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(Please include reference to Newsletter number and page when inquiring about material published.

NEWSLETTER SUBMISSIONS

Submissions for the 12 Bit News are accepted at all times and are normally used in the next issue to go to press regardless of date of receipt.

Material submitted in machine readable form is particularly desirable because it can be edited and incorporated into the newsletter format more easily. Higher quality reproduction is also possible this way. Contact Bob Hassinger for further details on acceptable media and formats if you plan to make a submission in machine readable form.

WELCOME 12 BIT USERS: PDP-8, PDP-12, DECSTATION AND DECMATE TOO

This issue of the Newsletter is scheduled to be the first published under the new "One Big One" policy - that is all the Newsletters combined into one large, monthly issue rather than separate, less frequent issues for each Special Interest Group. As a result many who have lost track of the 12 Bit Newsletter over the past few years or who are new to the 12 Bit world will be getting this issue and wondering about it so here are a few words about what it is and why.

You will notice this 12 Bit Newsletter is number 50. It started in 1970 when I was asked to start something called the PS/8 Newsletter, which later graw into the PS/6 Special Interest Group (the first DECUS SIG). The name changed to OS/8 when DEC changed the name of PS/8 which by then had become the principle operating system for PDP-8 based systems. As time went on the Newsletter and SIG evolved to cover all 12 bit related topics, using the 12 Bit SIG name. It new covers all PDP-8, PDP-12, DECstation, and DECmate systems. Hardware as well as all the software systems including the OS/8 family, WPS, COS and the multiuser systems are included. Once in a long while we even get questions about the LINC-8 and we still do our best to help. If you use a 12 bit systems, this Newsletter is where you will find a chance to exchange information, ideas and help.

A dew years ago DECUS decided the level of activity of the 12 Bit SIG had tapered off to the point were it should be converted into a subordinate activity of the Office Automation SIG because that was the only product area where DEC was still actively marketing new 12 bit based products (DECmate WPS systems) and so that was where DECUS thought DEC support would come from. It has not worked out quite that way but here we are any way.

The new combined newsletter format has been a highly controversial issue within the DECUS leadership this Spring, with many bad feelings and problems caused by the way it was pushed on the rank and file workers with poor leadership. I guess after all that has happened in the past I can give this latest brainstorm a chance even though it would be easy to say that fifty issues and fifteen years is enough for anyone, but, if you want the 12 Bit News to continue you need to let me know and you need to pass along your thoughts, ideas, problems and solutions. A Newsletter without news is not very interesting and it is certainly hard to edit. -- Bob Hassinger

12 BIT COMMITTEE

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12 Bit Software Project Wally Kalinowski The Aerospace Corporation PO Box 92957 Los Angeles, CA 90009 (213) 648-6940

12 BIT SOFTWARE PROJECT UPDATE

Wally Kalinowski has been working for quite some time on a project to raise money to acquire and place in the public domain 12 bit software that is particularly valuable and worth insuring continued availability for. Recently I received material from Wally that indicates he is making progress on a number of items, particularly the software from Dewar Information Systems including PAGE8, ACID, ICE, HIBOL and VISTA. We have had very little chance to talk lately but I get the impression the main need now is for additional contributions to purchase the rights to these very useful items. If you are interested, Wally's address and phone number are listed at the beginning of this Newsletter.

Wally also sent information on the progress on CCLX, a new and much improved version of CCL. Wally says it is almost ready for submission to DECUS. I had hoped to be able to review this and report on it in this issue but no time.

OS/278 FOR PRE-DECMATE II SYSTEMS - UPDATE

Ever since OS/278 became available for the DECmate II through the DECUS Program Library, we have been trying to make it available for pre DECmate-II systems. Regular readers of this Newsletter know of the many problems with this. Recently Rudi Stange sent me an 8 inch floppy set with OS/278 on it. There is still a problem however. Because of space problems, Rudi made one of the disks an RXO2 double density floppy. He can not test it on his DECmate II because you can only boot from RX50s on it and I can not test it because I only have single density floppys. I think the best thing would be to rebuild the kit as an all RXO1 package that all 8 inch floppy systems could work with. The only resource I currently have for that would be through the DECUS office and that option has been tied up in red tape for many months.

Don't lose hope, I am still working on it. I think it will be worth the wait.

UPDATE ON LIBRARY SUBMISSIONS FROM JIM VAN ZEE

In the last Newsletter issue there was an article about new and updated material Jim van Zee had recently submitted to the DECUS Program Library. I recently received a package from Jim containing new media and a note about problems he had with his submission of DIRECT V7C. The new submission is on it's way to the Library and hopefully will be available soon. Others may find what Jim ran into interesting or helpful.

Jim's original submission had included copies on DECtape (real DECtape, not TU58), LINCtape, paper-tape and RX01 (single density) floppy disk along with a full listing done on a good letter quality printer. DECUS returned everything except the floppy disk saying that DECUS no longer supplied DEC-, LINC-, or paper-tape! Well, this is almost true. The Library stopped accepting paper tape submissions some time ago and I think we have now passed the cutoff date for ordering existing material on paper tape. They stopped supporting LINC tape quite some time back because of lack of interest. I am not sure I knew DECtape was no longer supported at the time of Jim's submission but I think it too has been dropped by now for lack of orders and the cost of continuing to maintain the hardware to reproduce it.

In fact, this Spring the DECUS Library decided to get rid of it's PDP-8 system completely. In the future they plan to do all reproduction on a VAX. It should be possible to handle floppy disks this way but not much else from the 12 bit world. They will retain the ability to reproduce RX50 (5 1/4 inch) floppies too of course.

Needless to say these changes in the Library have come slowly and over much objection from people like me but when you are a small minority compared to the vast numbers in the VAX, PDP-11, PC and 36 bit worlds there is just so much you can do. Economics rules in the end and you find yourself outvoted many times over by people who may never even have heard of a 12 bit system and certainly have no feeling for the systems or the needs of their user base. Self interest and politics are very strong, even among the user leadership of DECUS. I think we can take comfort however in the fact that many of those other systems are starting to get old too and before long a lot more people are going to start understanding our problems much better.

The DECUS Library later returned Jim's floppy too because they had trouble getting a proper directory listing from it (that issue will go away when they move PDP-8 reproduction to the VAX where they will not be able to do directories). Jim checked into the problem and found his disk was fine. Eventually he concluded DECUS was using the "kludged up" version of DIRECT mentioned last time. If they had been using the standard OS/8 version of DIRECT or Jim's V7B from the Library or the V7C version off the new submission they would not have had trouble.

The new submission also contains an improved version of HELP. It will handle abbreviated topic names, that is HELP DIR rather than HELP DIRECT. This is nice because now the help can match with the abbreviations CCL allows when you issue the commands. The new version is three blocks shorter than the standard DEC version. Another very handy feature is that it looks for the help file on the device called HELP: first, then it looks on DSKO: (good for MULTI-8 users) then finally on SYS:. This is very nice for saving scarce system disk space, makes it less painful to have extensive help files and it allows swapping help files with a simple ASsign command.

HELP - OS/8 V3D FOLLOWUP

In the last Newsletter issue, Dr. Anthony L. Marchese wrote looking for help on how to get an upgrade from OS/8 V3C to OS/8 V3D which is the current (and last) release of OS/8. This is the release that fixed the dates so they would continue to work after 1977. It started shipping early in 1978.

Dr. Marchese had been having a lot of trouble trying to find a way to get a V3D update for the V3C system that was with the computer that had recently been transferred to him. He could not find anyone at DEC who could help him even though DEC still considers this a product and so public domain distribution outside DEC's marketing channels is still prohibited.

Since anyone who wants to use an OS/8 system needs OS/8 V3D to fix the date problem that had been built into all previous releases, this is still a real problem for people who want to upgrade a system to an OS/8 configuration or who, like Dr. Marchese, come into possession of a system that had not been kept up to date in the past.

In response to this problem I got a call this Spring from Bob Kaplow at DEC. Bob is an "old PDP-8 person" and he offered help on this sort of thing. He says the OS/8 V3D Combined Kit Update order number is QJ-024-H* (*=media code) and the price is \$740. I have since checked the listings on DEC's "Electronic Store" and found this kit listed under QF-024-H* (that is QF rather

than QJ) so check it both ways if you are looking for it. Note too, this is an update kit for someone who has a license for OS/8 already. The full price to buy the kit new is about four times as much. Note though that DEC may have a lot of trouble trying to figure out at this late date if you had a V3C or earlier licenses. Their records do not seem to be very good that far back.

The combined kit brings together the various parts of the system that had originally been sold as separate pieces - BASIC, BATCH, FORTRAN IV and so on. It is what almost everyone would want if they were ordering OS/8 today. I did find I had a problem with the kit when I got it because mine came on DECtape and there were only TD8E type boot blocks, none for my TC08 as there had been in past releases. That is a very obscure case at this point though and I was able to get around it so others should be able to also.

Bob's phone number is 312-394-6141.

DECHATE

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RAINBOH TO DECMATE AND BACK USING POLYCOM By Alex Garbera

There may be occasions when you want to send a document from a DECmate to a Rainbow, or from a Rainbow to the DEDmate using PolyCOM communications package, but this is not necessary for sending and receiving text files. Since MPS word processing has a character transmission pack-age built into it, these transfers are easy. Here is just one example of how it works. To begin with, both the DEDmate and the Rainbow must have the same communication parameters; that is, have the same Baud rate, data bits, stop bits, and parity. For exam-ple: ples

parity databits No 9 stopbit

1200 Baud (can be any other rate from 300 to 9600 depending on the modem or the distance of the cable.)

These parameters can be set up in the Systems Option (SO,CC) menus of the DECmate and under the communications menu of PolyCOM.

DECmate to Rainbow

To send a text document from a DECmate to a Rainbow, the procedure is as follows:

1. Create a document such as this: ______START CONTROL_____

EOL CR LF

Note the number of the document and file it. This document will send a carriage return and a line feed at the end of every line.

 Specify this as a control document by going into the system op-tions menu (SO) and type "CD" with a space and the name or number that you just created.

3. On the Rainbow side, make sure that the "Communications" menu matches the DECmate parameters, and the "Console" menu is in ANSI mode with "crlf" as the new line mode. In the "Host" attributes menu, the EDL Sync must be set to None, and CR Action as "crcr" (no spaces).

4. With these settings in place, the user can go into terminal mode and presses "Select" "r" to receive a file and give it a file name.

5. Go into the "CX" menu of the DECmate and specify "DH" to send a document to the host. This can be any document that have previous-ly created.

Remember that you are sending a document through the communications port, and not to the printer. This method will cause the loss of special features such as bolding, superscripts, special rulers with word-wrap tabs, etc. It's great for centered text and blocks of information.

Rainbow to DECmate

To send a document from a Rainbow to the DECmate:

a constant

1. The DECmate CX menu can be set to "HD" host to document. Give the document a name and press return. 2. go into the PolyCDM terminal mode and "Select" "S" to send a file and specify the name.

Sending text files is that easy. It may take a little coor-dination between the two users, but it's nice to know that DECmates and Rainbows can talk and share information. To transfer more complicated files, such as CP/M programs and non-text files, the DECmate will need a CP/M or XPU board and the

same PolyCOM software using the XFR and HST functions.

DECHATE II HPS Version 2.0 Fix by Cheryl Johnson

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One feature of MPS Version 2.0 that everyone has found annoy-ing is the problem with editing a wide document. Instead of auto-matically going into the wider ruler with compressed characters, it stays at 80 columns and you shift between 'regions' by advancing past the 80th character. Most, if not all, of the time, it is more convenient to view all of the text at one time. It is a real bother to have to change something in a menu to do that every-time. So I have designed a <u>user-defined key</u> (UDK) to automate the sequence of strokes necessary to get to the wider ruler. To define the UDK, from the Main Menu, type DK, press the space bar, type a number between 1 and 9 (which will be the number you use to activate the UDK). Press return, then type in the following key strokes:

Gold M SH Space Hide (Return) (Return)

Press Gold Halt (the Halt key is just above the Tab key) to end definition of the UDK.

To use your UDK, edit the document you want to view in the mode. Press Gold and then the number you defined above. The stored sequence of keystrokes will be executed. When you file the document, the screen will automatically return to narrow rule. The UDK will remain stored on your system disk until you redefine the number.

(Cheryl Johnson, of the Grinnell College Office of Computer Ser-vices, is the DECUS PC SIG's DECmate Working Group Chairman.)

DECMATE NOTES FROM DECUS NEW ORLEANS by Cheryl Johnson

--TypeEasy was announced, and is expected to be available in June or July. It is targeted for DECMate III users with LQP03's, but will work on the DECMate II with other DEC printers. TypeEasy gives the DECmate capabilities similar to those on a typewriter. For instance, it can be set so that the printer prints letter by letter, just as a typewriter does, or to print line by line, for used in processing forms.

--The DECmate does support the LNO3, but it does not support special functions, such as font loading.

Minutes of the DECmate Working Group Meeting:

Members were introduced. The following items were discussed:

--The DECmate wishlist

--Technical Documentation for OS278 (part number)

--Larger <u>Personal Dictionary</u> with XPU board or replacement of words in the main dictionary

Identification of differences between CP/M and MS-DOS between the DECmate the Rainbow

--Identify specific software that will work on the DECmate

--Identify specific software that will work on the Rainbow

--Identify specific software which works on both Rainbow and the DECmate

--Foreign printer ability (DEC response: "thinking about it")

--VT102 emulation for the DECmate (DEC response: "priority for future versions of WPS")

--inability of the screen width wide feature to reset itself

--possible sessions in Anaheim to be sponsored by the PC SIG

DECmate Technical Q and A DECmate as a PC DECmate Office Workstation Script Processor 0

DECMATE QUESTIONS AND ANSHERS

From Perspective:

Q. How do I load CP/M on the DECmate hard disk with Master Menu?

- A. Boot the CP/M INSTALL disk (CP/M 2.2, Version 2.0 INSTL BIN RX50) in Drive A and do the following:
 - In response to the prompt for installing CP/M on the hard disk, choose H and press "DO". 1.
 - 2. In response to the prompt for creating a new CP/M volume, choose C and press "DO".
 - When prompted for a volume name, enter the name and press "DO". 3.
 - When prompted for a size, enter a size, keeping in mind that some CP/M files consist of 200K. 4.
 - After the system copies the CP/M utility programs, press "SET-UP" and "REMOVE".
- 6. Remove the INSTALL disk.
- 7. Press "DO" to boot the hard disk.
- At the Master Menu, press "NEXT SCREEN". 8.
- 9. In response to the prompt to create a TAG, choose MM and press
- 10. Position the cursor on End of List and press "INSERT HERE".
- Put in a three-letter TAG.
- 12. Hit the down-arrow key for the next item. Type in LEGEND.

- Q. While list processing with HPS-8, I receive an error message indicating I have too many characters in a record. How can I correct this problem?
- A. The maximum number of characters in a record is 2,049. If your ne maximum number or characters in a record is 2,049. If your record does not exceed 2,049 characters and you receive this message, you probably omitted a closing diamond ((>) to end a record. If a record does have too many characters, you can use the following method to shorten the record by shortening the field names. Use the old list, create a spec document arguing "process record", and create the following form document:

((new name)(old name) <(new name>(old name>

Print to a document and use the resulting document as your new list. For example:

(old record)

(employee name) (employee address)
(employee salary) (years with company)

(new form)

((n)(employee name) ((a)(employee address)
((s)(employee salary) <{y><years with company>

(new record)

 \mathbf{O}

<n> (a) (\$)

(v)

- Q. Sometimes while using Multiplan, when I try to copy a formula, the wrong value is copied instead of new calculations being made as a result of copyng the formula. What could be wrong?
- A. Check your options command and check to see if recalc is off. Also make sure that the cells which will receive the new calculations are blank. Press the shift key followed by the to recalculate values based on the formula
- Q. I tried to convert a Multiplan file created under CP/M 80 to a WPS file and thought I followed the directions in the CP/M <u>User's Guide</u> under WFSCONVERT. However, when I went to edit my new document under WPS, there were only garbage characters on the screen. Why?
- A. You probably did not run PRINT FILE from your Multiplan spread-sheet first to create an ASCII file or you did not use the correct name of the new ASCII file created. When you use PRINT FILE, name the ASCII file differently from the name which under the second s which you gave the spreadsheet.
- Q. Can I format a cell under Multiplan using the dollar sign (\$) without the two decimal places?
- A. The two decimal places are a default in the software and cannot be modified.

- How can I print a CP/M file on the printer from the CP/M opera-0. ting level?
- A. Use the PIP command: PIP LST:=(filename) (LST is the name assigned to the physical device for the printer.)

DECMATE WISH LIST

If you have items you want to include on the wish list, send them either to the editor of the newsletter, or the DEDmate Working Group Chairman, Cheryl Johnson.

1. Global search and replace: the ability to do more than one search and replace string at a time.

2. Text wrap: text should automatically wrap when editing so that the user doesn't have to advance through it.

3. Additional paste buffers: the ability to save and rearrange multiple segments of text at the same time.

4. Spelling error detection: the ability to check spelling of text easily and accurately without using CP/M (to be included on DECmate word processing software, possibly as an optional feature), or rearranging document in any way. The current DECspell is very slow and doesn't seem to be very reliable.

5. Simple math logic: the ability to have five-function math (addition, subtraction, multiplication, division and percentages) on DECmate word processing software, possibly as noptional fea-ture). Would like the ability to check columns of numbers and perform simple math operations with a minimal number of keystrokes. The current math software seems very complicated to usé.

6. UDKs: the ability to actually do the UDK as the user is set-ting it up, not just displaying the typed keystrokes.

UDKs: the ability to edit existing UDKs which have already been filed.

ENTER key: would like it moved closer to the normal typing 8. keyboard.

Print specific pages: the ability to print any specified page when reset pages are used; ie., print section II, page 8.

10. Graphics: the ability to easily draw vertical and horizontal lines around text that will print out to form boxes and charts, to be an inclusion in DEDmate word processing software.

Background transmission: the ability to continue to use the system while transferring documents from the VAX, converting docu-ments, using list processing and other foreground functions.

12. Working with a "COPY" document on disk, not the actual copy, so that if the user messes up, the orignal can be recalled to use again.

13. Multiple wraps: the ability to have multiple wraps so the user doesn't have to keep changing rulers; possibly by using the GOLD TAB to indicate the specific tab wrap that you desire at that time.

14. Sub- and superscripts displayed: show sub- and superscripts on the screen by actually moving the character up and down.

15. Printer stop: the printer should have the ability to detect when the ribbon breaks (not just runs out), and stop.

16. Printer detects paper out: the ability for the printer to detect when no paper is in the printer so it will not print on the platen.

 Hard disk volumes: the ability to choose the size of segments on the hard disk, instead of having to break it up into 7 small volumes.

18. Software "q" problem: the ability to use GOLD SEARCH PAGE or GOLD PAGE BOTTOM without worry that a hidden "q" will be put in the document to cause various problems.

19. Screen scrolling: have screen scroll a single character at a time in wide documents, rather than jump.

20. Local software support: provide local support to help with special set-ups and problems. Sometimes you need someone to actually be there and share ideas with, not just a voice over the phone.

21. Hide screen setting to stay with the document: With version 2.0, giving users the ability to change the size of the screen. 2.0 does not allow the wide screen to be stored with the document. The chosen setting should stay with the editor menu (narrow or wide), to be stored with the document.

22. Cutting text of any size: to have the ability to cut any amount of text, possibly by making saving and cutting separate functions. That way, since the system wouldn't be saving it, the size of the text to be cut would not matter.

23. Replacement charactes on draft printer: the ability to print replacement characters on a draft printer going through communications, particularly double underscores.

24. Advance forward: to be able to advance directly to the end of a word, sentence, or segment of text.

25. Document view while printing: the ability to view or edit a document while other pages of it are being printed.

26. Multiple simultaneous print queue: the ability to queue several non-consecutive pages of a document to the printer at the same time: ie., queue pages 2, 6, and 8, or at least to be able to send page 8 of a document to the printer while page 2 of the same document is printing, so you can then work on something else.

27. Underlines recognized as part of a word: the ability for the DECmate to recognize underlines before text that are entered using select and the "UMDERLINE" key to be recognized as part of that word, i.e., <u>846</u>. This would make the system back up to the beginning of the underlines when "BACKUP WORD" is pressed at the end of the word/number or delete the word/number with underlines consecutively when "DEL WORD" is pressed.

28. Larger capacity in DEC DX account: the ability to put more than 200 documents in a DEC DX account, up to 999 or so, if limited by three digits.

29. Recreate index: the ability to automatically recreate the index of a DEC dx account if it becomes corrupted.

30. Caps lock sound recognition: a different key sound when the LOCK key is on to signal the operator the lock key is on.

31. Replacement character view: the ability to see numbers/characters which have replacement characters, such as double underscores, onscreen.

32. Gold GRT DOCHT PAGE: use GOLD GET DOCHT to get only certain specified pages of a document.

33. Page markers: page markers not to be removed when rulers or text are changed.

34. Delete page key: the ability to delete an entire page at a time, allowing the operator to verify deletion of the page.

35. Double underscore with decimal tabs: the ability to use double underscoring with decimal tabs without having the text move over.

36. Simple column logic: the ability to set up multiple columns on a page by putting more than one set of margins on a page, also, allowing the use of the sheetfeeder during multi-column printing, since the page would not be going up and down.

37. Column centering: the ability to easily center headings over a column of text.

38. A place to get detailed information addressing software for wierd applications, such as PD8 real time data acc replacement.

39. VT131 and VT2XX support.

40. A way to split out DX and compite it into OS278 (DECUS version).

41. Address comm port under COS 310.

42. Ability to use print screen with FMS forms that have line drawings.

43. Full compatibility with the LA210 and LN03.

44. Elimination of hard returns when transferring a $\mathsf{WPS+}$ document from the VAX to the DECmate.

45. Capability to put escape sequences in a document, e.g., print a line at 3 characters per inch, then print the next one at 10 characters per inch, etc.

46. Support printer as a local printer, such as "VT100 printer port escape sequence."

47. Gold Q for Quit on DECmate and Rainbow WPS+.

48. The new 'search forward or backward' is great, but the user can't change direction after it is chosen. Go back to the old way.

49. Ability to use non-DEC printers.

50. The ability to call up the index in alphabetical order by document name.

51. The ability to use the system while doing list processing.

52. The ability to add information on to the end of a paste buffer before pasting, ie., cut a paragraph, then on the next page, add that to another paragraph, cut again, and past both paragraphs elsewhere, in one operation.