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DISCLAIMER

L B L
COMPUTING
NEWSLETTER

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AUGUST 1986

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OFFICE OF COMPUTING RESOURCES
Head: Ken Wiley (KGWiley) 7083   50B - 2258E
Ethernet Manager: Sig Rogers (SGRogers)..6713   50B - 2258G

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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
   Software Tools: JASmith@lbl-arpa

DEVELCON

DEVELCON **Access Names**

| VAX 8600's (GENERIC)CSA |

VAX 8600 (VMS) CSA1
VAX 8600 (VMS) CSA2
VAX 8650 (VMS) CSA3
VAX 8600 (VMS) CSA4
VAX 8600 (VMS) CSA5

VAX 11/ 780 (UNIX4)UX4
VAX 11/ 750 (UNIX5)UX5
VAX 11/ 750 (UNIX6)UX6
VAX 11/ 780 (UNIX7)UX7
IS V-24   (UNIX8)UX8

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

Oakland	430-2900	Vallejo	707-644-1192
Walnut Creek	938-9550	Concord	685-6003
Pleasanton	462-8900	Fremont	490-7366
San Francisco	974-1300	Antioch	754-8222
Santa Clara	408-986-0646	Palo Alto	415-366-1092

COMPUTER CLASS SCHEDULE

Jerry Borges

The following computer classes are to be offered by the Computing Division. With the exception of the LaTeX class (see article below) 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
Aug 12, 14, 19, 21	9 AM - 11:30 AM	C Programming	Marty Gelbaum
Aug 14	11 AM - NOON	Electronic Mail	William Jaquith
Aug 28	11 AM - NOON	Electronic Mail	William Jaquith
Aug 25, 26, 27 Sept 4, 5	9 AM - 5 PM	Introduction to LaTeX	See below
Sept 8, 9, 11	9 AM - NOON	Introduction to VAX/VMS	Rosemary Allen
Oct 8, 10, 15, 17	10 AM - NOON	Introduction to TEX	Jerry Borges
Oct 21, 23, 28, 30	9 AM - NOON	Introduction to VAX/UNIX	Dave Cleveland
Nov 3	10 AM - NOON	Introduction to SPSS	Elon Close

LaTEX CLASS

Jerry Borges

A five-day class in the LaTEX document preparation system will be taught at the Laboratory on August 25, 26, 27 and Sept. 4 & 5. The class will be taught by an instructor provided by the TEX Users' Group of Providence, RI, and will cost $300 per person.

The class is filling up rapidly, but room remains for a few more students. If you are interested, please contact Jerry Borges (×5568), or Jeanne Miller (×5074).

TEX OUTPUT ON THE TALARIS

Jerry Borges
Marty Gelbaum

You can now get TEX output from the Talaris laser printers located on the first floor of Building 50B. To direct a TEX output file ("dvi") to a Talaris, execute the following commands on CSA -

　　CSA> **talaris_tex** (to define necessary symbols)

　　CSA> **taldvi filename** (to print the file)

As before, TEX output can also be directed to your favorite Imagen printer by executing

　　CSA> **lpr -pip$n$ -d filename.dvi**

where n is the number of the Imagen.

A wide range of fonts and font sizes are available for both the Talaris and Imagen devices.

For further information, see the on-line HELP article "TEX" and the following documentation, which can be obtained from the Computing Services Library (50B/1232):

● The TEXbook - Donald E. Knuth

● LATEX User's Guide and Reference Manual - Leslie Lamport

● First Grade TEX - A Beginner's TEX Manual

● TEX User's Guide

● TEX Font Catalogue for LBL Imagen Printers.

For more info, contact

VMS Mail:	lbl::JTBorges
UNIX or Tools Mail:	JTBorges@lbl.arpa
VMS Mail:	lbl::M_Gelbaum
UNIX or Tools Mail:	M_Gelbaum@lbl.arpa

INFORMATION, PLEASE

Sandy Merola

The DOE Energy Research community is looking at needs and options for improved networking between CERN and the U.S., and between Japan and the U.S. If you have any current or anticipated needs that would be useful input to the planning process, please let us know.

Forward comments to me at ×**4389**

VMS **Mail:**	lbl::AXMerola
UNIX **or Tools Mail:**	AXMerola@lbl.arpa

NMFECC USERS' MEETING

Dennis Hall

There will be a meeting of the National Magnetic Fusion Energy Computer Center (NMFECC) users in Oak Ridge, Tennessee, during the week of August 25, 1986. Topics for discussion include:

- MFEnet VAX software
- MFEnet II
- Software Sharing
- Security Issues
- Election of Officers
- VAX Software
- Cray 2
- Filem
- Multitasking
- A low cost video-based movie making system

Any comments or questions about these or related NMFECC topics will be conveyed to the appropriate people. Please contact Dennis Hall at ×**6053**).

VMS **Mail:**	lbl::DEHall
UNIX **or Tools Mail:**	DEHall@lbl.arpa

RECORD THOSE DISKS & TAPES

Vickie Davis

The Dept of Energy requires the Laboratory to report its records holdings each year. The Archives & Records Office Office, which compiles the data for the report, requests that you note the number of magnetic tapes and the number of floppy disks you currently are storing in your offices.

You will be given specific guidelines for reporting this information by your Division Administrator.

AUGUST SICBIG MEETING

Richard House of Pacific Sierra Research is the featured speaker at the August 6 meeting of "SIC-BIG", the Special Interest Committee on Large High-Speed Computers (established by the Association for Computing Machinery San Francisco Golden Gate Chapter). His topic: "FORGE: Vectorizing Aid for Supercomputers". Particulars: Time - 7:30 PM. Location - AXIOM Systems, 1589 Centre Pointe Drive, Milpitas, CA. (Wheelchair Accessible)

For more info, contact Mary Fowler, Chairperson (415) 839-6547 or Mike Austin, Publ. Chair (415) 423-8446.

Tape-recordings of this and most of the previous talks may be obtained in exchange for a tape cassette or $5.00 by contacting Mary.

"SICBIG" meetings are regularly held at 7:30 PM on the first Wednesday of each month. Speakers give insights into various aspects of supercomputing. Recorded announcement of meetings can be heard by calling the Oakland number 261-4085.

"Where there is an open mind,
there will always be a frontier."

Charles Kettering - (1876-1958)

. . . . On the Ethernet

HILL-WIDE ELECTRONIC MAIL FACILITY

William Jaquith

As described in the May, 1985 issue of the Computing Newsletter, a Central Electronic Mail Facility, using the LBL Telephone Directory as reference, has been installed at the laboratory.

The laboratory has connected many of its local computers to a hill-wide Ethernet, which will be this Mail system's electronic carrier.

To find out if someone's name (for instance, "William D. Smith") is registered in the Central Electronic Mail Facility's database, type

    CSA>   **lookup WDSmith <cr> - or**

    CSA>   **lookup Smith <cr> - or**

    CSA>   **lookup Smitty <cr>**

(Abbreviations and partial names can be used to search the database.) If that name has been registered in the database, the computer will let you know with a single line of information.

This "lookup" facility is installed in the Computing Services' computers and in other computers that have requested the software. If you wish to have the software installed on your computer, contact

    csa::networks or

    networks@lbl-csa.arpa.

A typical line or "lookup" information will look like this:

WDSmith Wiliam D. Smith Computing/
        Services 50B-2239 x4388

- The first thing listed is your recipient's **electronic mail address** in the central mail facility. ("WDSmith".)

- Next you'll see his full name as it appears in the LBL phone book. ("William D. Smith")

- Then comes his laboratory address/phone ("Computing Services 50B-2239 x4388")

If an individual named, say, Malachi Martin has no middle initial, the space for the middle initial will be filled with an underscore. The entry will read

M_Martin Malachi Martin Physics 50-211 x9999

If you'd like to take advantage of this service and have your name included in the LBL central electronic mail database, you'll have to send a request via electronic mail to:

lbl::registrar   using VMS mail
registrar@lbl.arpa   using software tools or UNIX mail

In your request, please include the following info:

<div align="center">* * * * *</div>

Full Name ....first name, middle initial, last name
Electronic
Mail Address ....the computer you designate to receive electronic mail and your login name on that machine.

Phone ....× 9999 (your extension)

Department..............Your Department

Mail Stop................Your Mail Stop

<div align="center">* * * * *</div>

When your name and address are installed in the electronic mail database, a user can go to the phone book, find your First name, Middle *initial*, & **Last** name, (say, "FMLast") and use one of the address patterns outlined above to send electronic mail to you. (**NOTE:** we use **UPPER** and **lower-case** letters (and *italics*) in this example and throughout this article for for **emphasis only.** Follow your local system conventions for upper and lower case letters.)

TECHNICAL SUMMARY:

- ☐ You can send mail via the LBL central electronic connection *only* to users who are registered in the central electronic database.

- ☐ It's possible for you to use your local electronic mail facilities and not use this special central facility at all.

- ☐ You can tell if someone is registered in the electronic mail database by using the command:

    CSA>   **lookup name <cr>**

- ☐ You need not know which computer your recipient uses as his electronic mail address. The database already has that information.

- ☐ You need not know the path to the computer your recipient specified to receive mail. The central mail facility knows that path.

- ☐ You need not register a middle initial. If you don't have one, you must substitute an underscore "_" (e.g., "M_Martin"). Those first three columns are significant in the database. The characters - consisting of first initial, middle initial or underscore, plus full last name - just about guarantees unique name-strings in the database.

You should have no difficulty figuring out which one of, say, seven Joe Smiths is your recipient.

If exactly the same name string occurs more than once in the database, an incremental number is appended to the name string (e.g., **FMLast, FMLast1, FMLast2,** etc.) for precise identification.

☐ A last name may be very long or hyphenated. The mail database has no problem with it.

☐ The central electronic mail database uses people's names as they are listed in the printed LBL telephone directory as the registry format of choice. If you had your nickname (**Ruth, Babe**) listed in the phone directory, then it will be registered thusly in the database (**B_Ruth**). If you had your "formal" name (**Ruth, George Herman**) listed in the printed telephone directory, it will be so registered in the electronic database (**GHRuth**), even though most people know you by your nickname.

☐ VMS users of the **VMS mail** should use the following form of address when sending electronic mail:

     lbl::FMLast

☐ VMS users of **software tools mail** should use the following form of address when sending electronic mail:

     FMLast@lbl.arpa

☐ UNIX users should use the following form of address when sending electronic mail:

     FMLast@lbl.arpa

☐ Mail that cannot be delivered is returned to the sender.

Forward comments and questions to

VMS Mail:	**lbl::registrar**
UNIX or Tools Mail:	**registrar@lbl.arpa**

FOCUS NEWS

Bert Albrecht

● **NEW RELEASE**

Release 1.2 for VAX/VMS should be available for testing in the first week of August. Major additions include

☐ **HOT SCREEN**

☐ **COMBINE**

☐ **DEFINES & TITLES** in masters.

Watch the Billboard for news about trying the new release when it arrives. Descriptions of these additions will probably be included in the accompanying release notes.

● **NEXT RELEASES**

Mainframe (IBM) Version 5.0 features are expected to come in releases scheduled for the end of August and October.

A **TELL-A-GRAF** interface is scheduled to arrive in late August.

The Version 5.0 additions that everyone has been waiting for are the new **MODIFY** features, including **REPEAT.** Information Builders has decided to use five sites to Beta-test these features prior to release. LBL has been selected as one of these sites. (Beta-testing will probably begin here in August.)

● **HLI**

HLI, the Focus Host Language Interface, allows application programs written in any compilable language to retrieve and modify data stored in Focus Databases. Reports from users in other environments indicate that this is a very good product.

We are currently leasing HLI. If you foresee appreciable usage of this facility, please inform your CSAC representative.

Also, please let me know your experience with HLI should you decide to use it. Documentation covering Release 1.1 for VAX/VMS (April 15, 1986) contains more information about HLI and can be picked up at the Computing Services Library (50B/1232B). A formal manual on HLI is expected this month.

Forward comments and questions to

VMS Mail:	**lbl::HCAlbrecht**
UNIX or Tools Mail:	**HCAlbrecht@lbl.arpa**

... LSE & PCA

NEW PRODUCTS ON CSA3

Jerry Borges

Two new DEC software products, the VAX Language-Sensitive Editor and the VAX Performance and Coverage Analyzer, are now available on CSA3.

- **LSE**

The editor is a multi-language, multi-window, screen-oriented editor specifically designed for program development and maintenance. It is "language sensitive" in that it provides users with VAX language-specific information. This information enables faster program development, with fewer errors, through language-specific construct completion, and error detection and correction facilities. The editor works in concert with supported VAX languages and the symbolic debugger to provide a highly interactive, on-line environment that facilitates the EDIT-COM-PILE-DEBUG portion of the program development cycle.

- **PCA**

The Performance and Coverage Analyzer is a tool to help users analyze the execution behavior of their application programs, and aids in tuning and testing them. It can pinpoint execution bottlenecks and other performance problems in programs, and it provides test coverage analysis by measuring what parts of a program are executed or not executed by a given set of test data.

Manuals have been ordered and should be available from the Computing Services' Library by the time you read this article.

For further information, see the on-line HELP articles "PCA" and "LSE".

TRY UX8 - YOU'LL LIKE IT

Marv Atchley

UNIX 8 ("UX8") an IS (Integrated Solutions) Model V-24 system featuring a Motorola 68020 CPU, is up and running. It is currently the least-used UNIX system. It is also considerably faster than the VAX 11/780's (UX4 and UX7) and costs less to run. Users are encouraged to open accounts on it. (Call Pat Bean, ×7008 for a login).

UX7 was turned off on August 1. Call the HELP DESK at ×5981 for help in retrieving files. (There will be a small charge).

Most software that ran on UX7 is now available on UX8. We're still debugging some options (the NAG library, Refer, the NEWS Service, and Prolog). Meanwhile, users can run them on UX4.

A TPEG (Technical Planning and Evaluation Group) sub-committee is currently evaluating UNIX at LBL and will have presented a report and recommendations at an open meeting on July 31. Copies of this report are available from Lisa Long (×5871).

Meanwhile, we welcome user input on this newer, faster system. Forward comments to me

	VMS Mail:	lbl::FMAtchley
UNIX or	Tools Mail:	FMAtchley@lbl.arpa

... Another Teleconferencing Tool

VAX NOTES

Rosemary Allen

VAX Notes is a computer conferencing software product that allows users to conduct conferences, discussions, meetings, etc. electronically by computer. Participants in a conference can introduce new topics, or comment on existing topics, and all topics or comments can be seen by everyone participating in the conference.

This product has been installed on CSA3 and will be available through the month of August for evaluation. It is open to all users of the CSA Cluster. There is an extensive on-line help facility for **Notes**. A two-page document describing basic **VAX Notes** commands, which may be typed or printed, is available in the file **sys$help:notes_shortguide.mem**. Access this conferencing product (on CSA3 only) by typing

CSA> **NOTES**

DI-3000 GRAPHICS USER UPDATE

Edna Williams

New versions of **DI-3000, CONTOURING, DI-3000 DEV-ICE DRIVERS, DI-TEXTPRO, GRAFMAKER, METAFILE TRANSLATOR**, and **PICSURE** will be installed on Monday, August 4, 1986. The major difference between these versions and the previous ones is that **DI-3000** and all the related products now use shareable images.

The primary advantages of Using Shareable Images:

- Disk space is saved. The image size for a **DI-3000** application on disk is reduced to just the size of the application program itself. The machine code image for **DI-3000** and its drivers are stored in one place for all users.
- Link time is reduced. Because all subroutine references internal to **DI-3000** and its drivers are resolved ahead of time, the amount of time taken to link a program is drastically reduced.
- The user can choose a driver at run-time. Since the actual choice of a driver is deferred until run-time, users do not need separately linked executables for every driver that they wish to use for their application. This also saves disk space.
- The **DI-3000** library can be automatically updated. When a new version of **DI-3000** or a driver is created as a shareable image, all users automatically get the updated version without relinking.

The following devices worked correctly when tested with the new versions of the drivers:

PVI DRIVER CODE	DEVICE DESCRIPTION
240	VT240
241	VT241
405	Tektronix 4105
AED	AED 512
IML	IMLAC Series II
PCD	IBM PC
T14	Tektronix 4014 (ADM3A with Retrographics)
ZTQ	ZETA 1453 4-pen plotter

Those devices listed below were not available to me for testing.

PVI DRIVER CODE	DEVICE DESCRIPTION
125	VT125
414	Tektronix 4114
721	HP7221 8-pen plotter
HP2	HP2647/8
TRI	Trilog
ZT8	ZETA 8 8-pen plotter
ZTX	ZETA 1453 (50 in. long frame)

The Dicomed driver (for the DICOMED D48 film recorder) is currently not working properly; the same problems occur as those experienced by some users under the previous version. Efforts are being made to determine the cause of the errors.

On August 4, 1986, and thereafter, users who wish to use the new version of **DI-3000** and any of the Precision Visual products must type the symbol "PVI". Regular users of these graphics packages may wish to put the following in their LOGIN.COM:

    $ PVI

Typing the symbol "DI3" will continue to define the logical names and symbols for the older versions of **DI-3000** and its related products; however, these old versions will eventually become unavailable.

If any users of **DI-3000** and related packages have developed routines which you feel might be helpful as examples for new graphics users, please contact me (×**5093**).

For further information about **DI-3000** or any of the other Precision Visual products type

    HELP DI3000.

If anyone experiences any difficulties in using any of these products or devices please contact me,

VMS **Mail:**	lbl::EEWilliams
UNIX/**Tools Mail:**	EEWilliams@lbl.arpa

WORKSTATION NEWS

[23.8.1]...

● NEW PC-KERMIT

KERMIT Version 2.29 for IBM PCs, XTs, ATs and compatibles is available thru the HELP DESK or from **LBL109:[util.micro. ibm.kermit]** on the CSA cluster machines. It fixes many bugs and adds several new features., such as

- the long awaited DEC VT-100 terminal emulation (actually VT-102 emulation)

- the ability to use paths. (i.e., KERMIT now knows about directories).

The new KERMIT is also available for Wang PCs and for Zenith Z-110 or Z-120s from Station Group Member - Dan Van Zile, (×5589). Note that the VT-102 emulation is available only on IBM or compatibles -- NOT on Wang or Zenith PCs.

[23.8.2]...

● REFLEX

or . . . What Good is It If You've Already Got LOTUS *1-2-3? (from Jack Zelver)*

Borland's REFLEX is touted as an "easy to use" data base management system. Its subtitle is "The Analyst". It somehow seems associated with LOTUS 1-2-3, but it is not a spreadsheet.

Since LOTUS 1-2-3 is an integrated package with a wide range of functions, you might wonder what REFLEX does, and what it could possibly offer beyond the capabilities of LOTUS 1-2-3.

First the similarities.

Both LOTUS 1-2-3 and REFLEX:

- are limited to files that will fit into memory.

- have a broad range of scientific, financial and logical functions available.

- allow you to define your own functions using mathematical and logical operators.

- generate reports.

- manage variable field data bases with sort, search and filter facilities.

- graph a number of fields against an x-axis with line graphs, scatter plots, pie charts, and bar graphs.

- import and export files from other software packages.

- allow variation of input values for "what-if" analysis.

- are·incapable of significant character string manipulation, except for some moderate capabilities provided in the latest releases of LOTUS 1-2-3.

Now the differences:

- LOTUS 1-2-3 has a macro language to allow you to create your own menus and to perform complicated operations with few keystrokes.

- LOTUS 1-2-3 generates nicer looking graphs than REFLEX.

- LOTUS 1-2-3 allows you to define a cell as summarizing qualities of a particular, flexible combination of other cells in the database.

- REFLEX is primarily oriented around its data base features, while LOTUS 1-2-3 is primarily oriented around its visual spreadsheet capabilities.

- REFLEX has a few more functions than LOTUS 1-2-3 allowing, for example, more elaborate date calculations.

- REFLEX has an interactive, visually oriented report generation package. It is far more flexible and easier to use than the simple LOTUS 1-2-3 page layout and titling commands. Anyone seriously considering generating complex reports from LOTUS 1-2-3 should either get REFLEX, or at least get an auxiliary package such as LOTUS REPORT WRITER. (I'll say more later about REPORT WRITER).

- REFLEX has built-in summary and analysis features not found in LOTUS 1-2-3.

- REFLEX has sort, search and filter commands that are much easier to use than those of LOTUS 1-2-3.

- REFLEX allows windowing of data and graphs simultaneously. LOTUS 1-2-3 does not, but LOTUS SYMPHONY does.

- REFLEX has a "cross-table" feature that will arrange your data in a matrix with your choice of fields on each axis, and will summarize the values with several available functions.

So why should you get REFLEX?

If your primary purpose is to track data and generate reports from it, you may find that REFLEX's advanced data base and reporting features will do all you want.

Suppose you need to manipulate segments of rows or columns visually, and to include sums or other summary functions in these columns (or fields) within the

data set. In this case, LOTUS **1-2-3** would probably be the best choice of the pair.

You may need to do both of the above, or -- generally -- to analyze the data as thoroughly as possible, and from as many viewpoints as possible. This is best achieved by having both packages.

LOTUS 1-2-3 and LOTUS REPORT WRITER

This combination of packages would make it much easier to get reports from a database in LOTUS **1-2-3**.

The disadvantages are:

- You would still be stuck with the difficult, unfriendly LOTUS **1-2-3** database commands.

- REPORT WRITER must be "installed" on a hard disk with its elaborate copy protection scheme. REFLEX is not copy-protected.

- You would still not have all the cross-tabulation, summary, and windowing capabilities of REFLEX.

- REPORT WRITER's list cost is 50% more than REFLEX, and is only an adjunct to LOTUS **1-2-3**.

Transferring Data.

LOTUS **1-2-3** allows you to combine parts of spreadsheets from other Lotus products, to import DIF files, and to import ASCII text files. However, the text must be delimited properly with commas, quotes and spaces, or results will not be satisfactory.

REFLEX will directly read and translate LOTUS **1-2-3** worksheets, SYMPHONY worksheets, **dBase II** and III files, PFS files, DIF files, and ASCII text files. Text files may be delimited in almost any conceivable fashion, or column numbers may be provided to delimit the fields. REFLEX also has an "export" attribute selection that permits quote and comma delimiting files for transfer to other packages. In general, REFLEX translation facilities are superior to those of LOTUS **1-2-3**.

Examples where I found REFLEX more useful than LOTUS **1-2-3**.

(1) Analyzing project cost profile data. The data was best presented in a cross tabulated format, years on the vertical axis, resources on the horizontal axis, with summaries as entries, and totals of summaries. Several different filters were used to obtain a sequence of reports, each displaying the data quite differently.

(2) Translating a LOTUS **1-2-3** file that was used to track equipment and its depreciation. The LOTUS **1-2-3** file was getting too unwieldy for easy use.

(3) Tracking names, addresses, affiliations, etc., in a file where mailing labels, and lists of varying formats need to be printed.

(4) Tracking computer usage. I used to use both Focus and LOTUS **1-2-3** for a job that REFLEX does alone now.

SUMMARY

If you are using LOTUS **1-2-3** or SYMPHONY now without wondering if there is a better way to handle the data you track, then by all means don't buy REFLEX!

However, if you are regularly frustrated by the LOTUS **1-2-3** database command language, and by difficulty in generating reports and transferring data, REFLEX may make life easier for you. If you find that spreadsheets grow and grow as you need more macros or spreadsheet area to extract, import, and manipulate the data, you'll find that many of these functions are built in to REFLEX, and that REFLEX stores data in a compact format so that sparse matrices won't generate giant spreadsheets.

Perhaps you would like a relatively easy way to increase your ability to analyze your data, and perhaps to analyze it from more viewpoints. Again, REFLEX would benefit you.

[**23.8.3**]..

- **NEW ZENITH AT CLONE**

The Workstation Group has received a Zenith 241 AT clone for evaluation. At the time this Newsletter goes to press, the approximate Lab or personal cost is $2400 with a 20mb hard disk and $1800.00 without hard disk. For more information or to arrange a test drive, contact Workstation Group member Dan Van Zile ($\times$ **5589**).

[**23.8.4**]..

- **PC-OUTLINE**

(*More good stuff from Jack Zelver*).

I've just acquired a copy of the shareware package called PC-Outline. It's been getting rave reviews recently, and has been said to compare favorably with the $200 ThinkTank package.

Though I've only used it for a short while, I actually like it better than ThinkTank, and the author only requests $50 to register if you desire.

The SSC has bought about 4 ThinkTanks, and has used them quite successfully to develop outlines, plans, and to even create and track some unusual databases. I think PC-Outline would probably do all that stuff just as well.

For more info and/or a copy of this shareware package, contact Workstation Group member Dan Van Zile (×5589).

[**23.8.5**]...

● **SOFTWARE RATINGS**

The Workstation Group subscribes to a monthly RATINGS NEWSLETTER that does a comprehensive testing and evaluation of the more popular programs in a selected category. For example, this May's issue evaluated Spreadsheet Programs. Included in the 67-page report were evaluations of **LOTUS 1-2-3** Enable, Microsoft Multiplan and SuperCalc. The July issue evaluated Office Accounting Systems (including **4-in-1**, Basis Accounting, the Shoebox Accountant, Back to Basics, and One-Write Plus.) If you wish to see how a favorite software package is ranked by the "experts", contact M. Morley (×5529) at the Computing Library for a short-term loan of the RATINGS NEWSLETTER.

[**23.8.6**]...

● **APPLE LASER WRITER NOW AVAILABLE**

In response to numerous requests, an Apple Laser-Writer Plus and an Apple Macintosh have been made available in the B50B I/O area (next to the **HELP DESK**). This machine is intended to allow Macintosh users access to a high-quality printer in a public area. The combination is intended for printing user generated files **ONLY** (not as a personal work- station). It has a single 400K disk drive and no connection to Develcon.

[**23.8.7**]...

● **DISABLING CALL WAITING**

(*The following is a reprint from the "Sacra Blue", a monthly publication of the Sacramento PC User's Group*).

Does it drive you nuts when you're trying to use your modem and the cherished "call waiting" option on your phone interrupts to tell you someone is trying to reach you. You can temporarily cancel call-waiting before using your modem. Just tap in the string "*70" before initiating the call. (So that's what the asterisk key on the touch-tone phone pad is for! If you have a rotary dial, you must enter 1170 instead.) You should hear a double beep followed by a dial tone. Go ahead and place your call; call-waiting will be disabled until you hang up. Of course you ought to be able to put the initialization string into your modem program so that it will automatically take care of suspending call-waiting.

(Note: this feature is being installed as part of the conversion of phone exchanges to the new easy access system. If it doesn't work for you right now, it should

later on. Many East Bay prefixes now have it; others may or may not.)

[**23.8.8**]...

● **NEW PC-VT SHAREWARE**

A new version 8.4 of PC-VT is now avail able for our IBM or compatible users. This is a shareware package which allows an IBM PC or compatible to emulate DEC VT-100 terminals. The most important new feature is that it now supports **KERMIT** file transfer protocol as well as the **XMODEM** protocol. Copies may be obtained by contacting Workstation Group member Dan Van Zile, (×5739) or by downloading the files in the directory **LBL109:[util.micro.ibm.pcvt]** on the CSA cluster.

[**23.8.9**]...

● **GOOD READING!**

The Whole Earth Software Catalog, Stewart Brand's first-rate compendium of recommended software, hardware, magazines, books, accessories & online services for personal computers, is available for browsing at the Computing Services Library, (50B/ 1232B, ×5529, ×6919). Drop on over. Check it out.

[**23.8.10**]...

● **FREE LOTUS 1-2-3 TIPS**

LOTUS Version 1A Users: Here are some more tips for you from MACROPAC INTERNATIONAL of Cupertino. Those of you who use LOTUS Version 2 will find that some, but not all, of these may apply.

(1)   **GO TO A NAMED RANGE**

One often-overlooked trick of **LOTUS 1-2-3** is its ability to display Range Names for you after you've pressed the <**F5 GOTO**> key.

Simply use the following sequence.

<**F5 GOTO**> <**F4 NAME**>

All of your range names will be displayed in the panel, and you can then use your cursor to "point" to the range you want to select. This is also a useful trick for viewing the names of ranges, even if you don't want to **GOTO** the range locations.

How about a macro that will allow you to view an entire range-named location? Or a macro to print out all of the range names of your spreadsheet, along with their locations? See "101 MACROS FOR LOTUS 1-2-3"(tm)[1]

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[1] $49.95 from MACROPAC INTERNATIONAL, 19855 Stevens Creek Blvd., Suite 168, Cupertino, CA 95014.

(2)   CHECK OUT ALL FOUR CORNERS OF A RANGE

This is another obscure feature of **LOTUS 1-2-3** buried in the bowels of the **LOTUS 1-2-3** manual.

You're about to print out a portion of your spreadsheet. You press **/Print Printer Range** and now you're staring at the lower righthand corner of the last designated print range. But is it really right? If you could look at the lower LEFTHAND corner or the UPPER righthand corner, you could be sure. Guess you'll just have to back out of the print commands to check it out.

However, there is another way. Once you're staring at the Range, simply press the PERIOD [.] key. The cursor will move to the upper righthand corner of the range. Press the PERIOD [.] key again, and it moves to the upper lefthand corner. Press it again, and it moves to the lower lefthand corner. Once again, and you're back where you started.

This, too, is a useful technique to use in macros, and especially in Print Macros. For a look at eight (8) useful Print Macros -- from double-space printing, to super-compressed elite printing, see "101 MACROS FOR LOTUS 1-2-3"(tm)

(3)   HOW TO CHANGE RANGES

For the longest time I had a problem with Print Ranges. After placing my cursor at the upper lefthand corner of the range I wanted to print, I would press **/Print Printer Range** and, to my chagrin, the range was already established, but at the LAST range I had selected. Unfortunately, the last range was not the range I wanted now. So I pressed <ESCAPE>. But that put my cursor at the upper lefthand corner of the LAST range, not the new range.

My solution was to back out of the **/Print** command, determine the coordinates of the range I wanted (such as A7 . . N23), go back into **/Print Printer Range** and type in the correct range.

Fortunately, there is an easier way. It is, simply, to type **/Print Printer Range** <BACKSPACE>. Using the <BACKSPACE> key will locate the cursor at the upper lefthand corner or the cell you were in when you started the Print Command.

The is a useful technique for any kind of range designation, from **/Range Name Create** to **/File Extract**. For a look at macros that use this technique -- as well as another, more important technique when it comes to using the **/Range Name Create** commands within a macro -- see "101 MACROS FOR LOTUS 1-2-3"(tm)

(4)   USING THE <F4 ABS> KEY

Have you ever wondered how to use the <F4 ABS> key -- never quite enough to look it up? Well, here's your handy <F4 ABS> lesson, for free.

Suppose you want to copy the information from cell **C2** into cells **C3** through **C15**. However, **C2** has a formula that turns into a "relative" formula when you try to copy it.

No problem. Move to cell **C3**. Press the PLUS [+] key. Now press the **LEFT CURSOR** key. You are now in the **POINT MODE** (check the upper righthand box). This is where the <F4 ABS> key comes in handy. Press the <F4 ABS> key and <RETURN>. Now cell **C3** shows the formula +C2. Simply copy this formula to cells **C4** through C15, and you're done.

There's more. Instead of pressing the <F4 ABS> key *once* after the Plus [+] key, try pressing it *twice*. Now Cell **C3** shows the formula +C$2. Now press it *three* times. The formula is now +$C2. When you press it the fourth time, you are returned to the original +C2.

Perhaps you'd like to see this in a macro. Or better yet, to have a macro that will copy any formula "as-is", without using the Absolute dollar signs ($), and without changes due to relative position. See "101 MACROS FOR LOTUS 1-2-3"(tm)

(5)   USING THE COPY COMMAND IN REVERSE

Have you ever wanted a Copy Command that worked starting at the "TO" cell, rather than at the "FROM" cell?

Say you want to copy FROM someplace else TO the cell your cursor is on now. So you (1) move your cursor to the FROM cell, (2) copy to the TO cell -- after which you're returned to the FROM cell, so you (3) move back to the TO cell. All pretty complicated and time-consuming.

Try this instead. Type **/Copy** <ESC>. At the prompt, "ENTER RANGE TO COPY FROM:", move to the FROM cell (or cells), "paint" the cells in, if required, and hit <RETURN> twice. It's done, and you've only moved the cursor once.

Have you ever wanted to copy FROM one location TO another location, but remain at the TO location? There's a macro that offers you this choice, along with the choice of either Standard Copying or the Reverse Copying described above. See "101 MACROS FOR LOTUS 1-2-3"(tm)

[23.8.11]...

• **VP-Planner**

An Inexpensive Alternative to **LOTUS 1-2-3**

(*. . . from Jack Zelver*)

VP-Planner is a spreadsheet program from Paperback Software International in Berkeley. It lists for $99.95. The company is trying to market quality software at reasonable prices. **VP-Planner** is intended to nudge the giant Lotus corporation with its competition, and in my opinion, it does much more than that. It boasts

• a "multidimensional" spreadsheet capability that links up to five spreadsheets, and

• a direct connection with **dBase II** and **dBase III** files. **VP-Planner** is also compatible with **LOTUS 1-2-3** Release 1A worksheets, templates and macros.

Other features are "learn-mode" macro creation, zero-width columns, named range listing, and minimum memory usage.

The program disk that comes with the book is copy-protected. When you register your copy of **VP-Planner**, you can sign a Single User License agreement and return it with your completed registration and $10.00 to purchase a non-copy-protected backup disk. Alternatively, you can send $5.00 with your completed registration to receive a copy-protected backup disk.

The **VP-Planner** worksheet is made up of columns (named in the top margin using letters, A through IV) and rows (numbered in the left margin from 1 to 9,999). The data is held in memory in a sparse matrix design that stores only those worksheet cells that contain actual information, allowing larger worksheets in less computer memory. This means you can use all 9,999 rows in the spreadsheet without wasting memory (just as in the Release 2 of **LOTUS 1-2-3**, only there you have 8000 rows).

According to Paperback Software, their tests verify that **VP-Planner** appears to work when the following co-resident software is running:

☐ **1DIR 3.11** from Bourbaki, Inc.

☐ **DESQview 1.00** from Quarterdeck Office Systems

☐ **DOS Command Retriever 07-13-84** from IBM Personally Developed Software

☐ **File Facility 1.00.0** from IBM Personally Developed Software

☐ **FilePath 3.01** from SDA Associates

☐ **Grafix Partner 2.0** from Brightbill Roberts & Co.

☐ **Keyworks 1.3** from Alpha Software

☐ **MicroLynx Trackball Software 6.0** from Honeywell Disc Instruments

☐ **Mouse Driver Software 4.0** from Mouse Systems

☐ **Multiple Choice 2.3** from Awesome Technology

☐ **One Look 2.0** from International Microcomputer Software

☐ **Pathminder 2.16** from Westlake Data Corp.

☐ **PopUp DeskSet** from Bellsoft

☐ **Prokey 4.0** from Rosesoft

☐ **Sidekick 1.52A** from Borland International

☐ **SmartKey 5.0** from Software Research Technology

☐ **Superkey 1.11A** from Borland International

☐ **Windows 1.0** from Microsoft Corporation

☐ **ZeroDisk** from Quaid Software Ltd.

Installation.

Installing **VP-Planner** was much easier than I had anticipated. All I had to do was copy the files to my hard disk, into a directory of my choice, and begin! Once **VP-Planner** was invoked, I could use the **/wgd** (worksheet global default) section to set the default values for directories, and set up the default printer configuration. There are two additional choices, "custom" and "hardware". The first allows you to customize your numeric representation formats. You can choose any type of currency sign, separators, and negative number formats. The "hardware" choice allows you to eliminate snow on standard color graphics adapters, or to speed up screen movement on other systems. It also allows you to choose background and foreground colors with an easily-used interactive system.

Graphics.

Graphs look very good on the screen. All graphics are done in the 640 × 200 pixel high-resolution black and white mode. This makes printing a graph very easy. You simply choose the **/gp** (graph print) option, and the graph prints out immediately. You can also use the **shift-PrtSc** (shift print screen) key , even though you have not previously loaded the IBM graphics drive with the "graphics" command.

Printed graphs, however, do not compare with the resolution you can achieve using **LOTUS 1-2-3**'s *Printgraph* command. **VP-Planner** acknowledges this by including a graph-save option, and a note that the

/GS (Graph Save) command is not implemented in the current version of **VP-Planner**. An update will be provided to registered users at no charge when available. /GS will be used to save a graphic picture in a .PIC file which can then be used with external graphics print programs.

Column widths.

Widths can be set for a RANGE of columns - this is a feature that I sorely missed in LOTUS **1-2-3**. A spreadsheet is much easier to set up with this capability.

The widths of columns can be set to zero. This allows columns with notes, intermediate steps, or macros to be hidden while you are viewing the screen or printing the spreadsheet. You can still access and modify the contents of zero-width columns. The cell data will show up on the status line as you move the cursor to the column.

Miscellaneous bells and whistles.

VP-Planner allows you to use the function keys to move all through its menu structure. This is a useful feature for those whose typing style is hunt and peck. At any point in the menu the functions keys are listed next to the menu choice in a sequential form corresponding with menu choices. The LOTUS **1-2-3** function key template is obsolete with **VP-Planner** since the function key actions are displayed on the screen whenever they are available.

In addition to the horizontal and vertical title functions, **VP-Planner** will split the spreadsheet into windows. Not just two, like LOTUS **1-2-3**, but up to *six* windows! If you have all six up at once, you'll find that some of the windows are rather small - but this will delight some people.

The first 128 range names can be displayed in a list showing the names and ranges represented by each. You can define as many range names as memory permits, but only the first 128 can be seen in the list. You can see the rest in the usual manner with the /rnc (range name create) option.

Printing can be done as a background task while you continue working on your spreadsheets.

File import/export.

In addition to text and numbers, you can import formulas into **VP-Planner**. Thus, you could write an entire spreadsheet with an editor, formulas and all, then import it into **VP-Planner**. I'm not sure why you need this, but someone will have just the use for it.

There is also another menu selection besides text and numbers in the /fi (file import) menu. It is called

"DIF", and allows direct importation of the so-called Data Interchange Format created by the originators of Visicalc. The corresponding menu selection for direct exportation to a DIF file can be found in the /fx (file extract) menu.

If you have a column-delimited file that you want to import into **VP-Planner**, you can accomplish it by first translating it to a multidimensional database file, which **VP-Planner** will do for you. This allows files to be passed between other applications, including those on mainframes and **VP-Planner**.

Macros.

VP-Planner supports the same macros as LOTUS **1-2-3**. However, since the menus are a bit different, some macros will need re-working. Most of the macros I tried worked fine, and those that didn't work only needed some minor re-working.

A second type of macro featured by **VP-Planner** is the "autokey" macro. This macro is generated in a "learn" mode, where the program remembers your keystrokes as you type them in. If you can go through a procedure manually, then you can make a macro out of it by simply invoking this feature. This is a valuable capability that should have been included with all of Lotus' spreadsheets. It's common in many word processors and there's no excuse for a company with the stature of Lotus Corporation to overlook it.

VP-Planner also has a translation utility that translates the LOTUS **1-2-3** hand-programmed macros into autokey macros and vice versa. You can write a macro with autokey and translate it into a string of characters in a column of cells. These can be transported to LOTUS **1-2-3**, but may need some re-working. For example, autokey will use {F5} instead of {goto} in order to save some space. Unfortunately, LOTUS **1-2-3** will not understand {F5}, so some hand translation will be necessary.

Help.

The help facility of LOTUS **1-2-3** is one of my favorites. I use it all the time, probably because the manual is always just out of reach, and the electronic index is faster. Well, **VP-Planner** also has a help facility. It is also "context sensitive" so that if you hit the **F1** key you will be led directly to the section you want (in theory, anyway). However, it is improved over LOTUS **1-2-3** in that there are more ways to short-circuit the menu structure and go directly to the pages you want. This is accomplished with an index that is more descriptive and is three screens long.

The manual is larger, better written and more complete in many respects than the LOTUS **1-2-3** manual.

This is not too surprising, since that's Paperback Software's primary job - to write books.

dBase II/III.

According to the manual, **VP-Planner** allows you to

- Copy the data from **VP-Planner** worksheet cells into **dBase II** or **dBase III** formatted files, making it faster and simpler to set up **dBase** files.

- Read information from an existing **dBase II/III** file into a worksheet. During this process, you can select the fields and records that are to be displayed, using field names and attributes. You can also set up logic searches on one or more fields to select specific records from a file.

- Join data from two or more **dBase** files, pick fields form separate files to display, define join criteria and select records to be fetched.

- Edit **dBase** files: delete, append or modify records, then write them back to dBase format disk files.

These features are useful even if you don't use **dBase**. The search and selection criteria are extensive, allowing better database facility and much larger files than the spreadsheet alone will.

Multidimensional database capability.

This feature will allow you to create a 3-, 4- or 5-dimensional database, rather than just the 2-dimensional spreadsheet you normally use. You could have, for example, one dimension representing time, so that the database will have data for each month of a quarter in standard 2-dimensional format, and the last dimension can be a summary worksheet which rolls up the data according to the logic you define.

A tutorial example in the manual uses one 2-dimensional worksheet for raw data, a second one to calculate the monthly entries from the first, and a third one which derives the quarterly results by summing the monthly results. All three worksheets are connected and consolidated as a 3-dimensional database.

If the multidimensional database has the same labels as a **dBase** file, you can link the two together and transfer data from one to the other.

Summary.

Though I only had a short time to look it over, I was impressed with **VP-Planner**. It seems to be equal or superior to LOTUS **1-2-3** Version 1A in all respects except for the lack of a "PrintGraph" program equivalent and ability to save pictures in that format. If this is an important consideration, you might consider getting one of the graphics programs available to

do the final graphs. **VP-Planner** could be used for quick drafts of the graphs quite successfully.

Considering the price, **VP-Planner** is an exceedingly good value. In addition, you get the extended **dBase** file links and accompanying database capabilities. You also get the multidimensional database capabilities. Even if you don't need these, the macro, memory saving, and color-customizing enhancements make the program worth consideration.

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Forward comments or questions to Workstation Group members by sending electronic mail to

VMS **Mail:**	lbl::WKSG
UNIX **or Tools Mail:**	WKSG@lbl.arpa

SATURN DEMO

Mike I. Green

There will be a demonstration of SATURN, an integrated spreadsheet/graphics/word processing package, from 1:30 to 5 PM Tuesday, August 12. Personnel from the Real Time Systems Group will be running the package on two systems, (1) the VAX CSA cluster in the HELP DESK Area (Building 50B, First Floor) and (2) an RT-11 system running TSX+ in the Building 58 highbay. Documentation and hands-on terminal use will be available.

SATURN software can be used on DEC's PDP-11, PRO 350 and VAX computers running VMS, RSX-11M, P/OS, RT-11, TSX+, MICRO/RSX, and RSTS-E operating systems. The system is similar in function to LOTUS **1-2-3**.

Additionally, this package will be available on the CSA cluster for a 60-day trial period. (Use the command @lbl137:[randy.saturn]demo). There's on-line help. Users require a VT100 or VT2xx-compatible terminal and about 400 blocks of disk space. For graphics, a VT240 or GRAPHON is recommended. Licenses & documentation (if you're interested) are available at reduced rates.

For more information, contact me at ×**4607** or send electronic mail to

VMS **Mail:**	lbl::MIGreen
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