PRENTICE COMPUTER CENTRE

UNIVERSITY OF QUEENSLAND, ST. LUCIA, QUEENSLAND, AUSTRALIA. 4067.

NEWSLETTER

N-264 22-June-81

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Authorized by the Director of the Computer Centre

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1.0 AVAILABILITY OF THE VAX

As notified in the previous newsletter (N-263 of 25-5-81) the VAX 11/780 will be available from 6th July on a non-charged basis for a month to allow familiarisation. Details are provided in the Newsletter of 25-5-81.

John Noad
extension 3017

2.0 CHANGE IN HOURS OF ATTENDED OPERATIONS

At the end of semester the hours of attended operations will change. As from 6 July 1981 the systems will be running unattended from 2am (change from 4am) Tuesday morning till Friday morning, and 1am Saturday morning (change from 2am). This is due to the introduction of the VAX 11/780 which will lighten the workload on the KL system, and therefore reduce the need for operator attended running until 4am.

Di Ball
extension 3471

3.0 SANDERS PRINTER

Work has been completed on software for a Sanders Media 12/7 printer. This printer is installed in the graphics room (the same room which holds the Diablo printer) and is now available for use on the same basis as the Diablo. This means that bookings for using the Sanders must be made on extension 2188 with the Accounts Supervisor prior to use.

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The Sanders printer produces output of higher quality than is available with the Diablo, and has several features which make it very attractive. Character styles can be changed automatically, even within a single line; you can use either proportional or non-proportional character styles; scientific symbols are available; and you can use single sheet letter-head stationery.

The printer is connected to the network via a Visual 200 terminal. This allows you to perform final editing, running utility programs, etc. on the video screen and you need only commit your output to printing when it is complete. In line with this the TYPE utility has been changed. TYPE has two new switches - /SANDER and /DIABLO for typing files on the Sanders and Diablo printers respectively. These switches cause the printers to be initialised correctly and set up the appropriate line characteristics.

Typeset output can be sent to the Sanders as well. To facilitate this the RUNOFF, TXTMEN, and ITPS programs have been updated to recognize the device SANDER as legitimate. To typeset to the Sanders the value SANDER should be used instead of DIABLO or APS - otherwise the method is the same as before.

It is intended that the scientific character set (and possibly other special character sets which become available) will be accessible via the typesetting system. However work on this has not yet been completed. These characters can be accessed by performing some minor editing before printing your output. A sequence of special characters must be inserted in your file to allow this. Full information may be obtained, should you desire to do this, by contacting the Computer Centre.

Future text-processing courses will cover the use of the Sanders printer. Any other enquiries should be directed to Dianne Ball on extension 3471.

Andrew Broughton
extension 3022

4.0 COMPIL

COMPIL is a program which handles the interpretation of monitor commands to compile, load, and debug programs, as well as some utility functions like RENAME, DELETE, etc.

A new version of COMPIL (version 22D - edit 323) has been placed on NEW:. This version is purely a maintenance update of the previous one and incorporates no new features.

It is intended that this version will be placed on the SYS: area on 31st of July. If there are any problems (i.e. unexpected results) from using the new version please contact me on extension 3022.

Andrew Broughton
extension 3022

5.0 LIBRARY NEWS: NEW VERSION OF NAG - MARK 8

There is an updated version of NAG on NEW:. This will be moved to STA: in mid-July. For further information on new or withdrawn rountines, contact Leonie Roberts on extention 3943.

1. New Routines

C05ADF	D01ALF	D02RAF	F01LZF	G01AGF	G08CAF
C05AGF	D01AMF	D02SAF	F01MCF	G01AHF	G08DAF
C05AJF	D01ANF	D02TGF	F01QAF	G01DAF	H01AFF
C05AVF	D01APF	D03ECF	F01QBF	G04AEF	H01BAF
C05AXF	D01AQF	D03PAF	F02GJF	G04AFF	S14ABF
C06EAF	D01BCF	D03PBF	F02SDF	G04AGF	S17AGF
C06EBF	D01BDF	D03PGF	F02SZF	G05DPF	S17AHF
C06ECF	D01FBF	D03UBF	F02WAF	G05EGF	S17AJF
C06FAF	D01FCF	E01AEF	F02WBF	G05EWF	S17AKF
C06FBF	D02GAF	E01BAF	F02WCF	G08AAF	S21BAF
C06FCF	D02GBF	E02AGF	F02WDF	G08ABF	S21BBF
C06GBF	D02HAF	E02AHF	F04JAF	G08ACF	S21BCF
C06GCF	D02HBF	E02AJF	F04JDF	G08ADF	S21BDF
D01AHF	D02JAF	E02AKF	F04JGF	G08AEF	X02AGF
D01AJF	D02JBF	E02GCF	F04LDF	G08AFF	X02DAF
D01AKF	D02KEF	F01LBF	F04MCF	G08BAF	

2. Withdrawn Routines

The following 24 routines have been withdrawn from the NAG FORTRAN Library at Mark 8.

Routine withdrawn	Recommended replacement
C05PAF	E04GBF, E04GCF, E04GDF or E04GEF
D01AAF	D01AJF
D01ABF	D01AJF
D01ADF	D01BAF or D01BBF
D01AEF	D01BAF or D01BBF
D01AFF	D01BAF or D01BBF
D02AAF	D02YAF
D02ABF	D02BAF or D02PAF
D02AHF	D02CAF or D02QAF
D02AJF	D02EAF, D02EBF or D02QBF
E04CFF	E04CGF or E04JBF
E04DDF	E04DEF, E04DFF, E04KBF or E04KDF
E04EAF	E04EBF or E04LBF
E04FAF	E04FCF or E04FDF
E04GAF	E04GBF, E04GCF, E04GDF or E04GEF
F01BFF	F01BQF
F01CJF	F01CRF
F02AHF	F02BCF
F02ALF	F02BDF
F02ATF	F02BKF
F02AUF	F02BLF
F03AJF	F01BRF
F03AKF	F01BSF
F04APF	F04AXF

3. Routines Scheduled for Withdrawal at Mark 9

The following 21 routines are scheduled for withdrawal from the NAG FORTRAN Library at Mark 9, because improved routines have now been included in the Library. Users are advised to stop using any routine which is scheduled for withdrawal and to use the recommended replacement routine instead.

Routine scheduled for withdrawal	Recommended replacement
C05AAF	C05ADF
C05ABF	C05ADF
C05ACF	C05ADF
C06AAF	C06ECF
C06ABF	C06EAF
D01ACF	D01BDF
D01AGF	D01AJF
D02ADF	D02HAF or D02GAF
D02AFF	D02TGF
D02AGF	D02HBF or D02SAF

E01ADF	E01BAF
F01BHF	F02WAF or F02WCF
F01BJF	F01BWF
F01BKF	F02WDF
F01BMF	F01LBF
F02BMF	F01BWF + F02BFF
F03ALF	F01LBF
F04AUF	F04JGF
F04AVF	F04LDF
G01ACF	G04AEF
H01AEF	H01BAF or H01ADF

Leonie Roberts
extension 3943

6.0 AVAILABILITY OF CLIENT ROOM

Some users will be aware that on Tuesday and Wednesday nights following the Queen's Birthday weekend, University Security cleared the client's room in the Hawken Building. Whilst carrying out this duty they apparently claimed to be acting on my instructions. I should like to make it quite clear that University Security were not acting on advice from the Computer Centre.

The Centre apologizes to users who were inconvenienced by the actions of the Security Officers. Representations have been made to prevent a re-occurrence of this situation.

Tony Bird
extension 3944

7.0 SPSS CORNER

The Case of the "Missing" Values

Query:

In my last SPSS run, I omitted to include values for some variables in a number of cases in the data-file, yet the output did not contain any reference to any "missing values". What happened to

them?

Answer:

SPSS does not interpret the term "missing values" in a "common-sense" manner. It does not treat the absence of a value as "missing"; indeed, for numeric variables, any such non-existent value is interpreted as the "real" value zero.

The values which SPSS treats as "missing" are only those values which the user instructs SPSS to treat as such. Each variable may have up to 3 distinct values declared as "missing" (i.e. to be disregarded during processing).

As a rider to the above query, we should consider the use of the ASSIGN BLANKS card (for numeric variables only), since this affords a means of distinguishing between "non-existence" (i.e. blank) values and the (possibly legitimate) value zero.

The form of this card is

ASSIGN BLANKS n , where n is a number

The effects of this card is to place the nominated value "n" into every completely blank value for every numeric variable for every case.

This value may then be declared "missing" via the normal MISSING VALUES card for all numeric variables. Thus, we have the full circle - the non-existent value ("missing" in common-sense terms) is given a real value (via the ASSIGN BLANKS card), which is subsequently declared "missing" (via a MISSING VALUES card).

One final point:- suppose a variable V takes legitimate values 0-99, but for some cases, no value is available for V; suppose also that this variable has been declard to have format F2.0. Can the ASSIGN BLANKS card still be used, since all possible two-digit numbers can occur as legitimate values? The answer is YES - we can use a value such as 999 (three-digits) without upsetting SPSS. We do not have to alter the data-file in any way, nor do we have to re-declare the format to be F3.0.

Tony Bird
extension 3944

8.0 INFORMATION CONCERNING COURSES

Second Semester Courses

The following courses will be offered during the period August-December (July has been reserved for VAX courses, as outlined in Newsletter N-263):

August

(a) Introduction to PDP-10 : August 10 - August 11
2 full days 9-12 am + 2-5 pm each day

(b) RUNOFF : August 17 - August 21
5 half days 9.00 am - 12.30 pm each day

(c) VG : August 17 - August 21
5 half days 2-5 pm each day

September

(d) SPSS : September 7 - September 11
5 half days 9.00 am - 12.30 pm each day

(e) SOS Editor : September 7 - September 8
2 half days 2-5 pm each day

Note: This course is suitable for users of both PDP-10 and VAX systems.

(f) VAX Course * : During week Sept 14 - Sept 18
(See note below)

October

(g) VAX Course * : During week October 5 - October 9

(h) Elementary BASIC Programming : October 19 - October 21
3 full days 9-12 am + 2-5 pm each day

(i) VAX Course * : During week October 26 - October 30

November

(j) Introduction to PDP-10 : November 2 - November 3
2 full days 9-12 am + 2-5 pm each day

(k) Introduction to PDP-10 : November 5 - November 6
2 full days 9-12 am + 2-5 pm each day

(l) RUNOFF : November 9 - November 11
3 full days 9-12 am + 2-5 pm each day

(m) SPSS	: November 16 - November 20 5 half days 9 - 12.30 each day
(n) VAX Course *	: During week November 16-November 20 (afternoons only)
(o) Elementary FORTRAN Programming	: November 30 - December 4 5 full days 9-12 am + 2-5 pm each day

*Note: In the above list, provision has been made for the conducting of additional courses on VAX 11/780 system. The exact nature of these courses has yet to be determined, and will be based on user's needs. Details will appear in later Newsletters.

General Notes:

1. All courses are conducted in the Client Room, Hawken Building.

2. Staff and post-graduate students are admitted free to courses. Other users are required to pay a fee of $10.00 per half-day.

3. Enrolments for all courses may be made by contacting

Barry Maher
extension 3021

9.0 DATA COMMUNICATIONS SEMINAR

The Australian Computer Society and the International Federation of Information Processing are conducting a 3-day Symposium on Data Communications Technology and Practice (COMTAP 81) in Sydney 16th - 18th November 1981.

There are fourteen speakers of international reputation representing 10 countries. The topics to be covered are:

SATELLITE COMMUNICATIONS
USING PACKET SWITCH NETWORKS
LOCAL AND HYBRID NETWORKS
MESSAGE SYSTEMS - ELECTRONIC MAIL
TECHNIQUES FOR MANAGING COMPUTER NETWORKS
ECONOMIC FACTORS IN CHOOSING NETWORK ALTERNATIVES
SECURITY ISSUES IN PUBLIC NETWORKS
SIGNIFICANCE OF NETWORKS TO MANAGEMENT AND SOCIETY

I bring the Symposium to users attention as it represents a rather unique opportunity in Australia to obtain current information on this rapidly developing area. Further information and registration forms can be obtained from the Centre's enquiry counter at the Hawken Building.

Alan Coulter
extension 2189

10.0 SYSTEMS PERFORMANCE - MAY

Exchanging printers on the Commerce Node caused some disruption to our otherwise flawless service this month. The Data Products 600 lpm printer from Commerce now resides on the VAX. Commerce Node now has an LA120 which has been coping with the print load adequately.

Graham Rees
extension 3288

S Y S T E M P E R F O R M A N C E R E P O R T

For node KA10 there were 29 working days in the period 1/May/81 to 31/May/81

		< KA10 HHH:MM	> %
1.	Attended system running time	456:14	
2.	Plus unattended system running time	258:12	
3.	Equals total system running time	714:26	100.0
	less time used for:		
4.	Scheduled maintenance	18:21	2.6
5.	Dedicated operations tasks	5:38	0.8
6.	Dedicated systems development	0:00	0.0
7.	Equals time scheduled for use	690:27	96.6
	less lost time due to:		
8.	Unscheduled maintenance	1:52	0.3
9.	Hardware faults	3:12	0.4
10.	Software faults	0:13	0.0
11.	Unresolved	1:39	0.2
12.	Environmental conditions	0:00	0.0
13.	Equals time available to users	683:31	95.7
14.	Effective user uptime (13./7.)		99.0
15.	Number of crashes		12
16.	Mean availability between crashes		56:58
17.	Mean time to recover crashes (minutes)		25
18.	Total number of Jobs		13940

S Y S T E M P E R F O R M A N C E R E P O R T

For node KL10 there were 27 working days in the period 1/May/81 to 31/May/81

		< KL10 >		< DN87A >		< DN87B >	
		HHH:MM	%	HHH:MM	%	HHH:MM	%
1.	Attended system running time	458:55		458:55		458:55	
2.	Plus unattended system running time	135:43		135:43		135:43	
3.	Equals total system running time	594:38	100.0	594:38	100.0	594:38	100.0
	less time used for:						
4.	Scheduled maintenance	19:49	3.3	19:49	3.3	19:49	3.3
5.	Dedicated operations tasks	10:10	1.7	10:10	1.7	10:10	1.7
6.	Dedicated systems development	2:48	0.5	2:48	0.5	2:48	0.5
7.	Equals time scheduled for use	561:51	94.5	561:51	94.5	561:51	94.5
	less lost time due to:						
8.	Unscheduled maintenance	6:55	1.2	0:00	0.0	0:00	0.0
9.	Hardware faults	3:16	0.5	0:00	0.0	0:00	0.0
10.	Software faults	0:08	0.0	0:00	0.0	0:00	0.0
11.	Unresolved	0:35	0.1	0:04	0.0	0:04	0.0
12.	Environmental conditions	0:00	0.0	0:00	0.0	0:00	0.0
13.	Equals time available to users	550:57	92.7	561:47	94.5	561:47	94.5
14.	Effective user uptime (13./7.)		98.1		100.0		100.0
15.	Number of crashes		14		3		4
16.	Mean availability between crashes		39:21		187:16		140:27
17.	Mean time to recover crashes (minutes)		17		1		1
18.	Total number of Jobs		16728				

S Y S T E M P E R F O R M A N C E R E P O R T

For node GRIFFITH there were 26 working days in the period 1/May/81 to 31/May/81

		< GRIFFITH >	
		HHH:MM	%
1.	Attended system running time	166:57	
2.	Plus unattended system running time	383:22	
3.	Equals total system running time	550:19	100.0
	less time used for:		
4.	Scheduled maintenance	0:00	0.0
5.	Dedicated operations tasks	0:00	0.0
6.	Dedicated systems development	0:00	0.0
7.	Equals time scheduled for use	550:19	100.0
	less lost time due to:		
8.	Unscheduled maintenance	0:00	0.0
9.	Hardware faults	6:08	1.1
10.	Software faults	0:00	0.0
11.	Unresolved	0:49	0.1
12.	Environmental conditions	0:00	0.0
13.	Equals time available to users	543:22	98.7
14.	Effective user uptime (13./7.)		98.7
15.	Number of crashes		9
16.	Mean availability between crashes		60:22
17.	Mean time to recover crashes (minutes)		46

S Y S T E M P E R F O R M A N C E R E P O R T

For node COMMERCE there were 20 working days in the period 1/May/81 to 31/May/81

		< COMMERCE >	
		HHH:MM	%
1.	Attended system running time	163:14	
2.	Plus unattended system running time	0:00	
3.	Equals total system running time	163:14	100.0
	less time used for:		
4.	Scheduled maintenance	0:00	0.0
5.	Dedicated operations tasks	0:00	0.0
6.	Dedicated systems development	0:00	0.0
7.	Equals time scheduled for use	163:14	100.0
	less lost time due to:		
8.	Unscheduled maintenance	0:00	0.0
9.	Hardware faults	24:27	15.0
10.	Software faults	0:00	0.0
11.	Unresolved	0:27	0.3
12.	Environmental conditions	0:00	0.0
13.	Equals time available to users	138:20	84.7
14.	Effective user uptime (13./7.)		84.7
15.	Number of crashes		14
16.	Mean availability between crashes		9:53
17.	Mean time to recover crashes (minutes)		107