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SPRING '73 DECUS SYMPOSIUM

The Spring meeting will be held in Philadelphia May 2 through 5. It looks as though there is going to be a lot of interesting activity for the OS/8 world. In conjunction with our regular workshop there will be three papers given on "DEC SYSTEM-8". DS/8 is John Covert and Doug Wrege's new name for what we have been calling PS/8X - the extended, improved PS/8. A closed session is scheduled for considering how the users can organize the continuing support and extension of DS/8 and related software. Letters with return forms for this meeting have gone out to the Newsletter mailing list.

One of the subjects for the workshop is how to achieve a good multi-user, Foreground/Background, or Virtual Macnine US/\hat{S} system. Some interesting ideas on hardware and software have been circulating on this subject recently.

OMSI is scheduled to give an extensive presentation on their BASIC. No details are available as yet on what they are doing.

It is hoped that the customary trading of programs by copying tapes on the demo PDP-8 can be formalized a little by having some capable users volunteer to do the copying and listing. If it works out someone wanting to make a tape copy or listing will be able to leave the necessary instructions and materials with the volunteer operator and pick them up when they are done. If we can make this work it will be a very nice addition to the content of the DECUS meetings. We hope to get Bob Lane from DEC to bring a supply of DECtapes and other supply items to sell at the meeting for those who don't happen to have the necessary materials with them.

We hope to see a big turn out at the meeting. The new developments have been coming fast and furious lately and this will be a great chance to catch up on them.

NEW FROM DEC

DEC has announced OS/8 FORTRAN IV. This is the new, improved versiou of RTPS FORTRAN IV that will run with or without the FPP12 hardware that was previously manditory. It will run on any OS/8 configuration and will utilize

the FPP12 or the PDP-8e EAE option if they are present. It also has provisions for supporting a real time interrupt structure including user written interrupt service routines. The software is not quite ready for delivery yet but it seems to be coming along nicely and should be ready before too much longer. The price was announced as \$700 plus \$300 for OS/8 if you don't have it. I'll bet that DEC could sell three or four times as many copies if they dropped the price to around half of that.

NEW PROGRAMS IN DECUS

- DECUS 8-586 XDIREC Selected Director lister
 - 8-599 DIBILD Rebuild clobbered device directories from a copy of a /E format directory listing.
 - 8-598 CRT Tektronix 611 Storage Scope Handler.
 - 8-608 FUTIL Super ODT type program for working on the contents of mass storage devices. See last Newsletter.
 - 8-609 OCOMP Octal Compare and Dump for mass storage devices.
 - 8-610 INVENT-8 See last Newsletter.
 - 8-611 PIP11 Enables PS/8 users to read and write PDP-11 DECtapes in DOS or RSTS format. Also allows output in TSS8 BASIC format.
 - 8-600 EXPIP Utility PIP type program for transferring files. Will transfer all files with a given file name extension.
 - 8-597 NTH OS/8 Package 17 utility programs including file listing, a set of mag tape utilities, and many more FORTRAN items.
 - 8-607 CALCULI PDP-8 functioning as a printing calculator
 - FOCAL 8-268 FX OMSI PS/8 FOCAL patch to give random access data function. Allows up to 2047 floating point variables.
 - FOCAL 8-269 FSPEED Speed up patches for FOCAL.
 - 12-124 FR, FDIS, FADC Gives PDP-12 users of OMSI PS/8 FOCAL access to the LINC mode functions. Read sense switches, display on the scope, and A/D conversion.
 - 12-112 IDXRDD Unformatted input for OS/8 FORTRAN.

- DECUS 12-113 IDXWT Unformatted output for OS/8 FORTRAN.
 - " 12-111 ADFILE, ADTAPE The IAP6-DIAL programs adapted to OS/12.
 - " 12-101 OS/8 SKED-SKED running under OS/8.
 - " 12-129 OS/12S Scope oriented version of OS/12. See last Newsletter for details.
 - " 8-427b MEMO III revised version of MEMO II (DECUS 8-472a) -
 - " 12-100 Formats and justifies text for neat output. A poor man's RUNOFF (See DECUS 10-85).
 - " 12-123 VR12 Scope Handler This is a handler for the PDP-12 scope.
 Different from 12-81 mentioned last time.

WORK BEING DONE

A lot of work has been done lately to update PS/8X - DS/8. Many new and improved functions are being added by several of the users. Examples are MAKE and TECO commands to create and edit files with TECO. An option has been added to run a TECO macro directly from the Keyboard Monitor (".") level. A FOCAL command has been added to directly execute a FOCAL/F program from the Keyboard Monitor including specification of input and output files. These new items make it possible to include programs written as TECO macros or as FOCAL/F programs to be run under HASP (the batch control program for DS/8) and by users who do not know anything about TECO and FOCAL. All this work will be covered in detail at the Spring meeting next month.

Jim Crapuchettes is working on a program to transfer files between OS/8 DECtapes and OS/12 LINCtapes (presumably via the TC-12F option on the PDP-12). It will work something like PIP or SPIP. This has been a pet project of almost everyone who has occasion to use both OS/8 and OS/12. So far no one actually has gotten it done (including myself) so I hope Jim can find the time to do it.

BUGS AND PATCHES

Dave Kristol called about a fix to his 8BAL macro PS8IO that is included on the 8BAL tape in DEJUS. This is the macro that 8BAL expands into a nice field independent set of routines to do character by character file input and output and file opening and closing. He says to insert "TAD OOPN1" just before the "JMS OSETUP" that is a couple of instructions after location OOPN1. When you look at the code it should be easy to understand what is going on with this.

A patch for OMSI PS/8 FOCAL follows that solves the input buffer overflow problem on PDP-8e machines the same way DEC has done it in the FOCAL-17 note in the Software Performance Summary. It was sent to OMSI by J. Delayre from Grenoble.

```
P177=106
EXIT=2646
C200=123
SIN=2662
MBREAK=2602
RECOVR=2736
INBUF=0034
INRET=2675
       / PS-8 FOCAL 1971
       / PATCH TO CURE BUFFER OVERFLOW (?41.35)
       / (FOR PDP-8/E ONLY)
       FIELD 1
       *2647
       KRS
       KCF .
       AND P177
       SNA
       JMP EXIT-1
       TAD C200
       DCA SIN
       TAD SIN
       TAD MBREAK
       SNA CLA
       JMP RECOVR
       TAD SIN
       DCA INBUF
       SKP
     - KCC
      · *2673
      JMP I .+1
       OPATCH
       *1343
OPATCH, DCA INBUF
                      / DISABLE FADC
    KCC
      TAD I XOUTL
       JMP I .+1 :
```

INRET

XOUTL, 2676