSTRUCTOR
Dec 8	11 am-noon	Electronic Mail: Introduction	William Jaquith
Dec 15	11 am-noon	Electronic Mail: Further Topics	William Jaquith
Dec 15	1:30 PM - 3 PM	VMS Language Sensitive Editor	Cliff Stoll
Dec 16	1:30 PM - 3 PM	VMS Source Code Analyzer	Cliff Stoll
Jan 13, 15, 1988	12:30 - 4:30 РМ	Introduction to VAX/VMS	Marty Gelbaum

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

Carole Casaretto

The following computer classes are to 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 elsewhere in this Newsletter. If you have questions about what's being offered, or suggestions for other computer-oriented topics, contact Richard LaPierre (×4692).

DATE	TIME	DESCRIPTION	INSTRUCTORS
Dec 1, 3, 8, 10	1-2:30 PM 3-4:30 PM	BASIC MAC (WORD 3.01 & Excel)	Claudia Madison, Jean Wolslegel Anne-Marie Soulsberg
Dec 7, 9, 11	1 - 3 PM 3 - 5 PM	Beginning Excel Spreadsheet*	Nancy Travis, Sandy Mahannah Claudia Madison, Dana Conant
Dec 10	10 AM - 11 AM	Introduction to HyperCard	Bill Brown
Dec 17	10 AM - NOON	Using Your MAC as a Terminal	Cliff Stoll
Jan 11, 13, 15, 1988	1 - 3 PM 3 - 5 PM	Beginning Excel Spreadsheet	Nancy Travis, Sandy Mahannah Claudia Madison, Dana Conant
Jan 12, 14, 18, 21	1-2:30 PM 3:30-5 PM	Beginning MS WORD 3.01*	Karla Savage, Anne-Marie Soulsberg Claudia Madison, Jean Wolslegel
Feb 8, 10, 12	1 - 3 PM 3 - 5 PM	Beginning Excel Spreadsheet	Nancy Travis, Sandy Mahannah Claudia Madison, Dana Conant
Feb 16, 18, 23, 25	1-2:30 PM 3:30-5 PM	Beginning MS WORD 3.01*	Karla Savage, Anne-Marie Soulsberg Claudia Madison, Jean Wolslegel

LBLNET NEWS

Bob Fink Sig Rogers

LBLnet Activity

The monthly average packet rates took a very large jump during the month of October. This was due to a very high activity period from early to mid-october between CSRLAN and MISCLAN. During late October packet rates returned to the previous average rates (of September).

No one seems to know what caused this very large burst in activity. If anyone does know anything about it, please call Bob Fink (×5692).

LBLnet is quite robust, and users did not seem to be unduly disturbed during this high activity period.

It is very important that users notify LBLnet staff when highly unusual use patterns are expected. This will aid in our understanding of what happens on LBLnet in an unusual situation AS it is happening.

New LBLnet LANs

All of the Building 50 complex LANs previously on MISCLAN are now on a separately bridged LAN called 50LAN. This leaves Buildings B46D, 55, 55A, 70 and 88 on MISCLAN.

A second CSLAN has been added in preparation for the eventual separation of DecNET and tcp/ip networking. The original CSLAN is now called CS1LAN and the new one CS2LAN. More on this new LAN as Computing Services moves systems to it.

Forward comments or queries to Bob Fink (×5692) or Sig Rogers (×6713).

VMS Mail: lbl::RLFink

UNIX or

RLFink@lbl.gov

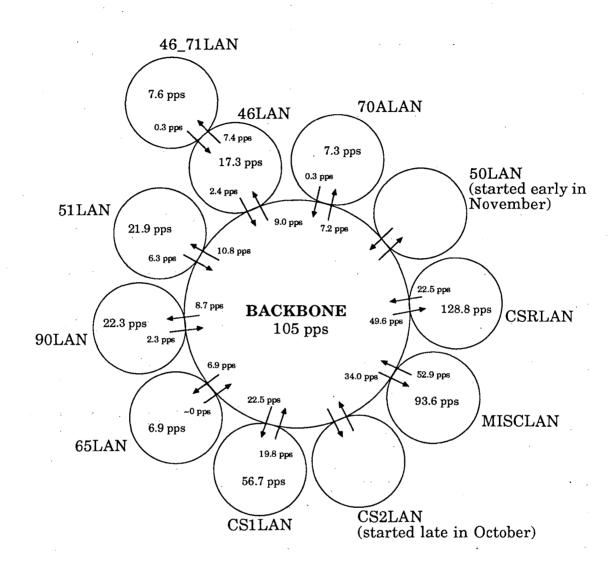
Software Tools Mail: VMS Mail:

lbl::SGRogers

UNIX or

Software Tools Mail:

SGRogers@lbl.gov



pps = packets per second; all figures are monthly averages

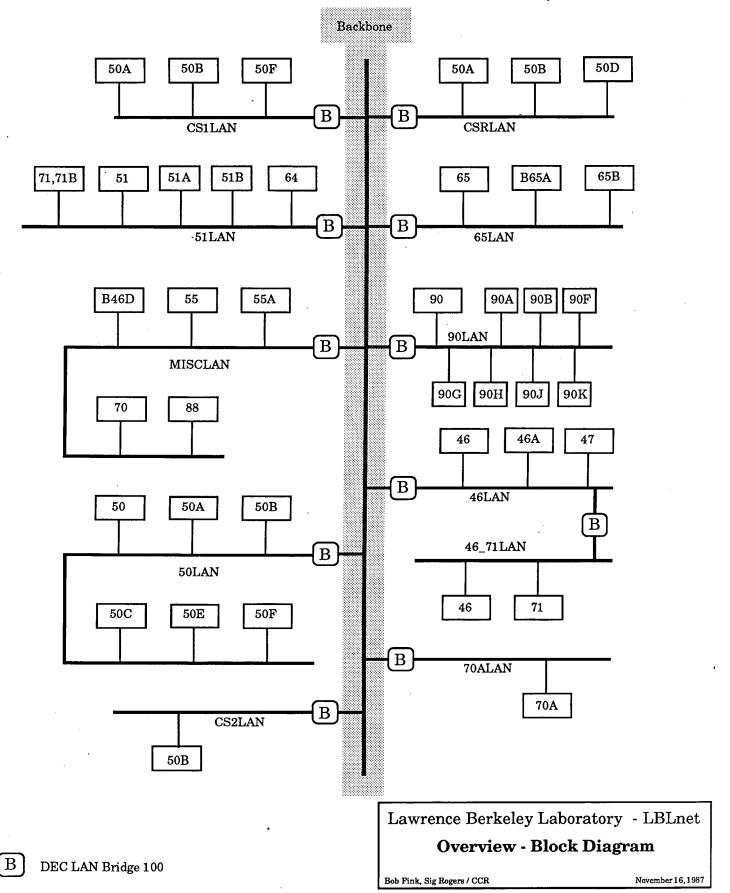
arrows represent packet flow through a LanBridge from one LAN to another

Note: Each ellipse shown above is a separate Ethernet that is interconnected to the others via Digital LanBridge-100 devices that provide forwarding of packets based on a learning algorithm that minimizes traffic between networks to those packets addressed to computers on another Ethernet.

LBLnet Activity October 1987

ICSD/CCR

Fink/Rogers



NEW POLICY FOR DIRECTORY AND FILE PROTECTION

Maggie Morley

Effective January 11, 1988, security protection defaults on the VMS and UNIX systems will be changed so that new directories and files will no longer provide GROUP and WORLD access privileges.

On VMS, the access privileges for SYSTEM and OWNER will remain the same. On UNIX, the privileges for OWNER will remain the same.

This new policy comes as a result of recommendations made by the recently convened Security TPEG, and reflects the increasing importance of file protection.

As you know, unauthorized users have been attempting to gain access to computer systems and files. Any single user's account or files could be used not only against that user but against all users (for example, as a Trojan Horse). We strongly encourage users to adopt these protection defaults in order to aid system-wide security.

The protection on old files (that is, those files created *before* 1/11/88) will not be changed. This policy will affect only new files (that is, those files created *after* 1/11/88).

You can, if you desire, change your own default protections to whatever configuration you wish. Users might consider changing their defaults to the new defaults prior to 1/11/88 and changing previously-created files' protection to the new defaults.

TO CHANGE PROTECTION DEFAULTS

In VMS, to change protections to the new (i.e., post-1/11/88) defaults, type

set prot=(s:rwed,o:wed,g,w)/default

in your login.com file. (Translated, that's READ, WRITE, EXECUTE, & DELETE privileges to the SYSTEM, WRITE, EXECUTE, & DELETE privileges to the OWNER, NO privileges to the GROUP and NO access to the WORLD.)

Original (i.e., pre-1/11/88) default was the command set prot=(s:rwed,o:rwed,g:re,w:re)/default

in your login.com file. (Translated, that's READ, WRITE, EXECUTE, & DELETE privileges to the SYSTEM, READ, WRITE, EXECUTE, & DELETE privileges to the OWNER, READ & EXECUTE privileges to the GROUP and READ & EXECUTE access to the WORLD.)

In UNIX, to change protections to the new (post-1/11/88) defaults, type

UMASK 77

in your .login file. This will cause new files and directories to be created with no access for GROUP and OTHERS.

To set permissions to the original (i.e., pre-1/11/88) set of default protections (to restore reading of files by members of your group and others), type

UMASK 22

in your .login file.

For further discussion, see VMS HELP file set protection/default and/or UNIX man article UMASK.

Forward comments and questions to Marty Gelbaum, (×4749), or

VMS Mail:

lbl::M_Gelbaum

UNIX or

Software Tools Mail:

M_Gelbaum@lbl.gov

. . . Helpful Handout

USER INTRODUCTION

Maggie Morley

USER INTRO, a document designed to acquaint users with the LBL Central Computing Facility, is now available at the HELP DESK and at the Computing Library (Bldg. 50B, Rm. 1232B, ×4242).

It discusses

- the Center's hardware & operating systems
- Supported software
- User Services
- Operations
- Plotters & Printers
- Networking
- Electronic Mail
- Charges.

It is free for the asking.

. . . Fortran 8x

FORTRAN UPGRADE IN THE WORKS

Dave Stevens

Now is your chance to influence your programming future.

Accredited Standards Committee X3J3 has released S8(X3.9-198x), commonly known as Fortran 8x, to the to the Board of Standards Review for public comment. This is a proposed upgrade to Fortran 77, and, in the absence of significant adverse comment, will become the next standard.

As it stands, it is an extension to Fortran 77, but with a caveat, discussed below. The extensions include array operations, some portability-enhancing features for numerical data, user-defined data types, and more succinct ways to handle modular data (of the sort traditionally handled through COMMON and BLOCK DATA structures.

The caveat is that these goodies are accompanied by an implied price: The expected eventual deletion of some heavily-used statements and constructs. Fortran 8x is defined to be Fortran 77 with both *incremental* features (the extensions) and *decremental* features. Three categories of decremental feature have been defined:

- deletions features removed from the language,
- obsolescent features which are expected to be removed in the next version (i.e., the version after 8x), and
- deprecated features which are expected to progress through obsolescence to deletion.

Fortran 8x specifies the following decremental features:

Deletions

None

Obsolescent features

- Arithmetic IF
- ASSIGN and Assigned GOTO
- PAUSE
- Real or double precision DO variable
- Alternate RETURN
- DO termination on an action statement (i.e., on anything other than END DO or CONTINUE).

Deprecated features

- COMMON, DIMENSION, and EQUIVALENCE statements
- ENTRY statements
- BLOCK DATA programs.

Before you get too exercised over these decisions, you should understand that removal of these features would cause no loss of functionality; all legitimate purposes of these features (and some of the illegitimate purposes as well) are better served by some of the new constructs. These are well described in a report prepared by DOE's Language Working Group, Document ANL-87-40, available from Argonne National Laboratory. (A few copies have been ordered for the Computer Center Library, Bldg. 50B, Rm. 1232B, ×4242 for you to check out). Further details may be found in the standard itself, or in "Fortran 8x Explained", Reid and Metcalf (Oxford University Press, November, 1987). Because of its length (more than 300 pages, including appendices), we do not intend to distribute copies of the proposed standard. A couple of copies are available in the Computer Center Library for on-site reference; for more extended study, you should order your own copy (from Global Engineering Documents Inc., 800-854-7179. Cost: \$50).

If you decide that equivalent or superior functionality is not enough, and that you would prefer to keep the old forms as well, now is your time to comment. You may comment in any or all of the following ways:

- To support Fortran 8x as proposed, to suggest wording changes to the document, to support the addition of extensions not included (several that were considered, but dropped for lack of support, are described in Appendix F of the proposed standard), or to oppose the deprecation or obsolescence of a particular feature:
 - a) Send your comments to me and I will submit an omnibus comment, incorporating all of those from the Laboratory. (I do not intend to submit a self-inconsistent comment, so if you think your opinion might not match majority Laboratory opinion, or if you want to be sure your specific comment in your specific wording is considered, see c) below.) I can be reached at MS 50B 2258, or as

VMS Mail:

lbl::DFStevens

UNIX or Software Tools Mail:

DFStevens@lbl.gov

(I will accept comments for consolidation through February 7.)

- b) Send your comments to DOE, through John Ruatto, Office of ADP Management, MA-24, DOE, Washington, DC 20545. (Comments to DOE should be received by January 4, 1988.
- c) Send your comments directly to X3:
 Public Comment on Fortran 8x
 Gwendy Phillips
 X3 Secretariat
 CBEMA
 311 First Street N.W., Suite 500
 Washington, DC 20001-2178

All personal comments received by X3 before February 23 will receive formal responses from X3J3.

2) To guide me in the vote that will eventually be taken in X3 on whether or not to accept Fortran 8x as a standard, please let me know if you have strong feelings one way or the other. If you have strong negative feelings, it would be useful to indicate the changes necessary to make the new standard acceptable to you.

Political questions on the process may be addressed to me, but technical questions about Fortran 8x and the effect it may have on you should be addressed to Marty Gelbaum (MS 50B - 2239) or

VMS Mail:

lbl::M_Gelbaum

UNIX or Software Tools Mail:

M_Gelbaum@lbl.gov

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.

There will be two Electronic Mail classes in December. (See Page Three of this Newsletter). The first will be an Introductory class. The second class will be for users who can send and receive mail and who would like to know more about network addresses, how to use editors with mail, how to create distribution lists, how to use folders, and other related subjects.

Q UESTION: I confused about what .ARPA means. Also, what is this new .GOV? Do I have to use .GOV?

A NSWER: The electronic mail community is undergoing a major change in how the network is organized and administered. This is the so-called change to "domains".

LBL has been a member of one of the very first large networks - the ARPA (Advanced Research Projects Agency) net. In 1983, this network was split into two unclassified networks - the Milnet and the ARPAnet. LBL is a member of the Milnet and the Berkeley campus is a member of the ARPAnet.

There is now further division of the network into smaller segments. LBL is joining a domain called GOV (GOVernment) and the campus is joining the domain called EDU (EDUcational). Normal communications continue among all the new segments of the original large network.

What has changed is the electronic mail addresses of computers in each network.

- The LBL computers, which used to be LBLxyz.ARPA, become XYZ.LBL.GOV in the new domain addressing.
- The Berkeley campus computers, which used to be UCBxyz.ARPA, will be XYZ.BERKELEY.EDU in the new domain addressing.

This change is happening now. People giving out new addresses should use UX1.LBL.GOV and CSA4.LBL.GOV and not the old .ARPA address. Please note that there is an overlap period (guaranteed to be a minimum of 1 year - possibly longer) during which all addresses will work.

Following are examples of some addresses:

john@csa3.lbl.gov sharon@violet.berkeley.edu david@ux1.lbl.gov fmlastname@lbl.gov rt345@hamlet.caltech.edu

NOTE: if you are sending mail within the local domain (LBL.GOV) you do not need to specify the full domain address: you only need to specify the computer. The mail will be delivered locally by default. For example, from CSA3 you can send mail to JAMES on UX1 by using the address:

james@ux1

You could also use the full domain address if you prefer:

james@ux1.lbl.gov

The November issue of the COMPUTING SER-VICES NEWSLETTER has more examples of how many different electronic mail addresses are valid.

Of the name MAIL\$...MAI. Why? Why can't I delete them? Do you have any suggestions as to what I can do with these files?

A NSWER: These files are VMS Mail files. When VMS Mail receives a file that is greater than 3 blocks in length, the file is not stored within Mail, but is kept as a sequential file with the file name you see.

My suggestion: use the VMS Mail command -

SET MAIL_Directory [.mail]

and all files of the form MAIL\$xyz...mai are automatically moved down to a subdirectory called [.MAIL]. The files are still available exactly as they are normally within mail except that your top-level directory is not cluttered with these funny file names.

There is help available within VMS Mail. Look at set mail_directory.

Here is an example using the command within VMS Mail:

MAIL> set mail_directory [.mail] %MAIL-I...

These files cannot be deleted at DCL level unless you modify the file protections to allow deletion. The correct way to delete these files is from within VMS Mail, using the DELETE command. If you delete these files at DCL, you will receive an error within Mail when you next try to read the message.

UESTION: Sometimes while using one of the mail utilities, a message is broadcast to my terminal telling me that I have 'new mail'. How can I read that 'new mail' without exiting and re-entering the mail?

NSWER: Here's how to do it on the three sys-. tems.

VMS Mail

From within VMS Mail use the 'select' command to open the folder called 'newmail'. The new mail is now available to you.

MAIL> select newmail

MSG Software Tools Mail

use the 'o' Overwrite command. This command will update your MSG mail, deleting messages marked for deletion and bringing all the new messages into MSG.

<- overwrite old file...

[press SPACE-BAR to confirm]

Your new MSG mail will now be available for you to read.

UNIX Mail

On the UNIX system you will have to leave the mail and then return to read new mail.

UESTION: I am changing my computer account from UX8 to UX1. What do I need to do about my electronic mail?

NSWER: Several comments here.

- If you are registered in the LBL Central Electronic mail database, send mail to the REGISTRAR at LBL (registrar@lbl), telling them what your former computer address is and what your new computer address will be. The registrar will make the requested changes in the database. Now all mail addressed to FMLastname@LBL will be delivered correctly to your new computer account.
- If you are NOT registered in the LBL Central Electronic mail database, you can use the .forward file on UX8 (while UX8 is still up) to forward mail to UX1. The entry will be

userid@ux1

in the .forward file. You will also have to contact ALL of your correspondents to tell them your new electronic mail address. This situation points to one of the advantages of the LBL Central Electronic mail database: When you change computers or userid you need only to notify the Registrar of the change and NOT all of your correspondents.

. . . Hermes - Postmaster

Forward comments or queries to William Jaquith (×4388) or

VMS Mail:

lbl::Registrar

Registrar@lbl.gov

Software Tools Mail:

THE WORKSTATION SCENE

[24.12.1].....

• 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.arpa

We hope this alternative (to the telephone) will be of assistance to users who have problems or would like to forward helpful hints.

[24.12.2].....

MICROSOFT DEMO

Representatives of MicroSoft Corp. will be presenting their new products for the IBM-PC family on Wednesday, December 16 in Bldg. 70A, Rm. 3377, (the Conference Room).

New products to be presented include MicroSoft Windows 386, MicroSoft Excel for Windows (Excel for the PC), C Compiler, Version 5, with QuickC and Quick Basic.1.

Formal presentations commence at 10 AM and will continue until noon. The afternoon will be devoted to hands-on exercises. Watch the *CURRENTS* for a detailed agenda. For more info, contact the Workstation Group (×6858).

[24.12.3].....

• SGML – IS THERE ANYBODY OUT THERE?

oes anyone have printed materials on SGML (Standard Generalized Markup Language) that I could look at? Is anyone else curious about it? Call Claudia Madison (×6858) or mail to WKSG. Thanks.

[24.12.4].....

SCSI HARD DISK DRIVES ON THE IBM-AT

The Workstation Group recently had the opportunity to run tests on a CDC WREN III SCSI hard disk interfaced to an IBM-AT. A controller from Future Domain allowed this full height drive to be mounted and used in the AT. The drive had an unformatted capacity of 180 megabytes and formatted to about 155 usable megabytes. Since all of our tests are intended for hard disks with the ST-506 interface (the normal interface for IBM-XTs and ATs), we could not produce hard numbers for this SCSI drive to allow direct comparisons. Our seat-of-the-pants feeling,

however, is that this is a very satisfactory combination for those users who need a lot of disk capacity. The drive was even faster than the 51 MB 1/2 height CDC WREN II drives which we have been recommending for the past year. Its noise level was about the same as the WREN II drives — which is to say, fairly quiet. On both read and write of large files (more than 1 megabyte), it is noticeably faster than other CDC drives and seems comparable with the large Maxtor drives. There were no problems with several different formattings of the drive. We tried a small DOS boot partition and a single very large data partition. We also tried it as 5 about equal-sized partitions (C: - G: logical drives), again without any problems.

The drive costs almost \$2000 (about \$13 per Megabyte). This is very reasonable for such capacity. The Future Domain controller card for the AT costs less than \$200. Future Domain is one of several companies manufacturing SCSI controllers for the AT bus. They have a good reputation for quality and support. We have also had very good experience with CDC drives.

For this month, this is a state-of-the-art drive which should satisfy most users' needs for large capacity hard disk storage. For more information, contact Workstation Group member Dan Van Zile (×6858 or ×5589).

[24.12.5].....

PUBLIC DOMAIN (OR SHAREWARE) SOFTWARE FOR THE IBM

This month's pick of interesting and useful software for the IBM PC/XT/AT is a shareware package called Bakers's Dozen by Jim Button's Buttonware company. (Jim Button is one of the originators of the "shareware" concept wherein you can obtain useful programs for free and form your own opinion of their value to you. You are, of course, expected to pay something if you find the programs useful and you do continue to use them.)

Baker's Dozen consists of 14 different programs, any of which may be run as a separate entity. Most of them may be run from within a batch file called dozen.bat as well.

BTTNCALC.EXE is a one-page spreadsheet program with online help and color. Previously saved spreadsheets may be recalled. This will never replace Lotus 1-2-3 but it's a nice introduction to some of the things spreadsheets are good for.

CALENDAR.COM is a programmable calendar program which uses color and may be made resident in memory. If it is made resident, it will always be available through a 'hot key'.

DISKUTIL.COM is a poor programmer's Norton utilities. It can be used to change files, change directories, change date/time, restore lost files, patch files, modify FATs and much more. This program has extensive on-line help screens.

FILECOMP.EXE will compare two ascii text files. The size of the files is limited to limited to the amount of available memory.

GKEY.EXE is a neat little program which will tell you all the key codes produced by pressing and releasing a key on your IBM machine.

LOCATE.EXE is another useful program which can search your hard disk for files by name or extension, or for a string within any file. It is case insensitive and can save its output on a file.

P90.EXE will print files rotated 90 degrees from the normal on an Epson printer.

PC_SORT.EXE is a useful sort program which can sort ascii files on up to 4 fields where each field may be in ascending or descending order. It is also case insensitive.

PRN_FILE.EXE will redirect all print output to a disk file instead of the printer. This feature can be very useful on occasion.

RDIR.EXE will remove a directory or subdirectory including all files and subdirectories under the target directory. Watch out for this one. It is extremely powerful. It is easy to make a mistake. It does ask for verification before doing anything however.

SET_SCRN.EXE is a program that works with 'ansi.sys' and a color monitor to set screen border, foreground and background colors. This program also works on the IBM Enhanced Color Display and the new PS/2 Color Display.

SNAPSHOT.COM will save any non-graphic screen image to a file.

SWCOM12.COM will switch COM1 and COM2 ports until the next boot process.

SWLPT12.COM will switch LPT1 and LPT2 printer ports until the next boot process.

We have found several interesting and useful programs in this collection. Enjoy....

[24.12.6].....

• LOTUS 1-2-3 ADD-INS

L otus Speedup and Lotus Learn are memoryresident programs that work with and extend or enhance the capabilities of Lotus 1-2-3.

O Speedup optimizes the recalculation of cells in many worksheets. It recalculates only those cells with formulas whose values have changed since the worksheet was last recalculated, and the cells

- that depend on them. The Lotus Speedup Add-in requires 1-2-3 Release 2.01.
- O Lotus Learn provides an alternate method of entering macro instructions. Instead of typing the macro instructions, you simply perform the task that you want to automate. 1-2-3 "learns" your keystrokes and translates them into macro format in a worksheet range called the Learn range. The Add-in Manager and the Lotus Learn Add-in work with 1-2-3 Releases 2.0 and 2.01.

Both these add-ins are available at no charge. Please bring a blank floppy disk to the Workstation Group Lab, Bldg. 50B, Rm. 2231,×6858.

[24.12.7].....

• LBL PHONEBOOK FOR THE IBM-PC

Th electronic edition of the LBL phone list continues to be updated about once a month (usually by the 15th). This list is the most up-to-date electronic listing generally available to PC users. The easiest way to access this list is through the CSA cluster. The command:

SET DEF IBMPCPHONE

will move you to the directory where the latest list (and the most recent previous version) resides. 'KER-MIT' can be used to download the file and its search programs to a PC. For help or more information, contact Workstation Group member Dan Van Zile (×5589).

[24.12.8].....

• HERE'S DESQVIEW

... from Jose Olivares in the Main Library

Title: Desqview, version 2.

Publisher: Quarterdeck Office Systems

150 Pico Boulevard Santa Monica, CA 90405 ATTN: Customer Support

Hardware: IBM Personal Computer

100% IBM PC compatible

IBM PS/2

Memory: Requires 512K memory

Boards: Supports exPanded memory boards,

Enhanced exPanded memory boards. If there is an exTended memory board Desqview will load itself into 60K of it. On a 386 system, works as a control pro-

gram.

Monitors: Monochrome,

Color/graphics (CGA),

Enhanced color graphics (EGA), Video graphics array (VGA)

Mouse:

PC mouse, MS mouse, Logitech, MS

mouse driver compatibles

Other features: Supports RAM disks, print spoolers, disk caches. To use exPanded memory

requires that one install the REMM device drive (Rampage Expanded Memory

Manager) in the CONFIG.SYS file.

Operating System:

PC or MS DOS versions: 2.0, 2.1, 3.0 to 3.3

Price: \$130.00 (found in Data Sources)

Version 1.11 came with my Rampage

board. I upgraded to 2.0.

WHAT IS IT:

esqview is a multi-tasking system integrator. It is a windowing system. It allows you to have up to 255 windows - each one character big. What a way to look at an application. You can define the size, screen position, foreground color and background color for each window. You can only have one active window at any time. However, you can have programs running in the background. Desqview is similar to MS-Windows. Both allow the user to partition the screen. Desqview will manage any program. Actually there are some programs that write directly to the screen buffer. These programs will only run if they are in a full-screen window. Many programs fall into this category - e.g., Kermit, List, PC-VT, Reflex, etc. You can start them up from within Desqview but they take over the screen. On the other hand Desqview will allow you to size the window the program is using. In doing so, Desqview suspends processing of that program. To resume processing you make the window a full-screen window.

WHAT DOES IT WORK WITH?

In addition to working with programs that use the full-screen like the ones mentioned above, Desqview will work with programs that are written to work in a windowing environment. Some examples are DOS, wordprocessing programs, spreadsheet programs, etc.

SPECIAL FEATURES

It has an auto-dialer. You can point to a telephone number on the screen and tell it to dial the number. You can allow the modem to complete the telephone connection or you can pick up the telephone handset for voice communication. One application might be to put up the LBL telephone list on the screen, point to your favorite telephone number and let Desqview do the dialing.

Another feature is Desqview's macro facility. You can tell Desqview to remember your keystrokes. Later you can play back the keystrokes. The macros can be

global or specific to one program. There are several companions which augment Desqview. These are datebook, notepad, calculator, and view-link. Datebook is a calendar-type program. You can log appointments, set alarms, book specific day/time slots for every Monday or Friday, etc. Establish multiple datebooks. Notepad allows you to write notes, reminders, and short memos. It has automatic word wrap, reformatting of paragraphs, etc. It has most standard wordprocessing functions, though not all. It is not meant to replace your favorite wordprocessor. The calculator program displays a calculator in a small window. It has standard functions, i.e. +, -, x, divide, =, %, and a square root function. It also has a memory function. It has a tape function. You can save your calculator entries for printing. The link program will remember modem settings, telephone numbers, logging on protocols, etc. You can "playback" this information at the touch of a key. Link also has a terminal emulator which has VT52, ANSI (VT100), ASCII modes. File transfer/capture is accomplished via the XMODEM protocols.

EASE OF USE

Pop down menus are available for all features. You can use either a mouse to point and shoot or the keyboard. Loading DOS programs into Desqview is relatively painless. Desqview will establish defaults for the application being loaded in. The user can always change the defaults at any time. The user can control how much memory a program takes up, what priority Desqview should assign to its processing requirements.

ERROR HANDLING

The manual lists all major error messages. Minor error messages are self-explanatory. For trivial errors, Desgview just "beeps". Other error message that the user might see most probably come from DOS or the program they are running.

DOCUMENTATION

The Desqview manual has an excellent discussion of exTended, exPanded and enhanced exPanded memory systems. The discussion is fairly technical, though the noninitiated will be able to read it too. The manual is clearly written and easy to read. There are many tutorials with step-by-step instructions. I played with Desqview using the menus before I read the manual. When I got around to reading the manual I found that I had already used most of its features. One appendix in the manual is written for the applications programmer. It contains detailed information on writing programs that interface with Desqview.

WHY WOULD I WANT TO USE IT?

Desgview makes it easy to move information from one program to another, from a mainframe to the PC-AT

and vice versa. One can take information from Lotus and plunk it into a document, an address from an address list and put that into a letter, etc. For those folks that want to have multiple processes on the same screen Desqview is excellent. Now you can be editing a document in one window and be sorting a database in another.

[24.12.9].....

• LBL PHONEBOOK FOR THE MACINTOSH

The November update for the LBL Phone Book is now available. As announced in the October Computing Newsletter, the Workstation Group has developed a Hypercard stack containing the LBL Telephone Book and Payroll Account Numbers for Department from the paper edition of the Telephone Book. These stacks are updated every month. At present, you can obtain these stacks by bringing a blank, double-sided, formatted diskette to the Workstation Group Lab (Bldg. 50B, Rm. 2231).

[24.12.10].....

AUDIO TRAINING COURSES

... Reprinted from our September Newsletter

I f you cannot get to a MAC training class and need help with WORD, PageMaker or EXCEL right now, the Workstation group offers a solution. Personal Training Systems of San Jose has put together a series of tutorials on audio tapes and practice disks and they are now available for loan through the Workstation Group Software Library. The series includes three tutorial courses on both WORD 3.0 and Pagemaker 2.0; and nine courses on EXCEL 1.04, a spreadsheet program for the MAC.

A tutorial session consists of listening to an audio tape and working simultaneously with a practice disk. The "cassette" instructor will talk you through each lesson of the tutorial, step by step, and at your own speed. Of course, you must have the appropriate software.

The Learn WORD 3.0 training series consists of:

	_
W1	Beginning Course
W2	Intermediate Course
W3	Advanced Course

The PageTutor training series consists of:

P1	Beginning Pagemaker 2.0
P2	Intermediate Pagemaker 2.0
P3	Tips & Techniques

The EXCEL -lerate training series consists of:

	· ·
E1A	Fundamentals of EXCEL, for the Beginner
E1B	Fundamentals of EXCEL, for the Experi-
	enced Spreadsheet User
E2	Creating Business Graphs
E3	Adding Power to Your Spreadsheet
E4	Building and Using Databases
E5	Building and Using Macros
E6	Linking and Consolidating Spreadsheets
E7	Advanced Spreadsheet Techniques

Your ideal training situation would be to take one of the scheduled classes in the new MAC Training Room (Bldg. 50B, Rm. 1227). But, if you want to get started on your own, check out one of the tutorials above. You will have to supply your own audio cassette player. For more info, contact Workstation Group member Bruce Burkhart (×6858).

Advanced Macro Techniques

[24.12.11].....

PRINTING THE LBL LOGO IN A MICROSOFT WORD DOCUMENT

The Microsoft WORD file "LBL Logo" is a program for placing the LBL logo at any desired point in a document. It embeds in the document a Postscript program that instructs a LaserPrinter to print the logo—in the desired size—at the desired place on the page. It is not necessary for the user to have any knowledge of the functioning of the program, nor to ever see it.

Four versions of the LBL Logo are available as PostScript files for use with WORD 3.01 on the MAC. Instructions can be picked up at the Workstation Lab (Bldg. 50B, Rm. 2231 -×6858).



[24.12.12].....

E8

LASERWRITER & LASERWRITER PLUS UPGRADE

Apple Corp. has announced the availablility of a new ROM revision (REV 47) for the LaserWriter and the LaserWriter Plus. This upgrade enhances the processing speed of the printer.

Excel jobs were printed 25% faster and a WORD document, with graphics, came out about 35% faster.

Upgrade costs approximately \$100 for LaserWriter Plus and \$475 for LaserWriter printers.

For ordering information, contact Jim Harvill at Bldg. 46A (×6411).

[24.12.13].....

• THE NO-BLUE, BIG-RED BLUES

Dateline: LBL, November 11, 1987

Six months anniversary at the Lab, and six months anniversary working with the MAC.

I try to love it -- the MAC, that is. And I do. Except --. *Verse 1*: User calls to say that printing at 60% reduction in WORD leads to garbage. It does unless the following settings are made in Page Setup:

Paper width: 13.6" Height: 20" Left margin: .85" Right: 2.35" Top margin: 3.5" Bottom: .5"

The mathematics of this elude me. I call Microsoft, whose rep says the trouble is in the LaserWriter. New software, coming soon, should fix it. The new Laser-Prep and LaserWriter files have arrived. They don't fix the problem.

Refrain: Does anybody have a work-around?

Verse 2: User says that deleting a paragraph following hidden text in WORD also deletes the hidden text. A call to Microsoft — rep says this is a bug. I'm to forward a report.

Refrain: Moan, moan.

Verse 3: User reports that LaserWriter prints garbled text, randomly, and always has. There are numerous desk-top accessories on the system. Pressed for time, I can't test them in various combinations so I trash them all, and the LaserWriter works. But for how long? Until someone installs the next can't-live-without-it DA.

Refrain: Try one DA at a time, test it thoroughly, look to DA's first when odd problems arise.

Verse 4: User drops in with his original WORD disk and a copy of the disk. The original does not work (well, it works if you don't mind the fact that the bottom half of the screen is always missing). The copy works fine. Not a WORD problem. Somehow the system file mutated. A new system file, and all is right as rain.

Refrain: I don't know how these things happen but they do.

Verse 5: On the other hand -- can't we do wonderful things with our MACS? Integrating text, graphics, and a spreadsheet is so easy it doesn't even bear comment. Anyone who tries EXCEL -- and the mouse -- after Lotus has got to like it. And, for all that a bunch of MAC-loving reviewers have trashed it, I find WORD by itself enough to make the whole transition worthwhile.

FINAL CHORUS: Rousing: Users who have troubles or triumphs to report, let us know. We are all in this together. Mail to WKSG Bldg. 50B, Rm. 2231.

...Claudia Madison

[24.12.14].....

MAC SOFTWARE UPDATE VERSION 5.0 ORDERS

The initial order of Version 5.0 with Multifinder has arrived at WKSG. Version 5.0 is packaged with 4 disks and extensive documentation; the recharge cost is \$32. Those users who have signed up on our reserve list will be contacted. Those users who have not been on the reserve list may obtain copies as they are available. When current supplies are exhausted, WKSG will begin a new reserve list.

Users are reminded that minimum memory (1MB or less) may not be sufficient to take full advantage of this new system. There are other reasons to be very cautious about quickly implementing this new system on your MAC. For right now, Version 5.0 may not be for you. See the following article on Multifinder and the new System 5.

[24.12.15].....

• MULTIFINDER ARRIVES!

Q: What do you get when you cross Multi-Finder and Hypercard?

A: More memory!

A s the Newsletter deadline approached, we finally received that shipment of MultiFinder, the latest operating system from Apple Corp. — (the *third* this year) — variously known as System 5 or System 4.2/Finder6.0. It appears to be identical to an undocumented copy that we have been using for a couple of weeks. While we have "tested it exhaustively" only in the sense that we used it until we became fatigued, we have seen enough that a few comments are in order.

This is not a product that we would turn loose on the community of "naive" users at this time; we haven't had enough experience with it to foresee what problems are likely to occur. It is, as they say, loaded with features. Users who like being on the leading edge of technology are encouraged to be cautious and to make frequent back-ups of work in progress.

If you are using a MAC (Plus, SE, or II) with 1 megabyte of memory, we don't see any reason to upgrade to this version. MultiFinder itself uses a fair amount of memory and we doubt that enough will remain to have more than one application in memory at a time. A discussion of memory upgrades, memory requirements, and a rationale for deciding if these upgrades are appropriate may be found in the October and

November Newsletters.

We have installed MultiFinder on an SE equipped with a RADIUS single-page large-screen display and there appear to be no compatibility problems with this configuration. We have run into problems when trying to use it on an SE equipped with a LaserView large-screen display. At this point we are uncertain as to the degree of incompatibility; we mention it as a possible problem and will continue to explore the situation.

Problems have also been experienced with various print-spooler programs — notably SuperLaserSpool. These may or may not be real problems, however, since MultiFinder includes a print-spooling utility (see below). We hear that the authors of SuperLaserSpool are going to release a compatibility upgrade "real soon now".

This new version operates in two modes --

- single tasking, much like the preceding versions, and
- multifinder mode, which allows almost any application to remain memory-resident while another application is executing.

It is possible to write applications which do not simply go dormant when another application is made active. An example of this type of program is Backgrounder, the print-spooler provided with MultiFinder. At this time very few existing applications take advantage of this feature, but we expect to see future releases of various applications work in this manner.

Backgrounder, the print-spooling application supplied with MultiFinder, operates only when the system is operating in "MultiFinder" mode. We have had no problem printing from various programs while using it. It does not have some of the fancier features of other print-spoolers, such as flagging the completion of a print job, but may be satisfactory in many situations.

New versions of LaserPrep and LaserWriter are included with MultiFinder. If one MAC of a group which shares a printer has these files upgraded, ALL the MACs which share the printer must have their LaserPrep and LaserWriter files upgraded. (Remember to re-select your LaserWriter using Chooser after installing the new files.) The good news is that these new Laserwriter files work with the earlier versions of the Finder and System.

There are some applications which simply refuse to work with MultiFinder. One of these is MiniCad, a mechanical drawing program. Switching the system back to Finder, as opposed to MultiFinder mode, only takes a short time, so the problem is more annoying than serious. It would not work at all with EXCEL on a MAC II with 1 megabyte of memory. Although EXCEL

normally seems to work fine with MultiFinder, we did run into trouble trying to import a large Lotus spreadsheet. Since this occurred on a MAC II with 5 megabytes of memory, we have doubts that the warning of insufficient memory was correct. Swapping to Finder mode allowed the file to be imported with no problems. We have also had some problems with MacWrite but we have not had time to investigate them completely. Microsoft WORD (V3.01) appears to be quite happy in the MultiFinder environment. In summary, Multifinder, while not totally problem free, and definitely not useful in every situation, is habit-forming. Installation is not difficult; one simply follows the cookbook. One of the instruction manuals included with the documentation, the "Software Update User's Guide", is marked "IMPORTANT -Before doing anything else - READ THIS FIRST", an injunction which is not to be ignored! Using it is quite easy (especially if one has LOTS of memory!) and moving from a machine which has MultiFinder to a machine that doesn't leaves your author with a definite feeling of deprivation. We have no doubt that other problems will surface as we continue to use the product. This product represents new directions for Apple Corp. and will undoubtedly be improved in future updates.

[24.12.16].....

NEWSLETTERS AND REPORTS:
 A SUMMARY AND RATING

... From Workstation Group Member (and Constant Reader) Bruce Burkhart.

N ewsletters and the like have emerged as new weapons in the software application wars. Rival developers have discovered that regular mailings to their registered software users has become highly beneficial. Whether it is a single sloppy page memo or a sophisticated ten-page report, communication between developer and user has begun in earnest—and it is proliferating.

It's strictly [good] business for the software house, aiming to keep its users and to promote new ones. However, the user has benefited from this corporate policy, and deservedly so. Remember, it was not so long ago that manuals hindered rather than helped you learn a program. And manuals are not that much improved today. Now, a practical application and cookbook approach has arrived to solve real problems. Regular newsletters and reports by major software players is definitely a plus for the user.

There are some obvious omissions: as yet there are no newsletters or report listings from (most notably) 4th Dimension, Ventura Publishing, Cricket, Ready-Set-Go and Textures, as well as a few lesser-known software developers. It would be nice if these more

popular and widely-used programs had a regular newsletter or report.

Herewith is a list, showing number of issues published, of current mailings we receive. Basically these mailings are promotional, with announcements of new products, upgrades and unnecessary company trivia. Ratings are ours; we've awarded a higher rating to the publisher for including application and cookbook helps for the user. Four stars: excellent. Three stars: good. Two stars: fair. One star: not very useful.

- ** Adobe Systems News Publication: MAC, 9-10 very large pages, many issues. A very classy, visual newsletter, with some practical applications.
- * Breakthrough Software: PC-DOS, quarterly, 7-10 pages, 10 issues. Published by makers of TimeLine and Q&A. Some tech tips, little else.
- **** DeskTopics: MAC, 6/year, 30+ pages, 2 issues. From Apple, very high quality, slick publication. Primarily desktop publishing reference-library-type contents, with super graphics.
 - * The DeskTop Publisher: MAC/PC-DOS, bimonthly, one very large fold-out page. A few tips, not much for such a highly used program as Aldus PageMaker. In all fairness, we must state that there is an increasing number of magazine articles, and booksize resources, becoming available for PageMaker.
- **** FileMaker Reports: MAC, monthly, 10-15 pages, 7 issues. An excellent monthly guide for the database program FileMaker Plus. Lots of application examples, and practical easy-to-follow text and graphs.
 - * MacAdvisor: MAC, monthly, 7-8 pages, ? issues. Several informative articles, but lots of advertising.
 - * MiniCad Newsletter: MAC, variable, 1 page, several issues. Notes on bugs, previews, contacts. No practical help for this intermediate level CAD/CAM program. Would like to see this Newsletter expanded.
- ** News and Views: PC-DOS, monthly, 4 pages, ? issues. Short and to-the-point. Some hints and tips, and somewhat technical paper on the Paul Mace Software.

- *** One-to-One with Microsoft: MAC/PC-DOS, quarterly, 10-12 pages, 3 issues. Good information, some practical help, Q & A section, latest products.
- **** Sacra Blue: PC-DOS, monthly, 50-60 pages, 63 issues. Probably ranks as a magazine, however the content is newsletter in style and content. Excellent articles on Lotus 1-2-3 and WordPerfect. Produced by the Sacramento PC Users Group.
- **** The Seybold Report: MAC/PC-Dos, monthly, 50-60 pages, 27 issues. The top-ranked publication on desktop publication. Very expensive. This report is packed with well-written information on almost all software packages current or being developed. Lacks only in specific application helps for software packages.
- **** Word Perfectionist: PC-DOS, monthly, 10-15 pages, several years of back issues. Excellent publication for practical applications in the word processor, WordPerfect, and Lotus 1-2-3.
 - * WordStar News: PC-DOS, bimonthly, 15-20 pages, 11 issues. Little substance, some tech notes.
 - * WP Corp Report: MAC/PC-DOS, quarterly, 10-12 pages, 1 issue. Another small report from WordPerfect. Primary a product promotion.

These are just a few of the total number of newsletters proliferating around the country these days. If you receive one that you don't see listed above, bring it around to The Workstation Group Lab (Bldg. 50B, Rm. 2331). We'd like to check it out.

LBL users are encouraged to drop into The Workstation Group Lab and browse through the publications we have. If you're a registered user of a piece of software and do not receive its newsletter (if it exists), we can help you get onto the mailing list.

YES I would like to receive the Computing Newsletter

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PUB-429 12-87/1575

Newsletter Closing Date is Friday, December 11, 1987 . . . and no later.

Address all communications for the Newsletter to login news on UX1.

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 UC Berkeley Campus. The (chocolate-colored) Building 50 Complex is located across from the red-and-white shuttle bus stop. You can get a free ride to the Laboratory on the shuttle bus. Pickup point is at Shattuck and Center in downtown Berkeley.

SIGN UP FOR THE NEWSLETTER

Attention LBL employees: If you use the Computer Center's UNIX or VMS system, or if you are a 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 Maggie Morley, ×5529, or

VMS Mail:

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VOGUE LA GALERE ... Rabelais