

UNIVERSITY OF QUEENSLAND

Computer Centre

WEEKLY NEWSLETTER

date : week ended 14 December 1972
authorization : Director of the Computer Centre

1 OPERATIONS

1.1 PDP-10 System

Friday 8 December system failure, offline 1835-1840,
2345-2349
monitor reloaded each time.

Wednesday 13 December system unavailable 1240-1320, monitor
restarted to release magnetic tape units
pink scheduling 1320-1340, monitor
reloaded.

Thursday 14 December system failure, offline 1400-1405,
continued successfully
system looping 1420-1430, 1445-1453,
reloaded monitor each time
disk pack maintenance 1500-1655.

2 LAST NEWSLETTER FOR 1972

This is the last newsletter for the year. The next newsletter
will be produced for the week ending 12 January 1973.

The Centre would like to wish users and clients a happy Christmas
and New Year.

3 INTRODUCTORY FORTRAN COURSE

An introductory Fortran course has been arranged for Monday 12
February to Friday 16 February inclusive, from 9 a.m. to 1 p.m.
each day.

The room location will be advertised next year when it has been finalized. Enrolments should be in by Friday 2 February.

4 DECODE ERRORS

(a) ^P is responsible for the governing of software or hardware interpretation of horizontal and vertical tabs, and form feeds. The current decoder contains an error whereby the current line characteristics (including the current setting of ^P) are not examined but are reset each new command to be default software translation. This will be corrected but in the meantime it works if the output is produced on the terminal through PIP or Edit.

(b) An example has been found where directories specified in initial file became 'sticky' for subsequent files
e.g. RUN 171.ABC DEF
assumes DEF also to be on 171.

This problem could affect a number of commands, namely MACRO, COBOL, etc, COPY, RENAME, etc. Either reverse the order of the specified files or, if order is important, specify all directories

e.g. RUN DEF 171.ABC
or RUN 171.ABC 32.DEF

(c) The F4 option in LIST becomes sticky if specified for initial files in a command string
e.g. LIST ABC(F4) DEF

Again, reverse the order of the files.

These errors will be corrected in the next version of Decode.

5 BATCH WARNING

Users are warned that some system programs (e.g. Algol compiler and execution, Cobol execution, Sort, to name a few) do not fully conform with UQ standards and do not accept a file separator as a terminator. The ^C card (a card with 12-9-3 punching in column 1) will terminate the program correctly, but to establish the proper relationship in batch the sequence recognized for termination is file separator and command. Student accounting sequences should always be terminated by the file separator-.QUIT command.

6 SUGGESTIONS

6.1 Response to Suggestions in WN-118

We have received a number of comments regarding the DELETE command in Editor, and a suitable abbreviation for it. Comments have been divided although it appears that most users are in favour of leaving the abbreviation as it is. Various amendments and alterations to the Editor are currently being considered and the format of the DELETE command may be made more rigid to make inadvertent deletions less likely.

We have also had further ideas on the altmode and carriage return matter. The Centre has decided also to leave this as is for the following reasons:

- (a) if the altmode is typed at the end of a line, the first line of response from the called program would get split unless a return was provided by Decode.
- (b) also altmode has a different meaning in some cases i.e. in dialogue mode, altmode is used to indicate that no more questions are to be asked; default values will be assumed. In this case a return should be supplied.

6.2 System Crash Problem

sug: At 5.30 p.m. on Wednesday night I put a program in for execution from a terminal with all output onto the disk. At 5.45, since I was still in the execution mode I rang the Centre for System Status. At 6 p.m. I decided to use ^C, check the account and then use @PC to continue. I was told to login. Apparently, about 5.30 p.m. the system collapsed for five minutes.

I would recommend that all collapses however small be added to the recorded message with date and time, and that the system be bypassed if possible and typewritten messages be sent to all active terminals, even during crashes.

rep: It is not possible for you to have typed ^C, checked the status of your account using ACCOUNT, and then continued with @PC.

The @ commands operate on the current core file, which can be set up in a variety of ways (e.g. RUN, LOAD, GET etc). A few of the system commands are monitor commands (i.e. these commands are executed by the monitor without disturbing the state of the user's core); others require a

system program to be executed.

Monitor commands are:

```
^C          (halt command)
RESOURCES
PJOB
DAYTIME
TIME
ASSIGN
DEASSIGN
CORE        (with no arguments)
EOF
D
E
```

The ACCOUNT command runs a system program Accoun. To have said @PC after ACCOUNT, the system would have attempted to continue with the Account program - not yours.

It would be desirable to have monitor commands for ACCOUN(BRIEF) and LIMIT(TASK) or LIMIT(PHASE) and the Centre will investigate this possibility.

The operator can only talk to a terminal if the terminal concerned is logged in. Otherwise the monitor is unaware of which line the message is to be sent. In view of this, your comment that the status should reflect all crashes, however minor, would appear to be very necessary, in order to prevent situations such as you describe occurring. This will be reviewed.

6.3 End of File

sug: Assume you are running from a terminal with output assigned to \$DSK=6. If the error message 'ILLEGAL MEMORY REF . . .' occurs. The run is not only aborted but also all previous output on FOR06 is deleted. Not very satisfactory for debugging.

rep: This situation is the main reason for having an EOF command! EOF forces the device specified to be closed, the input/output currently taking place to be finished and the file to be made available.

In your case, an EOF \$6 would have made the file FOR06 available to you for inspection when debugging.

6.4 Special Services

sug: The Centre should make every attempt to handle reasonable requests for special services and facilities. To this end, a form for requesting special services should be available, and the Centre should make an effort to quote the cost of the special service in advance.

In the interests of public relations the Centre should make it widely known that they are prepared to handle the special services on a 'by request' basis if at all possible.

rep: The Centre would be happy to receive requests for special services including software packages not entirely supported by the Centre. It is only by good communication between the Centre and its clients that we can be aware of computing needs. It must be appreciated however, that the Centre may not always be in a position to agree to non-standard services particularly if other users could suffer in any way at all as a result. The Centre exists primarily to provide a computing service to the University and will give proper consideration to all reasonable requests. Much can be achieved in a situation of mutual cooperation - of understanding both the problems the Centre may have in providing a service and the problems the user may have in not receiving a service. It is not proposed to introduce a special form at this stage but a written request for special services would seem necessary.

7 GE-225 FORTRAN ERROR

Because of an error in the Fortran compiler, under some circumstances the order in which specification statements occur is significant, and use of any other order may lead to incorrect results. In a particular case reported, where elements of a double precision array were equivalenced to double precision scalar variables, the necessary order was

```
DIMENSION A(10,10)
EQUIVALENCE (A(1,1),A11) . . .
DOUBLE PRECISION A,A11
```