UNIVERSITY OF QUEENSLAND

Computer Centre

WEEKLY NEWSLETTER

date   : week ended 16 March 1972
authorization : Director of the Computer Centre

1.   OPERATIONS

1.1   PDP-10 System

Friday   10 March   monitor reloaded, 1325-1330.

Monday   13 March   end of day accounting, which aborted   on
Friday night, 0945-1004
new monitor set up, 1004-1010
system   failure,   offline   1025-1042,
1047-1055, 1155-1205, 2308-2325.

Tuesday   14 March   disk errors, 0945-1018
retrieval   of   necessary   disk   files,
system unavailable, 1104-1155
system   maintenance   and   development,
1343-1359
system failure, offline 1645-1700.

Wednesday   15 March   end of day accounting which aborted
previous   night due to disk errors,
0945-1033
high   speed   printer   maintenance,
1115-1300.

schedule for forthcoming week: maintenance 0700-0900
                                 operations   0945-2330.

1.2   GE-225 System

schedule for forthcoming week: maintenance 0700-0830
                                  operations 0900-2400.

2.   NEW EDITOR

On Monday 20 March, a new version of the Editor (version 1B-3)
will be implemented.

This version allows variable line lengths. Lines may be up to
160 characters long excluding the <cr><lf>. Lines of 159 and 160
characters length will however be output on the teletype without
the <cr><lf>.

These longer lines will be useful for those editing files where
comments tend to run past 80 characters and also for those
wishing to inspect files created for listing with long printer
lines.   In addition the variable length lines will mean that
paging files will be smaller and disk accesses reduced for most
users.

(a)   consequent changes in error actions

> After a 'LINE SPLIT' the first line is typed out.   In   the
> CHANGE and ALLCHANGE commands the 'TRUNCATED' message is
> replaced by the message 'NO CHANGE, LINE TOO LONG' and   the
> line is unchanged.

(b)   continued lines

> Longer lines than 72 characters may be input in the INSERT,
> INPUT and REPLACE commands by ending the line with a '-'
> immediately before the <cr><lf>. The continuation may be
> continued   on as many lines as necessary but if 160
> characters is exceeded the message 'LINE TOO LONG, IGNORED'
> is given and all the parts of the continued line ignored.

(c)   break characters

> Lines in the INSERT, INPUT and REPLACE commands are no
> longer terminated by the break characters <bell>, <lf>,
> <vt>, <ff> and <altmode>.

2

(d) new commands

JOBTIM   types out the job time since login in milliseconds
JOBBAL   types out the current job balance in internal
          cents.

(e) further paging access reduction

The paging system has now been arranged so that a page is
not written out if it already exists on the paging file and
has not been altered since it was last written out. Free
lines are also chained together within pages so that
inserted lines will be placed in the current page if
possible.

3. FINISH

A new version of FINISH will become operational next week. This
version does not affect the users, but improves the handling of
accounting for jobs logging out.

4. JOBDAT

On Monday 20 March a new version of JOBDAT will be put onto the
system. This version is compatible with the previous version,
but includes additional definition of all symbols according to
new standards promulgated by Digital. Its use will facilitate
adoption of new release of Digital software.

JOBDAT defines symbolically the various locations within the job
data area that are used by the operating system for the control
of the user's job.

5. PDP-10 FORTRAN

(a) The FORTRAN manual, MNT-5, states on page 6-16,
    'If the closing parenthesis of the format is reached before
    the end of the input/output list, then the format is
    repeated from the last left hand bracket of level 1 or level
    0.'

    It is not specifically stated that a repeat from level 1
    includes the repeat count for that group if any, but this in

fact what occurs.

<u>example:</u>

```
        WRITE (6,10) (I,I=1,20)
    10 FORMAT (2X, 'TEST', 10(I3, 2X))
              ↑                 ↑
           level 0          level 1
```

The above coding repeats from level 1, putting 10 values on each line.

(b) It has been found that some programs that have very long ASCII output records run correctly with output to teletype (logica l unit 6) but do not run if they are changed to output to disk (e.g. logical unit 10). This is because all FORTRAN ASCII output to the disk is transmitted via a line buffer with a capacity of 133 characters. FORTRAN ASCII output records to disk should therefore be limited to 133 characters.