

**PDP-8**  
**Digital Software News**

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The **PDP-8 Digital Software News** complements Reviews for **CAPS-8, COS-310, OS/8 V3C, OS/8 Version 3D and OS/78 V1**. It publishes new and revised software product descriptions, programming notes, software problems and solutions, and documentation corrections. Much of the material is developed from answers to customer Software Performance Reports (SPRs) significant to the general audience.

The following products are supported in the **PDP-8 Digital Software News**:

<b>CAPS-8 V1</b>	<b>OS/8 V3C, V3D</b>	<b>OS/8 INDUSTRIAL BASIC V3</b>
<b>COS-310 V2(6.05)</b>	<b>OS/8 EXTENSION KIT V3C, V3D</b>	<b>OS/8 MACREL/LINKER V1A</b>
<b>COS-310/2780 RDCP V6.05</b>	<b>OS/8 FORTRAN IV V3C, V3D</b>	<b>OS/78 V1</b>
<b>DECnet-8 V1</b>	<b>OS/8 FORTRAN IV PLOTTER V3C</b>	<b>RTS-8 V2, V2B</b>

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**TYPESET-11**

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**USER LETTER**  
**Jan Fair, SPR Administration**

Customers (and others) have brought to our attention the need for additional information regarding SPR service, particularly as it involves SPR Administration. The following represents our attempt to fulfill this need. Your comments and suggestions are most welcome.

**HOW TO MAKE THE BEST USE OF SPR FORM**

**What WE Can Do for YOU**

1. Blank SPR forms are available upon request in the desired quantities through SPR Administration (P.O.Box F) and your local office/SPR Center.
2. Copies of the SPR acknowledgment and answer are sent to the appropriate DIGITAL Office/SPR Center for their information.
3. SPRs marked *SOFTWARE ERROR* or *INQUIRY* will have a response for supported Category A and B products. These SPRs should refer to suspected deficiencies in the software.
4. SPRs marked *FYI* or *SUGGESTION* are forwarded to the pertinent software group for information purposes, and are responded to at their discretion.
5. SPRs marked *DOCUMENTATION ERROR* should report those problems dealing with software manuals or newsletters, and will be forwarded to the pertinent software group.

**What YOU Can Do For US**

1. Customer Name and Address and Problem Statement should always be typed or printed clearly.
2. SPRs should not be used for problems concerning software policy, software distribution, or hardware. Your local office should be contacted in these cases.
3. It would be most helpful to all concerned, if problems with patches are reported as soon as possible.
4. For security SPRs, it is imperative that the *DO NOT PUBLISH* box be marked.
5. It would be helpful if tapes submitted with SPRs are labeled (track and density), and have a directory attached.
6. Should you ever receive an unacceptable SPR response, please contact us or the appropriate SPR Center so that the response may be readdressed.

POSSIBLE SYSTEM CRASH OR LOOP WHEN EXITING COS-310/2780 RDCP (DC)

Possible System Crash or Loop when exiting COS-310/2780 RDCP.

Apply the following patch to correct the problem. The New RDCP Version number will be 6.05G.

```
R PATCH
FILE NAME: RDCP
BLOCK:3
LOCATION: 154
OLD VALUE: 7600
NEW VALUE: 1543
LOCATION: END
RELATIVE CHECKSUM: 1743
NEW BLOCK PATCHED OK
BLOCK: 24
LOCATION: 143
OLD VALUE: 2201
NEW VALUE: 2074
LOCATION: 144
OLD VALUE: 5307
NEW VALUE: 5343
LOCATION: 145
OLD VALUE: 5306
NEW VALUE: 2257
LOCATION: 146
OLD VALUE: 0375
NEW VALUE: 5343
LOCATION: 147
OLD VALUE: 7650
NEW VALUE: 5750
LOCATION: 150
OLD VALUE: 5362
NEW VALUE: 7600
LOCATION: END
RELATIVE CHECKSUM: 2164
NEW BLOCK PATCHED OK:
BLOCK: 30
LOCATION: 231
OLD VALUE: 4700
NEW VALUE: 5000
LOCATION: END
RELATIVE CHECKSUM: 0100
NEW BLOCK PATCHED OK
BLOCK: END
03 BLOCK(S) PATCHED IN THIS FILE
FILE NAME: /X
EXIT
```

ERROR IN DECNET MANUAL. (SR)

The following corrections should be made in the RTS/8 DECNET/8 User's Guide [AA-5184A-TA].

Page 2-29: First statement of last paragraph should read:  
Unlike a normal RTS/8 derail subroutine, the DECNET/8 AST does save and restore the state of the accumulator, the link, and the data field.

Page 2-30: The first item in the table (CCBRSN) is not explained. The reason codes are very important and should be listed in the manual. These codes can be found in the file CCB.PA.

The reason codes are as follows:

Octal	Symbolic	Explanation
0	INTRSN	Received interrupt message from partner
1	CONRSN	Connect Init received
2	DISRSN	Partner issued a disconnect
3	DABRSN	Partner task aborted (shouldn't happen under rts/8)
10	ERRRSN	NSP error caused line to break (shouldn't happen if software works)
11	LDNRSN	Physical link went down

Page 5-3: The location of the 9 words described at the bottom of the page is not specified. The first word of these 9 should be loaded into location CCB+12.

Page 5-10: Fourth line of paragraph 5.5 is wrong. Node numbers range from 2 to 177 (not 1 to 177).

Page 5-12: In table 5-6, the length of the LOCAL ISR is wrong. It is 2 pages long, not 3.

OS/8 V3C  
MONITOR  
CCL.PA VG

Seg 20.3.1 0  
1 of 1

ERROR IN CCL (version G) SOURCE PAPERTAPE (SR)

There is an extraneous "PAGE" directive in the paper tape source of CCL (version G) distributed with OS/8 V3C. Paper tape 5 of 9 entitled CCL.PA (DEC-S8-OSYSB-B-PA5) ends with the following two lines:

PAGE  
PAUSE

The PAGE directive should not be there. (This occurs immediately following subroutine DEASSIGN on listing page 81.)

If this PAGE directive is removed, CCL should assemble properly.



OS/8 V3D  
NOTES & DOCUMENTATION

Seq 21.1.2 N  
1 of 1

SOFTWARE REVIEW CORRECTION (SPR 8-2484 JB)

OS/8 V3D Software Review AA-08771-BA

The patch issued concerning EQUIVALENCE statements (Seq 2 M; 1 of 1; pg. 24), should reference the F4 compiler not FRTS. It should read as follows:

```
.GET SYS:F4
.ODT
2067/1471 1367
2070/1071 5363
2163/xxxx 2071
2164/xxxx 7000
2165/xxxx 1071
2166/xxxx 5271
2167/xxxx 2
1130/6401 6042
^C
.SAVE SYS:F4.SV

.GET SYS:PASS3.SV
.ODT
712/6401 6402
^C
.SAVE SYS:PASS3.SV
```

This patch upgrades F4.SV to V4B.

OS/8 V3D  
MONITOR  
CCL VLF

Seq 21.3.1 0  
1 of 1

DEFAULT EXTENTIONS TO TECO (SR)

Users who edit MACREL source files a lot might wish to make the following patch to CCL to cause the MAKE and TECO commands to use .MA as their default extension. (The current default is a .PA)

```
.GET SYS:CCL  
.ODT  
15402/0320 0315  
^C  
.SAVE SYS:CCL
```

In general, the default extension assumed by MAKE and TECO resides in the two words beginning at location 15402 in CCL.SV.

OS/8 V3D  
UTILITIES  
CREF V5A

Seq 21.15.1 M  
1 of 1

BUG WITH FIXTAB (SR)

Problem: CREF dies on source files containing a FIXTAB directive.

Diagnosis: Patch V4B incorrectly installed into CREF V5A.

Solution: Apply the following patch:

```
.GET SYS:CREF  
.ODT  
6063/2022/5270  
6070/2025 2022;5314  
6114/xxxx 1363;1025;3025;3425;2025;5252  
2576/0301 0302  
^C  
.SAVE SYS:CREF
```

This patch upgrades CREF to V5B.

OS/8 V3D  
UTILITIES  
SET V1B

Seq 21.26.1 M  
1 of 1

USING SET WITH 2-PAGE SYSTEM HANDLERS (SR)

PROBLEM: The commands SET TTY SCOPE and SET SYS INIT ruin systems which use a 2-page system handler.

DIAGNOSIS: SET modifies block 0 of the system device to handle these commands. However, in the case of two-page system handlers, the correct image is stored in block 66 instead.

SOLUTION: Install the following patch which creates once-only code in SET V1B to check for a 2-page system handler and modify itself accordingly.

```
.GET SYS:SET
.ODT
0507/6102 6103
0240/5632 5357
0357/xxxx 1765;1366;7650;4767;3362;5632;7612;7775;4400
4401/0000 1207;3460;2202;2210;5201;5600;0066;7774
0060/xxxx 0713;0725;3444;3453
^C
.SAVE SYS:SET
```

This patch upgrades SET to V1C.

OS/8 V3D  
UTILITIES  
SET V1C

Seq 21.26.2 M  
1 of 1

SCOPE RUBOUTS FAIL IN SET (TL)

**PROBLEM:** If SET is run directly ( .R SET) and TTY SCOPE had previously been SET, then rubouts to a SET command fail to properly erase characters from the screen.

**DIAGNOSIS:** The scope rubout code is failing to send the initial backspace character to the display terminal.

**SOLUTION:** Install the following patch to SET V1C:

```
.GET SYS:SET
.ODT
0507/6103 6104
2337/5274 5370
2370/xxxx 1056;7650;5274;5271
^C
.SAVE SYS:SET
```

This patch upgrades SET to V1D.

## HOW TO WRITE TWO-PAGE SYSTEM HANDLERS FOR OS/8 (D.S.)

This tutorial explains how to write two-page system handlers for OS/8 for those rare occasions when a device handler cannot be written to fit in one page.

The remainder of this discussion will use the term "handler" to refer only to two-page system handlers.

Such a handler has code and/or variables in the last page of fields 0 and 2. The last page of field 1, it will be recalled, contains resident monitor tables.

All DIGITAL-supplied handlers have a one-letter version, starting with "A". The version letter, truncated to 6 bits, must be stored in (or immediately preceding) each entry point. One entry point must be called "SYS"; any other names or entry points are termed "coresident with SYS". All unused locations within the handler portions of each page must contain zeros.

Your handler must contain the following items:

1. \*0 (This tells BUILD.SV that a header block is starting.)
2. -n (Where n is the number of device names = entry points.)
3. DEVICE xxxx (Where xxxx is the "group name" of your handler; xxxx should also be the file name: xxxx.BN)
4. DEVICE SYS (Device name)
5. 4xxp (Where xx is a "device type" of your handler, used by PIP to ZERO the device directory, and p is the number of platters or other indication of device size. If the device has only one size, p=0.)
6. SYS&177+6000 (Entry point address offset)
7. 0

OS/8 V3D  
HANDLERS

Seq 21.40.1 N  
2 of 3

8. xxxx (Where xxxx is the octal number of blocks = size of your device)
9. Repeat items 3 through 8 for each additional entry point = device name, changing item 4 for each name, and changing item 6 for each entry point (use 5000 instead of 6000).
10. -n (Where n is the number of words in your secondary bootstrap routine.)
11. RELOC x (Where x is the first location of your secondary bootstrap when it is in memory.)
12. Your secondary bootstrap code (see below). NOTE: This code must not contain origin statements.
13. RELOC
14. \*200 (This tells BUILD to start the first page of the handler.)
15. RELOC 7600  
ZBLOCK 7 (Contains monitor code)
16. SYS, VERSION (Entry point for SYS must be at 7607.)
17. The first page of your handler may occupy locations 7607 through 7743. Locations 7744-7777 are used by the monitor.
18. RELOC  
\*400 (This tells BUILD to start the second page of the handler.)
19. RELOC 7600
20. The second page of your handler may occupy locations 7600 through 7773. Locations 7774-7777 must be reserved for use by BATCH.

These 20 items, in order, comprise the handler code.

Bootstrapping (starting up the monitor) involves the following steps:

1. The primary bootstrap code (loaded from console switches, Read-Only Memory, BOOT.SV, or other method) reads at least the first half of OS/8 Block 0 (one page) from your device into memory, at any desired locations. This page will contain your secondary bootstrap code.

2. The secondary bootstrap reads the second half of Block 0 into the last page of field 0.
3. The secondary bootstrap reads the first half of Block 66 (octal) into the last page of field 1.
4. The secondary bootstrap reads the second half of Block 66 (octal) into the last page of field 2.
5. The secondary bootstrap jumps to locations 07605.

Your handler must obey the following restrictions:

1. Location 7612 of the first page must contain 3. This is a flag to OS/8 that this is a two-page system handler.
2. Location 7642 of the first page must contain either CIF 20, CDF 20, or CDF 20. This is used by FRTS when relocating the second page to or from the highest memory field. This is a temporary restriction.
3. If you have any "once-only" code, it must appear only in the first page, since BUILD restores only the first page when building the monitor.
4. There must be no instructions of the form 62nX, where  $n > 0$  and X is anything, in the second page or from 7607 through 7634 in the first page. This refers to CIF 20, CDF 20, and CIF 20 instructions.
5. All desired instructions of the form 62nX in the first page must appear only in locations 7635-7743.
6. No constants (non-instructions) of the form 62nX are allowed in locations 7635-7743 of the first page.
7. Restrictions 4,5, and 6 are to be ignored in the case of instructions and constants which are used once only. (Once-only code is not executed on successive calls to the handler once it is resident.)



OS/8 V3D  
EXT KIT  
BASIC

Seq 31.1.1 N  
1 of 1

GOOD RANDOM NUMBERS FOR OS/8 BASIC (DS)

The following BASIC program may be used to generate really good random numbers. It should be noted that the RND function gives only 12 bits of precision and has a short period.

```
10 REM ** INITIALIZE RANDOM ARRAY **
20 DIM R8(55)
30 FOR R8=1 TO 55
40 R8(R8)=RND(0)+.00244141*RND(0)
50 NEXT R8
100 REM ** DEMONSTRATION PROGRAM **
110 GOSUB 9000 / REM R=RANDOM VALUE
120 PRINT R;
130 GOTO 100
9000 REM ** SUBROUTINE: R=RANDOM VALUE **
9010 R8=R8-1
9020 IF R8>0 THEN 9040
9030 R8=55
9040 R9=R8-31
9050 IF R9>0 THEN 9070
9060 R9=R9+55
9070 R8(R8)=R8(R8)-R8(R9)
9080 IF R8(R8)>=0 THEN 9100
9090 R8(R8)=R8(R8)+1
9100 R=R8(R8)
9110 RETURN
9999 END
```

OS/8 V3D  
EXT KIT  
TECO V5.03

Seq 31.20.8 M  
1 of 2

CTRL/U SOMETIMES FAILS AFTER \* (SR)

PROBLEMS:

- (I) If a command line contains the character '\*', then a subsequent use of the immediate mode command, ^U, will reprint the entire command string as well as erasing the current line. (This will not hurt you - but it is annoying.)
- (II) If on a scope terminal, a command line contains the character '\*', then rubbing out a tab, line feed, vertical tab, or form feed will cause the entire command string to be reprinted.
- (III) The bell-space and bell-star (^G<space> and ^G\* ) commands were not documented because they did not work properly.

The immediate mode command, ^G<space> causes the current line of the command string to be retyped.

The immediate mode command, ^G\* causes the entire command string to be retyped.

Note that the ^G (bell) character cannot be entered in up-arrow mode.

- (IV) The ^G\* command incorrectly prints out the contents of all your Q-Registers.
- (V) When in scope mode, if you rub-out back to the first line of the command string, and if there is text in some Q-register, the '\*' representing TECO's last prompt vanishes from the screen.
- (VI) The ^G<space> command works improperly on 12K machines when there are more than 2900 characters stored away in Q-registers.

ANALYSIS:

Poltergeists in TECO.

DISPOSITION:

The following patch fixes all these bugs in TECO. It also makes the ^G<space> and ^G\* commands work properly. This patch upgrades TECO to version 5.04.

OS/8 V3D  
EXT KIT

Seq 31.20.8 M  
2 of 2

```
.GETSYS:TECO
.ODT
1341/1435 1464;1464
1431/5235 5264
1435/4265 7510;5313;1072;5304
1500/7240 1072;7040;1050;5235
1463/4265 5266;1175;3331
1524/1175 6032;5775;1175;5253
4570/1454 1526
0255/5772 5004
0004/xxxx 1577;4540;5407;1464
4573/0767 0770
^C
.SAVE SYS:TECO
```

OS/8 V3D  
EXT KIT  
TECO V5.04

Seq 31.20.10 M  
1 of 1

MULTIPLYING BY 0 IN TECO (SR)

PROBLEM:           TECO computes the product  $n*0$  incorrectly.  
DIAGNOSIS:         Complementing a 13-bit 0 sets the link.  
                  TECO fails to account for this.  
SOLUTION:          The following patch to TECO V5.04 fixes this bug by  
                  zeroing the link before starting the multiply.

```
.GET SYS:TECO  
.ODT  
1311/7010 7110  
4573/0770 0771  
^C  
.SAVE SYS:TECO
```

This patch upgrades TECO to V5.05

NOTE:             Just as in V3C TECO (Version 4), multiplication by  
                  negative numbers is not supported and unpredictable  
                  results will occur if a multiplicand is less than  
                  0.

OS/8 V3D  
EXT KIT  
TECO V5.05

Seq 31.20.11 M  
1 of 1

Q-REGISTERS DON'T WORK IN 8K (SR)

PROBLEM:           TECO doesn't work properly on 8K machines.

DIAGNOSIS:         The code which changes the handling of Q-register  
                    storage in the 8K case is faulty.

SOLUTION:           Apply the following patch:

```
.GET SYS:TECO
.ODT
5264/7240 1360
5461/7346 7344
6250/7346 7344
4573/0771 0772
5227/1760 1642
5242/6201 7777
5360/7777 7776
5331/5266 5264
^C
.SAVE SYS:TECO
```

This patch upgrades TECO to Version 5.06.

OS/8 V3D  
EXT KIT  
TECO V5.06

Seq 31.20.12 M  
1 of 1

CAN'T SKIP OVER A "W" (SR)

PROBLEM: If the letter W (as in PW) occurs inside a piece of TECO code which is being skipped (say because it is part of an unsatisfied conditional), TECO V5.06 will blow up.

DIAGNOSIS: The appropriate skip table does not end with the required negative number. This table flows into the skip table for skipping the second letter of an E command (R, W, B, or G). The corresponding entries in the dispatch table are all harmless (positive) except for 'W' which causes SORT to branch to 'death'.

SOLUTION: The following patch inserts a -1 indicator to properly terminate the table:

```
.GET SYS:TECO
.ODT
5762/0122 7777
5771/xxxx 122,127,102,107,7777
5710/3362 3371;24
4573/0772 773
^C
.SAVE SYS:TECO
```

This patch upgrades TECO to V5.07.

OS/8 V3D  
EXT KIT  
FUTIL V7A

Seq 31.21.1 M  
1 of 1

FUTIL PATCH (DS)

The patch given below upgrades FUTIL V7A to V7B. It corrects the following problems:

1. Typing CTRL/U crashes FUTIL if the current partiall-typed line contains a semicolon.
2. Overlay mapping (in SAVE mode) is not done correctly.

PATCH:

```
.GET SYS FUTIL
.ODT
310/3523/3536
333/1523 1536
3342/3357 3362
3343/1357 1362
3351/1361 1357
3354/2357 2362
12520/0100 0200
^C
.SAVE SYS FUTIL
```

## USING FUTIL TO DEBUG OVERLAYS (DS)

FUTIL is an excellent debugging tool for use with MACREL/LINK overlays. This tutorial describes FUTIL, version 7B.

MACREL/LINK supports an overlay scheme in which memory is partitioned into 1-8 "levels", level number 0 being the resident portion of your program, and levels numbered 1-7 being overlay areas. Each overlay area is uniquely defined by its level number as well as by its "starting address" (its lowest address). Each overlay level in memory may be occupied by any of up to 16 overlay, numbered 0-17 octal. Thus an overlay must be specified by two numbers: its level (or starting address) and its overlay number for that level. See the diagram on page 10-9 of the MACREL/LINK USER'S MANUAL (Order No. AA-5664A-TA) for further clarification.

To debug a .SV file which contains overlays, follow this procedure:

1. Run FUTIL.
2. Issue a FILE command to loop up your file.
3. Issue a SET MODE SAVE command to enable automatic addressing mapping. Don't forget this step!
4. (Optional) Issue a SHOW CCB command if you wish to inspect the CCB contents. If the file contains overlays, the first overlay information line will describe the memory-resident portion ("MAIN") of your program, since it is "level 0". Each additional line describes each level of your program.
5. Open desired locations just as in ODT, except that you specify the overlay number explicitly (FUTIL deduces the level number from the address you specify). For example the command "e.2405" opens locations 02405 of overlay number 3 for the level which includes location 02405.
6. Don't forget the final WRITE command to make sure your changes get written out.

For further informaton, refer to pages 79 and 80 of the OS/8 HANDBOOK UPDATE (Order No. DEC-S8-OSHBA-A-DN4).



OS/8 MACREL/LINKER V1A  
LINK V1C

Seq 40.2.1 M  
1 of 2

PATCH V1D TO LINK (ES)

THIS PATCH FIXES THE FOLLOWING BUGS:

1. THE WRONG 2 WORD PAIR IN THE MEMORY CONTROL BLOCK FOR A FULL 4K MEMORY IMAGE.
2. ACCESSING THE WRONG GST SYMBOL WHEN USING LOADER CODE 11 (POP AND STORE INTO GST).
3. LINK MEMORY ALLOCATION BUG WHEN DEALING WITH RESTRICTED PROGRAM SECTIONS.

THIS PATCH UPGRADES LINK TO V1D

```
.R EPIC
*LINK.SV</1$
R,1(CR)
O,111(CR)
0340/ 440(CR)
W(CR)
```

```
R,3(CR)
O,352(CR)
5356/ 5364(CR)
O,355(CR)
1443/ 6211(LF)
5747/ 5363(CR)
O,363(CR)
0000/ 1443(LF)
0000/ 5747(CR)
W(CR)
```

```
R,24(CR)
O,222(CR)
2441/ 7000(CR)
W(CR)
```

```
R,25(CR)
O,305(CR)
3162/ 3055(CR)
O,336(CR)
1562/ 1455(LF)
3562/ 3455(CR)
W(CR)
```

OS/8 MACREL/LINKER V1A  
LINK V1C

Seq 40.2.1 M  
2 of 2

R,46 (CR)  
O,254 (CR)  
7001/ 5271 (CR)  
O,271 (CR)  
0000/ 7450 (LF)  
0000/ 1370 (LF)  
0000/ 7001 (LF)  
0000/ 5255 (CR)  
W(CR)

(CONTROL-C)

[END OF PATCH]

\$=ESCAPE OR ALT-MODE

(CR)=CARRIAGE RETURN

(LF)=LINE FEED

(CONTROL-C)=HOLD DOWN "CTRL", DEPRESS "C"

OS/8 MACREL/LINKER V1A  
LINK V1D

Seq 40.2.2 M  
1 of 3

PATCH V1E TO LINK (ES)

THIS PATCH FIXES THE FOLLOWING BUGS:

1. ERROR IN COMPUTING JOB STATUS WORD FOR MEMORY IMAGE
2. BAD TECHNIQUE IN COMBINING MULTIPLE NULL PAGES
3. BAD FIELD NUMBER IN OVERLAY DATA TABLE FOR OVRDRV
4. BAD OVERLAY/LEVEL LENGTH IN OVERLAY DATA TABLE FOR OVRDRV

THIS PATCH UPGRADES LINK TO V1E

```

.R EPIC
*LINK.SV</1$
R,1(CR)
O,111(CR)
0440/ 0540(CR)
W(CR)

```

```

R,24(CR)
O,31(CR)
1227/ 1775(LF)
3776/ 7450(LF)
1775/ 5257(LF)
7450/ 7041(LF)
5257/ 3244(LF)
7041/ 7344(LF)
3244/ 3137(LF)
7344/ 1227(LF)
3137/ 3776(LF)
O,56(CR)
5242/ 5240(CR)
O,314(CR)
1035/ 5715(LF)
3035/ 5065(CR)
W(CR)

```

```

R,25(CR)
O,57(CR)
7450/ 1043(LF)
5265/ 7450(LF)
1043/ 5271(CR)
O,64(CR)
7100/ 5246(CR)

```

OS/8 MACREL/LINKER VIA  
LINK VLD

Seq 40.2.2 M  
2 of 3

O,70(CR)  
7630/ 400(LF)  
5305/ 7100(LF)  
1341/ 1043(LF)  
1371/ 1270(LF)  
7041/ 3043(LF)  
3043/ 7430(LF)  
7100/ 5337(CR)  
O,100(CR)  
7041/ 7161(CR)  
O,102(CR)  
7620/ 7670(CR)  
O,111(CR)  
5332/ 5246(CR)  
O,117(CR)  
7100/ 1341(LF)  
1341/ 7041(LF)  
1044/ 7100(LF)  
7620/ 5273(CR)  
W(CR)

R,31(CR)  
O,2(CR)  
7041/ 376(LF)  
1063/ 7041(LF)  
0376/ 1063(CR)  
O,65(CR)  
0000/ 3275(LF)  
0000/ 1275(LF)  
0000/ 7040(LF)  
0000/ 35(LF)  
0000/ 1275(LF)  
0000/ 3035(LF)  
0000/ 5674(LF)  
0000/ 2716(CR)  
W(CR)

R,42(CR)  
O,50(CR)  
1042/ 1542(LF)  
7041/ 7001(LF)  
1542/ 5360(LF)  
7710/ 7700(CR)  
O,160(CR)  
0000/ 7110(LF)  
0000/ 7041(LF)  
0000/ 1042(LF)  
0000/ 5253(CR)  
W(CR)

OS/8 MACREL/LINKER V1A  
LINK V1D

Seq 40.2.2 M  
3 of 3

R,46(CR)  
O,111(CR)  
7112/ 7000(LF)  
7010/ 7000(CR)  
O,125(CR)  
7001/ 7000(LF)  
7110/ 7000(CR)  
O,264(CR)  
1041/ 1042(CR)  
O,273(CR)  
7001/ 3042(LF)  
5255/ 1042(LF)  
0000/ 7001(LF)  
0000/ 5255(CR)  
W(CR)

R,50(CR)  
O,214(CR)  
1411/ 5243(CR)  
O,243(CR)  
0000/ 1411(LF)  
0000/ 7001(LF)  
0000/ 7110(LF)  
0000/ 5215(CR)

W(CR)

?(Question mark, if output by EPIC here, may be ignored)  
(CONTROL-C)

[END OF PATCH]

\$=ESCAPE OR ALT-MODE

(CR)=CARRIAGE RETURN

(LF)=LINE FEED

(CONTROL-C)=HOLD DOWN "CTRL", DEPRESS "C"

OS/8 MACREL/LINKER V1A  
LINK V1E

Seq 40.2.3 M  
1 of 2

LINK CORRECTIONS (ES)

THIS PATCH FIXES THE FOLLOWING BUGS:

1. LOSS OF DATA IN THE .SV IMAGE
2. BUG IN COMPUTATION OF RSECTS ON THE SAME PAGE AS ANOTHER PROGRAM SECTION
3. BAD MEMORY CONTROL BLOCKS WHEN USING /M OPTION
4. NEW SYSTEM ERROR (2760) FOR BAD SYMBOL TYPE

THIS PATCH UPGRADES LINK TO V1F

.R EPIC  
\*LINK.SV</1\$  
R,1(CR)  
O,111(CR)  
0540/ 640(CR)  
W(CR)

R,24(CR)  
O,357(CR)  
0000/4514(LF)  
0000/5357(CR)  
W(CR)

R,25(CR)  
O,147(CR)  
1101/2757(LF)  
1101/2757(LF)  
W(CR)

R,26(CR)  
O,74(CR)  
5235/5250(CR)  
O,301(CR)  
7041/7161(CR)  
O,303(CR)  
7740/7660(CR)  
W(CR)

OS/8 MACREL/LINKER V1A  
LINK V1E

Seq 40.2.3 M  
2 of 2

R,46 (CR)  
O,35 (CR)  
0374/7200 (CR)  
W(CR)

R,47 (CR)  
O,326 (CR)  
7041/5342 (LF)  
7100/7141 (CR)  
O,340 (CR)  
1411/5741 (LF)  
7041/5524 (LF)  
7100/7440 (LF)  
1410/5327 (LF)  
7640/5765 (LF)  
7420/7670 (CR)  
O,365 (CR)  
0000/5537 (DR)  
O,367 (CR)  
1401/1201 (CR)  
W(CR)

R,50 (CR)  
O,124 (CR)  
0000/7320 (LF)  
0000/1411 (LF)  
0000/7440 (LF)  
0000/7041 (LF)  
0000/3013 (LF)  
0000/1410 (LF)  
0000/7450 (LF)  
0000/7020 (LF)  
0000/1013 (LF)  
0000/5736 (LF)  
0000/5345 (LF)  
0000/2010 (LF)  
0000/2010 (LF)  
0000/5742 (LF)  
0000/5355 (LF)  
W(CR)

?(Question mark, if output by EPIC here, may be ignored)

(CONTROL^C)

[END OF PATCH]

\$=ESCAPE OR ALT-MODE

(CR)=CARRIAGE RETURN

(LF)=LINE FEED

(CONTROL^C)=HOLD DOWN "CTRL", DEPRESS "C"

OS/8 MACREL/LINKER V1A  
MACREL V1C

Seq 40.5.1 M  
1 of 1

PATCH V1D TO MACREL (SR)

IN MACREL V1C, SECT LENGTHS ARE WRONG FOR SECTS WHICH CONTAIN RELOC  
STATEMENTS AND CURRENT PAGE LITERALS. THE FOLLOWING PATCH CORRECTS  
THIS PROBLEM AND UPGRADES MACREL TO V1D.

```
.GET SYS:MACREL
.ODT
305/3303 5325
320/4772 5772
372/5546 5547
322/3036 1044;1106;5721
356/1044 4321
363/1044 4321
5455/0000 303
5546/0000 364
5552/5746 5356
5555/1044 5762;1655;3036;1655;5746;363
325/0000 1106;3303;5306
13136/0303 304
^C
.SAVE SYS:MACREL
```



OS/8 MACREL/LINKER V1A  
MACREL V1D

Seq 40.5.2 M  
1 of 2

PATCH V1E TO MACREL (SR)

THIS PATCH FIXES THE FOLLOWING BUGS:

1. THE 'DEVICE' DIRECTIVE SOMETIMES PRODUCES RELOCATABLE TEXT. THE TEXT PRODUCED SHOULD ALWAYS BE ABSOLUTE.
2. AN UNKNOWN KEYWORD AFTER A .LIST DIRECTIVE FAILS TO PRODUCE THE ERROR MESSAGE: "UNKNOWN LIST CONDITION".
3. > AT THE END OF A DECLARATION CAUSES AN ERRONEOUS ERROR MESSAGE TO BE PRINTED.
4. CERTAIN DIRECTIVES DO NOT PRINT IN THE LISTING WHEN THEY CONTAIN A SYNTACTIC ERROR.
5. DATES LATER THAN DECEMBER 31, 1977 DO NOT PRINT CORRECTLY IN THE HEADER LINE.
6. THE THIRD CHARACTER IN OS/8 TEXT PACKING IS COMING OUT AS THE FIRST CHARACTER OF THE TRIPLE.
7. EVERY THIRD CHARACTER IN OS/8 TEXT PACKING IS IGNORING THE 7BIT/8BIT ENABLE CONDITION.

THIS PATCH UPGRADES MACREL TO V1E.

```
.GET SYS:MACOVR
.ODT
11531/1033 5345
11545/xxxx 3030;1033;5332
12541/xxxx 1026;1347;7650;5763;1026;5740;7702
12637/1026 4763
12763/xxxx 2140
10763/1302 1333
10553/7775 7774
10751/7006 0173;4767
10767/5762 2156
10557/1137 7440;1764;7006;7006;5756;2332
^C
.SAVE SYS:MACOVR
```

OS/8 MACREL/LINKER V1A  
MACREL V1D

Seq 40.5.2 M  
2 of 2

```
.GETSYS:MACREL
.ODT
13136/0304 305
0242/5566 5301
7220/0177 4621;2112
2113/xxxx
0177;3725;1726;7012;7012;0327;1725;3725;2312;5712;7342;7777;30
^C
.SAVE SYS:MACREL

.GET SYS:MACERR
.ODT
21335/5544 5542
^C
.SAVE SYS:MACERR
```

OS/8 MACREL/LINKER V1A  
OVRDRV.MA V1A

Seq 40.6.1 M  
1 of 2

PATCH V1B TO OVRDRV.MA (ES)

THE FOLLOWING IS A SOURCE COMPARE OF THE DISTRIBUTED OVERLAY-DRIVER (OVRDRV.MA) VERSES THE CHANGES NECESSARY TO MAKE IT COMPATIBLE WITH THE BUG FIXES CORRECTED IN PATCH 1E OF LINK.SV. THE CHANGES TO OVRDRV.MA ONLY HAVE TO BE MADE IF YOU ARE USING THE LINK OVERLAY STRUCTURE.

SRCCOM V4A

```

1) /OVRDRV - OVERLAY DRIVER
2) /OVRDRV - OVERLAY DRIVER
1)001 /COPYRIGHT (C) 1977 BY DIGITAL EQUIPMENT CORPORATION
1) /
****
2)001 /COPYRIGHT (C) 1977,1978 BY DIGITAL EQUIPMENT CORPORATION
2) /
*****
1)002 /V1A
1) /THIS SECT IS TWO LOCATIONS AND CONTAINS THE TRANSFER VECTOR
   TO SWAPER
****
2)002 /V1B
2) /THIS SECT IS TWO LOCATIONS AND CONTAINS THE TRANSFER VECTOR
   TO SWAPER
*****
1)002 SWAP, 6101 /VERSION NUMBER
1) DCA AC /SAVE CALLING AC
****
2)002 SWAP, 6102 /VERSION NUMBER
2) DCA AC /SAVE CALLING AC
*****
1)003 ISZ TEMP /TIMES (THE NUMBER OF THE
   OVERLAY)
1) JMP .-2
1) LOAD2, TAD I RELBLK /PLUS (RELATIVE BLOCK OF
   LEVEL)
****
2)003 JMP I .+1 /TIMES (THE NUMBER OF THE
   OVERLAY)
2) PATCH
2) LOAD2, TAD I RELBLK /PLUS (RELATIVE BLOCK OF
   LEVEL)
*****
1)003 RTR /POSITION
1)004 TAD I LENGTH /GET LENGTH
1) RTR
1) RTR
1) RTR
1) DCA REDCNT /FORM CONTROL WORD
****

```

OS/8 MACREL/LINKER V1A  
OVRDRV.MA V1A

Seq 40.6.1 M  
2 of 2

```
2)003          RAR                      /POSITION
2)004          TAD I   LENGTH           /GET LENGTH
2)             RTL
2)             RTL
2)             RTL
2)             DCA          REDCNT       /FORM CONTROL WORD
*****
1)006          /THIS AREA CONTAINS OVERLAY DATA FOR MAIN AND THE 7 LEVELS
****
2)006          /PATCH TO FIX BLOCK POSITION CALCULATION
2)          PATCH,  IAC                      /CONVERT PAGES TO BLOCKS
2)             CLL RAR
2)             DCA          PTEMP
2)             TAD          PTEMP           /MULTIPLY BLOCK LENGTH
2)             ISZ I   PPNT                /BY OVERLAY NUMBER
2)             JMP          .-2
2)             JMP I     .+1
2)             LOAD2
2)          PPNT,  TEMP
2)          PTEMP,  0
2)          /THIS AREA CONTAINS OVERLAY DATA FOR MAIN AND THE 7 LEVELS
*****
```

8 Digital Software News, April/May 1978

OS/78 V1  
HANDLERS  
LPQ.BN VA

Seq 70.49.1 M  
1 of 1

Supersedes article dated Mar. 78

LPQ01 HANDLER FAILS TO RECOGNIZE TABS (SPR 8-2441 JM)

The LPQ.BN handler as distributed does not recognize the TABS character. Any listing or text that uses TABS will not be printed correctly.

The method to patch this problem is through the BUILD procedure. This will fix this problem and maintain the correct version in the saved copy of BUILD.

This is done as follows:

```
.SET      LQP:LOC 324 = 7640  
.SET      LQP:VERSION 8
```

This patch corrects this problem and upgrades the LPQ.BN to VB.

This article replaces and supercedes the same number published last month.

**8 DIGITAL SOFTWARE NEWS  
CUMULATIVE INDEX  
APRIL/MAY 1978**

This is a complete listing of all articles for current products supported in the 8 Digital Software News. Missing sequence numbers may pertain to problems unique to other versions of the same product.

**IMPORTANT!**

The following numerical system has been grouped in logical order.

Retracted articles are indicated: RETRACTION.

Flags are currently being installed for all articles. The flags and definitions are as follows.

M = Mandatory patch. These are critical patches which each customer is required to install.

O = Optional patch. These articles are applicable only if the reported problems have occurred at the customer site or if they are unique to his operation.

R = Restriction. These problems are not patchable in released software. Restrictions are reviewed and corrected when possible as part of the normal release cycle.

N = NOTE. This information may be helpful to the user.

<u>Component</u>	<u>Sequence</u>	<u>Mon/Yr</u>
<b>CAPS-8</b>		
CAPS-8 UTIL CANNOT READ 13-BIT CHECKSUMS	01	Jun 76
BASIC IS OVERLY SENSITIVE TO INTERRUPTS	02	Dec 76
<b>COS-310 V2 (6.05)</b>		
DIRECTORY CHARACTERISTICS	01	Oct 76
LAYOUT OF A DATA FILE ON A LOGICAL UNIT	02	Dec 76
COMP.SV FILE PLACEMENT ON SYSTEM DISKS	03	Dec 76
DECTAPE HANDLER INSTALLATION	04	Dec 76
SYSGEN PRINTER OPTIONS	05	Dec 76
ERROR IN LAST RECORD OF A DATA FILE	06	Feb 77
LA35 WITH HARDWARE TOP OF FORM TIMING PROBLEM	07	Mar 77
<b>MONITOR</b>		
CHAIN OPERATION RESTRICTION	08	Apr 77
<b>COS-310/2780 RDCP V6.05</b>		
LOST RECORDS, INCORRECT RECORDS, CRASHES	01 M	Feb 78
INCORRECT SEGMENT LENGTHS	02 M	Feb 78
SOURCE FILE	03 M	Feb 78
SOURCE/DATA FILE OVERFLOW	04 M	Feb 78
TEMPORARY FILE BLOCK	05 M	Feb 78
FATAL ERROR MESSAGES	06 M	Feb 78
POSSIBLE SYSTEM CRASH OR LOOP WHEN EXITING	07 M	May 78
<b>DECNET/8 V1</b>		
<b>NSP</b>		
DISCONNECT BUG	01 M	Feb 78
<b>MACREL/LINKER V1</b>		
<b>NOTES/PROGRAMMING HINTS</b>		
HARDWARE RESTRICTIONS	01 N	Dec 77

<u>Component</u>	<u>Sequence</u>	<u>Mon/Yr</u>
<b>OS/8 V3C</b>		
<b>BUILD</b>		
CORRECTION FOR OS/8 HANDBOOK	06	Jul 76
<b>CAMP</b>		
CAMP FAILS TO UNLOAD MULTIPLE RK8E DRIVERS	01	Jan 77
<b>CCL</b>		
DEFAULT EXTENSIONS FOR TECO	03	Sep 76
ADDING A NEW CCL COMMAND	06	May 76
<b>CREP</b>		
FIXING PROBLEMS: /M, FIXMRI, DOLLAR SIGN PUG, AND JSW	10	Sep 76
FIXTAB	11	Sep 76
<b>DIRECT</b>		
DIRECT /B DOES NOT PRINT A SPACE	04	Sep 76
<b>DOCUMENTATION</b>		
<b>OS/8 HANDBOOK</b>		
DOCUMENTATION CHANGE	11	May 76
CHANGE TO CASSETTE BUILD PROCEDURE	12	Oct 76
FAULTY DESCRIPTION FOR ERROR PERFORMANCE	13	Nov 76
<b>FORTRAN II</b>		
FORTRAN II LIBRARY	10	Jan 77
<b>HANDLERS</b>		
MAGNETIC TAPE	07a	Sep 76
OPTIONAL PATCH TO NULL HANDLER	10	Sep 76
RK8 SYSTEM HANDLER DOES NOT ALWAYS RETRY ERRORS	13	May 76
<b>MONITOR</b>		
JSW BIT II AFFECTS SAVE	01 N	Feb 78
PROPER SETTING OF JSW BEFORE CHAINING	02 N	Feb 78
<b>PAPER TAPE KIT</b>		
OS/8 V3C PAPER TAPE KIT	01	Jan 77
<b>TDINIT</b>		
PROBLEM WITH TD8E SYSTEMS	01	Aug 76
<b>UTILITIES</b>		
HOW TO COPY LARGE FILES WITH PIP10	02	Apr 77
UNDEFINED PASS1 ARGUMENTS IN ZBLOCK	12	Apr 77
<b>OS/8 EXTENSION KIT V3C</b>		
<b>BASIC</b>		
USE OF DUMMY ARGUMENTS IN BASIC	05	Sep 76
RETRACTION	20	XXX XX
BRTS GETS LOST	24	Jun 76
RESTRICTION ON EXTENDED RANGE FOR-NEXT LOOPS	25	Sep 76
BLOAD NOT RESTORING LOCATION 7600 PROPERLY	26	Jul 76
BAD LOCATION IN BASIC.FF	28	Sep 76
BRTS DOES REPETITIVE MULTIPLIES	31	Nov 76
ERROR IN BASIC EDITOR	32	Nov 76
RETRACTION	33	XXX XX
BASIC HALTS THE SYSTEM	35	Mar 77
LIMITATION OF RND	36	Oct 77
<b>BATCH</b>		
CANNOT MOVE BATCH INPUT FILE	05	Mar 76
RESTARTING BATCH	06	Sep 76
"MANUAL HELP MESSAGE" PRINTED ERRONEOUSLY	08	Jul 76
RUNNING BATCH IN 32K	09	Sep 76
<b>GENIOX (formerly indexed under OS/8 V3C)</b>		
GENIOX QUESTIONS	01	Nov 76

<u>Component</u>	<u>Sequence</u>	<u>Mon/Yr</u>
<b>MARK SENSE BATCH</b>		
MARK SENSE BATCH FORTRAN II READS THROUGH DOLLAR SIGNS	02	Jun 76
<b>TECO</b>		
CONDITIONS INSIDE ITERATIONS	04	Jul 76
<b>OS/8 FORTRAN IV V3C</b>		
POSSIBLE ERRONEOUS STATEMENT NUMBER IF ERROR TRACEBACK	02	Sep 76
USE OF EAE MODE A UNDER FRTS	15	Sep 76
PASSING ARGUMENTS	16	Sep 76
ERROR IN SINH FUNCTION	23	Sep 76
RETRACTION	25	XXX XX
FPP-8A	27	Aug 76
VERSION AND OUTPUT FILE ERRORS	28	Oct 76
RUNTIME SYSTEM PROBLEM	29	Oct 76
Q OPTION	31	Nov 76
FORMATTED INPUT RECORDS LONGER THAN 132 CHARACTERS	33	Nov 76
FRTS DOES NOT FLAG FIELD OVERFLOW PROPERLY ON OUTPUT	34	Feb 77
PLOT, ADC, AND REALTM MODULES	35	Jan 77
RUNNING FORTRAN IV UNDER BATCH IN 32K	36	Apr 77
RETRACTION	37	XXX XX
FORTRAN IV V3C CRASHES	38	Jun 77
B AND D FORMAT CONVERSION	39	Aug 77
EQUIVALENCE STATEMENT IN FORTRAN IV V3C	40	Oct 77
QUESTIONS CONCERNING ARRAY SIZES	41	Oct 77
COMPILER GENERATES WRONG LENGTH	42	Oct 77
<b>OS/8 FORTRAN IV PLOTTER V3C</b>		
FORTRAN IV PLOTTER ROUTINE, PSCALE, HANGS IN ENDLESS LOOP	01	Apr 77
PLOTTER OUTPUT PROBLEM	02	Aug 77
<b>OS/8 INDUSTRIAL BASIC V3</b>		
INCORRECT SOFTWARE CORE SIZE	03	May 76
RESTRICTION ON EXTENDED RANGE FOR-NEXT LOOPS (See BASIC, Seq 25)	05	Sep 76
.SV FILES CANNOT BE CHAINED	06	Oct 76
NONEXISTENT CHARACTERS ERRONEOUSLY MATCHED	07	Mar 76
INDUSTRIAL BASIC EDITOR GARBAGE	08	Jun 77
<b>OS/78 V1</b>		
<b>NOTES/PROGRAMMING HINTS</b>		
FUNCTIONALITY	01 N	Dec 77
RESTARTING OS/78	02 N	Jan 78
<b>UTILITIES</b>		
CANNOT MOVE BATCH INPUT FILE	01 R	Sep 77
SUGGESTED PATCH	02 O	Jan 78
<b>OS/78 BASIC V1</b>		
RESTRICTION ON EXTENDED PANGE FOR-NEXT LOOPS	01 R	Sep 77
<b>OS/78 FORTRAN IV V1</b>		
<b>FRTS.SV V5</b>		
FORMATTED INPUT RECORDS LONGER THAN 132 CHARACTERS	01 O	Sep 77
<b>F4.SV V4</b>		
PASSING ARGUMENTS	01 R	Sep 77
THE "EQUIVALENCE" STATEMENT	02 M	Sep 77
COMPILER VERSION NUMBER	03 N	Sep 77
QUESTIONS CONCERNING ARRAY SIZES	04	Oct 77
COMPILER GENERATES WRONG LENGTH	05 O	Oct 77



<u>Component</u>	<u>Sequence</u>	<u>Mon/Yr</u>
<b>RTS/8 V2/V2B</b>		
<b>EXECUTIVE</b>		
CANNOT FREE PARTITION WITH WAITM	01	Mar 76
RTS-EXEC NON RESIDENT TASK PROBLEM	02	Jun 77
<b>MCR</b>		
SOME TIME-OF-DAY REQUESTS RUN 24 HOURS LATE	01	Mar 76
DATE PROBLEM	02 M	Feb 78
<b>OS/8 SUPPORT TASK</b>		
SOURCE CHANGE FOR EXECUTING BATCH	01	Feb 76
USING OS/I SUPPORT	02	Mar 76
COMMUNICATING BETWEEN OS/8 AND RTS-8	03	Mar 76
EMPTY KEYBOARD INPUT RING BUFFER	04 M	Feb 78
<b>PWRP</b>		
RTS/8 POWER FAIL PROBLEM ON PDP8-A	01	Jun 77
<b>TTY TASK</b>		
DEFICIENCY IN TTY TASK	01	Mar 76
<b>UDCICS</b>		
UDCICS ERROR	01	Feb 78

#### OS/8 V3D

\*Articles dated October 1977 appeared in OS/8 V3D Software Review, October 1977.

<b>DOCUMENTATION</b>		
FAULTY DESCRIPTION FOR ERROR PERFORMANCE	01 N*	Oct 77
<b>HANDLER</b>		
CTRL/Z AND NULL	01 O*	Oct 77
<b>NOTES/PROGRAMMING HINTS</b>		
DATE ALGORITHM	01 N	Dec 77
<b>UTILITIES</b>		
ADDING A NEW CCL COMMAND	01 N*	Oct 77
DEFAULT EXTENSIONS FOR TECO	02 O*	Oct 77
HOW TO COPY LARGE FILES	03 O*	Oct 77

#### OS/8 EXTENSION KIT V3D

<b>BASIC</b>		
RESTRICTION ON EXTENDED RANGE FOR-NEXT LOOPS	01 R	Oct 77
<b>BATCH</b>		
CANNOT MOVE BATCH INPUT FILE	01 R	Oct 77
RESTARTING BATCH	02 N	Oct 77
RUNNING BATCH IN 32K	03 O	Oct 77
<b>MSBAT</b>		
MARK SENSE BATCH FORTRAN II READS THROUGH DOLLAR SIGNS	01 O	Oct 77
<b>GENIOX</b>		
GENIOX QUESTIONS	01 N	Oct 77

<u>Component</u>	<u>Sequence</u>	<u>Mon/Yr</u>
OS/8 FORTRAN IV V3D		
<b>FORLIB.RL V5A</b>		
PLOT, ADC, AND REALTM MODULES	01 N	Oct 77
<b>F4.SV V4A</b>		
PASSING ARGUMENTS	01 R	Oct 77
EQUIVALENCE STATEMENT	02 M	Oct 77
COMPILER VERSION NUMBERS	03 N	Oct 77
COMPILER GENERATES WRONG LENGTH	04 O	Oct 77
QUESTIONS CONCERNING AFRAY SIZES	05	Oct 77
<b>FRTS V5A</b>		
USE OF EAE MODE A	01 R	Oct 77
FORMATTED INPUT RECORDS LONGER THAN 132 CHARACTERS	02 O	Oct 77
RUNNING FORTRAN IV UNDER BATCH IN 32K	03 O	Oct 77
FPP-8A	04 O	Oct 77

**IMPORTANT!**

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<u>Component</u>	<u>Sequence</u>	<u>Mon/Yr</u>
<b>DECNET-8 V1</b>		
<b>DOCUMENTATION</b> ERROR IN DECNET MANUAL	10.0.1 N	May 78
<b>OS/8 V3C</b>		
<b>MONITOR</b> <b>CCL</b> ERROR IN CCL (VERSION G) SOURCE PAPERTAPE	20.3.1 O	May 78
<b>OS/8 V3D</b>		
<b>MONITOR</b> <b>NOTES &amp; DOCUMENTATION</b> USING THE PDP-8/A PARALLEL PORT FOR A LINEPRINTER SOFTWARE REVIEW CORRECTION	21.1.1 N 21.1.2 N	Mar 78 May 78
<b>CCL</b> DEFAULT EXTENSIONS TO TECO	21.3.1 O	May 78
<b>UTILITIES</b> <b>CREP</b> BUG WITH FIXTAB	21.15.1 M	May 78
<b>EDIT</b> EDIT PROBLEM WITH NO FORMFEED AT END OF THE INPUT FILE	21.17.1 M	Mar 78
<b>MCPIP</b> DATE-78 PATCH FOR MCPIP	21.21.1 M	Mar 78
<b>SET</b> USING SET WITH 2-PAGE SYSTEM HANDLERS SCOPE RUBOUTS FAIL IN SET	21.26.1 M 21.26.2 M	May 78 May 78
<b>HANDLERS</b> <b>ASR33</b> HOW TO WRITE TWO-PAGE SYSTEM HANDLERS	21.40.1 N	May 78
<b>LPQ</b> LPQ01 HANDLER FAILS TO RECOGNIZE TABS	21.49.1 M	Mar 78
<b>OS/8 EXTENSION KIT V3C</b>		
<b>BASIC</b> <b>BRTS</b> BASIC FAILS TO OUTPUT 132 CHARACTERS TO LA-36	30.11.1 O	Mar 78

<u>Component</u>	<u>Sequence</u>	<u>Mon/Yr</u>
<b>OS/8 EXTENSION KIT V3D</b>		
<b>BASIC</b>		
<b>BASIC</b>		
GOOD RANDOM NUMBERS FOR OS/8 BASIC	31.1.1 N	May 78
<b>BRTS</b>		
IOTABLE OVERFLOW	31.11.1 M	Mar 78
BASIC PNT FUNCTION	31.11.2 M	Mar 78
<b>TECO</b>		
CHANGING THE DEFAULT EU VALUE	31.20.1 O	Mar 78
CHANGING THE DEFAULT EH VALUE	31.20.2 O	Mar 78
REMOVING YANK PROTECTION	31.20.3 O	Mar 78
SCOPE SUPPORT FOR VT05 USERS	31.20.4 O	Mar 78
PROBLEM WITH AY COMMAND	31.20.5 M	Mar 78
CONDITIONALS INSIDE ITERATIONS	31.20.6 M	Mar 78
ECHOING OF WARNING BELLS	31.20.7 M	Mar 78
CTRL/U SOMETIMES FAILS AFTER *	31.20.8 M	May 78
MULTIPLYING BY 0 IN TECO	31.20.10 M	May 78
Q-REGISTERS DON'T WORK IN 8K	31.20.11 M	MAY 78
CAN'T SKIP OVER A "w"	31.20.12 M	May 78
<b>FUTIL</b>		
FUTIL PATCH	31.21.1 M	May 78
<b>OS/8 V3D MACREL/LINKER V1A</b>		
USING FUTIL TO DEBUG OVERLAYS	40.0.1 N	May 78
<b>LINK</b>		
PATCH V1D TO LINK	40.2.1 M	May 78
PATCH V1E TO LINK	40.2.2 M	May 78
LINK CORRECTIONS	40.2.3 M	May 78
<b>MACREL</b>		
PATCH V1D TO MACREL	40.5.1 M	May 78
PATCH V1E TO MACREL	40.5.2 M	May 78
<b>OVRDRV</b>		
PATCH V1E TO OVRDRV.MA	40.6.1 M	May 78
<b>OS/8 FORTRAN IV V3C</b>		
<b>F4</b>		
FORTRAN COMPILER FAILS TO RECOGNIZE " AS AN ERROR	50.3.1 M	Mar 78
<b>OS/8 FORTRAN IV V3D</b>		
<b>F4</b>		
FORTRAN COMPILER FAILS TO RECOGNIZE " AS AN ERROR	51.3.1 M	Mar 78
<b>OS/78 V1</b>		
<b>HANDLERS</b>		
<b>LPQ</b>		
LPQ01 HANDLER FAILS TO RECOGNIZE TABS	70.49.1 M	May 78



## DECUS SPECIAL INTEREST GROUPS

A DECUS Special Interest Group (SIG) is an activity whereby members of the DIGITAL Equipment Computer Users Society who share common interests in a particular field, join together to promote the interchange of information. Specialization may be in application areas such as education or industry, specific software systems such as OS/8 and RSX-11, or a specific main-frame such as the DECsystem-10/20.

SIG members derive numerous benefits from communicating with others who share specialized interests and who may wish to share their experiences. SIG s sponsor business meetings, tutorials, and workshops at the various chapter symposia which fulfill the two-fold purpose of fostering communication among users and between users and DIGITAL. Channeled communication provides DIGITAL and the users with insight into the direction of future developments. SIG s provide direct feedback to DIGITAL's in-house activities and have thereby made substantial contributions to OS/8, RSX-11, RSTS and TOPS-10.

User submitted articles, minutes of local meetings, and letters comprise the major portion of the individual SIG newsletters. Suggestions, hints, bug fixes, program plans, or questions of a non-commercial nature are suitable material for SIG newsletters.

SIG members are encouraged to make presentations at the SIG sessions held during DECUS Symposia.

The semi-annual U.S. Symposia sessions are organized by special interest areas. Submissions received from the user community are reviewed by symposia committee members from the special interest groups for appropriate placement on the agenda.

Special Interest Group participation in the review of programs submitted to the DECUS Program Library provides an opportunity to improve the quality and utility of programs available to you and to fellow users.

DIGITAL standards are issued to DECUS members for review and on the theory and philosophy of the standards. DECUS is a voting member of ANSI X3. Users are encouraged to register their areas of expertise with DECUS and assist with reviewing standards. SIG s often play a role in this process.

Below is a list of U.S. based Special Interest Groups within DECUS.

If you would like information regarding membership in any of the Special Interest Groups, contact DECUS U.S. Chapter, 129 Parker Street, PK3-1/E55, Maynard, Massachusetts 01754 or one of the other DECUS Chapter offices in Kanata, Sidney or Geneva.

MCPU SIG - Multi-CPU Special Interest Group  
NETSIG - Networks Special Interest Group  
Biomed SIG - Biomedical Special Interest Group  
RSTS SIG - RSTS and RSTS/E Special Interest Group  
SIGIG - Special Interest Group on Interactive Graphics  
ESIG - Engineering Applications Special Interest Group  
SIG-18 - 18-Bit Users Special Interest Group  
12-Bit SIG - 12-Bit User Special Interest Group  
RSX-11/IAS SIG  
RT-11 SIG  
EDUSIG - Educational Users Special Interest Group  
DEBUG - Digital Equipment Business Users Group  
MUSIG - Mumps Special Interest Group  
PASCAL SIG  
DBMS SIG  
TECO SIG  
SIGIL - Special Interest Group on Implementation Languages  
LSI-11 SIG  
FOCAL SIG  
STANDARDS SIG



DIGITAL EQUIPMENT COMPUTER USERS SOCIETY

12-BIT Special Interest Group

The 12-Bit Special Interest Group is an informal group of users interested in 12-Bit software and related subjects. The principle activities of the group are a newsletter and panel-workshop sessions at the DECUS Symposium. The only requirement for membership in the 12-Bit SIG is an interest in its goals and activities.

The goals of the 12-Bit SIG are:

- 1. Provide an informal means for quick dissemination of information and ideas about software developments and related topics.
2. Encourage users to write and make available useful programs.
3. Act as a forum for the development and communication of needs and ideas for future developments.
4. Serve as a communication channel between DEC and the user community.
5. Coordinate Special Interest Group sessions at the DECUS Symposia with the DECUS meetings committee and assist the DECUS librarian with 12-Bit submissions.

User generated software that the 12-Bit SIG has been involved with includes:

- 1. Extended and improved versions of the monitor systems.
2. Extensions to system programs such as the compilers, assemblers and loaders.
3. Many special device handlers.
4. New compilers and other language processors.
5. Routines to support special requirements such as a laboratory environment.
6. Adaption of many existing programs to the 12-Bit environment.

Correspondence or submissions to the newsletter should be sent to:

12-Bit Special Interest Group
c/o DECUS Office
146 Main Street - PK3/E55
Maynard, Massachusetts 01754

If you wish to become a member of the 12-Bit SIG, please fill out the form below.

Are you a DECUS Member? \_\_\_\_\_ DECUS Membership Number \_\_\_\_\_

NAME \_\_\_\_\_

AFFILIATION \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP CODE \_\_\_\_\_

TELEPHONE NUMBER \_\_\_\_\_

## SOFTWARE PROBLEMS OR ENHANCEMENTS

Questions, problems, and enhancements to DIGITAL software should be reported on a Software Performance Report (SPR) form and mailed to the SPR Center at one of the following DIGITAL Offices: (SPR forms are available from the SPR Center).

AREAS COVERED	SPR CENTER	AREAS COVERED	SPR CENTER
United States, remainder of Far East, Middle East, Africa Latin America	Administrative Services Group, SWS P.O.Box F Maynard MA 01754	Italy	Digital Equipment SPA Viale Fulvio Testi 117 20092 Cinisillo Balsamo Italy
Canada	Digital Equipment Canada P.O.Box 11500 Kanata Canada K2H 8K8 Ontario	Japan	Digital Equipment Corp., INTL 3rd Floor Kowa Building 8-7 Sanban Cho Chiyoda Ku Tokyo 102 Japan
United Kingdom	Digital Equipment Corp., LTD Fountain House Butts Centre RG1 7QN Reading England	New Zealand	Digital Equipment Corp., LTD Challenge House 3 Wolfe Street P.O.Box 2471 Auckland New Zealand 10010
Australia-Melbourne	Digital Equipment Aust. Pty., LTD 60 Park Street South Melbourne Victoria Australia 3205	Belgium, Holland	Digital Equipment BV Kaap Horndreef 38 3563 AV Utrecht Netherlands
Australia-Sydney	Digital Equipment Aust. Pty., LTD 123 125 Willoughby Road P.O.Box 491 Crows Nest NSW Australia 2065	Denmark, Finland, Norway, Sweden	Digital Equipment Corp., AB Englundavaegen 73 TR 171 41 Solna Sweden
Brazil	Digital Equipment Comercio Ind Rua Batatais 429 Esq AL Campin 01423 Jardim Paulista Sao Paulo 0100 Brazil	Switzerland, Spain, Greece, Romania, Portugal, Bulgaria Yugoslavia	Digital Equipment Corp., SA 20 Quai Ernest Ansermet Boite Postale 23 CH 1211 Geneva Switzerland
Caribbean	De Latin America P.O.Box 11038 Fernando Juncos Sta. Santurce PR 00910	Austria, Poland Hungary, Rumania East Germany, West Germany, Russia, Czechoslovakia	Digital Equipment Corp., GMBH Wallsteinplatz 2 8000 Munchen 40 Germany 8000
France	Digital Equipment Corp., LTD. Centre Silic Cidex L225 18 Rue Saarinen 94533 Rungis France	Israel	DECSYS Computers, LTD 7 Habakuk Street Il-Tel Aviv 63505 Israel

DIGITAL EQUIPMENT CORPORATION, Corporate Headquarters: Maynard, Massachusetts 01754, Telephone: (617)897-5111—SALES AND SERVICE OFFICES: UNITED STATES—ALABAMA, Huntsville • ARIZONA, Phoenix and Tucson • CALIFORNIA, El Segundo, Los Angeles, Oakland, Ridgecrest, San Diego, San Francisco (Mountain View), Santa Ana, Santa Clara, Stanford, Sunnyvale and Woodland Hills • COLORADO, Englewood • CONNECTICUT, Fairfield and Meriden • DISTRICT OF COLUMBIA, Washington (Lanham, MD) • FLORIDA, Ft. Lauderdale and Orlando • GEORGIA, Atlanta • HAWAII, Honolulu • ILLINOIS, Chicago (Rolling Meadows) • INDIANA, Indianapolis • IOWA, Bettendorf • KENTUCKY, Louisville • LOUISIANA, New Orleans (Metairie) • MARYLAND, Odenton • MASSACHUSETTS, Marlborough, Waltham and Westfield • MICHIGAN, Detroit (Farmington Hills) • MINNESOTA, Minneapolis • MISSOURI, Kansas City (Independence) and St. Louis • NEW HAMPSHIRE, Manchester • NEW JERSEY, Cherry Hill, Fairfield, Metuchen and Princeton • NEW MEXICO, Albuquerque • NEW YORK, Albany, Buffalo (Cheektowaga), Long Island (Huntington Station), Manhattan, Rochester and Syracuse • NORTH CAROLINA, Durham/Chapel Hill • OHIO, Cleveland (Euclid), Columbus and Dayton • OKLAHOMA, Tulsa • OREGON, Eugene and Portland • PENNSYLVANIA, Allentown, Philadelphia (Bluebell) and Pittsburgh • SOUTH CAROLINA, Columbia • TENNESSEE, Knoxville and Nashville • TEXAS, Austin, Dallas and Houston • UTAH, Salt Lake City • VIRGINIA, Richmond • WASHINGTON, Bellevue • WISCONSIN, Milwaukee (Brookfield) • INTERNATIONAL—ARGENTINA, Buenos Aires • AUSTRALIA, Adelaide, Brisbane, Canberra, Melbourne, Perth and Sydney • AUSTRIA, Vienna • BELGIUM, Brussels • BOLIVIA, La Paz • BRAZIL, Rio de Janeiro and Sao Paulo • CANADA, Calgary, Edmonton, Halifax, London, Montreal, Ottawa, Toronto, Vancouver and Winnipeg • CHILE, Santiago • DENMARK, Copenhagen • FINLAND, Helsinki • FRANCE, Lyon, Grenoble and Paris • GERMAN FEDERAL REPUBLIC, Cologne, Frankfurt, Hamburg, Hannover, Munich, Nuremburg, Stuttgart and West Berlin • HONG KONG • INDIA, Bombay • INDONESIA, Djakarta • IRELAND, Dublin • ITALY, Milan, Rome and Turin • IRAN, Tehran • JAPAN, Osaka and Tokyo • MALAYSIA, Kuala Lumpur • MEXICO, Mexico City • NETHERLANDS, Utrecht • NEW ZEALAND, Auckland and Christchurch • NORWAY, Oslo • PUERTO RICO, Santurce • SINGAPORE • SPAIN, Madrid • SWEDEN, Gothenburg and Stockholm • SWITZERLAND, Geneva and Zurich • UNITED KINGDOM, Birmingham, Bristol, Epsom, Edinburgh, Leeds, Leicester, London, Manchester and Reading • VENEZUELA, Caracas •