RT-11

June 1982

AD-C740C-28

THE SOFTWARE DISPATCH

digital

RT-11 SOFTWARE DISPATCH

Published by
Corporate Administrative Systems Group, Software Services
Digital Equipment Corporation
P.O. Box F
Maynard, MA 01754

The RT-11 Software Dispatch complements the RT-11 Software Dispatch Review. New and revised Software Product Descriptions, programming notes, software problems and solutions, and documentation corrections are published here. Much of the material is developed from Software Performance Report (SPR) answers significant to the general audience and is printed here to supplement the maintenance notebook (established by the Software Dispatch).

PRODUCTS SUPPORTED in the RT-11 SOFTWARE DISPATCH

BASIC-11/RT-11 V2
CTS-300 V6/V7
DECnet-RT V1.1
FMS-11/RT-11 V1.1
FORTRAN IV/RT-11 V2.5
GAMMA-11 F/B V3.1
LSP-11 V1.1
MSB11 V1.2
MSB/FORTRAN IV V1
RT-11 V4
RT-11 2780 3780 Protocol Emulator V4
SSP-11 V1.3

DISTRIBUTION

The RT-11 Software Dispatch is directed to one software contact for each software product. No mailing will be made to addresses without a software contact name. **Address change requests should be sent to the nearest DIGITAL field office. Include the new address and mailing label from the most recently received publication.**

Software binary and sources are provided under licenses only. The standard Terms and Conditions, OEM Agreement, and/or Quantity Discount Agreement contain the licenses for all binaries other than DECsystem-10.

Ann Owens, Associate Editor

TABLE OF CONTENTS

PRODUCT AVAILABILITY DATES - RT-11

JUNE 1982

The following are dates products have become available. Customers who are in warranty or have a Software Product Service contract during the month the product became available are eligible to receive the update. Customers who are eligible and have not received the update should contact their local Digital office.

Autopatch is distributed to Software Product Service Basic contract customers and to Self-Maintenance contract customers who have selected this option. Autopatch will be installed for DECsupport contract customers as part of their Preventive Maintenance.

PRODUCT	VERSION	AVAILABLE
CTS-300	7.0	MAR 82
DECNET-RT	2.0	MAR 82
DECTYPE-300	1.2	APR 82
LSP 11	1.2	NOV 81
MACDBG	1.0	MAR 82
MU-BASIC	2.1	SEP 81
SSP-11	1.3	NOV 81
RT-11 AUTOPATCH	E	MAR 82

SPR USER LETTER

Submitted by Sheila Hatchell, 8/11 Administration

How to Make the Best Use of the SPR Form

What We Can Do for You:

1. Blank SPR forms are returned with each SPR acknowledgement and are available upon request in the desired quantities through the SPR Administration (P.O. Box F) and your local office/SPR Center.

2. Copies of the SPR acknowledgement and answer are sent to the appropriate DIGITAL Office/SPR Center for their information.

3. STATUS FOR SUBMITTED SPRs IS PROVIDED UPON REQUEST.

4. SPRs marked PROBLEM/ERROR will have a response for DIGITAL SUPPORTED products. These SPRs should refer to suspected deficiencies in the software.

5. SPRs marked SUGGESTION are forwarded to the pertinent software group for information purposes, and are responded to at their discretion.

What You Can Do for Us:

1. Fill out the form completely either by typing or printing clearly. **PLEASE INCLUDE YOUR SOFTWARE SERVICE CUSTOMER NUMBER IN THE ADDRESS BOX.**

2. Limit only one problem per SPR form. Several problems on an SPR can lengthen the turnaround time.

3. WHENEVER POSSIBLE, SUBMIT AN SPR WITH ATTACHMENTS, SUCH AS MACHINE READABLE DATA, DETAILED INSTRUCTIONS ON HOW TO REPRODUCE THE PROBLEM, PROGRAM AND/OR DATA FILES, LISTINGS, AND CONSOLE LOG.

4. It would be helpful to all concerned if problems with patches are reported as soon as possible.

5. For security SPRs, it is imperative that the DO NOT PUBLISH box be marked.

6. It would be helpful if tapes submitted with SPRs are labeled (track and density), and have a directory attached.

7. Complete the questionnaire that is supplied with each SPR answer. Your feedback is essential in monitoring the quality of our responses.

8. SPRs should not be used for problems concerning software policy, software distribution, or hardware. The local office should be contacted in these cases.

BOUNDS CHECKING OF INTERNAL BUFFER IN OPTIMIZER (PAT 29)

PROBLEM:

The FORTRAN IV optimizer will switch the operands of an instruction involving array elements when part of the instruction has filled the optimizer's internal buffer. When the buffer is filled, final optimization is performed resulting with the destination operand becoming the source operand.

SOLUTION:

1. Type in the following MACRO files: PAT29.MAC, FIXVER.C10

FIXVER.C10:

```
            .TITLE  FROOT
            .IDENT  /017/
            .PSECT  ROOT
    .=.+370
            .ASCII  /5-10/
            .END
```

PAT29.MAC:

```
            .TITLE  F11
            .IDENT  /005/
            .PSECT  PAT011,D,LCL
    PAT02:
            BIT     #10,STATUS
            BNE     1$
            CMPB    #101,(R5)
            BEQ     7$
            CMPB    #102,(R5)
            BNE     2$
    7$:     ADD     #20,R0
            CMP     SPTR,R0
            BGE     2$
    1$:     JMP     FLSH
    2$:     JMP     NOFLSH

            .PSECT  F11B
    S=.
    .=S+32
    STATUS:

    .=S+36
    SPTR:
```

```
.=S+206
        JMP     PAT02
        NOP
        NOP
FLSH:

.=S+222
NOFLSH:
        .END
```

2. Assemble the patches using MACRO-11

```
.R MACRO
*PAT29=PAT29.MAC
*FIXVER.P10=FIXVER.C10
*^C
```

3. Apply the patches, using PAT, to the most recently patched F11.OBJ and FROOT.OBJ files:

   NOTE: Make a copy of F11.OBJ and FROOT.OBJ before you patch it just in case something goes wrong.

```
.R PAT
*F11=F11/C:164673,PAT29.OBJ/C:021017
.R PAT
*FROOT=FROOT/C:117117,FIXVER.P10/C:007074
```

4. Rebuild the compiler using the procedure described in the FORTRAN IV Installation Guide.

5. Test the patches by creating and compiling the following FORTRAN program.

```
BYTE ALPHA(19)
REAL*8 ARR1(7)
ALPHA(1) = 'A'
ALPHA(2) = 'B'
ALPHA(3) = 'C'
ARR1(1) = ALPHA(2)
ALPHA(4) = 'D'
ALPHA(5) = 'E'
ARR1(2) = ALPHA(1)
ALPHA(6) = 'F'
```

```
ALPHA(7) = 'G'
ALPHA(8) = 'H'
ARR1(3) = ALPHA(4)
ALPHA(9) = 'I'
ALPHA(10) = 'J'
ALPHA(11) = 'K'
ARR1(4) = ALPHA(3)
ALPHA(12) = 'L'
ALPHA(13) = 'M'
ARR1(5) = ALPHA(6)
ALPHA(14) = 'N'
ALPHA(15) = 'O'
ALPHA(16) = 'P'
ARR1(6) =  ALPHA(5)
ALPHA(17) = 'Q'
ALPHA(18) = 'R'
ARR1(7) = ALPHA(13)
ALPHA(19) = 'S'
END
```

Before the patches have been installed the inline generated code for line 28 will appear as:

```
                                        ; Statement #0028
000600          INC     @$AOTS
000604          MOVB    ALPHA+22,#123
```

After the patches have been successfully installed, the inline generated code for line 28 will appear as:

```
                                        ; Statement #0028
000600          INC     @$AOTS
000604          MOVB    #123,ALPHA+22
```

COMPILER HANGS WHEN ERRORS OCCUR IN STATEMENT FUNCTIONS (PAT 31)

PROBLEM:

The FORTRAN IV compiler will hang when there are errors detected in several statement function declarations.

SOLUTION:

1. Type in the following MACRO files: PAT31.MAC, FIXVER.C11

FIXVER.C11:

```
                .TITLE  FROOT
                .IDENT  /018/
                .PSECT  ROOT
        .=.+370
                .ASCII  /5-11/
                .END
```

PAT31.MAC:

```
                .TITLE  F9
                .IDENT  /007/
                .PSECT  PAT009,D,LCL
        PATSTM:
                CMP     R0,#114
                BEQ     2$
                CMP     R0,#60
                BEQ     3$
                JMP     RETSTM
        2$:     INC     R5
        3$:     JMP     THREE

                .PSECT  F9CB
        S=.
        .=S+2402
                JMP     PATSTM
                NOP
        RETSTM:
        .=S+2420
        THREE:
                .END
```

2. Assemble the patches using MACRO-11

```
.R MACRO
*PAT31=PAT31.MAC
*FIXVER.P11=FIXVER.C11
*^C
```

3. Apply the patches, using PAT, to the most recently patched F9.OBJ and FROOT.OBJ files:

   NOTE: Make a copy of F9.OBJ and FROOT.OBJ before you patch it just in case something goes wrong.

```
.R PAT
*F9=F9/C:152573,PAT31.OBJ/C:012630
.R PAT
*FROOT=FROOT/C:121401,FIXVER.P11/C:007076
```

4. Rebuild the compiler using the procedure described in the FORTRAN IV Installation Guide.

5. Test the patches by creating and compiling the following FORTRAN program.

```
      DATA    PI /3.14159/
      ST(X) = 3**.5
      STT(X) = 5**.4
      Y = 2**.5
      STOP
      END
```

   After the patches have been applied, the following diagnostics will be generated when compiling the sample program:

```
In line 0002,  Error:   Illegal type for operator
In line 0003,  Error:   Illegal type for operator
In line 0004,  Error:   Illegal type for operator
```

CORRECTION TO ALLOW CLOSING OF UNIT RECORD DEVICES (PAT 28)

PROBLEM:

An attempt by a FORTRAN IV program to CLOSE a UNIT associated with a file whose NAME has been specified in OPEN as a device (except TT:) will cause the program to hang during execution.

SOLUTION:

1. Type in the following MACRO file: PAT28.MAC.

PAT28.MAC:

```
            .TITLE  $CLOSE
            .IDENT  /007/
            .PSECT  OTS$I
S=.
.=S+54
            JMP     NLTST
RETST:
.=S+212
NULCLO:
.=S+560
NLTST:  CMP     6(R4),#54540
        BEQ     NULCLO
        TST     10(R4)
        BNE     PTST
        TST     12(R4)
        BEQ     NULCLO
PTST:   BIT     #1000,@R4
        JMP     RETST
        .END
```

2. Assemble the patches using MACRO-11

```
.R MACRO
*PAT28=PAT28.MAC
*^C
```

3. Install the patch, using PAT, to the most recently patched OTSCOM.OBJ file:

   NOTE: Make a copy of OTSCOM.OBJ before you patch it, just in case something goes wrong.

```
.R PAT
*OTSCOM=OTSCOM/C:116474,PAT28/C:012510
```

4. Rebuild the OTS using the procedure described in the FORTRAN IV Installation Guide.

5. Test the patches by creating, compiling, linking, and executing the following FORTRAN program.

```
TYPE *,'NULL DEVICE TEST'
OPEN(UNIT=1,NAME='NL:',TYPE='OLD')
WRITE(1,*) 'ANY OLD TEXT WILL DO'
CLOSE(UNIT=1)
TYPE *,'NULL DEVICE TEST COMPLETE'
END
```

   The program will execute completely without errors when the patch has been successfully installed, with the following output to the terminal:

```
NULL DEVICE TEST
NULL DEVICE TEST COMPLETE.
```

PREMATURE CLEARING OF ERR= BRANCH WHEN EOF IS ENCOUNTERED (PAT 30)

PROBLEM:

When end-of-file is encountered during the reading of a file, where an ERR= branch has been specified, the FORTRAN IV OTS will clear the ERR= branch before checking for the existence of an END= branch.

SOLUTION:

1. Type in the following MACRO file: PAT30.MAC

PAT30.MAC:

```
                .TITLE  $RWBLK
                .IDENT  /003/
                .PSECT  OTS$I
        S=.
        .=S+364
                NOP
                NOP
                NOP
        .=S+410
        $EOF2:: NOP
                NOP
        .=S+420
                BNE     PATEOF
        .=S+424
        DOBRA:

        .=S+430
        PATEOF: CLR     162(R3)
                BR      DOBRA
                .END
```

2. Assemble the patches using MACRO-11

```
.R MACRO
*PAT30=PAT30.MAC
*^C
```

3. Apply the patches, using PAT, to the most recently patched OTSCOM.OBJ:

   NOTE: Make a copy of OTSCOM.OBJ before you patch it just in case something goes wrong.

```
.R PAT
*OTSCOM=OTSCOM/C:063243,PAT30.OBJ/C:012430
```

4. Rebuild the OTS using the procedure described in the FORTRAN IV Installation Guide.

5. Test the patch by compiling and running the following FORTRAN program.

```
            CALL ASSIGN( 2 , 'NL:' , 0 )
            READ( 2 , 10 , ERR=50 ) I
10          FORMAT( A4 )
            STOP
C
50          STOP 'TOOK ERR= BRANCH, PATCH SUCCESSFUL'
            END
```

   Before the patch has been installed, the above program will generate the following error message.

```
?Err 24 Attempt to read/write past end of file
in   routine ".MAIN."  line 2
```

   After the patch has been successfully installed, the following output will be generated.

```
STOP ~~ TOOK ERR= BRANCH, PATCH SUCCESSFUL
```

CTS-300 V7.0
for RT-11 V4.0
DOCUMENTATION

Seq 52.01.02 N

1 of 1

XMTSD RUN-TIME SYSTEM SIZE (LG)

It is possible for you to include (or exclude) certain optional capability (e.g., DDT) in the run-time system during CTSGEN, and yet not notice any change in the amount of free memory in the extended region. In other words, the STATUS program reports no change, but the link map will indicate a change in the actual size of the DIBOL run-time system.

When the extended memory run-time system is first started, the initialization code takes all available extended memory and rounds it down to an integral multiple of 2K bytes. The rounding is due to the way the Core Allocator allocates memory upon request by the run-time system. It is this rounding, which can cause the noted discrepancy.

CTS-300 V7.0
for RT-11 V4.0
DOCUMENTATION

Seq 52.01.03 N

1 of 1

CHANGING THE DEFAULT TIME SLICE VALUE FOR XMTSD (PG)

Currently, each program that runs with XMTSD receives a time slice of 5 clock ticks. This default value is chosen for each program when it is initially loaded and run. Any given program can then alter its own time slice by calling the external subroutine, SLICE.

However, it might be desirable to alter the default time slice, such that each program would be assigned this altered value when it was first loaded and run. The procedure for doing this is as follows.

After doing a CTSGEN, you can use SIPP (Save Image Patch Program) to patch the XMTSD save image file. Using the link map produced by CTSGEN, locate the global reference "$INSC" in the module "$KDTO", which is in Segment 3. The address of $INSC is the value you will enter in response to SIPP's "Base?" prompt. The offset is 2. When SIPP prompts "New?" you can change the contents of the "Old" location from a 5 to your desired time slice.

Below is an example of this procedure:

```
.R SIPP
*XMTSD.SAV
Segment? 3
Base?    xxxxxx
Offset?  2

Segment Base    Offset  Old     New?
000003  xxxxxx  0000002 000005   n
000003  xxxxxx  0000004 zzzzzz  ^Y
*^C
```

You may have to experiment to determine the value that gives you the desired results with your particular application. These steps will have to be repeated whenever you build a new XMTSD run-time system.

CTS-3ØØ V7.Ø
for RT-11 V4.Ø
DOCUMENTATION

Seq 52.Ø1.Ø4 N

1 of 1

RELINK DIBOL PROGRAMS FOR CTS-3ØØ V7

The CTS-300 Version 7 Release Notes and Installation Guide (AA-5697F-TC) imply on page 1-30 that DIBOL programs which ran on Version 6 of CTS-300 will run on Version 7 without relinking. This is incorrect. Existing V6 DIBOL programs must be relinked for V7 operation.

CTS-3ØØ V7.Ø
for RT-11 V4.Ø
DIBOL RUN-TIME SYSTEMS
TSD VBØ7-ØØ
XMTSD VCØ7-ØØ

PATCH 5: VARIOUS TSD AND XMTSD PROBLEMS (LG)

The following problems occur under the TSD or XMTSD run-time systems as indicated:

1. (TSD/XMTSD) Consider a situation where one program chains to another, and both programs execute an XCALL FLAGS to ignore CTRL/C characters. Currently, the XMTSD scheduler does not allot the program being chained to any time to execute the XCALL FLAGS before checking for double CTRL/C. Therefore, a double CTRL/C across a chain will succeed.

   Patch 5 ensures that when a program is started up, it will be given sufficient time to execute the XCALL FLAGS.

2. (TSD/XMTSD) A problem occurs if auto-job startup is used to start a job which executes an XCALL TTSTS followed by an ACCEPT statement. The ACCEPT will hang because TTSTS reports that input is available when it actually isn't.

   Patch 5 corrects this so that in the above situation TTSTS does not erroneously report input.

3. (TSD/XMTSD) Under certain conditions, some applications run slower under Version 7 than under Version 6.

   Patch 5 causes performance of these programs to be improved.

4. (XMTSD) If a program is run that opens a file but there is insufficient memory for the run-time system to allocate an I/O buffer for that file, then the error "?DIBOL-E73--Job exceeds maximum size" is generated. The error that should be generated under these circumstances is "?DIBOL-E9--Not enough memory".

   Patch 5 ensures that in the above situation the run-time system issues an Error 9.

5. (XMTSD) If XCALL RUNJB is used to start up the Macro Sort program on another terminal, it is possible that any subsequent program that accesses the same file(s) may receive the error "?DIBOL-E16--Dibol channel in use."

   Patch 5 ensures that these files are properly removed from the tables of open files in the XMTSD system and an Error 16 is not generated.

CTS-3ØØ V7.Ø
  for RT-11 V4.Ø
DIBOL RUN-TIME SYSTEMS
TSD VBØ7-ØØ
XMTSD VCØ7-ØØ

Patch 5 also changes the version number of TSD to VB07-00A and XMTSD to VC07-00A.

Using the editor, create the following files as shown. Name them as indicated in the comment line that is the first line of each file. Then, to install the patch, follow the procedure shown following the files.

Corrections are made to the source module TSDTBL.MAC using the SLP (Source Language Patch) program. Please note that the first record in the patch file P005.PAT is ";P005.PAT" and the last record is "/". You must terminate each line in that file with a carriage return, including the last line "/".

CTS-300 V7.0
  for RT-11 V4.0
DIBOL RUN-TIME SYSTEMS
TSD VB07-00
XMTSD VC07-00


```
;P005.PAT
-1,2
-221,221
        .WORD   0
/
```

```
;P005A.MAC

        .TITLE  $DIO
        .PSECT  $DIO
P005:
        .=      .+11002
        JMP     P005A

        .PSECT  $P005
P005A:  SUB     #1,R3
        SBC     R2
        JMP     P005+11006
        .END
```

```
;P005B.MAC

        .TITLE  DTO
        .CSECT  DTO
P005:
        .=      .+3326
        .WORD   5267
        .=      P005+6067
        .BYTE   'A
        .END
```

```
;P005C.MAC

        .TITLE CORE ALLOCATOR
        .CSECT  $CORE
R6=%6
P005:
        . =     .+712
        JMP     P005A
        NOP

        .PSECT  $P005
P005A:  MOV     P005+40,R6
        SUB     #20,R6
        SEC
        RTS     PC
        .END
```

CTS-300 V7.0
  for RT-11 V4.0
DIBOL RUN-TIME SYSTEMS
TSD VB07-00
XMTSD VC07-00


```
;P005D.MAC

        .TITLE  $KDIO
        .PSECT  $DIO
P005:
        .=      .+10074
        JMP     P005A

        .PSECT  $P005
P005A:  SUB     #1,R3
        SBC     R2
        JMP     P005+10100
        .END


;P005E.MAC

        .TITLE  $KDTO
        .PSECT  $KDTO
        .GLOBL  $SLEEP,JOBSTS
P005:
        . = P005+2600
        JMP     P005A
        . = P005+3400
        JMP     P005B
        . = P005+3424
        .WORD   5267

        .PSECT  $P005
P005A:  SUB     #100000,R1
        CMP     R1,#74000
        BGT     1$
        JMP     P005+2604
1$:     TRAP    311
P005B:  BIC     #1000,JOBSTS(R0)
        JMP     $SLEEP
        .END


;P005V1.MAC

        .TITLE  $KEROR
        .PSECT  $ERROR
P005:
        .=      .+2476
        .BYTE   'A
        .END
```

CTS-3ØØ V7.Ø
  for RT-11 V4.Ø
DIBOL RUN-TIME SYSTEMS
TSD VBØ7-ØØ
XMTSD VCØ7-ØØ


```
.RENAME TSDTBL.MAC *.OLD
 Files renamed:
DK:TSDTBL.MAC  to DK:TSDTBL.OLD

.RENAME (DIO,DTO).OBJ *.OLD
 Files renamed:
DK:DIO.OBJ     to DK:DIO.OLD
DK:DTO.OBJ     to DK:DTO.OLD

.RENAME (KCORE,KDIO,KDTO,KERROR).OBJ *.OLD
 Files renamed:
DK:KCORE.OBJ   to DK:KCORE.OLD
DK:KDIO.OBJ    to DK:KDIO.OLD
DK:KDTO.OBJ    to DK:KDTO.OLD
DK:KERROR.OBJ  to DK:KERROR.OLD

.MACRO P005A,P005B,P005C,P005D,P005E,P005V1
ERRORS DETECTED:  0
ERRORS DETECTED:  0
ERRORS DETECTED:  0
ERRORS DETECTED:  0
ERRORS DETECTED:  0
ERRORS DETECTED:  0

.R SLP
*TSDTBL.MAC=TSDTBL.OLD,P005.PAT
*^C

.R PAT
*DIO.OBJ=DIO.OLD/C:017574,P005A/C:014427

.R PAT
*DTO.OBJ=DTO.OLD/C:034270,P005B/C:004221

.R PAT
*KCORE.OBJ=KCORE.OLD/C:144416,P005C/C:015070

.R PAT
*KDIO.OBJ=KDIO.OLD/C:045276,P005D/C:014770

.R PAT
*KDTO.OBJ=KDTO.OLD/C:131722,P005E/C:026034

.R PAT
*KERROR.OBJ=KERROR.OLD/C:063631,P005V1/C:006221

.R CTSGEN          ;FOR NORMAL TSD

.R CTSGEN          ;FOR EXTENDED-MEMORY TSD
```

CTS-3ØØ V7.Ø
  for RT-11 V4.Ø
DIBOL RUN-TIME SYSTEMS
SUD VAØ7-ØØ
TSD VBØ7-ØØA
XMTSD VCØ7-ØØA

PATCH 6: ISAM FILE RECORD COUNT REVERTS TO Ø (LG)

If a record is added to an ISAM file containing 65,535 records and the ISMUTL Status function is then run, it will show the record count for the file as 0 rather than 65,536. This is true whether running under SUD, TSD, or XMTSD.

Patch 6 corrects this problem so that the record count of an ISAM file is updated correctly when the number of records in the file exceeds 65,535. Patch 6 changes the version number of SUD to VA07-00A, VB07-00B, and XMTSD to VC07-00B.

Using the editor, create the following source files. Name them as indicated in the comment line that begins each file. Then, to install the patch, follow the procedure shown following the files.

CTS-300 V7.0 Seq 52.03.02 M
  for RT-11 V4.0
DIBOL RUN-TIME SYSTEMS 2 of 4
SUD VA07-00
TSD VB07-00A
XMTSD VC07-00A

```
;P006V1.MAC

        .TITLE  DIRT
        .CSECT  $DIRT

        .=      .+13475
        .ASCII  /A/
        .END


;P006V2.MAC

        .TITLE  DTO
        .CSECT  DTO
P006:
        .=      .+6067
        .BYTE   'B
        .END


;P006V3.MAC

        .TITLE  $KEROR
        .PSECT  $ERROR
P006:
        .=      .+2476
        .BYTE   'B
        .END



;P006A.MAC

        .TITLE  $ISAM
        .PSECT  $ISAM
P006:
        .=      .+5416
        JMP     P006A
        .=      P006+6160
        JMP     P006B
        .=      P006+6340
        JMP     P006C

        .PSECT  $P006
P006A:  JSR PC, P006+10114
        SUB #1,(R2)+
        JMP     P006+5424
P006B:  JSR PC, P006+10114
        ADD #1,(R2)+
        JMP     P006+6166
P006C:  JSR PC, P006+10114
        ADD #1,(R2)+
        JMP     P006+6346
        .END
```

CTS-3ØØ V7.Ø
  for RT-11 V4.Ø
DIBOL RUN-TIME SYSTEMS
SUD VAØ7-ØØ
TSD VBØ7-ØØA
XMTSD VCØ7-ØØA


```
;P006B.MAC

        .TITLE  $DISAM
        .CSECT  $DISAM
P006:
        .=      .+5346
        JMP     P006A
        .=      P006+6110
        JMP     P006B
        .=      P006+6270
        JMP     P006C

        .PSECT  $P006
P006A:  JSR     PC,P006+10152
        SUB     #1,(R3)+
        JMP     P006+5354
P006B:  JSR     PC,P006+10152
        ADD     #1,(R3)+
        JMP     P006+6116
P006C:  JSR     PC,P006+10152
        ADD     #1,(R3)+
        JMP     P006+6276
        .END
```

```
;P006C.MAC

        .TITLE  $KISAM
        .CSECT  $KISAM
P006:
        . = P006+5302
        JMP     P006A
        . = P006+6040
        JMP     P006B
        . = P006+6220
        JMP     P006C

        .PSECT  $P006
P006A:  JSR     PC,P006+10074
        SUB     #1,(R3)+
        JMP     P006+5310
P006B:  JSR     PC,P006+10074
        ADD     #1,(R3)+
        JMP     P006+6046
P006C:  JSR     PC,P006+10074
        ADD     #1,(R3)+
        JMP     P006+6226
        .END
```

CTS-3ØØ V7.Ø
  for RT-11 V4.Ø
DIBOL RUN-TIME SYSTEMS
SUD VAØ7-ØØ
TSD VBØ7-ØØA
XMTSD VCØ7-ØØA


```
.RENAME (ISAM,DISAM,KISAM).OBJ *.OLD
 Files renamed:
DK:ISAM.OBJ    to DK:ISAM.OLD
DK:DISAM.OBJ   to DK:DISAM.OLD
DK:KISAM.OBJ   to DK:KISAM.OLD

.RENAME (SDIRT,DTO,KERROR).OBJ *.OLD
 Files renamed:
DK:SDIRT.OBJ   to DK:SDIRT.OLD
DK:DTO.OBJ     to DK:DTO.OLD
DK:KERROR.OBJ  to DK:KERROR.OLD

.MACRO P006A,P006B,P006C
ERRORS DETECTED:  0
ERRORS DETECTED:  0
ERRORS DETECTED:  0

.MACRO P006V1,P006V2,P006V3
ERRORS DETECTED:  0
ERRORS DETECTED:  0
ERRORS DETECTED:  0

.R PAT
*ISAM.OBJ=ISAM.OLD/C:022730,P006A/C:027036

.R PAT
*DISAM.OBJ=DISAM.OLD/C:045162,P006B/C:036225

.R PAT
*KISAM.OBJ=KISAM.OLD/C:112067,P006C/C:035152

.R PAT
*SDIRT.OBJ=SDIRT.OLD/C:122730,P006V1/C:005242

.R PAT
*DTO.OBJ=DTO.OLD/C:035356,P006V2/C:002766

.R PAT
*KERROR.OBJ=KERROR.OLD/C:064544,P006V3/C:006222

.R CTSGEN          ;FOR SINGLE-USER DIBOL

.R CTSGEN          ;FOR NORMAL TSD

.R CTSGEN          ;FOR EXTENDED MEMORY TSD
```

CTS-3ØØ V7.Ø
for RT-11 V4.Ø
MACRO SORT
SORT.SAV VØ7-ØØ
SORT.TSD VØ7-ØØ

Seq 52.15.1 M

1 of 3

Supersedes article dated April 1982

PATCH 1: TWO SORT PROBLEMS EMERGE UNDER CERTAIN CONFIGURATIONS (DS)

REPLACEMENT PATCH

Patch 1 to CTS-300 was originally published in the April 1982 issue of the RT-11 Software Dispatch in incomplete form. It appears below in its entirety. This patch should be applied before Patch 3 (Seq 52.15.2M), which was published in the May 1982 issue of the RT-11 Software Dispatch, in order for the version number for SORT.SAV to be updated correctly and the checksums for module SRT11R to agree in both patches.

Under the TSD version of the macro sort routine, when the IDENT option is used with the TTNUM option there is a possibility of getting an illegal terminal number. This occurs when the terminal number is a 2 digit value.

Under the single user version of the sort, there is a possible error in the I/O routines with certain hardware configurations.

Patch 1 to CTS-300 Version 7 ensures that the above problems are properly taken care of. Patch 1 changes the version numbers of both sorts from V07-00 to V07-0A.

Using the editor, create the following four files exactly as shown. Name them as indicated in the comment line that is the first line of each file. Then, to install the patch, follow the procedure shown following the files.

$P001A.MAC

```
        .TITLE SORTM
        .PSECT SORTM
        .GLOBL LASTP

        . = . + 1440
        NOP
        NOP
        NOP
        NOP
        NOP
        NOP
        NOP
        NOP
        CLR LASTP
        .END
```

$P001B.MAC

```
        .TITLE SRTIO
        .CSECT SRTIO

P001:
        . = P001 + 42
        JMP P001A
MODE:   . = P001 + 100

        .PSECT $P001

P001A:  TST MODE(R1)
        BEQ 5$
        TST (R1)+
        JMP P001 + 22
5$:     JMP P001 + 46
        .END
```

$P001V1.MAC

```
        .TITLE SORTR
        .PSECT SORTR

        . = . + 23
        .BYTE 'A
        .END
```

$P001V2.MAC

```
        .TITLE SORTR
        .PSECT SORTR

        . = . + 21
        .BYTE 'A
        .END
```

```
.RENAME (SORTR,SORTM,SRT11R,SRT110).OBJ *.OLD
 Files renamed:
DK:SORTR.OBJ    to DK:SORTR.OLD
DK:SORTM.OBJ    to DK:SORTM.OLD
DK:SRT11R.OBJ   to DK:SRT11R.OLD
DK:SRT110.OBJ   to DK:SRT110.OLD

.MACRO P001A,P001B,P001V1,P001V2
ERRORS DETECTED:  0
ERRORS DETECTED:  0
ERRORS DETECTED:  0
ERRORS DETECTED:  0

.R PAT
*SORTM.OBJ=SORTM.OLD/C:106762,P001A/C:010233

.R PAT
*SRT110.OBJ=SRT110.OLD/C:152001,P001B/C:015631

.R PAT
*SORTR.OBJ=SORTR.OLD/C:021321,P001V1/C:005026

.R PAT
*SRT11R.OBJ=SRT11R.OLD/C:157713,P001V2/C:005020

.R LINK
*SORT,SRT11/M:1400/B:1400=RTIO,SRT110,SRT11R/P:500./C
*MSGLIB/C
*SRT11C/O:1/C
*SRT11A/O:1/C
*SRT11D/O:1/C
*SRT11M/O:1
*SORT.TSD,SORT=SORTR,SRTIO/B:100000/P:500./C
*SORTC/O:1/C
*SORTA/O:1/C
*SORTD/O:1/C
*SORTM/O:1
*^C

.R REDUCE
*SORT/N
*^C
```

CTS-3ØØ V7.Ø
for RT-11 V4.Ø
SYSTBL.CTS VØ4.ØØB

Seq 52.16.1 M

1 of 2

Supersedes article dated May 1982

PATCH 4: TERMINAL OUTPUT CORRUPTION ON DZ11 OR DZV11 LINES

*** REPLACEMENT PATCH ***

The following is a replacement for Patch 4 Seq 52.16.1 M published in May 1982. A correction has been made in the first line of the patch file P004.PAT: the characters ".,." have been changed to ",.,".

Corruption of terminal output may occur when using a multi-terminal monitor which includes more than one DZ11 or DZV11 mutliplexor. An incorrect calculation is made when setting up the input/output buffer pointers. This error causes the pointers for lines on the first multiplexor to be relocated to the same area as another for each line on the second multiplexor. For example, the pointers for the first line on the DZ11 is the same for the first line on the second DZ11 multiplexor. It is recommended that you run CSYSGN after applying the patch below.

1. The following is a required patch to SYSTBL.CTS. It must be applied to all copies of SYSTBL.CTS.

   NOTE: Since patching the distribution medium is not recommended, the patch must be installed whenever you copy the source file from the distribution medium.

   To install the patch, first create a patch file for input to the SLP utility. Using an editor, create a file called P004.PAT on your system volume. Enter the text below into the file. The hyphen must be the first character in the file. The special symbol '<tab>' indicates the TAB character. All other blank spaces in the text should be entered in the file as single space characters.

```
-/ELSYTB == 2/,.,/;003/
ELSYTB == 3
-2,2,/;003/
; SYSTBL.CND - SYSTEM DEVICE TABLES<tab>V04.00C
-12,12,/;003/
 ; SYSTBL.MAC - SYSTEM DEVICE TABLES<tab>V04.00C
-329,329,/;003/
X=.
/
```

2. Rename SYSTBL.CTS to SYSTBL.OLD:

```
.RENAME SYSTBL.CTS SYSTBL.OLD
```

3. Apply the patch to the source file as follows:

```
.R SLP
*SYSTBL.CTS=SYSTBL.OLD,P004.PAT
^C
```

4. Preserve the patched source file. If there are any future corrections to SYSTBL.CTS, you will be requested to apply them to the patched source file.

The resulting version will be SYSTBL.CTS V04.00C.

DECtype-300 V1.1 Seq 57.1.1 M
for RT-11 V4.0/CTS300 V06
(PATCH 01) 1 of 1

REPEATED USE OF THE PASTE FUNCTION WILL CAUSE AN ERROR 28 (PM)

If text is pasted enough times in a document, the work file that is being used will fill up. At this point DECtype is supposed to expand the work file. Instead, it will try to write to an illegal record in the work file.

********** I M P O R T A N T **********

UNDER NORMAL CIRCUMSTANCES BINARY FILES CAN NOT BE PATCHED. THE ONLY TIME PATCHING OF BINARY FILES CAN BE DONE IS IF THERE IS A ONE FOR ONE REPLACEMENT. IN THIS CASE, WE ARE REPLACING THE VALUE 1 FOR THE VALUE 2 IN ONE DIBOL STATEMENT.

****

The following patch will remove this problem.

This patch is installed using SIPP, the Save Image Patching Program. First, ensure that a copy of TYPED.TSD is on a mounted volume. Create the file DECTYP.001 as follows. Replace the "DK:" in the patch with the name of the device that contains the program file.

```
RUN SIPP
DK:TYPED.TSD/A
0
27770
2043
2043
^Y                  (UP-ARROW/Y)
^C                  (UP-ARROW/C)
```

To apply the patch to TYPED.TSD type:

```
@DECTYP.001
```

When the RT-11 prompt (.) is displayed, the patch is complete. Save the new version of the program on a backup volume.

RT-11 V4.0
CUMULATIVE INDEX
JUNE 1982

This is a complete listing of all articles for RT-11 V4.0 and related products. In the case of subordinate software, missing sequence numbers may pertain to problems unique to interaction with previous versions of the same product or other major operating systems.

IMPORTANT!

Unassigned articles are indicated: UNASSIGNED.

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

M = Mandatory Patch. These patches correct errors in the software product. All users are required to apply these patches to maintain consistent "user level" unless the accompanying article specifies otherwise.

F = Optional Feature Patch. These patches extend or configure functionality into the product. These functions will be treated as a supported part of the product for the duration of the current release and will be incorporated with any future release, unless otherwise stated.

R = Restriction. These articles discuss areas that will not be patched in the current release because they require major modification or because they are not consistent with the design of the product. Restrictions, except those described as permanent, are reviewed and modified when possible as part of the normal release cycle.

N = NOTE. These articles provide explanatory information that supplements the manual set and provide more detailed information about a program or package. They also provide procedural information to make it easier to use a program or package.

+ = Articles appeared in the RT-11 Software Dispatch Review, March 1980.

*The "Autopatch Kit" column in the list which follows indicates the first RT-11 V4.0 Autopatch Kit in which the associated patch was included. Unless otherwise indicated, the patches also appear in subsequent Autopatch Kits as well. Note that Autopatch Kit "D" is the latest kit available from the SDC.

Component	Autopatch Kit	Sequence	Mon/Yr
RT-11 V4.0			
MONITOR PATCHES			
ISSUING .SETTOP #-2 AND .EXIT UNDER XM MONITOR MAY CORRUPT SYSTEM DISK	A	1.1.1 M	Jul 80
IMPLEMENTING INTERNAL HANDLER QUEUEING IN FB AND XM MONITORS	A	1.1.2 M	Jul 80
ADDING HIGH SPEED RING BUFFER SUPPORT	A	1.1.3 M	Jul 80
CORRUPTION OF CSI TEXT UNDER XM MONITOR	A	1.1.4 M	Jul 80
MISSING COLON IN BOOT XX CAUSES SYSTEM HALT	A	1.1.5 M	Jul 80
TYPING ^U WHILE IN A ^X SEQUENCE UNDER A SYSTEM JOB	A	1.1.6 M	Sep 80
ABNORMAL TERMINATION OF FG JOB WHICH IS USING CSI	A	1.1.7 M	Nov 80
MISCELLANEOUS MRRT-11 BUGS	A	1.1.8 M	Nov 80
MRRT-11 MINIMAL FILE SUPPORT PROBLEM	A	1.1.9 M	Nov 80
INCORRECT LIMIT CHECKS ON PRIVILEGED BACKGROUND JOBS USING VIRTUAL OVERLAYS	A	1.1.10 M	Nov 80
MULTI-TERMINAL MONITORS DON'T ALWAYS PROCESS CTRL/F PROPERLY	A	1.1.11 M	Nov 80
MONITOR CHANGES AND CORRECTIONS	A	1.1.12 M	Dec 80
MONITOR CORRECTIONS	B	1.1.13 M	Jan 81
MONITOR UPDATES	B	1.1.14 M	Feb 81
ABORT I/O IN PROGRESS HANDLER BIT	B	1.1.15 M	Apr 81
CORRECTIONS FOR DISTRIBUTED AND SYSTEM GENERATED MONITORS	C	1.1.16 M	Jun 81
PRINT COMMAND RESTRICTION		1.1.17 R	Jul 81
UPDATES TO MONITOR FILES	D	1.1.18 M	Oct 81
CORRECTIONS TO THE MONITOR	E	1.1.19 M	Jan 82

Component	Autopatch Kit	Sequence	Mon/Yr
DEVICE HANDLER SOURCES			
DEVICE HANDLER NOTES			
RL02s AT REV. LEVEL "F" FAIL DURING RT-11 SYSGEN		6.1.1 N	Oct 80
DD.MAC			
DD PRIMARY BOOTSTRAP PROBLEM	A	6.4.1 M	Jul 80
DL.MAC			
PATCH XM VERSION OF DL HANDLER .SPFUN GET SIZE ROUTINE	A	6.5.1 M	Dec 80
ERRORS ON RL01 DISK DRIVES AFTER DISK PACKS ARE CHANGED	B	6.5.2 M	Jan 81
DM.MAC			
ERRORS IN DM OFFSET POSITIONING AND ERROR LOGGING	A	6.6.1 M	Jul 80
DY.MAC			
DELETED DATA MARK MAY BE LOST IF BUFFER STARTS ON PAR BOUNDARY	D	6.11.1 M	Aug 81
LP.MAC			
LP SET NOHANG MAY CRASH SYSTEM	A	6.12.1 M	Sep 80
LS.MAC			
LS SET NOHANG MAY CRASH SYSTEM	A	6.13.1 M	Sep 80
PROBLEMS WITH LS HANDLER	B	6.13.2 M	Jan 81
USING AN LA120 TERMINAL AS A LINE PRINTER WITH THE LS HANDLER		6.13.3 N	Jul 81
SET LS NOHANG IS CURRENTLY INOPERATIVE	C	6.13.4 M	Jul 81
RACE CONDITION IN LS HANDLER	D	6.13.5 M	Aug 81
LS HANDLER SET "NOHANG" PROBLEM	E	6.13.6 M	Jan 82
PD.MAC			
CORRECTION TO PDT ERROR LOGGING SUPPORT	B	6.16.1 M	Apr 81
MAG TAPE HANDLERS			
BUFFER CLEARING ON SHORT READ IN XM MONITOR	A	6.20.1 M	Jul 80
LINKING AN XM, NON-FILESTRUCTURED TS HANDLER GENERATES AN UNDEFINED GLOBAL	A	6.20.2 M	Aug 80
INCORRECT READ ERROR RECOVERY IN MT HANDLER	A	6.20.3 M	Sep 80
TS-11 DOES NOT RECOVER FROM SOFT ERROR ON WRITE EOF	C	6.20.4 M	Jul 81
SYSTEM UTILITIES			
PIP.SAV			
ERRORS IN PIP	A	7.1.1 M	Sep 80
COPY/PREDELETE COMMAND		7.1.2 N	Sep 80
MATCHING FILE SPEECIFICATIONS ERRORS	B	7.1.3 M	Feb 81
COPY/BINARY/WAIT AND LOG HEADER PROBLEMS	B	7.1.4 M	Apr 81
COPY/PREDELETE AND COPY/NOREPLACE WORK INCORRECTLY WITH /WAIT	C	7.1.5 M	Jun 81
ERROR WITH RENAME/NOREPLACE	C	7.1.6 M	Jul 81
/POSITION:N SWITCH FOR MAGTAPE INPUT WORKS INCORRECTLY	D	7.1.7 M	Oct 81
COPY/BINARY STOPS PROCESSING AFTER ENCOUNTERING AN OBJ LIBRARY FILE	E	7.1.8 M	Nov 81
COPYING FILES TO UNINITIALIZED DISKS		7.1.9 N	Nov 81
ALLOCATE AND DELETE WORK INCORRECTLY WITH COPY OPERATIONS	F	7.1.10 M	Feb 82
DUP.SAV			
MISSING COLON IN BOOT XX CAUSES SYSTEM HALT	A	7.2.1 M	Jul 80
SQUEEZE CREATES <UNUSED> ENTRIES OF LENGTH ZERO BEFORE .BAD FILES	A	7.2.2 M	Aug 80
PROBLEMS WITH COPY/DEVICE AND INITIALIZE	A	7.2.3 M	Dec 80
BOOTSTRAPPING AN UNPATCHED MONITOR FROM A PATCHED SYSTEM	B	7.2.4 N	Jan 81
.SPFUN RETURN BUFFER PROCESSED INCORRECTLY FOR RK06/7	B	7.2.5 M	Jan 81
USE OF INITIALIZE/RESTORE ON MEDIA SUPPORTING BAD BLOCK REPLACEMENT		7.2.6 N	May 81
PROBLEMS WITH INIT/BAD AND COPY/DEVICE	C	7.2.7 M	May 81
PROBLEMS WITH INITIALIZE COMMAND	C	7.2.8 M	Jun 81
ATTEMPT TO RESTORE UNCLOSED TENTATIVE FILES FAILS	C	7.2.9 M	Jul 81
/V WITH NO DEVICE SPECIFICATION GIVES WRONG ERROR MESSAGE	D	7.2.10 M	Sep 81
OUTPUT ERROR DURING COPY/DEVICE TO MAGTAPE CAUSES SYSTEM ERROR	E	7.2.11 M	Oct 81
USE OF COPY/DEV/FILE WITHOUT FILE SPECIFICATION	E	7.2.12 M	Nov 81
PROBLEMS WITH COPY/DEVICE USING /END	F	7.2.13 M	Apr 82

Component	Autopatch Kit	Sequence	Mon/Yr
DIR.SAV			
DIR/OUT COMMAND PRODUCES DEVICE NOT ACTIVE MESSAGE	A	7.3.1 M	Jul 80
DIR/VOL GIVES ?MON-F-TRAP TO 4	A	7.3.2 M	Dec 80
LOSS OF LAST PRINT CHARACTER IN DIRECTORY LISTING	D	7.3.3 M	Sep 81
RESORC.SAV			
RESORC MAY REPORT INCORRECT JOB NAMES ON A SHOW JOBS COMMAND	A	7.5.1 M	Aug 80
ADD CIS DETECTION CAPABILITY TO RESORC	B	7.5.2 M	May 81
PROBLEM WITH IDENTIFYING 11/23 PROCESSOR	D	7.5.3 M	Sep 81
LINK.SAV			
LINK BYTE RELOCATION AND DIRECTORY SIZE	A	7.9.1 M	Jul 80
LINK MAP PROCESSING ERROR	A	7.9.2 M	Aug 80
LINK MAP ERROR AND MULTIPLE DEFINITION LIBRARIES	A	7.9.3 M	Oct 80
RT-11 V4 LINKER RESTRICTION	B	7.9.4 R	Jan 81
LINK TRANSFER ADDRESS CALCULATION BUGS	B	7.9.5 M	Mar 81
LINK ADDITIONS AND CORRECTIONS	D	7.9.6 M	Aug 81
LINK UPGRADE	E	7.9.7 M	Nov 81
LINK ERROR IN LIBRARY MODULE TRANSFER ADDRESS PROCESSING	E	7.9.8 M	Jan 82
LINK LIBRARY MODULE PLACEMENT ERROR	E	7.9.9 M	Jan 82
LINK MULTIPLE ERROR FIXES		7.9.10 M	May 82
LIBR.SAV			
A LIBR COMMAND WITH NO FILE-SPEC CAN CAUSE A SYSTEM CRASH	A	7.10.1 M	Jul 80
LIBR ERRORS	C	7.10.2 M	Jul 81
LIBR CORRUPTS FORM LIBRARY DIRECTORY	C	7.10.3 M	Jun 81
LIBR ERROR IN GENERATING ENTRY POINT TABLE	E	7.10.4 M	Jan 82
LIBR RESTRICTION		7.10.5 N	Jan 82
FILEX.SAV			
FILEX WILDCARD TRANSFERS CAUSE MONITOR TRAP	A	7.11.1 M	Aug 80
FILEX CREATES ZERO FILLED INTERCHANGE RECORDS	A	7.11.2 M	Sep 80
SIZE CALCULATION PROBLEM IN FILEX	D	7.11.3 M	Aug 81
RECORDS DROPPED BY FILEX	D	7.11.4 M	Sep 81
SRCCOM.SAV			
COMPARING TWO FILES MAY CAUSE TRAP TO 4	A	7.12.1 M	Aug 80
BLANK LINE COMPARISON FOR SLIDING MATCH	A	7.12.2 M	Dec 80
BINCOM.SAV			
BINCOM GENERATES ERRONEOUS ERROR MESSAGE	B	7.13.1 M	Apr 81
ERRONEOUS DOUBLE PRECISION CALCULATION IN BINCOM	C	7.13.2 M	Jun 81
BINCOM PLACES TAB CHARACTER AFTER OFFSET IN SIPP COMMAND FILE	E	7.13.3 M	Jan 82
DUMP.SAV			
BLOCK NUMBERS OUTPUT FROM DUMP	D	7.14.1 M	Aug 81
SLP.SAV			
TERMINATION OF PATCHING SESSION WITH SLP FATAL ERRORS	A	7.15.1 M	Nov 80
SLP GENERATES FATAL ERROR TRAP	B	7.15.2 M	Jan 81
SLP ERROR	B	7.15.3 M	Mar 81
SIPP.SAV			
CORRUPTION OF MULTI-BLOCK LOG FILES	A	7.16.1 M	Jul 80
PAT.SAV			
USE OF THE PAT UTILITY WITH RT-11 V3B PATCHES		7.17.1 N+	Mar 80
HELP.SAV			
PROBLEMS WITH HELP UTILITY	A	7.19.1 M	Nov 80
EDIT.SAV			
EDIT MISHANDLES OUTPUT FILE FULL ERROR	B	7.20.1 M	Nov 81
SYSTEM SUBROUTINE LIBRARY (SYSLIB)			
SYSLIB.OBJ			
PATCH TO ICSI	A	8.1.1 M	Oct 80
IASIGN REDEFINITIONS	A	8.1.2 M	Oct 80
ILUN RESTRICTION		8.1.3 R	Feb 81
VIRTUAL OVERLAY HANDLER CORRECTION	E	8.1.4 M	Feb 82

Component	Autopatch Kit	Sequence	Mon/Yr
SYSTEM MACRO LIBRARY			
.SPFUN PROGRAMMED REQUEST	A	9.1.1 M	Dec 80
ABORT I/O PROGRESS SUPPORT FOR SYSMAC	B	9.1.2 M	Apr 81
.CMKT PROGRAMMED REQUEST	C	9.1.3 M	Jun 81
INCORRECT EXPANSION OF .DRSET MACRO	F	9.1.4 M	Apr 82
SYSTEM GENERATION PACKAGE			
SYSGEN CREATES ONE MORE DEVICE SLOT THAN REQUESTED	A	10.3.1 M	Dec 80
ASSEMBLY ERROR AFTER SYSGEN	B	10.3.2 M	Mar 81
TERMINAL OUTPUT CORRUPTION ON DZ11 OR DZV11 LINES	F	10.3.3 M	Apr 82
DOCUMENTATION			
RT-11 SYSTEM RELEASE NOTES			
RT-11 V4.0 DOCUMENTATION CORRECTIONS AND ADDITIONS		11.2.1 N	Jul 80
DOCUMENTATION CORRECTIONS		11.2.2 N	Aug 80
CHANGES TO DUP /I OPTION		11.2.3 N	Apr 81
INCORRECT DUP CUSTOMIZATION PATCHES		11.2.4 N	Sep 81
RT-11 INSTALLATION AND SYSTEM GENERATION GUIDE			
RT-11 V4.0 DOCUMENTATION CORRECTIONS AND ADDITIONS		11.3.1 N	Jul 80
CORRECTION TO AN OPTIONAL PATCH TO LINK		11.3.2 N	Aug 80
DOCUMENTATION ERROR: REFERENCE TO RL02 OMITTED FROM SYSGEN DIALOGUE		11.3.3 N	Oct 80
INCORRECT LINK MAPS FOR DISTRIBUTED MONITORS		11.3.4 N	Dec 80
INCORRECT PATCH FOR CHANGING QUEUE WORK FILE SIZE		11.3.5 N	Dec 80
CHANGING DEFAULT NUMBER OF DIRECTORY SEGMENTS		11.3.6 N	Apr 81
INTRODUCTION TO RT-11			
RT-11 V4.0 DOCUMENTATION CORRECTIONS AND ADDITIONS		11.4.1 N	Jul 80
RT-11 SYSTEM USER'S GUIDE			
RT-11 DOCUMENTATION CORRECTIONS AND ADDITIONS		11.5.1 N	Jul 80
CORRECTIONS TO SLP CHAPTER: RT-11 SYSTEM USER'S GUIDE		11.5.2 N	Oct 80
DIFFERENCES BETWEEN DEVICE COPYING COMMANDS		11.5.3 N	Dec 80
RT-11 SYSTEM MESSAGE MANUAL			
RT-11 V4.0 DOCUMENTATION CORRECTIONS AND ADDITIONS		11.6.1 N	Jul 80
CORRECTIONS TO SLP MESSAGES IN "RT-11 SYSTEM MESSAGE MANUAL"		11.6.2 N	Nov 80
NEW SLP ERROR MESSAGE		11.6.3 N	Feb 81
PIP ERROR MESSAGES MISSING		11.6.4 N	Oct 81
RT-11 POCKET GUIDE			
RT-11 V4.0 DOCUMENTATION CORRECTIONS AND ADDITIONS		11.7.1 N	Jul 80
RT-11 PROGRAMMER'S REFERENCE MANUAL			
DOCUMENTATION CORRECTIONS		11.8.1 N	Sep 80
INCORRECT PROGRAMMED REQUEST EXAMPLES		11.8.2 N	Mar 81
UNDOCUMENTED .SERR ERROR CODE		11.8.3 N	Dec 81
RT-11 SOFTWARE SUPPORT MANUAL			
RT-11 V4.0 DOCUMENTATION CORRECTIONS AND ADDITIONS		11.9.1 N	Jul 80
SOFTWARE SUPPORT MANUAL CORRECTION		11.9.2 N	Jun 81
ERROR IN DESCRIPTION OF .DRSET MACRO		11.9.3 N	Sep 81
DEBUGGING UTILITIES			
VDT.OBJ			
NOTES ON USING ODT OR VDT IN AN XM ENVIRONMENT		12.2.1 N	Jan 81
ERROR CONTROL PACKAGE			
ERROUT.MAC			
ERROR LOGGING SUPPORT OF USER-WRITTEN HANDLERS		14.6.1 M	May 82
BATCH PACKAGE			
BATCH.SAV			
PATCH BATCH TO USE MONITOR SUFFIX	A	15.1.1 M	Oct 80

Component	Autopatch Kit	Sequence	Mon/Yr
SPOOLING PACKAGE			
QUEUE.REL			
SUPERFLUOUS LINEFEED FROM QUEUE	B	16.1.1 M	Mar 81
NARROW BANNER PAGES FROM QUEUE	C	16.1.2 F	May 81
/R FOLLOWING /S IF NO OUPTUT QUEUED MAY CAUSE FATAL ERROR IN QUEUE	D	16.1.3 M	Aug 81
ATTEMPTING TO COMMUNICATE WITH 'QUEUE' FROM A VIRTUAL JOB		16.1.4 N	Apr 82
QUEMAN.SAV			
PROBLEMS WITH QUEMAN	B	16.2.1 M	Jan 81
KEYPAD EDITOR			
KED			
MAKE TERMINAL SETUP OPTIONAL IF MTATCH FAILS	A	17.1.1 F	Aug 80
PROVIDE A .CHAIN INTERFACE FOR KED	A	17.1.2 F	Aug 80
PROVIDE REASONABLE ACTIONS AND ERROR MESSAGES WHEN DEALING WITH DEGENERATE FILES	A	17.1.3 M	Oct 80
SEARCH FAILS IF TARGET IF FIRST OR LAST STRING IN THE FILE	A	17.1.4 M	Nov 80
KNOWN ERRORS AND RESTRICTIONS		17.1.5 R	Dec 80
"SET SEARCH EXACT JUNK" COMMAND CRASHES KED	C	17.1.6 M	Jul 81
REPEATED USE OF THE "APPEND" FUNCTION CRASHES KED	C	17.1.7 M	Dec 81
DISABLE REVERSE VIDEO DISPLAY BY KED	E	17.1.8 F	Jul 81
FILE SAMPLE.KED OMITTED FROM DISTRIBUTION		17.1.9 N	Aug 81
KED DOCUMENTATION CORRECTION		17.1.10 N	Nov 81
K52			
MAKE TERMINAL SETUP OPTIONAL IF MTATCH FAILS	A	17.2.1 F	Aug 80
PROVIDE A .CHAIN INTERFACE FOR K52	A	17.2.2 F	Aug 80
PROVIDE REASONABLE ACTIONS AND ERROR MESSAGES WHEN DEALING WITH DEGENERATE FILES	A	17.2.3 M	Oct 80
SEARCH FAILS IF TARGET IS FIRST OR LAST STRING IN THE FILE	A	17.2.4 M	Nov 80
KNOWN ERRORS AND RESTRICTIONS		17.2.5 R	Dec 80
"SET SEARCH EXACT JUNK" COMMAND CRASHES K52	C	17.2.6 M	Jul 81
REPEATED USE OF THE "APPEND" FUNCTION CRASHES K52	E	17.2.7 M	Dec 81
NO EQUIVALENT PATCH FOR K52 FOR SEQ 17.1.8		17.2.8 N	Aug 81
FILE SAMPLE.KED OMITTED FROM DISTRIBUTION		17.2.9 N	Aug 81
KED DOCUMENTATION CORRECTION		17.2.10 N	Dec 81
AUTOMATED PATCHING FACILITY PACKAGE			
PACKAGE NOTES			
AUTOPATCH SERVICE FOR RT-11		19.1.1 N	Jun 81
FMS-11/RT-11 V1.1			
ANNOUNCING FMS-11/RT-11 V1.1		33.1 N	Aug 80
FRED V1.1			
ZERO IMPURE AREA SIZE PROBLEM		33.3.1 M	Sep 81
BASIC-11/RT-11 V2.0			
INTERPRETER			
REPUBLICATION OF PATCHES		35.1.1 N+	Mar 80
PRINT USING - PATCH A	A	35.1.2 M+	Mar 80
RESEQ - PATCH B	A	35.1.3 M+	Mar 80
EDITING A DIM #n STATEMENT - PATCH C	A	35.1.4 M+	Mar 80
DOUBLE PRECISION HANG - PATCH D	A	35.1.5 M+	Mar 80
SAVE dev: AND REPLACE dev: - PATCH E	A	35.1.6 M+	Mar 80
SINGLE PRECISION HANG AND NUMERIC CONVERSION PROBLEM - PATCH F	A	35.1.7 M+	Mar 80
~~SAVE .XXX & UNSAVE .XXX - PATCH G~~	~~A~~	~~35.1.8 M+~~	~~Mar 80~~
NEW - PATCH H	A	35.1.9 M+	Mar 80
RESEQ - PATCH I	A	35.1.10 M+	Mar 80
LISTNH / OLD - PATCH J	A	35.1.11 M+	Mar 80
SYS(1) - PATCH K	A	35.1.12 M+	Mar 80
CALL - PATCH L	A	35.1.13 M+	Mar 80
DOUBLE PRECISION INTEGER VARIABLES - PATCH M	A	35.1.14 M+	Mar 80
FILESIZE 0 - PATCH N	A	35.1.15 M+	Mar 80
INTEGERS IN DOUBLE PRECISION BASIC-11		35.1.16 N+	Mar 80

Component	Autopatch Kit	Sequence	Mon/Yr
REM STATEMENTS ON MULTI-STATEMENT LINES - PATCH 0	A	35.1.17 M+	Mar 80
INT FUNCTION - PATCH P FOR SINGLE USER BASIC-11	A	35.1.18 M	Nov 80
RETRACTED		35.1.19 M	May 81
PRINT USING - PATCH R FOR SINGLE USER BASIC-11	B	35.1.20 M	Jan 81
OMITTING TRIG FUNCTIONS FROM BASIC-11	B	35.1.21 N	Jan 81
STRING CONCATENATION - PATCH S FOR SINGLE USER BASIC-11	B	35.1.22 M	Mar 81
PROBLEM WITH BASIC-11 PATCH Q		35.1.23 N	May 81
UTILITIES			
CONVERSION PROGRAM		35.2.1 M+	Mar 80
BASIC-11/RT-11 V2 CONVERSION PROGRAM PATCH 1		35.2.2 M+	Mar 80
DOCUMENTATION			
OVERLAYING WHILE IN A SUBROUTINE		35.3.1 R+	Mar 80
OPERATION OF CTRLC, RCTRLC AND SYS(6) FUNCTIONS AND THE CTRL/C COMMAND		35.3.2 N+	Mar 80
OPERATION OF OLD, RUN, CHAIN, AND OVERLAY WHEN THE SPECIFIED FILE IS NOT FOUND		35.3.3 N+	Mar 80
CREATING AND ACCESSING VIRTUAL ARRAY FILES		35.3.4 N+	Mar 80
STORAGE OF THE NULL CHARACTER IN STRING VARIABLES AND VIRTUAL STRING ARRAYS		35.3.5 N+	Mar 80
USE OF COMPILE COMMAND		35.3.6 N+	Mar 80
STRING MANIPULATION IN ASSEMBLY LANGUAGE ROUTINES		35.3.7 N+	Mar 80
MAXIMUM ARRAY SUBSCRIPT SIZE		35.3.8 N+	Mar 80
NEW MANUAL AVAILABLE FOR BASIC-11/RT-11		35.3.9 N	May 81
MICROPOWER/PASCAL V1.0			
ANNOUNCING MICROPOWER/PASCAL V1.0		37.1.1 N	Apr 82
BUILDING AN APPLICATION THAT USES THE FILE SYSTEM		37.1.2 M	May 82
MU BASIC-11/RT V2.1			
MU BASIC V2.1 MAINTENANCE RELEASE AVAILABLE			Mar 82
FORTRAN IV/RT-11 V2.5			
COMPILER			
ANNOUNCING PDP-11 FORTRAN IV/RT-11 V2.5		45.1.1 N	Sep 80
THE COMPILER INCORRECTLY PARSES SOME EXPRESSIONS IN I/O LISTS	A	45.1.2 M	Nov 80
THE COMPILER INCORRECTLY CONVERTS INTEGER TO BYTE IN LOGICAL EXPRESSIONS	A	45.1.3 M	Nov 80
THE COMPILER GENERATES INCORRECT CODE FOR EQUIVALENCED ARRAYS (PAT 12)	D	45.1.4 M	Sep 81
THE COMPILER INCORRECTLY INTERPRETS COMMENTS WITH TABS (PAT 17)	E	45.1.5 M	Nov 81
MISSING END IN MAIN PROGRAM CAN CAUSE COMPILER CRASH (PAT 18)	E	45.1.6 M	Nov 81
THE COMPILER INCORRECTLY OPTIMIZES ARRAY ELEMENTS PASSED AS ARGUMENTS (PAT 20)	E	45.1.7 M	Dec 81
THE COMPILER INCORRECTLY PARSES PARENTHESES IN QUOTED STRINGS (PAT 21)	E	45.1.8 M	Jan 82
THE COMPILER CRASHES WHILE ACCESSING AN ODD ADDRESS IN PAT 12 (PAT 22)	E	45.1.9 M	Jan 82
CORRECTION FOR CONTINUATION LINES PRECEEDED BY COMMENTS (PAT 27)	F	45.1.10 M	Apr 82
BOUNDS CHECKING OF INTERNAL BUFFER IN OPTIMIZER (PAT 29)		45.1.11 M	Jun 82
COMPILER HANGS WHEN ERRORS OCCUR IN STATEMENT FUNCTIONS (PAT 31)		45.1.12 M	Jun 82
OTS			
THE OTS DOES NOT SET DEFAULT CARRIAGE CONTROL FOR SERIAL LINE PRINTER	B	45.2.1 M	Jan 81
THE LUN IS NOT SAVED WHEN AN ERROR OCCURS WHILE OPENING A FILE	B	45.2.2 M	Jul 81
PATCH TO ALLOW THE PLACEMENT OF THE FORTRAN OTS WORK AREA BETWEEN THE PROGRAM'S HIGH LIMIT AND THE BASE OF THE FIRST VIRTUAL OVERLAY FOR PRIVILEGED FORTRAN JOBS	B	45.2.3 F	Feb 81
BOUNDARY CONDITION ON FORMATTED I/O CORRUPTS I/O (PAT 6)	B	45.2.4 M	Mar 81
DEFAULT CARRIAGE CONTROL FOR IMPLIED SEQUENTIAL ACCESS FILES (PAT 7)	C	45.2.5 M	Jul 81

Component	Autopatch Kit	Sequence	Mon/Yr
STANDALONE FORTRAN YIELDS RUN-TIME ERROR 64 (PAT 8)	B	45.2.6 M	Apr 81
DISPOSE = 'KEEP' NOT RECOGNIZED WITH READONLY OPEN PARAMETER (PAT 9)	C	45.2.7 M	Jul 81
THE DATE ROUTINE DOES NOT PERMIT BYTE ALIGNED PARAMETERS (PAT10)	C	45.2.8 M	Jul 81
IMPLICIT READ FAILURE MAY HALT PROCESSOR (PAT 11)	C	45.2.9 M	Jul 81
FPU DOUBLE PRECISION SINE/COSINE MODULE ERRORS (PAT 13)	D	45.2.10 M	Sep 81
EMBEDDED BLANKS OVERRIDE THE ICNT PARAMETER IN THE ASSIGN ROUTINE	D	45.2.11 M	Oct 81
THE DEFAULT CARRIAGE CONTROL FOR THE ASSIGN ROUTINE IS INCORRECT	D	45.2.12 M	Oct 81
CORRECTION FOR UNIT CLOSING (PAT 16)	E	45.2.13 M	Nov 81
LIST DIRECTED INPUT CONVERSION ERROR (PAT 19)	E	45.2.14 M	Dec 81
BOUNDARY CONDITION ON FORMATTED I/O CORRUPTS I/O IN PAT 6 (PAT 23)	F	45.2.15 M	Feb 82
BOUNDARY CONDITION ON FORMATTED I/O BACKSPACE CORRUPTS I/O	F	45.2.16 M	Feb 82
CORRECTION OF ASSIGN FILENAME HANDLING WHEN ICNT EQUALS ZERO	F	45.2.17 M	Feb 82
CONVERSION ERROR WHILE READING COMPLEX NUMBER FROM FILE (PAT 26)	F	45.2.18 M	Apr 82
CORRECTION TO ALLOW CLOSING OF UNIT RECORD DEVICES (PAT 28)		45.2.19 M	Jun 82
PREMATURE CLEARING OF ERR= BRANCH WHEN EOF IS ENCOUNTERED (PAT 30)		45.2.20 M	Jun 82
GAMMA V3.1			
FGAMMA-FRAMES 3 TO 10 OF GSA STUDY SOMETIMES CORRUPT		49.2.1 M	Jul 81
SYSTEM MAY HANG WHEN DISK SQUEEZED		49.2.2 M	Oct 81
STATIC STUDIES ON LARGE DEVICES		49.2.3 M	Jan 82
STATIC STUDY ACQUISITION ON LARGE DEVICES		49.4.1 M	Jan 82
ISOMETRIC DISPLAY IMAGES USE INCORRECT INTENSITY LEVELS		49.5.1 M	Oct 81
SLICE - LAST POINT IS NOT PLOTTED		49.5.2 M	Nov 81
SLICE - <CR>, <LF> NOT ISSUED AFTER PRINTING SLICE DATA		49.5.3 M	Jan 82
TRANSFER STUDY IN SELECTIVE STEP MODE		49.8.1 F	Mar 82
GAMMA-11 DOCUMENTATION CORRECTIONS AND ADDITIONS		49.10.1 N	Mar 82
PATCHING THE RT-11 MONITOR FOR GAMMA-11		49.11.1 M	Nov 81
ERROR IN THE BASIC SUPPORT ROUTINE GPMR		49.12.1 M	Dec 81
ERRORS IN THE BASIC SUPPORT ROUTINES GPLR AND GPF		49.12.2 M	Mar 82
ERROR IN FORTRAN SUPPORT SUBROUTINE GPMR		49.13.1 M	Mar 82
ERRORS IN THE FORTRAN SUPPORT ROUTINES GPLR AND GPF		49.13.2 M	Mar 82
CTS-300 V6.0			
DBUILD			
CORRECTION FOR THREE DECFORM PROBLEMS		51.2.1 M	Oct 81
DECFORM			
PROBLEM WITH DECFORM AND THE VT100		51.4.1 M	Nov 80
CORRECTION FOR THREE DECFORM PROBLEMS		51.4.2 M	Oct 81
DECFORM WITH VT100 TERMINAL CAUSES BAD CHARACTER ON TYPE-AHEAD		51.4.3 M	Nov 81
DIBOL			
TWO CORRECTIONS TO XCALL PAK/UNPAK		51.5.1 M	Aug 81
DICOMP			
FOUR DICOMP ERRORS FIXED		51.6.1 M	Oct 81
DKED			
TWO PROBLEMS WITH DKED		51.7 M	Aug 80
~~DKED SELECT/CUT AND KEYPAD ERRORS~~		~~51.7.2 M~~	~~Sep 80~~
DKED INCORRECTLY HANDLES CONTINUED LINES		51.7.3 M	Oct 81
POSSIBLE BOTTOM OF SCREEN CORRUPTION USING DKED		51.7.4 M	May 82
ISMUTL			
CORRECTIONS FOR ISAM UTILITY ERRORS		51.8.1 M	Nov 81
ISMUTL GIVES INCORRECT ERROR MESSAGES IF INSUFFICIENT MEMORY AVAILABLE		51.8.2 M	Apr 82

Component	Autopatch Kit	Sequence	Mon/Yr
LPTSPL			
TSD SPOOLER GETS CONFUSED		51.9.1 M	Nov 80
SORTM			
SORT SENDS MESSAGES INDISCRIMINATELY		51.14.1 M	Jan 81
SUD			
CORRECTIONS TO DIBOL RUN TIME SYSTEMS		51.16.1 M	Jan 81
PROBLEMS WITH XCALL RENAM AND ERROR 6		51.16.2 M	Feb 81
NO ERROR 22 RETURNED		51.16.3 M	Nov 81
DIBOL STACK OVERFLOW ON OPEN		51.16.4 M	Nov 81
PROBLEMS WITH STACK OVERFLOW AND INCREMENT		51.16.5 M	Dec 81
SUD MESSAGES OVER 100 CHARACTERS IN LENGTH ARE NOT RECEIVED CORRECTLY		51.16.6 M	Feb 82
ISAM FILE RECORD COUNT REVERTS TO 0		51.16.7 M	Apr 82
TDIBOL			
PROBLEM WITH XCALL PAK		51.17 M	Aug 80
PROBLEM UNPACKING DATA		51.17.2 M	Sep 80
TWO CORRECTIONS TO XCALL PAK/UNPAK		51.17.3 M	Aug 81
TSD			
CORRECTIONS TO DIBOL RUN TIME SYSTEMS		51.18.1 M	Jan 81
PROBLEMS WITH XCALL RENAM AND ERROR 6		51.18.2 M	Feb 81
INCORRECT TERMINAL WIDTHS AND CIS PROBLEM		51.18.3 M	Aug 81
CORRECTION TO TSD/XMTSD		51.18.4 M	Sep 81
CORRECTION FOR ISAM PROBLEM		51.18.5 M	Oct 81
"SEND" STARTS MULTIPLE JOBS		51.18.6 M	Oct 81
NO ERROR 22 RETURNED		51.18.7 M	Nov 81
DIBOL STACK OVERFLOW ON OPEN		51.18.8 M	Nov 81
PROBLEMS WITH STACK OVERFLOW AND INCREMENT		51.18.9 M	Dec 81
CORRECTION FOR SIDE EFFECTS FROM PATCH 27		51.18.10 M	Feb 82
LINE PRINTER IS SOMETIMES INCORRECTLY CONSIDERED IN USE		51.18.11 M	Feb 82
ISAM FILE RECORD COUNT REVERTS TO 0		51.18.12 M	Apr 82
TSD AND XMTSD HANG AFTER ATTEMPT TO ILLEGALLY START UP JOB		51.18.13 M	May 82
XMTSD			
CONFLICT BETWEEN XMTSD AND RT-11 OVER CHANNEL 16		51.20 M	Aug 80
CORRECTIONS TO DIBOL RUN TIME SYSTEMS		51.20.2 M	Jan 81
PROBLEMS WITH XCALL RENAM AND ERROR 6		51.20.3 M	Feb 81
PATCH FOR XMTSD WITH CIS		51.20.4 M	Apr 81
INCORRECT TERMINAL WIDTHS AND CIS PROBLEM		51.20.5 M	Aug 81
XMTSD HANGS WHEN LP IS OFF-LINE		51.20.6 M	Sep 81
CORRECTION TO TSD/XMTSD		51.20.7 M	Sep 81
CORRECTION FOR ISAM PROBLEM		51.20.8 M	Oct 81
"SEND" STARTS MULTIPLE JOBS		51.20.9 M	Oct 81
NO ERROR 22 RETURNED		51.20.10 M	Nov 81
DIBOL STACK OVERFLOW ON OPEN		51.20.11 M	Nov 81
PROBLEMS WITH STACK OVERFLOW AND INCREMENT		51.20.12 M	Dec 81
CORRECTION FOR SIDE EFFECTS FROM PATCH 27		51.20.13 M	Feb 82
LINE PRINTER IS SOMETIMES INCORRECTLY CONSIDERED IN USE		51.20.14 M	Feb 82
ISAM FILE RECORD COUNT REVERTS TO 0		51.20.15 M	Apr 82
XMTSD GIVES INCORRECT ERROR WHEN NO ROOM FOR I/O BUFFER		51.20.16 M	Apr 82
TSD AND XMTSD HANG AFTER ATTEMPT TO ILLEGALLY START UP JOB		51.20.17 M	May 82
DOCUMENTATION			
CTS-300 VERSION 6 IS RELEASED		51.21 N	Aug 80
TWO RT-11 PATCHES MODIFIED FOR CTS-300 USE		51.21.2 N	Oct 80
RT-11 PATCH TO LS.MAC MODIFIED FOR CTS-300 USE		51.21.3 N	Feb 81
ADDITIONS TO CTS-300 DOCUMENTATION ON PRINT UTILITY		51.21.4 N	Mar 81
LIST OF SEQUENCE NUMBERS FOR CTS-300 V6		51.21.5 N	Mar 81
SOME NOTES ON RT-11 PATCH SEQ 6.13.3 M TO LS.MAC FOR CTS-300 USERS		51.21.6 M	Jul 81
SOME NOTES ON RT-11 PATCH SEQ 6.13.4 M TO LS.MAC FOR CTS-300 USERS		51.21.7 N	Aug 81
SOME NOTES ON RT-11 PATCH SEQ 6.13.5 M TO LS.MAC FOR CTS-300 USERS		51.21.8 N	Aug 81
AVOIDING POSSIBLE PROBLEM WITH ISAM FILES		51.21.9 N	Dec 81
SOME NOTES ON RT-11 PATCH SEQ 6.13.6 M TO LS.MAC FOR CTS-300 USERS		51.21.10 N	Feb 82
RESTRICTION FOR CTS-300		51.21.11 R	Apr 82

Component	Autopatch Kit	Sequence	Mon/Yr
LS.MAC			
SPECIAL CTS-300 PATCH FOR LS.MAC		51.23.1 M	Feb 81
CORRECTION TO CTS-300 PATCH 11 (SEQ 51.23.1 M) TO LS.MAC		51.23.2 M	Jun 81
SYSTBL.CND			
RT-11 PATCH TO SYSTBL.CND MODIFIED FOR CTS-300 USE		51.25.1 M	Mar 81
RT-11 PATCH SEQ 10.3.2 M TO SYSTBL.CND MODIFIED FOR CTS-300 USE		51.25.2 M	Apr 81
RT-11 PATCH SEQ 10.3.3 M TO SYSTBL.CND MODIFIED FOR CTS-300 USE		51.25.3 M	May 82
CTS-300 V7.0			
DOCUMENTATION			
CTS-300 VERSION 7 IS RELEASED		52.1.1 N	Apr 82
XMTSD RUN-TIME SYSTEM SIZE		52.1.2 N	Jun 82
CHANGING THE DEFAULT TIME SLICE VALUE FOR XMTSD		52.1.3 N	Jun 82
RELINK DIBOL PROBLEMS FOR CTS-300 V7		52.1.4 N	Jun 82
DIBOL RUN-TIME SYSTEMS			
PATCH 5: VARIOUS TSD AND XMTSD PROBLEMS		52.3.1 M	Jun 82
PATCH 6: ISAM FILE RECORD COUNT REVERTS TO 0		52.3.2 M	Jun 82
DIBOL/TDIBOL			
PATCH 2: POSSIBLE INCORRECT RESULTS FROM THE INSTR ROUTINE		52.4.1 M	Apr 82
MACRO SORT			
PATCH 1: TWO SORT PROBLEMS EMERGE UNDER CERTAIN CONFIGURATIONS		52.15.1 M	Jun 82
PATCH 3: SINGLE USER SORT MAY LEAVE TEMPORARY FILES ON DISK		52.15.2 M	May 82
SYSTBL.CTS			
PATCH 4: TERMINAL OUTPUT CORRUPTION ON DZ11 OR DZV11 LINES		52.16.1 M	Jun 82
CTS-300 DICAM (3271) V3.1			
INCORRECT ACK SENT IN CONVERSATIONAL MODE		55.1.1 M	Jul 81
LOOP WHEN CLOSE IS ISSUED WITH OUTSTANDING I/O REQUESTS		55.1.2 M	Jul 81
CTS-300 RDCP (2780/3780) V2.0			
ABNORMAL TERMINATION AND LISTING PROBLEMS		56.1.1 M	Dec 80
SUBSCRIPT ERROR IN RDCP EDITOR		56.1.2 M	Dec 80
MEMORY CORRUPTION PROBLEM		56.1.3 M	Dec 80
DECtype-300 V1.1			
REPEATED USE OF THE PASTE FUNCTION WILL CAUSE AN ERROR 28		57.1.1 M	Jun 82

DECUS

WHY YOU SHOULD JOIN DECUS

- SYMPOSIA
- PROGRAM LIBRARY
- TECHNICAL PUBLICATIONS
- SPECIAL USER GROUPS

DECUS (the Digital Equipment Computer Users Society), a worldwide association of customers and employees, provides a forum for the exchange of useful information, new program packages, and other innovations among those who use and supply the products of Digital Equipment Corporation.

Founded in 1961, DECUS is one of the largest and most active associations of its type in the world. Its objectives are to advance the effective utilization of computers, computer peripheral equipment, and software manufactured and marketed by Digital Equipment Corporation, by promoting the interchange of information concerning their uses; advance the art of computation through mutual education and exchange of ideas of information; establish standards and provide channels to facilitate the exchange of computer programs among DECUS members; provide feedback to the computer industry on equipment and software needs; and to reduce the duplication of development efforts.

DECUS membership is free--upon application--to owners of DIGITAL computers and to their computer-interested employees. Membership carries important benefits and opportunities; among them are access to the program library; membership in local, regional, and national organizations; invitations to symposia dedicated to optimal use of DIGITAL equipment; opportunity to present papers and workshops on your own new ideas; and, finally, access to special interest groups dedicated to particular uses, languages, operating systems, and hardware configurations.

The program library maintained by DECUS contains over 1700 active software packages written and submitted by members and DIGITAL employees, and available to members for the media fee and reproduction cost only. Programs in the library range from enhanced editors and cross compilers to statistics packages and games. Of particular interest to college and university customers, for example, might be a package of programs for registration, class scheduling, dormitory management, and annual giving records. A laboratory user could take advantage of various statistical packages, or programs that perform Fourier transforms or least squares fitting. There are programs for circuit analysis, resonance simulation, blood-count evaluation, and stress testing, and scores of others which medical, scientific, or engineering customers could employ. Business people can find accounting packages, data analysis and payroll programs among the library's offerings. In addition, of course, there is a wide range of text editing, display graphics, and enhanced utility programs available.

Local, regional, and national DECUS organizations give members the opportunity to meet other DIGITAL customers and employees in an informal setting. From the monthly local meeting to the semiannual national symposium, the members can discuss their ideas, can learn what others are doing, and can give DIGITAL feedback necessary in improvement and future development of important products. Often, the national meetings in the various countries also provide the stage for major new product announcements by the company, and a showplace for interesting developments in both hardware and software technology. At any meeting a member might describe ideas and programs he has implemented, or fine tuning that has been achieved for a particular application. Members give papers, participate in panel discussions, lead workshops, or conduct demonstrations for the benefit of other members.

DECUS also publishes newsletters focusing on special interest, technical books that contain the compilation of symposia presentations; and a society newsletter.

Many members derive a particular benefit from joining DECUS Special Interest Groups. Special Interest Groups often meet as subsets of regional and national meetings, or they may meet on their own, to discuss their special interest. Here, all RSTS/E users, or everyone interested in COBOL, for example, can have a chance to get together and discuss topics of mutual importance. At present there are more than 20 Special Interest Groups (SIGs) in the U.S. alone. Many of the SIGs print newsletters and disseminate valuable technical information to members. The SIGs really are the front-line of mutual help and problem solving.

DIGITAL provides DECUS with administrative personnel and office space around the world, but the organization is run by its members, who act as speakers for conferences, planners for meetings, editorial and production talent for newsletters and minutes, and the inventors of the ideas and new programs necessary to keep the library up to date. Belonging to DECUS is a valuable adjunct to owning DIGITAL equipment on both the program exchange and the information exchange fronts.

continued

To obtain a DECUS membership form, complete the form below and return it to the appropriate chapter office.

CHAPTER	ADDRESS
AUSTRALIA (Australia, Brunei, Indonesia, Malaysia, New Zealand, Singapore)	DECUS Australia P.O. Box 384 Chatswood NSW 2067 Australia
CANADIAN (Canada)	DECUS Canada P.O. Box 13000 Kanata, Ontario K2K 2A6 Canada
EUROPEAN (Europe, Middle East, North Africa, Russia)	DECUS Europe P.O. Box 510 12, avenue des Morgines CH-1213 Petit-Lancy 1/GE Switzerland
U.S. (U.S. and all other countries)	DECUS U.S. Chapter One Iron Way Marlboro, Massachusetts 01752 U.S.A.

Please send me a DECUS membership form.

NAME: _____
(First) (Last/Family Name)

COMPANY: (INSTALLATION) _____

ADDRESS: _____

_____

_____

_____
(City, Town, State/Province, and Zip/Postal Code)

COUNTRY: _____

TELEPHONE: _____ TELEX _____

I obtained this form from _____.

July 1980

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
United States; remainder of Far East, Middle East, Africa Latin America	Corporate Administrative Systems Group P.O. Box F Maynard, MA 01754
Canada	Digital Equipment of Canada, Ltd. P.O. Box 13000 Kanata, Ontario Canada, K2K 2A6
United Kingdom, Bahrein, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Qatar, Oman, Saudi Arabia, Syria, United Arab Emirates, Yemen, Arab Republic	Digital Equipment Co. Ltd. 2 Cheapside GB - Reading, Berkshire RG1 7AA England
Australia, New Zealand	Digital Equipment Aust. Pty. Ltd. P.O. Box 384 Chatswood, New South Wales 2067 Australia
Brazil	Digital Equipment Comercio e Industria Ltda. Avenida Augusto Severo, 156-A 20021 Rio de Janeiro, RJ Brazil
Caribbean	Digital Equipment Latin America P.O. Box 11038 Fernandez Juncos Station Santurce 00910 Puerto Rico
France	Digital Equipment France Cidex L225 18 Rue Saarinen F-94528, Rungis France
Italy	Digital Equipment S.p.A. Viale Fulvio Testi, 11 Ang. Via Gorki 105 I-20092 Cinisello Balsamo Milan Italy
Japan	Digital Equipment Corp. Intl. Japan Sunshine 60, P.O. Box 1135 1-1 Higashi Ikebukuro 3-Chome, Toshima-Ku, Tokyo, 170 Japan
Belgium, Holland, Luxemburg	Digital Equipment B.V. Kaap Hoorndreef 38 NL-3563 AV Utrecht Holland

Sweden	Digital Equipment AB P.O. Box 1250 S-17124 Solna 1 Sweden
Denmark	Digital Equipment Corp. AS Kristineberg 3 DK-2100 Copenhagen 0 Denmark
Finland	Digital Equipment Corp. Oy PL 16 SF-02201, Espoo 20 Finland
Norway	Digital Equipment Corp. A/S Pottemakerveien 8 N-Oslo 5 Norway
Austria, East Germany, West Germany, Poland, Hungary, Rumania, Czechoslovkia, Russia, Bulgaria	Digital Equipment Corp. GmbH Rheinstrasse 28 D - 8000 Munich 40 West Germany
Israel	Decsys, Computers Ltd. 4, Yirmiyahu Str. IL-63505 Tel Aviv Israel
Greece, Portugal, Spain, Switzerland, Yugoslavia, (Morocco, Algeria, Tunisia, Cyprus, Turkey, Malta)	Digital Equipment Corp. SA 9, Route des Jeunes Case Postale 191 CH-1211 Geneva 26 Switzerland
Mexico	Digital Equipment de Mexico, S.A. de C.V. Ave. Lopez Mateos 427, 1st. Floor Guadalajara Jalisco Mexico
China	Digital Computer Hong Kong Ltd. 1303-1309 Dominian Ctr. 43-59 Queen's Road East Wanchai Hong Kong

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 •