STANFORD

MEDICAL

CENTER

Computing Newsletter

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1. <u>Revised Rates for ACME Service</u>

As of April 17, 1972, ACME rates will be changed subject to NIH approval
expected momentarily. The purpose of the change is to offset the de-
crease in NIH support scheduled for this year. In February, 1969, ACME
started to charge for services and announced that periodic rate increases
would eventually result in full cost recovery. Those users receiving free
service on the ACME Facility (primarily students and core research) will
continue to be supported by the ACME Grant for the current fiscal year.
Those users who are paying for their use will pay somewhat more based
upon revised rates. The new rates are presented on the next page. The
changes are:

A) Terminal service fees are being reduced from $225 to $190.

B) The new rate for pageminutes will be 2¢. This rate is de-
    creased by virtue of a quantity discount for usage above
    specified levels.

C) Terminal access minutes (log-on time) will be multiplied
    by 2.5 and this product will be multiplied by a pageminute
    rate of 2¢.

D) New rates are announced for tape mounts, overnight batch
    service, and time slices. The new charge for time slices
    of 10¢ per 1,000 is intended to add a weighting factor for
    cycle-intensive users.

E) Disk charges will remain unchanged at 10¢ per block per
    month. We hope to announce some some data compression
    routines which will reduce the disk storage bill for many
    users.

F) Users are assigned to various categories based on type of
    use. The initial factor for sponsored realtime research
    users will be 50% and this factor will be applied to page-
    minutes and terminal access units. Non realtime sponsored
    research users will have an 85% factor.

A meeting to answer any questions concerning the new rate structure will be
held in Room M110 on Thursday, April 13, at 4:15 p.m. If any users are sig-
nificantly impacted by this revision, they should describe the financial
situation to the ACME Policy Committee, User Charges Subcommittee, in a
memorandum addressed to Ron Jamtgaard, TC 101. All users and department
heads were advised in a memorandum dated July 6, 1971, of the reduction in
general subsidized use of the ACME 360/50 and a corresponding set of rate
increases.

As the revised rates are implemented, I would like to hear from a number of
users concerning the impact of the change on your current and planned use of
ACME. Your feedback is essential.

Planned New Rates and Rationale

ACME COMPUTER FACILITY RATES
AS OF APRIL 17, 1972

Total monthly charges for use of ACME will be calculated as follows:

Monthly Charge = TH + INS + [(TA(f) + PMC + QD) x UCF] + TS + B + TM + DS

1) TH = Terminal Hardware and Related Services: $190 per month for IBM 2741.

2) INS = Installation Fee: $200 (one-time) for terminal hook-up.

3) TA$_{(f)}$ = Terminal Access Charge: Minutes @ 2.5 units/minute times 2¢ or
$3.00/terminal hour. The subscript is a factor which can be
adjusted for varying terminal speeds.

4) PMC = Pageminute Charge: (1 pageminute = occupancy of 4k bytes for 1 minute)
   a) For text editing mode, 1.5 pages/minute x 2¢ or $1.80/term. hour.
   b) For program mode, actual pages used times number of minutes x 2¢.

5) QD = Quantity Discount:
   IF (TA(f) + PMC) < $720
   THEN QD = 0.0;
   ELSE QD = $720 + $\left[2¢ \times (units - 36,000) \times \left(\frac{36,000}{units} + .08\right)\right] - (TA_{(f)} + PMC);$

   Note: "units" = terminal access units + pageminutes

6) UCF = User Category Factor: See table below --

Category	User Cat. Factor
1. Realtime User - Sponsored Research	.50
2. Non-Realtime User - Sponsored Research	.85
3. Non-Stanford Medical	1.25
*4. Medical Students	1.00
*5. Realtime User - Core Research	1.00
*6. Non-Realtime User - Core Research	1.00
*7. ACME Staff and Operations	1.00
8. Hospital and Clinics Data Processing	.85
9. Non- Medical - Stanford	1.00
*10. Realtime - Pilot and Pending Proposal	1.00
*11. Non-Realtime - Pilot and Pending Proposal	1.00
*12. Realtime - Extended Non-Funded	1.00
*13. Non-Realtime - Extended Non-Funded	1.00
16. Negotiated Rate - Combination of Core Research and Application	.60

*Charged in effect to the ACME NIH Grant. Some of these categories
may become chargeable to users in the next phase of rate adjustment.

7) TS = Time Slices: 10¢ per 1,000 time slices used.

8) B = Batch: $50 per hour, restricted to overnight service.

9) TM = Tape Mount: $4.00 per tape mounted.

10) DS = Disk Storage: 10¢ per block per month where 1 block = 2k bytes.

NIH has agreed to extend the ACME Grant for one year to July 31, 1973. Plans for research support computing beyond that date for the Medical Center are not firm at this time. Under the general guidance of Dr. Joshua Lederberg, a proposal is being prepared for a follow-on to the current ACME Grant. The content of the new proposal is still in flux.

Ron Jamtgaard

2. New Terminal Support

ACME has contracted with the Memorex Corporation for installation of a new terminal control unit. This device will replace the IBM 2702 transmission control unit. It will provide 32 ports of access for terminals to the ACME system. The primary reason for moving to this new device is that it will support six different terminal speeds. The 2702 was limited to 10 and 15 character per second support. The Memorex device will make available speeds up to 1200 baud or approximately 120 characters per second. The ACME staff is currently conducting a study of various terminal types available on the market. We hope to announce soon those terminals commercially available for which ACME will provide support. We expect to receive the new controller on April 14. Our study of various commercially available terminals will be presented in the next newsletter. Teletype (KSR-33) users should call Bob Stainton at extension 6124 for special instruction concerning operation with the new Memorex controller.

Ron Jamtgaard

3. Medical Computing Seminars

On March 16, Dr. Howard Sussman of Pathology conducted a seminar on the Clinical Laboratory Information System. He and his assistants used slides to illustrate the way a computer has been used to automate the paperwork of the Clinical Laboratory. The seminar was attended by over 40 people. ACME wishes to thank Dr. Sussman and his staff for their presentation.

More Medical Computing Seminars are being planned.

Erica Baxter

4. Reassignment of Gio Wiederhold

Beginning March 1, Gio Wiederhold, ACME's Manager of User Services, started working 60% time for Hospital Data Processing. An additional 10% of his time is allocated to Cardiovascular Surgery. Gio continues to spend 30% of his time on ACME for planning work.

Erica Baxter

5. New ACME Note Index

The March 1972, revision of ACME Note AA, the index to all the ACME notes, is now available in the ACME Office. If you are now using AA-32, you will find that the new edition, AA-33, is much easier to read.

Erica Baxter

6. New LISTAKER/JOBTAKER Feature

Users of these PUBLIC programs who produce long listings of text files on a daily basis will be interested in the new feature "/*.STOP.*/" in the ACME printing program.

Steps	Old Way	New Way
1.	DELETE ENTIRE FILE(X)	WRITE FILE(X)
2.	WRITE FILE(X)	ADD RECORD /*.STOP.*/
3.	PRINT via Listaker	PRINT via Listaker
4.	Go To Step 1	Go To Step 1

For instance, if the last record number of yesterday's file is 1400, and you rewrite 1050 lines then record 1051 should contain /*.STOP.*/ . The listing will stop at line 1050. You should still delete entire file occasionally in order to avoid paying disk storage charges for the unusually large file.

Bob Bassett

7. BUG: Character String Variable and Title Option

A character string variable passed as an argument to a procedure may not be used in the title option of an open statement without first being assigned to another character string variable. The following sample procedure will not work correctly:

```
openfile: PROCEDURE(string);
DECLARE string CHAR(*);
OPEN FILE(dummy) TITLE(string);
END openfile;
```

In order for the procedure to work correctly, the variable "string" must be assigned to another character variable (say, "newstring") and then "newstring" must be used in the title option.

It is not expected that this ACME bug will be fixed in the near future, since its correction would require extensive changes throughout the ACME system.

Chuck Granieri

8. Card and Paper Recycling

ACME now has a method of recycling your used paper output and IBM cards. To take advantage of this service (it's free!!) just bring your paper and cards to the ACME machine room (S101) between 8:00 a.m. and 4:00 p.m., Monday through Friday and the gracious operator will show you where to put them. Questions: Call extension 5903, Rich.

Rich Cower

9. Acknowledging ACME in Publications

ACME users publishing research papers can acknowledge ACME's help by saying: "Computer support for this research was obtained from ACME (Advanced Computer for MEdical Research) Facility at the Stanford Medical Center. ACME is sup-

ported by the Biotechnology Resources Branch of NIH, Grant Number RR00311."

Please send copies of your publications to the ACME Office so that they can be included in ACME Note APUB, Publications by ACME Users.

Erica Baxter

10. New and Revised ACME Notes Since Last Newsletter (2/28/72)

New:

AORG-1	ACME Organization Chart (E. Baxter) March 6, 1972.
BDEN-1	Beyond LISP (G. Wiederhold) March 29, 1972.
BSPD-1	Sharing Patient Data Files (G. Wiederhold) March 29, 1972.
CTP-1	Communication Port/Terminal Protection (G. Wiederhold) March 6, 1972.
EFFT-1	ACME Subprograms FFT and FFTD: Fast Fourier Transforms (J. Whitner) March 10, 1972.
HAC-1	Loma Linda Terminal/ACME 1800 Link (R. Matheson/M. Hu) EUN057, October 11, 1971.
HBS-1	Biosciences/ACME 1800 Digital-Analog Link (M. Hu) EUN046, September 1, 1971.
PLCH-1	A Choice of Language to Support Medical Research (G. Wiederhold) Position Paper for a Panel Discussion of "Computer Language for Medicine", to be held at the 1972 ACM Conference, Boston, March 6, 1972.
PSCS-1	Proposal for Small Computer Service by ACME (R. Stainton) March 21, 1972.
OSAPP-1	Notes on OS Appendages (R. Stainton) SLAC TM#3, June 8, 1970.
UPDP-1	PDP-11 Hanging the 360 Channel (R. Briggs) March 1, 1972.

Revised:

AA-33	ACME Notes Index (E. Baxter) March 15, 1972.
ODEB-2	Multiple Extent DEB Builder (W. Sanders) March 1, 1972.
OR-14	Procedure for Writing File Restore Tapes (C. Class) March 21, 1972.
PLC-2	Compatibility Requirements for PL/ACME Programs to Use IBM's PL/1 (G. Wiederhold/R. Frey) March 8, 1972.
UART-4	Access to Real-Time Directory Entries (G. Wiederhold/R. Frey) March 24, 1972.
WTUMP-12	Temporary Working Storage Function Table (C. Granieri/G. Wiederhold) March 28, 1972.