PRENTICE COMPUTER CENTRE
UNIVERSITY OF QUEENSLAND, ST. LUCIA, QUEENSLAND, AUSTRALIA. 4067.

NEWSLETTER

N-303 August 1985

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Authorized by the Director of the Computer Centre

COMPUTING SUPPORT CENTRE FOR UNIVERSITY OF QUEENSLAND AND GRIFFITH UNIVERSITY
Principal Service Centres

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<td>General Enquiries &amp; Course Enrolments</td>
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Consulting

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Engineering and Maintenance

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<td>Computing Co-ordinator</td>
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Terminals, CDN & Equipment Pricing

For prices on microcomputers, terminals, line charges, computer bits and pieces, type HELP PRICES on your terminal. This will provide appropriate menus.
1. Newsletter Summary

- A compiler for "C", the higher level language of the UNIX operating system, has been installed on the KL-10.
- A minor problem with VAX/VMS command procedures is advised.
- The plotter spoolers have been overhauled to improve plotting operations.
- Users are urged to report software problems on any of the central computers to the HELP desk or by electronic mail to CCHELP.
- A new gateway service to CSIRONET is now available. This will replace the current service which will not be available after 1.12.85.
- Advice is provided of courses conducted by the Prentice Computer Centre.

Director
extension 2189

2. Central Computing Facilities — Allan Woodland, ext. 4017

Operations — Sandra Campbell, ext. 3471
Systems Software & Extensions — Ian Burgess, ext. 4074

2.1 Sargasso C Compiler
A new C compiler for the KL-10 has been received from Sargasso Enterprises. It has been installed on SYS:. With minor exceptions, the compiler supports all the features of standard C, together with several important extensions of the language.

A help file is available on HLP:SARGAS.HLP. A manual which includes details of differences from other implementations is available on DOC as SARGAS.DOC. It is recommended that users obtain a copy of the manual before attempting to use the compiler.

The C compiler previously available on SYS: has been moved to OLD:. This version came from John Hopkins University.

Any problems with either version of the C compiler can be directed initially to the Help Desk, ext. 3025.

Lee MacDonald
extension 3943

2.2 Problem with VAX/VMS Command Procedures
Digital Equipment Corporation has notified us of the following problem with VAX/VMS V3.5 operating systems.

Problem Statement:

SST TERMINAL/WIDTH = n executed from a command procedure hangs if a user types CTRL/S on the terminal while the command is executing and the target terminal has the DEC—CRT attribute set.
Response:
The problem is fixed in VAX/VMS V4.0.
Meanwhile, all we can recommend is to try to avoid this set of circumstances. It is hoped that UQVAX:: will be upgraded from VAX/VMS V3.7 to V4.1 early in 1986.

Bryan Claire
extension 4078

2.3 Enhancements to HP Plotter Spoolers and CALF77 Library
Following recent overhauling of the plotting spoolers for the HP7475 and HP7585 plotters, the following modifications have been made to the spoolers and to the CALF77 routines to provide more consistent operation:

1. ALL paper, by default, will be mounted with the X-axis parallel to the longer edge of the paper. (Previously, plots on A4 paper were aligned with the X-axis parallel to the shorter edge of the paper.)
   Because A2 and A4 stationery need to be physically rotated when loading them into the plotters, it is important to nominate their size properly, especially user supplied paper, so that the spooler can correctly align the axes. The spooler first looks for a "/SIZE:" switch as specified in the DEVICE argument to the PLOTIN subroutine call. If that has not been specified, the first two characters of the "/FORMS:" switch (PLOTIN subroutine again) are checked to see if they correspond to a standard paper size, e.g. "A4NORMAL". If that fails, the paper is aligned in the same sense as A3 paper. Complex? See article 12 in newsletter N-289 (June 1984) for a detailed description of the PLOTIN subroutine.

2. A new switch "/ROTATE" can be specified in the DEVICE argument to the PLOTIN subroutine call. This switch will cause the paper to be logically rotated through 90 degrees. Another switch "/NORotate" has been created, implying zero degree rotation, which is of course the default. (We do not expect this switch to get much use.)

Bryan Claire
extension 4078

2.4 Software Problem Reporting
We encourage users to report all problems with software on any of the central machines. This should be done by contacting the HELP desk on extension 3025 or by sending mail to CCHELP on any of these systems.

Noela Meier
extension 2951

3. Engineering & Communications Services
   – Graham Rees, ext. 3288

3.1 Removal of Current CSIRONET Gateway
Users are reminded that the current CSIROnet service will not be available after 1st December 1985. A new service based on the VAX-11/780 is now available and users
are urged to make use of the period of parallel operation in order to minimise their conversion problems.

Arthur Hartwig
extension 4079

3.2 New CSIRONET Gateway

The CSIRONET gateway software for the central VAX-11/780 has now been installed. Users wishing to access CSIRONET from the VAX-11/780 should give the command

@CN$DEVICE:[CSIRONET]CNLOG

to define to the system the commands described in this article. If you are a reasonably frequent user of CSIRONET it would probably be most convenient for you to place the line

$@CN$DEVICE:[CSIRONET]CNLOG

in your LOGIN.COM file so that the appropriate command definitions are automatically made every time you login.

Terminal Access to CSIRONET Hosts

CSIRONET hosts can be accessed by means of the CNIA command.

Thereafter the terminal interface presented to the user is similar to that presented by standard CSIRONET nodes. Users of the ANF-10/CSIRONET gateway will probably consider this a giant step backwards (I do) but you will just have to get used to it.

The terminal interface can be changed by means of special commands beginning with <DLE> (control-P). Some of these are quite useful but it is easy to forget them.

<DLE>& caused <CR> to be treated as line terminator. Unless you type this sequence you will have to remember to type <LF> to terminate a line rather than <CR>.

<DLE>T terminates the session.

<DLE>S suppresses echoing of type-in. This is useful when entering passwords.

Note that character editing functions are vastly different from those standard to the DEC-10 and VAX/VMS.

<BEL> (control-G) is used to delete the last character typed into the current line.

<VT> (control-K) is used to display the current line.

It is hoped to have further information available for the next newsletter. Negotiations are being conducted with CSIRONET to make the terminal interface more familiar. Users who don't like the interface provided by the CNIA program should LOGIN to the CSIRONET MAIL system and send their complaint to OPS, or alternatively send their complaint by VAX mail to

UQKL10::ARTHUR

and I will use it to support my case that something better should be provided.
File Transfer to and from CSIRONET

Having given you the bad news (the unfamiliar terminal interface) now comes the good news.

The VAX based file transfer system will exchange files with many more CSIRONET hosts than the DEC10 based system AND it should prove to be much more reliable.

Details of the file transfer system can be found in the file

CN$DEVICE:[CSIRONET]CNFTS.DOC

which interested users are advised to print.

Terminal Access from CSIRONET

The VAX is CSIRONET node BXU, and can be accessed from CSIRONET in the usual way.

Restrictions

It is not yet possible to access the DECsystem 10 through the VAX gateway but this is being investigated.

The file transfer software will not accept network file specifications so that file transfers must always reference a file on the VAX-11/780. CSIRONET will be encouraged to enhance their software to support network file specifications.

Questions about the new CSIRONET gateway should be directed to Danny Smith (x4079).

Arthur Hartwig
extension 4079

4. Applications Development — Tony Bird, ext. 3944

4.1 Information Concerning Courses

Enrolments for all courses may be made by phoning extension 3018.

The following schedule of courses has tentatively been arranged for the period September — October, 1985:

September

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<tr>
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<th>Duration</th>
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<td>September 9-12</td>
<td>4 half days 1-4 each day</td>
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<tr>
<td>“Using your PC on the Network”</td>
<td>September 10-12</td>
<td>3 half days 9-12 each day</td>
</tr>
<tr>
<td>Introduction to PDP-10</td>
<td>September 17-20</td>
<td>4 half days 1-4 each day</td>
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<tr>
<td>Introduction to IBM</td>
<td>September 23-26</td>
<td>4 half days 9-12 each day</td>
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<tr>
<td>1022</td>
<td>September 23-27</td>
<td>5 half days 1-4 each day</td>
</tr>
<tr>
<td>SQL</td>
<td>September 30-October 4</td>
<td>5 half days 9-12 each day</td>
</tr>
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October
Typesetting
October 14-18
5 half days 1-4 each day

General Notes:

1. Intending users of the PDP-10 system must be familiar with the content of the course *Introduction to PDP-10* (i.e. terminal usage, file-management, editing) before attending other PDP-10 courses.

2. In corresponding fashion, for the IBM system, users should have attended either *Conversion to IBM* (for previous PDP-10 users) or *Introduction to IBM* (for completely new users) before attending other IBM courses.

3. Courses held at St Lucia (with the exception of CAD/CAM courses) are conducted in the Computer Centre's teaching area near the Physics Annex. Courses designated (GU) are held in Room 1.49, East Wing, SIA Building at Griffith University.

4. Staff and post-graduate students are admitted free to courses; all others pay at the rate of $10.00 per half-day session.

5. Enrolments for all courses may be made by phoning ext. 3018.

*Barry Maher*

*extension 3021*