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COMPUTING
NEWSLETTER

Volume 21, Number 6
August 1984

AUGUST HIGHLIGHTS

7600 VMS & UNIX EXPANSION - MUCH NEW HARDWARE

Four VAXes, 12 RA-81 Disk Drives, More Memory (Page 3)

TYMNET CONNECTION - UP ON AUGUST 1.

Now you'll have access to virtually every host on the Dataswitch. (Page 3)

THE IP/TCP - NEW SOFTWARE DRIVER (Page 4)

DECnet/ETHERnet CONFIGURATION - MORE NODES

This issue's map is part II of the three-phase re-draw. William Jaquith brings us Part III in September. (Page 5)

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Newsletter Closing Date is Friday, August 17, 1984 . . . and no later.

Address all communications for the Newsletter to Maggie Morley, Editor,
50B/1245 (415) 486-5529; or to login **mam** on all machines.

PUB-429

NAMES & NUMBERS TO KNOW

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

COMPUTING DIVISION

Head: Leroy Kerth7474 50B - 2232

OFFICE OF COMPUTING RESOURCES

Head: Ken Wiley7083 50B - 2258

ADVANCED DEVELOPMENT GROUP

Head: Dennis Hall6053 50B - 3238

COMPUTING SERVICES

Central Office5871,2 50B - 2239

Guest Cards & Parking Permits5947 50B - 2239

COMPUTING SERVICES

Operating Systems & Product Set

Head: Jerry Borges5568 50C - 106

COMPUTING SERVICES

Applications Group

Head: John Colonias6019 50B - 2262B

COMPUTING SERVICES

User Services

Head: Eric Beals5351 50B - 4224C

Accounting6310 50B - 4224B

Library/Document Sales6094 50B - 1237

Short Courses, VAX5947

Short Courses, UNIX5529 50B - 1245A

GSS Tape Repair Service6094 50B - 1245

Sticky Label Service6094 50B - 1245

COMPUTING SERVICES

Computer Operations & Networks

Head: F. Marvin Atchley5455 50B - 2239A

Assistant Mgr: Sandy Merola4389 50B - 2239B

Operations Area6211 50B - 1215

Cope/Coke Operator5311

Connecting a Remote Terminal7444 50B - 2249A

PSS (Program Storage System)6219 50B - 2249

Bldg 90 RJE5450 90 - 3136

Terminal or Port Repair5354 50B - 2259

Help Desk5981 50B - 1232

UNIX System Manager7005 50B - 1232

IGM System Manager6720 50B - 1232

NMM, PDM System Manager5234 50B - 2262A

Expediter Services6205 50B - 2249

Magnetic Tape Library6219 50B - 2249

Keypunch Service6256 50B - 2215A

Dial-up Access to Develcon

300 BPS486-4959

1200 BPS486-4979

VA-3400 & 212A are equivalent

Operating Hours

All machines are available 24 hours daily.

With these exceptions.

7600.....	M.....	5 AM to 8 AM
	Th.....	6 AM to 8 AM
6600B.....	T.....	5 AM to 8 AM
6400C.....	M.....	5 AM to 8 AM
COM.....	T.....	7 AM to 9 AM
PSS.....	W.....	6 AM to 8 AM
UNX1.....	Sun 8/ 5.....	12:30 to 6 AM
	Mon 8/ 6.....	12:30 to 6 AM
UNX2.....	Sat 8/18.....	12:30 to 6 AM
UNX3.....	Wed 8/22.....	12:30 to 6 AM
IGM.....	Sun 8/19.....	12:30 to Noon
NMM.....	Thu 8/23.....	12:30 to 8 AM
PDM.....	Sun 8/12.....	12:30 to 8 AM
	Mon 8/13.....	12:30 to 8 AM

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LBL COMPUTING NEWSLETTER

DEPARTMENTAL MATTERS

VMS & UNIX EXPANSION

Marv Atchley

The Computer Center's current plan for VMS and UNIX expansion is underway. Much hardware has arrived. We're busy.

On VMS, we are

- increasing central memory on the IGM, PDM & NMM (from 4 to 8 megabytes each),
- acquiring a VAX-11/780 CPU, with 8 megabytes of central memory, and
- acquiring 9 (nine) RA-81 Disk Drives, each with a capacity of 456 megabytes, to cluster with all four of the above VMS CPU's via CI 780's and an Hierarchical Storage Controller (HSC-50).¹

ON UNIX, we are

- acquiring 2 (two) VAX 11/750's with 4 megabytes of memory and 1 RA-81 each,
- acquiring a VAX 11/780 with 8 megabytes of memory and 3 RA-81's, and
- planning to install the 4.2BSD version of UNIX on these three machines.

The necessary DOE approvals and financing for expanding both VMS and UNIX capacity were finally obtained in June. While most of the hardware has arrived, some critical components won't arrive until later this summer.

¹ VMS Version 4.0, which we expect to have up in November, will support READING and WRITEing of user files to ALL clustered spindles by ALL clustered CPU's. Under the current release of VMS, while each spindle can be read by ALL CPU's, it may only be written by ONE designated CPU.

TYMNET CONNECTION

Sandy Merola

Effective August 1, 1984 we will be offering a new service to our interactive user community. We're establishing a connection from the TYMNET Public Data Network into the LBL Develcon Dataswitch. This service, while similar to the TYMNET-RECC connection which we have offered in the past, will potentially allow access to every host on the Dataswitch.

ABOUT TYMNET

The TYMNET Public Data Network is a commercial service by which interactive dial-up users can dial a phone number which is local to them and access remote host computers. Charges are accumulated and paid by the host facility on a time of day and byte count basis.

Tymnet auto-answer modem ports are offered in over 400 U.S. cities. All of these ports offer either 300/1200 bps Bell-compatible service or 1200 bps VADIC service. Most ports on the network support all three of the above modem types.

A list of locations with Tymnet auto-answer ports is available at the Help Desk. Sites include most major US cities, some international cities, & some local cities (Antioch, Fremont, Hayward, Walnut Creek, etc.).

CHANGE IN CURRENT SERVICE

The existing TYMNET service to RECC ("LBL") is being renamed "RECCLBL". Tymnet users of the RECC facility should use the RECCLBL service. This service is specific to the peculiar character controls embedded in the RECC operating system.

The new connection of TYMNET to DEVELCON will be accessible from TYMNET under the name "LBL". When you dial your local TYMNET access number, you will need to provide a password. This is available from the Help desk.

Once connected to LBL via Tymnet you will actually be connected to the Develcon dataswitch. You will receive the dataswitch prompt. Type in the name of the system to which you wish to be connected. The dataswitch will connect you to that facility, assuming there are ports available at 1200 bps.

NOTE: LBL is charged not only for each session, but also for the quantity of data transmitted. Users are requested to exercise good judgement.

SYSTEMS NEWS

NEW MILNET SOFTWARE DRIVER

William Jaquith

IP/TCP, (for Internet Protocol / Transmission Control Protocol), a software communications system from the Wollongong Group, will be installed on the NMM during the first week of August. It is an alternative to the current Compion Milnet software driver.

Experience has shown that the IP/TCP driver provides faster transmission of files and faster response to commands generally. We expect also that it will require less system overhead. The commands used by IP/TCP are generally very straightforward. Help is available at each level by typing "HELP" or "?".

A billboard message on the NMM will alert users to the conversion to IP/TCP and will direct users to a special file detailing IP/TCP use. (Some commands may have very subtle differences; we created this file to pinpoint those differences.) For more info, contact JAKE @ NMM.

TIME-OUTS ON ALL THREE VAXES

Marge Hutchinson

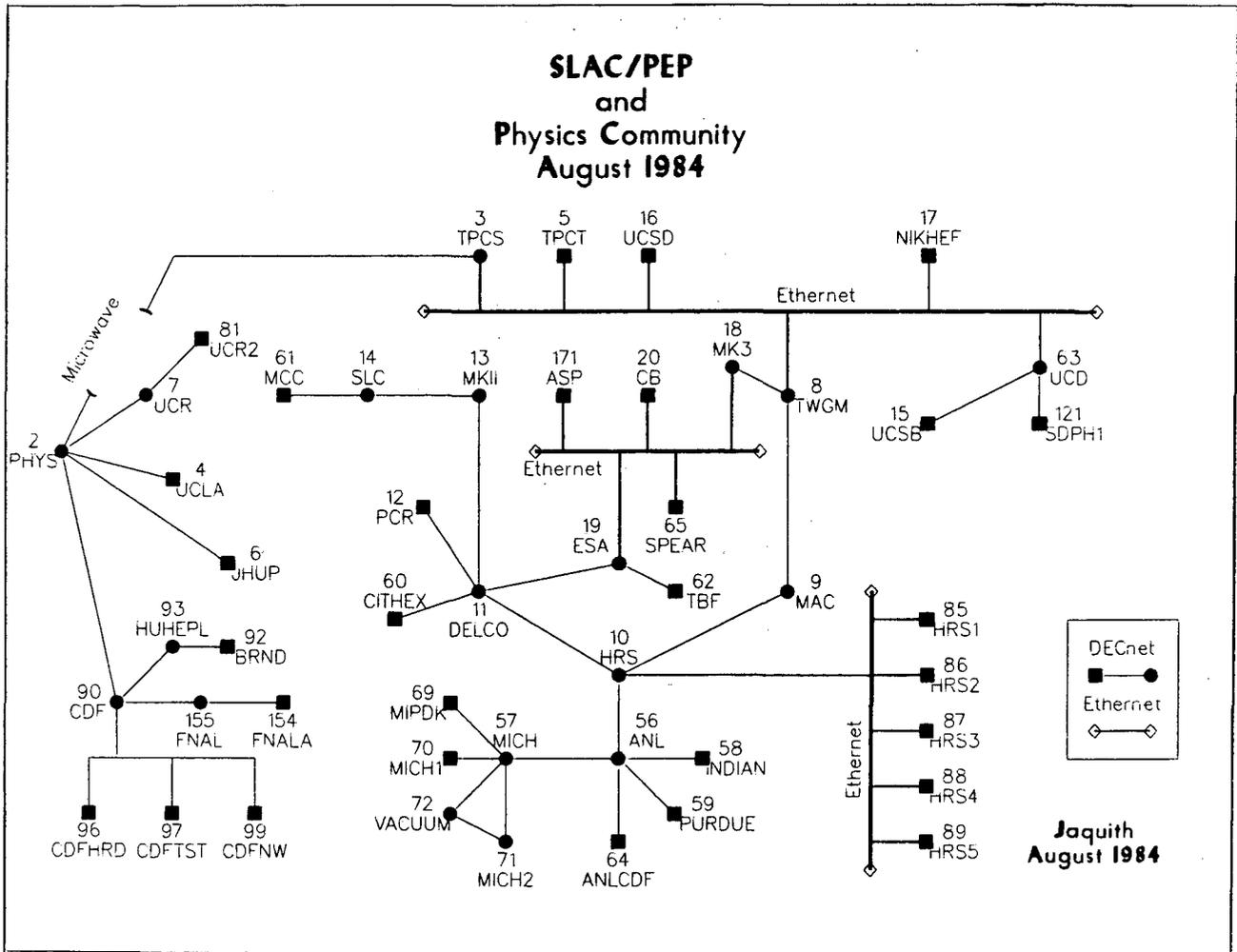
We're implementing an automatic time-out on NMM, IGM, & PDM.

We'll have to logout jobs which have used no CPU time or have not done any I/O for 30 consecutive minutes. This is to accommodate recent restrictions placed on these machines.

DATATRIEVE NEWS

Bert Albrecht

Datatrieve Smartstar and the Common Data Dictionary utilities will be removed from the IGM VAX sometime in August and will be reinstalled on the new VMS VAX expected in August. IGM Datatrievers needing assistance or information about this move should contact Bert Albrecht x6280.



This map shows LBL's connections to the SLAC/ PEP site and into a nation-wide physics community. The PHYS VAX at LBL connects to a microwave link to a VAX at SLAC called TPCS. TPCS is on an Ethernet which connects to many computers at SLAC - much as our Ethernet here at LBL interconnects many machines. Note that there three separate but interconnected Ethernets at SLAC.

Another interesting feature of the SLAC site is that the nodes TWGM, MAC, HRS, DELCO, and MKII are physically located at five of the six points of a hexagon. This hexagon corresponds to the Positron Electron Project ring.

PHYS also has leased telephone lines to sites UCR, UCLA, JHUP (Johns Hopkins University Physics), and CDF (Colliding Detector at Fermilab). These interconnect further into the nation's physics community.

Please address comments to **JAKE @ NMM**.

P C N E W S

PERSONAL COMPUTER SALES AT UCB

A good variety of personal computers are available to UC staffers at discount, based upon agreements the University has made with individual manufacturers. Buyers must agree to use the computers (purchased under those agreements) for personal (i.e., not commercial) use and must also agree not to resell the equipment for at least one year. For product availability and further information, call the ASUC Computer Store, 642-1968. Packets of information about available equipment, software, ordering procedures, etc., are also available from the Computer Services Library (218 Evans Hall, UCB, 642-5205).¹

The following products are being offered.

- **APPLE** - APPLE's personal computers (Macintosh, Lisa Models 2, 2/5, 2/10) as well as printers and peripherals are available to UCB staff at discounts ranging from approximately 38% to 49%. The

ASUC Computer Store will be handling orders for "personal sales".

- **DEC** - DIGITAL personal computer is available through the ASUC bookstore. Approximate discount is 20%.
- **IBM** - Ordering packets and pricing for the IBM personal computers and accessories are available from UC's Computing Services Library (218 Evans Hall, 642-5205). Pricing under that agreement represents a 20-22% discount.
- **RADIO SHACK & ZENITH** - Provisions for the handling of "personal sales" are being put into place.
- **HEWLETT PACKARD & XEROX** - The University's agreements with these two firms is limited to purchases of personal computers only.

For more info, call Buyer Barbara Cooper (642-1944).

... Extracted from a memo written by
Kathering Delucchi
Materiel Manager, UCB

¹ Interested buyers should specify whether they'll be buying with University or with personal funds when requesting a packet. For University purchases you may also call Buyer Barbara Cooper (642-1944) in the Purchasing Department.

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Return to:Newsletter - Bldg. 50B, Rm 1245
Lawrence Berkeley Laboratory - One Cyclotron Road
Berkeley, CA 94720
Attention: **DORTHA HINES**

We are here and it is now.
Further than that all human knowledge is moonshine.
H. L. Mencken (1880-1956)

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

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Computer Center Library
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University of California
Berkeley CA 94720