THE mini• tasker

DECUS
RT-11 SIG NEWSLETTER

JANUARY 1979 VOL. 5 NO. 1

Contributions to the newsletter should be sent to:

Ken Demers
MS-48
United Technologies Research Center
Silver Lane
East Hartford,Conn. 06108
203 727-7241

Other communications can be sent to:

John T. Rasted
JTR Associates
58 Rasted Lane
Meriden,Conn. 06450
203 634-1632

or

RT-11 SIG
C/O DECUS
One Iron Way
MR2-3/E55
Marlboro,Mass. 01752
617 481-9511 Ext. 4141

FROM THE EDITOR

The topic of forming an RT-11 'Brain Trust' was discussed at length in San Francisco. People expressed fears concerning the high quantity of calls they might receive. We came to the conclusion that only the names of certain people in each geographic region of the U.S. will be listed in the newsletter as contacts. These people will service the calls for their region and pass the request for information to 'Brain Trust' members of their region. We felt this tree structure approach could handle our needs most efficiently. We currently have over 30 volunteers for the brain trust. We need more. If you feel you can be of some service, please send me your name,address,phone number,area of expertise, and whether you would like to be a geographical contact. A list of 'Brain Trust' contacts will be published when we have more volunteers and it's structure is established. The target date is the first newsletter after the Spring Symposium in New Orleans. Reader comments are welcome.

USER REQUESTS

UNIVERSITY OF WASHINGTON
SEATTLE, WASHINGTON 98195

School of Public Health and Community Medicine
Department of Environmental Health, SC-34

December 7, 1978

John T. Rastad
JTR Associates
58 Rasted Lane
Meriden, CT 06450

RE: Declab 11/03 software

Dear Mr. Rastad:

I would like to obtain the addresses of the software coordinators for the various LUG's. In an effort to keep from re-inventing the wheel, I would like to find who is doing laboratory data acquisition with the 32K words, dual floppy, ADV-11 A/D, AAV-11 D/A, VT-55 hard copy terminal type of system.

We are in the process of organizing our University of Washington LUG and its potential is suddenly made apparent.

If I could find someone who has done chromatography integration (like at the University of Pitt.), infrared spectrophotometry (like at the University of Rhode Island), x-ray fluorescence (like at Penn. State University), I could save a year's work.

Sincerely,

Robert M. Orheim
Industrial Hygiene Chemist

Gould Inc., Gould Laboratories
40 Gould Center
Rolling Meadows Illinois 60008
Telephone (312) 640-4400

GOULD

5 December 1978

Ken Demers
MS-48
United Technologies Research Center
Silver Lane
East Hartford, Conn. 06108

Dear SIG Readers,

There is a spelling check program that operates on text files such as those for RUNOFF, which runs on DEC-10 systems. If anyone has knowledge of that or a similar program which will run on a PDP-11 under RT-11 or RSX-11, I would appreciate any information.

Please write to the above address or phone me at 312/640-4472.

Neil D. Herbert

USER INPUT

VETERANS ADMINISTRATION
HOSPITAL
COLUMBIA, S.C. 29201
151

IN REPLY REFER TO:

Ms. Maura Burke, Ed.
Decuscope
Digital Equipment Corp.
Maynard, Mass. 01754

10-12-78

Dear Ms. Burke:

Enclosed is an abstract which I am submitting for your consideration in the "programs available from the author" section of Decuscope.

Thank you.

Sincerely yours,
W. Lloyd Milligan
W. Lloyd Milligan

RT-11 / IBM VSPC Interface Program

W. Lloyd Milligan
Neuroscience Laboratory
V.A. Medical Center
Columbia, S.C., 29201

Computer: PDP 11/10

An RT-11 MACRO assembly language program was written to interface the PDP-11 to an IBM 370/168 via VSPC. This interface permits 'straight through' terminal communication between RT-11 and VSPC. It also permits automatic transmission of RT-11 ASCII files to VSPC. Files may consist of VSPC commands, data or any combination of commands and data. The hardware consists of a DL-11E and acoustic coupler operating at 300 baud. Minor modification would permit 1200 baud communication. The program is relocatable and can be run in either the foreground or background partition.

DYNAPRO SYSTEMS, INC.
875 W. Broadway
Vancouver, B.C.
Canada
V5Z 1J9

October 10, 1978

RT-11 SIG
c/o DECUS
129 Parker Street
PK-3/E55
Maynard, Mass. 01754

Dear Sirs:

We require word processing software to run on a PDP-11/05 with RK05 disks. This software should be suitable for processing the everyday correspondence of a business office as well as being capable of handling the editting and printing of large documents (eg. proposals) that can run to several hundred pages.

If you know of such a package, please contact me at your earliest possible convenience.

Thank you.

Yours truly

Karl R. Brackhaus Ph.D., P.Eng.
President

Special features include (a) a timed 1/2 second break or interrupt generated by the del key, (b) a carrier detect inquiry invoked by CTRL E, (c) interception of invalid characters prior to transmission at 'straight through' level (d) automatic wait until all messages coming from VSPC have been received before sending the next record of a sequential ASCII file.

A documented source listing of the MACRO program is available from the author on request.

CENTRE NATIONAL
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STRASBOURG, LE 19 octobre 19 78

Mr. John T. RASTED
JTR Associates

58 Rasted Lane

MERIDEN, CT 06450

U.S.A.

Dear Sir,

I would appreciate the publication of the enclosed paper in the next number of the Mini-tasker.

I thank you in advance

Yours sincerely

D. GUINIER

$$$
$ DECUSCOPE . DIGITAL EQUIPMENT COMPUTER USERS SOCIETY$
$$$

APPLICATION NOTE : RT 11
****

A FORTRAN IV SUBROUTINE FOR A DYNAMIC CHANGE OF THE ACTIVE TERMINAL TT:

****

BY D. GUINIER AND R. KIRSCH

LABORATOIRE DE PHYSIOLOGIE COMPAREE DES REGULATIONS
GROUPE DE LABORATOIRES DU CNRS DE STRASBOURG-CRONENBOURG
23 RUE DU LOESS
B.P. 20 CR
67037 STRASBOURG FRANCE

INTRODUCTION :
****

IT COULD BE IMPORTANT TO USE AN AUXILIARY TERMINAL AS THE CONSOLE TERMINAL TT: RT11 CAN BE MODIFIED BY THE PROGRAMME PATCH TO ALLOW A TERMINAL OTHER THAN THE STANDART CONSOLE TT: TO BECOME THE CONSOLE TERMINAL. THIS STATIC CHANGE IS DISCIBED P.2-23 IN CHAP.2.6 OF THE RT11 SOFTWARE SUPPORT MANUAL (DEC-11-ORPGA-B-D.DN1

WE PROPOSE A SHORT FORTRAN SUBROUTINE TO DO A DYNAMIC CHANGE WITH A TERMINAL WHOSE ADRESSES AND VECTORS COULD BE EVALUED BY A PROGRAM OF YOUR OWN.

EXAMPLE OF USE :
****

```
      CALL TT("60,"177560,"300,"176500)
      STOP
      END
```

LISTING OF THE COMPILATION : (UNDER RT11 V.02-C).
****

```
C
C-----------------------------------------------------------------
C SUBROUTINE TT  : DYNAMIC CHANGE OF ACTIVE TERMINAL TT:
C-----------------------------------------------------------------
C
      SUBROUTINE TT(VEC1,ADR1,VEC2,ADR2)
C
      INTEGER*2 VEC1,ADR1,VEC2,ADR2
      INTEGER*2 ADR(2),OFFSET,OFFADR,OFF342
C INITIALISATION.
      KOUI=VEC1
      KNON=VEC2
      KO=1
      ADR(1)=ADR1
      ADR(2)=ADR2
      CALL IPOKE(ADR(2),"000)
C USEFUL ADRESSES
```

```
      OFFSET=IPEEK("54)
      OFFADR=OFFSET+"304
      OFF342=OFFSET+"342
C EVENTUAL UPDATE.
      IF(IPEEK(OFFADR).NE.ADR(KO))GO TO 1
      KOUI=VEC2
      KNON=VEC1
      KO=2
C ZEROING TKS OF THE INACTIVE TERMINAL.
      CALL IPOKE(ADR(1),"000)
1     DO 2 I=1,4
      J=(I-1)*2
C EXCHANGE THE VALUES VECTIN,STATIN,VECTOUT,STATOUT
C BETWEEN KOUI AND KNON.
      K1=IPEEK(KNON+J)
      K2=IPEEK(KOUI+J)
      CALL IPOKE(KOUI+J,K1)
      CALL IPOKE(KNON+J,K2)
C UPDATE TKS,TKB,TPS.TPB FOR THE NEW ACTIVE TERMINAL TT:
2     CALL IPOKE(OFFADR+J,ADR(KO)+J)
C VECTORS INTERRUPT PROTECTION
      CALL IPOKE(OFF342,"360.OR.IPEEK(OFF342))
C BUZZER ON THE NEW ACTIVE TERMINAL TT:
      J=ITTOUR("007)
C
      RETURN
      END


***** COMPILATION STATISTICS *****
*                                *
*------- COMPILER  TABLES -------*
* SYMBOLS:          00205 WORDS *
* PROGRAM:          00190 WORDS *
*--------- OBJECT CODE ----------*
* TOTAL:            00232 WORDS *
**********************************

     LINKAGE : WITH SYSLIB AND FORLIB (/F)
     *********

     GOOD LUCK !
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The Swedish Hospital Medical Center

747 Summit Avenue
Seattle, Washington 98104

To: RSX/IAS Special Interest Group
RSTS Special Interest Group
RT Special Interest Group
LSI-11 Special Interest Group

December 6, 1978

Subject: Resurrection of Bio Medical Special Interest Group

The Bio-Med SIG was obviously absent at the Fall DECUS Symposium held in San Francisco, and, from what I understand, is currently defunct. I expressed interest to the DECUS Executive Board that I would like to revive the Bio-Med SIG if there is sufficient interest among DECUS members. I will volunteer to act as Chairman, and, to become registered as a SIG with DECUS, four other members will have to volunteer as (1) Newsletter Editor, (2) Library Coordinator, (3) Symposia Coordinator, and (4) Standards Representative. Ed Bolson, from the University of Washington, will act as one of these officers. To become a viable SIG, however, will require participation of additional individuals. There may be insufficient time to organize paper presentations at the Spring, 1979, symposium, but I would like at least to establish at New Orleans a "spoken here" room where the direction and scope of a Bio Med SIG can be discussed. It may be constructive to postulate why the Bio-Med SIG has been unsuccessful in the past, and how to minimize the conflict with other SIGs in which many of us may also have an interest. At our medical center, for instance, I have two RSX-11M systems, which perform patient monitoring and communicate with a DEC C300, am evaluating DECnet, and am also considering the 3271 P.E. for communication with an IBM 370/148. The system will ultimately contain some LSI-11s. We also communicate with an IAS system and a DECSYSTEM 10, and have a Gamma-11 system (RT-11).

Probably the three primary areas of interest of the Bio-Med SIG are:

(1) Medical Research
(2) Clinical Applications
(3) Human Interface

Historically, most of the effort has been directed toward medical research, and probably insufficient effort devoted to the human interface between the computer system and the medical personnel.

If you are interested in reviving the Bio-Med SIG, and/or are interested in participating as one of the above officers, please contact me by mail or at 206-292-2199

Thank you,

James St[illegible]
Systems Programmer

MICRO LOGIC CONSULTANTS

116 COLLEGE ROAD
SOUTHWATER
HORSHAM
SUSSEX
United Kingdom,

17th. October 1978.

Dear Sir,

Line Printer Handler for Serial XON/XOFF Printers - RT11

Your readers may be interested in a handler which we have recently developed which supports a buffered serial printer connected via a DL 11 interface as the RT 11 line printer device.

Printers such as the LA 180 will operate at full speed, and all the RT 11 LP options are retained. This handler provides a particularly cost effective solution where a serial printer is connected to a spare line of a DLV 11J.

We will be pleased to supply further details of the handler on request.

Yours sincerely,

J. Crabb

BANQUE DE FRANCE
FABRICATION DES BILLETS
57, 59, Quai National - 92803 PUTEAUX
BOITE POSTALE 89 - TÉL. : 773.04.48
ADRESSE TÉLÉGRAPHIQUE : PAIDEBILL 00 PARIS
R. C. SEINE No 57 6 10489

BP/YN.

PUTEAUX, le 18 octobre 1978

Mr. KEN DEMERS
MS-48
United Technologies Research Center
Silver Lane
East Hartford, Conn. 06108

Dear Mr. Demers,

May I send you a copy of the letter I wrote to Robert HASSINGER, Coordinator of the 12-bit SIG, about moving data files between PDP-8 and PDP-11 diskettes. This can be, I think, of interest as well for RT-11 users.

Yours sincerely,

B. PERRETTE

MOVING DATA BETWEEN 8' AND 11' DISKETTES

Dear Mr. Hassinger,

In addition to my letter of October 18th, 2 new points :

1. Having just read EARL T. ELLIS' letter in newsletter 30, page 26, I start doubting whether JIM VAN ZEE really passed me the STEWART DEWAR HANDLER ? It could rather be the handler of Dr. LYNCH of XEROX, since EARL T..ELLIS gratific it with 666 blocks, and only 650 blocks for the STEWART DEWAR'S. Mine definitely has 667 blocks (directory + 660 free blocks). Please ask JIM ...

2. As already said, the first track (= 26 sectors = 8 full OS/8 blocks = OS/8 blocks to 7 included) remains unknown from the RT/11 handler.

   Since the OS/8 directory uses blocks to 6 included, then you can have simultaneously on a diskette :

   1) an OS/8 directory
      + 1 OS/8 file 1 block long
      + 1 OS/8 "empty" 20_{10} blocks long
      + anything along 639 OS/8 blocks

   2) an RT/11 directory
      + the same thing in a different sequence, along 460_{10} RT/11 blocks.

If you baptize with some name the OS/8 "empty", then you can, according to the place of your latest work, (PDP 8 or PDP 11) have RT/11 files or OS/8 files one another convertible without alteration of the "other" directory.

Yours sincerely,

Bernard PERRETTE

PS. - Copy of both letters sent to LARS PALMER.

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57, 59, Quai National - 92805 PUTEAUX
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ADRESSE TÉLÉGRAPHIQUE : FABIBANK 00 PARIS
R. C. SEINE No 57 B ... 0469

BP/YN.

PUTEAUX, le 18th October 1978

Mr. Robert HASSINGER
Coordinator - 12 Bit SIG
LIBERTY MUTUAL RESEARCH CENTER
71 Frankland Road
HOPKINTON, MA 01748
U.S.A.

MOVING DATA BETWEEN 8'S AND 11'S THROUGH DISKETTES.

Dear Mr. Hassinger,

From the note of JIM VAN ZEE in the September newsletter (n° 30), it seems that CARL APPELOF and JIM succeeded in transforming with a PDP 11 a source file on diskette in such a way that it could be read on a PDP/8, using the STEWART DEWAR handler.

Since we have here some PDP 8 and 11, I did very recently the same but without any action on the PDP 11 side, except picking up the address and the place of the file. My PDP 8 program takes the 11 diskette as it is, translate it into one or several OS/8 file(s). I started investigating that way as soon as I received from JIM, when be passed in Paris in September, the STEWART DEVAR OS/8 handler mentioned in the newsletter 29.

As this handler uses the 8-bit mode transfer of the RX8, which means the full information capability of a diskette (667 blocks of 256 12-bit words = 77 tracks x 26 sectors x 128 bytes), then the conversion became theoretically possible between 12-bit and 16-bit words through RX8 and RX11 interfaces.

Having found that the bytes-packing was compatible with the RT/11 handler, and deciphered the relation between corresponding sectors (not so simple), I have written a small UWFOCAL program which asks the starting block number and the number of blocks of the diskette file, such as they are given by RT/11 PIP, then asks the device and name of the OS/8 file to be created, and finally operates the transfer sector after sector.

It could easily be improved, buk, as it is, it does the job. I join a copy of the text, but I also add a paper about the method, so that anybody can write a program in his usual language, the only condition being that this language be able to access absolute blocks.

The RT/11 DEC handler reveals only 494 blocks of 256 16-bit words, i.e. 76 tracks x 26 sectors x 128 bytes, with the same lose of one track as the OS/8 usual DEC handlers. It means that if you can translate with no limitation from 11 to 8 (with the STEWART DEWAR handler), it is better, when translating from 8 to 11 to drop starting blocks less than 11 (octal).

An RT/11 program can easily be written to do the symetrical operation on 11 side, taking the OS/8 diskette as it is (provided that it has been prepared with the STEWART DEWAR handler).

The method is also given in my paper.

Yours sincerely,

Bernard PERRETTE

```
METHOD TO CONVERT RT/11 SECTORS INTO OS/8 SECTORS ON DISKETTE
-------------------------------------------------------------
(BERNARD PERRETTE, BANQUE DE FRANCE, PARIS, OCTOBER 1978)

PREREQUISITES:
1-USING THE STEWART BEHAR 8 BIT-MODE OS/8 HANDLER,
FOR THE DRIVE RECEIVING THE 11 DISKETTE
2-KNOWING THE RT 11 ABSOLUTE STARTING BLOCK NUMBER OF THE FILE
3-KNOWING THE NUMBER OF RT/11 BLOCKS
4-OPENING SOMEWHERE AN OS/8 OUTPUT FILE

METHOD:
1-COMPUTE THE SECTOR NUMBER NS CORRESPONDING TO THE BLOCK NUMBER NB
2-COMPUTE THE TRACK NUMBER RP=INTEGER PART OF NS DIVIDED BY 26
3-COMPUTE THE SECTOR RANK RS IN THE TRACK (0 TO 25):
RS=NS-(26 X RP)
4-COMPUTE THE LAG D, IN TERMS OF 8-SECTORS, OF THE FIRST 11-SECTOR
IN THIS TRACK : D=2 X RP -(13 X INTEGER PART OF (3 X RP /13)
5-COMPUTE THE LAG AS OF THE SECTOR WITH RANK RS :
AS=RS+D+.5 X (1+SIGN OF (RS-12)+D)- SIGN OF (RS-12)+SIGN OF (RS-25+D))
AND AS=RS IF D=0
6-COMPUTE THE OS/8 BLOCK NUMBER WHICH COMPRISES THE 11-SECTOR
B8=INTEGER PART OF ((26+(RP X 26)+AS)/3)
7-COMPUTE THE RELATIVE SECTOR NUMBER TR (0,1,2)INSIDE THE BLOCK NUMBER
TR=26+(RP X 26)+AS-(3 X B8)
8-INPUT THE B8 BLOCK AND COPY JUST THE TR SECTOR
9-ITERATE OR CLOSE


METHOD TO CONVERT OS/8 SECTORS INTO RT/11 SECTORS
-------------------------------------------------

SIMILAR, BUT:
REPLACE NS BY NS-26 IN COMPUTING RP AND RS
CHANGE THE STEP 5 BY :
AS=RS-D+.5 X (1-SIGN OF (RS-12+D)+SIGN OF (RS-12)-SIGN OF (RS-25+D)
CHANGE THE STEP 6 BY :
B11=((RP X 26)+AS)/4
CHANGE THE STEP 7 BY :
(RP X 26)+AS-(4 X B11)



C U/W-FOCAL:  14K-V4  [illegible]

01.01 C TAMIER: POUR CONVERTIR DISKETTE 11 EN DISKETTE 8
01.02 C BERNARD PERRETTE, BANQUE DE FRANCE, PARIS, OCTOBRE 1978

01.10 T !"CONVERSION 11 VERS 8"
01.12 T !"METTEZ LA DISKETTE 11 SUR L UNITE [illegible]"
01.14 A !!"ADRESSE DU BLOC DEPART EN PIP [illegible] OPTION /DE) [illegible]
01.15 S NB=F(1+60)
01.16 A !"NOMBRE DE BLOCS A TRANSFERER "NB
01.17 T %3,"="FITR(4* [illegible] " BLOCS OS/8"
01.20 T !!"NUMERO DE L UNITE OU SERA CREE LE FICHIER OS/8"
01.21 T !"(S POUR SYS)" [illegible]
01.22 S C(7)=FIN()
01.24 T !!"NOM DU FICHIER OS/8 A CREER (A TERMINER PAR CARR RETURN)
01.26 T !"(L'EXTENSION DA SERA AUTOMATIQUEMENT AJOUTEE)"[illegible]
01.30 D AS1 (21) C(7) [illegible] 34
01.32 D D RP-C( [illegible]
01.34 D D SYS:(C(1),C( [illegible] ),C(3),C(4),C(5),C(6)) [illegible]
```

```
03.05 S NB=4*NB
03.10 S NS=4*NB
03.20 S RP=FITR(NS/26)
03.30 S RS=NS-26*RP
03.40 S D=2*RP-13*FITR(3*RP/13)
03.50 S AS=RS+D+.5*FSGN(D)*(1+FSGN(RS-12.1+D)-FSGN(RS-12.1)+FSGN( [illegible] ))
03.60 S B8=FITR((26+RP*26+AS)/3)
03.70 S TR=26+26*RP+AS-3*B8
03.80 D TB;D 6.1,6.2,6.3
03.90 T NS,-NB;I (NB-.1)5.1,G 3.2

05.10 D C;O I,E;Q

06.10 D 6.7,6.9
06.20 D 6.7,6.8,6.9
06.30 D 6.7,6.8,6.8,6.9
06.70 O I R1:<B8>
06.80 F I=1,128,1;X FIN()
06.90 F I=1,128,1;X FOUT(FIN())

14.05 S N;I (#-1000)14.1;S Z=FITR(#/1000),#=#-Z*1000,N=N+Z*512
14.10 I (#-100)14.2;S Z=FITR(#/100),#=#-Z*100,N=N+Z*64
14.20 I (#-10)14.3;S Z=FITR(#/10),#=#-Z*10,N=N+Z*8
14.30 S #=N+#

15.10 F I=6,-1,1;S C(I)=-192
15.20 S C=FIN();I (C-250)15.3;I (C-141),15.4;S I=I+1,C(I)=-C;G 15.2
15.30 S C(I)=-192,I=I-FSGN(I);I (I)15.3;T "/";G 15.2
15.40 R
```


CENTRE NATIONAL
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FRANCE

STRASBOURG, LE October, the 31st 19 78

Dear Sir,

I am sending you herewith an other paper that I would appreciate to be publicated in the next number of the Mini-tasker.

Thanking you in advance

Yours sincerely

D. GUINIER

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          ##########################################################
          # DECUSCOPE   DIGITAL EQUIPMENT COMPUTER USERS SOCIETY#
          ##########################################################


 APPLICATION NOTE :      RT 11  ( FORTRAN IV SOURCES )
 ******************


AN OVERLAY INTERACTIVE AND CONVERSATIONAL PROGRAM TO LOAD

 AND VERIFY REAL PAIRS OF Y,X FROM KEYBOARD INFORMATION.

************************************************************


 BY D GUINIER AND R KIRSCH

 LABORATOIRE DE PHYSIOLOGIE COMPAREE DES REGULATIONS
 GROUPE DE LABORATOIRES DU CNRS DE STASBOURG-CRONENBOURG
 23 RUE DU LOESS
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 INTRODUCTION :
 **************

   WE PROPOSE A PROGRAM TO LOAD AND VERIFY THE CONTAIN OF
 PAIRS OF Y,X IN A DIRECT ACCESS FILE WHOSE NAME IS DETERMINED
 BY THE USER
   THE INPUT INFORMATION ENTERED, FROM THE DEVICE GIVEN BY THE USER
 IS DECODED LIKE A COMMAND ORDER OR A NUMERICAL DATA BY ITS OWN
 NATURE AFTER AGREEMENT OR NOT
   FOR A FUTURE USE, A LOGICAL INDEX IS ASSOCIATED TO EACH PAIR
 OF Y,X VALUES ('Y' TO ACCEPT AND 'N' TO IGNORE THE PAIR )
   MANIPULATIONS AND LISTINGS OF Y,X AND INDEX ARE POSSIBLE BY THE
 APPROPRIATE COMMAND ORDER. INSTRUCTIONS FOR USE ARE GIVEN BY THE
 SINGLE COMMAND 'A'.
   IT IS IMPORTANT TO NOTICE THAT NUMERICAL REAL DATA CAN BE ENTERED
 WITHOUT '.' OR WITH '0'. (EX. : 1. OR 1 OR 1.0)


 LISTING OF THE COMPILATION : (UNDER RT11 V02-C).
 ****************************


      C
      C  MAIN INTERACTIVE AND CONVERSATIONAL PROGRAM TO LOAD A FILE
      C  WHOSE NAME WILL BE DETERMINE BY THE USER WITH PAIRS OF Y,X NUMERICAL
      C  REAL*2 VALUES ASSOCIED TO A LOGICAL INDEX 'Y' OR 'N'
      C  FOR A FUTURE USE.
      C
      C  REQUIRED SUBROUTINES : INOUT,FICH,DECLA,COR,RESUP,LIST,HELP
      C
0001        INTEGER*2 Y,YYY,INDIC,FIELD,WARN(6)
0002        DATA YYY/'Y '/,WARN/' F ','$ ','R ','S ','L ','A '/
           1LEC,IMP/5,7/,NENR/2048/,INDX/1/
      C  INPUT/OUTPUT INITIALISATION
0003        CALL INOUT(LEC,IMP)
      C  DIRECT ACCESS FILE DETERMINATION
0004        CALL FICH(IMP,1,NENR,5,INDX)
0005  200   FORMAT(A1)
0006        WRITE(IMP,100)
0007  300   FORMAT(' $IS THIS A NEW GROUP OF DATA : ')
0008        READ(LEC,200)NOUV
0009        IF(NOUV.NE.YYY)GO TO 5
0011        WRITE(IMP,400)
0012  400   FORMAT(' $DOES AN INCREMENTAL VALUE EXISTS FOR THE X : ')
0013        READ(LEC,200)INCRE
0014        IF(INCRE.NE.YYY)GO TO 1
0016        WRITE(IMP,500)
0017  500   FORMAT(' $INCREMENT   ')
0018        CALL DECLA(FIELD,VALINC,INDX,INDIC,LEC,IMP,' ')
0019  600   FORMAT(F18.8)
0020        X=0.
0021  1     DO 3 I=1,NENR
0022        CALL DECLA(FIELD,Y,INDX,INDIC,LEC,IMP,'Y')
0023        DO 8 K=1,6
0024  8     IF(FIELD.EQ.WARN(K))GO TO 9
0026  9     GO TO (4,12,13,13,15,16,17),K
0027  12    CALL COR(LEC,IMP,NENR,INDX,FIELD,INCRE)
0028        GO TO 28
0029  13    CALL RESUP(LEC,IMP,NENR,INDX,FIELD)
0030        GO TO 28
0031  15    CALL LIST(LEC,IMP,NENR,INDX)
0032        GO TO 28
0033  16    CALL HELP(IMP)
0034  28    I=I-1
0035        GO TO 3
0036  17    IF(INCRE.NE.YYY.OR.I.EQ.1)GO TO 6
0038        X=Z+(I-1)*VALINC
0039        GO TO 7
      C  DUMMY INDEX INDI
0040  6     CALL DECLA(FIELD,X,INDX,INDI,LEC,IMP,'X')
0041        Z=X
0042  7     WRITE(1'INDX)Y,X,INDIC
0043  3     CONTINUE
0044  4     CALL EXIT
0045  5     WRITE(IMP,700)
0046  700   FORMAT(' CORRECTION ($) RESTORATION (R) OR SUPPRESSION
           1(S) (LOGICAL),/'$LISTING (L), END (F) : ')
0047        READ(LEC,200)FIELD
0048        DO 18 K=1,6
0049  18    IF(FIELD.EQ.WARN(K))GO TO 19
0051  19    GO TO (4,22,23,23,25,26,5),K
0052  22    CALL COR(LEC,IMP,NENR,INDX,FIELD,INCRE)
0053        GO TO 5
0054  23    CALL RESUP(LEC,IMP,NENR,INDX,FIELD)
0055        GO TO 5
0056  25    CALL LIST(LEC,IMP,NENR,INDX)
0057        GO TO 5
0058  26    CALL HELP(IMP)
0059        GO TO 5
0060        END
```

```
      C
0001        SUBROUTINE DECLA(FIELD,X,I,INDIC,LEC,IMP,INDXY)
      C
      C  DECODE A SERIE OF ASCII CHARACTERS CORRESPONDING TO A COMMAND FIELD
      C  AND A REAL*2 NUMBER WITH CONTROL OF THE INFORMATION.
      C
      C   FIELD : '$' OU 'S' OU 'F' OU 'N'
      C   INDIC : 'Y' OU 'N' ('N' DIRECTLY DETERMINE BY THE 'N' VALUE OF THE FIE
      C       X : REAL*2 NUMBER.
      C LEC,IMP : LOGICAL UNITS FOR INPUT/OUTPUT.
      C   INDXY : 'X' OR 'Y' ( OR ' ' TO INHIB WRITE(IMP,100)...)
      C
0002        BYTE BUF(18)
0003        INTEGER*2 FIELD,YYY
0004        DATA YYY,NNN,'Y','N'/
0005  1     FIELD="40
0006        INDIC=YYY
0007        IFIELD=0
0008        IPOINT=0
0009        DO 8 J=1,18
0010  8     BUF(J)="40
0011        IF(INDXY.NE."40)WRITE(IMP,100)INDXY,I
0013  100   FORMAT('$',A1,'(',I4,') = ')
0014        READ(LEC,200)NBRC,(BUF(J),J=1,NBRC)
0015  200   FORMAT(Q,18A1)
0016        DO 5 J=1,NBRC
0017        IF(BUF(J).LE."71.AND.BUF(J).GE."60)GO TO 5
0019        IF(BUF(J).EQ."40.OR.BUF(J).EQ."55)GO TO 5
0021        IF(BUF(J).EQ."54)BUF(J)="56
0023        IF(BUF(J).EQ."56)GO TO 4
0025        IF(IFIELD.NE.0)GO TO 7
0027        IF(BUF(J).EQ."116)GO TO 2
0029        IFIELD=1
      C  OFFSET BETWEEN INTEGER AND BYTE VALUES : 'Y'-"131
0030        FIELD=BUF(J)+YYY-"131
0031        GO TO 3
0032  2     INDIC=NNN
0033  3     BUF(J)="40
0034        GO TO 5
0035  4     IF(IPOINT.NE.0)GO TO 7
0037        IPOINT=1
0038  5     CONTINUE
0039        IF(IPOINT.EQ.0)BUF(NBRC+1)="56
0041  6     DECODE(18,300,BUF)X
0042  300   FORMAT(F18.8)
0043        RETURN
0044  7     WRITE(IMP,400)
0045  400   FORMAT(/10X,'INPUT ERROR !'/)
0046        GO TO 1
0047        END
```

```
      C
      C
      C*************************************************************
      C
      C
0001        SUBROUTINE COR(LEC,IMP,NENR,INDX,FIELD,INCRE)
      C
      C  SUBROUTINE COR   TREATMENT OF NUMERICAL ERRORS
      C
0002        INTEGER*2 YYY,FIELD
0003        DATA YYY,'Y'/
      C
0004        MEME=INDX
0005        DO 1 I=1,NENR
0006        WRITE(IMP,100)
0007  100   FORMAT(' $INDEX OF THE PAIR TO MODIFY   ')
0008        READ(LEC,200)J
0009  200   FORMAT(I5)
0010        IF(J.EQ.0.OR.J.GT.NENR)GO TO 2
0012        IF(J.LT.0)J=INDX-1
0014        READ(1'J)Y,X,INDIC
0015        CALL DECLA(FIELD,Y,J,INDIC,LEC,IMP,'Y')
      C  DUMMY INDEX INDI.
0016        IF(INCRE.NE.YYY)CALL DECLA(FIELD,X,J,INDI,LEC,IMP,'X')
0018        WRITE(1'J)Y,X,INDIC
0019  1     CONTINUE
0020  2     INDX=MEME
0021        RETURN
0022        END
```

```
      C
      C
      C*************************************************************
      C
      C
0001        SUBROUTINE RESUP(LEC,IMP,NENR,INDX,FIELD)
      C
      C  SUBROUTINE RESUP : LOGICAL SUPPRESSION OR RESTORATION OF NUMERICAL
      C  DATA WITHOUT PHYSICAL MANIPULATION BY THE SKEW OF A LOGICAL
      C  INDEX 'Y' OR 'N'.
      C
0002        INTEGER*2 YYY,RRR,SSS,FIELD
0003        REAL*8 SOLR,SOLS,IDEST,DEB,FIN
      C
0004        DATA SOLR,SOLS/' RESTORE',' SUPPRESS'/DEB,FIN/
           1'    FIRST','     LAST'/YYY,NNN,RRR,SSS/'Y','N','R','S'/
      C
0005        MEME=INDX
0006        INDIC=YYY
0007        IDEST=SOLR
0008        IF(FIELD.EQ.RRR)GO TO 7
0010        IDEST=SOLS
0011        INDIC=NNN
0012  7     WRITE(IMP,100)IDEST
0013  100   FORMAT('$ARE THEY GROUPS OF PAIRS TO ',A8,' : ')
0014        READ(LEC,200)IN
0015  200   FORMAT(A1)
0016        IF(IN.NE.YYY)GO TO 3
0018        IG=0
0019        DO 2 I=1,NENR
0020        IG=IG+1
0021  1     WRITE(IMP,300)DEB,IG
0022  300   FORMAT('$NO.OF THE',A8,' PAIR OF THE GROUP NO.',I3,' : ')
0023        READ(LEC,400)IGDEB
0024  400   FORMAT(I5)
0025        IF(IGDEB.LE.0)GO TO 3
0027        WRITE(IMP,300)FIN,IG
0028        READ(LEC,400)IGFIN
0029        IF(IGFIN.LT.IGDEB.OR.IGFIN.GT.NENR)GO TO 1
0031        DO 2 J=IGDEB,IGFIN
0032        READ(1'J)Y,X,INDI
0033        WRITE(1'J)Y,X,INDIC
0034  2     CONTINUE
0035  3     WRITE(IMP,500)IDEST
0036  500   FORMAT('$ARE THEY INDIVIDUAL PAIRS TO ',A8,' : ')
0037        READ(LEC,200)IN
0038        IF(IN.NE.YYY)GO TO 6
```

```
0040          DO 5 I=1,NENR
0041  4       WRITE(IMP,600)
0042  600     FORMAT('$WHICH ? ')
0043          READ(LEC,400)J
0044          IF(J.LE.0)GO TO 6
0046          IF(J.GT.NENR)GO TO 4
0048          READ(1'J)Y,X,INDI

0049  5       WRITE(1'J)Y,X,INDIC
0050  6       INDX=MEME
0051          RETURN
0052          END
```

```
      C
      C
      C*********************************************************************
      C
      C
0001          SUBROUTINE LIST(LEC,IMP,NENR,INDX)
      C
      C  SUBROUTINE LIST : LISTING OF THE NUMERICAL VALUES OF THE PAIRS Y,X
      C  AND THE LOGICAL INDEX 'Y' OR 'N'.
      C
      C
0002          REAL*8 DEB,FIN
      C
0003          DATA DEB,FIN/'   FIRST','    LAST'/
      C
0004          MEME=INDX
0005  1       WRITE(IMP,100)DEB
0006  100     FORMAT('$INDEX OF THE',A8,' PAIR TO LIST : ')
0007          READ(LEC,200)IDEB
0008  200     FORMAT(I5)
0009          IF(IDEB.LE.0)GO TO 3
0011          WRITE(IMP,100)FIN
0012          READ(LEC,200)IFIN
0013          IF(IFIN.LT.IDEB.OR.IFIN.GT.NENR)GO TO 1
0015          DO 2 J=IDEB,IFIN
0016          READ(1'J)Y,X,INDIC
0017          WRITE(IMP,300)J,Y,X,INDIC
0018  300     FORMAT(10X,I5,5X,2(F18.6,2X),A1)
0019  2       CONTINUE
0020          GO TO 1
0021  3       INDX=MEME
0022          RETURN
0023          END
```

```
      C
      C
      C*********************************************************************
      C
      C
0001          SUBROUTINE HELP(IMP)
      C
      C  SUBROUTINE HELP : DIRECTIONS FOR USE.
0002          WRITE(IMP,100)
0003  100     FORMAT(///' ACTIVE COMMANDS :'/1X,17('-')//)
0004          WRITE(IMP,200)
0005  200     FORMAT('  F : TO STOP THE PROGRAM'/
     1'  $ : TREATMENT OF NUMERICAL ERRORS'/
     2'  R : LOGICAL RESTORATION OF DATA'/
     3'  S : LOGICAL SUPPRESSION OF DATA'/
     4'  L : LISTING OF DATA'//)
0006          RETURN
0007          END
```

```
      C
      C
      C*********************************************************************
      C
      C
0001          SUBROUTINE INOUT(IE,IS)
      C  INPUT/OUTPUT INITIALISATION
0002          WRITE(IS,100)
0003  100     FORMAT('$INPUT ON  : ')
0004          CALL CLOSE(IE)
0005          CALL ASSIGN(IE,'TT ',-1)
0006          WRITE(IS,300)
0007  300     FORMAT('$OUTPUT ON : ')
0008          CALL CLOSE(IS)
0009          CALL ASSIGN(IS,'TT ',-1)
0010          RETURN
0011          END
```

```
      C
      C
      C*********************************************************************
      C
      C
0001          SUBROUTINE FICH(IMP,NLOGIC,NENR,MOTS,INDX)
      C
      C  DIRECT ACCESS FILE DETERMINATION
      C
0002          WRITE(IMP,100)
0003  100     FORMAT('$NAME OF THE FILE WHICH CONTAINS THE Y,X VALUES  ')
0004          CALL ASSIGN(NLOGIC,'DK ',-1)
0005          DEFINE FILE NLOGIC(NENR,MOTS,U,INDX)
0006          RETURN
0007          END
```

```
INSTRUCTIONS FOR LINKAGE :
**************************

 RUN LINK
*MAIN=MAIN,SYSLIB/F,C
*INOUT/O,1,C
*FICH/O,1,
*DECLA/O,1,C
*COR/O,1,C
*RESUP/O,1,C
*LIST/O,1,C
*HELP/O,1

EXAMPLE OF USE
**************
```

EXAMPLE OF USE :
****

```
.RUN MAIN

INPUT ON  : *TT:

OUTPUT ON  : *TT:

NAME OF THE FILE WHICH CONTAINS THE Y.X VALUES  : *FOR01.DAT

IS THIS A NEW GROUP OF DATA : Y

DOES AN INCREMENTAL VALUE EXISTS FOR THE X : Y

INCREMENT : 1.0

Y(   1) = A


ACTIVE COMMANDS :
-----------------


 F : TO STOP THE PROGRAM.
 $ : TREATMENT OF NUMERICAL ERRORS.
 R : LOGICAL RESTORATION OF DATA.
 S : LOGICAL SUPPRESSION OF DATA.
 L : LISTING OF DATA


Y(   1) = 1

X(   1) = 1.0

Y(   2) = 2.0

Y(   3) = 3

Y(   4) = L

INDEX OF THE   FIRST PAIR TO LIST : 1

INDEX OF THE    LAST PAIR TO LIST   3

             1                1.000000            1.000000  Y
             2                2.000000            2.000000  Y
             3                3.000000            3.000000  Y
INDEX OF THE   FIRST PAIR TO LIST : 0

Y(   4) = 5

Y(   5) = 5

Y(   6) = $

INDEX OF THE PAIR TO MODIFY : 4

Y(   4) = 4.0

INDEX OF THE PAIR TO MODIFY   0

Y(   6) = N6

Y(   7) = 7

Y(   8) = L

INDEX OF THE   FIRST PAIR TO LIST   1

INDEX OF THE    LAST PAIR TO LIST : 7

             1                1.000000            1.000000  Y
             2                2.000000            2.000000  Y
             3                3.000000            3.000000  Y
             4                4.000000            4.000000  Y
             5                5.000000            5.000000  Y
             6                6.000000            6.000000  N
             7                7.000000            7.000000  Y
INDEX OF THE   FIRST PAIR TO LIST : 0

Y(   8) = S

ARE THEY GROUPS OF PAIRS TO SUPPRESS : Y

NO OF THE   FIRST PAIR OF THE GROUP NO   1 : 1

NO OF THE    LAST PAIR OF THE GROUP NO   1 : 3


NO OF THE   FIRST PAIR OF THE GROUP NO   2 : 5

NO OF THE    LAST PAIR OF THE GROUP NO   2 : 7

NO OF THE   FIRST PAIR OF THE GROUP NO   3 :

ARE THEY INDIVIDUAL PAIRS TO SUPPRESS   N

Y(   8) = L

INDEX OF THE   FIRST PAIR TO LIST   1

INDEX OF THE    LAST PAIR TO LIST : 7

             1                1.000000            1.000000  N
             2                2.000000            2.000000  N
             3                3.000000            3.000000  N
             4                4.000000            4.000000  Y
             5                5.000000            5.000000  N
             6                6.000000            6.000000  N
             7                7.000000            7.000000  N
INDEX OF THE   FIRST PAIR TO LIST :

Y(   8) = R

ARE THEY GROUPS OF PAIRS TO  RESTORE   Y

NO OF THE   FIRST PAIR OF THE GROUP NO   1   1

NO OF THE    LAST PAIR OF THE GROUP NO   1   7

NO OF THE   FIRST PAIR OF THE GROUP NO   2 :

ARE THEY INDIVIDUAL PAIRS TO  RESTORE   N
```

```
Y(   8) = L

INDEX OF THE   FIRST PAIR TO LIST   1

INDEX OF THE    LAST PAIR TO LIST   7

              1                1 000000          1 000000  Y
              2                2 000000          2 000000  Y
              3                3 000000          3 000000  Y
              4                4 000000          4 000000  Y
              5                5 000000          5 000000  Y
              6                6 000000          6 000000  Y
              7                7 000000          7 000000  Y
INDEX OF THE   FIRST PAIR TO LIST

Y(   8) = F
```

DEC INPUT

SUMMARY OF UPDATES FOR RT-11 V03B DOCUMENTATION (JAD)

This article summarizes the updates that have been issued for the RT-11 V03B documentation set. We will add information on future updates as they become available, and we'll publish this article on a regular basis.

RT-11 SYSTEM RELEASE NOTES (AA-5286B-TC)

Update Notice #1 - Order No. AD-5286B-T1 (September 1978)

This update includes information about the RX02 diskette device.

RT-11 ADVANCED PROGRAMMER'S GUIDE (AA-5280B-TC)

Update Notice #1 - Order No. AD-5280B-T1 (July 1978)

This update contains information that reflects engineering changes made to the RL01 disk hardware supported by the RT-11 V03B operating system.

Update Notice #2 - Order No. AD-5280B-T2 (September 1978)

This update contains information concerning arguments for the programmed requests. In particular, it affects the .MTIN and .MTOUT multi-terminal requests. This update also describes V2 and V3 device handler differences concerning end of file conditions.

Update Notice #3 - Order No. AD-5280B-T3 (November 1978)

This update contains software support information for RT-11 prograr s.

PAST SYMPOSIUM INFORMATION

December 1978

RT-11 V4 WISH LIST FROM

FALL DECUS 1978

1. Provide programmed Request to purge USR buffer.

2. Change Boot to use MOV (RØ),RØ)+ to size memory instead of TST (RØ)+ to check for adjacent ROM.

3. Provide disk file write protect bit on access - if such a bit is set, inhibit file access or renaming.

4. Abort code to force monitor action.

5. Assembly conditionals in system code/drivers for LSI/regular PSW access - like RSX - avoid saving R4 twice in interrupt service code.

6. Have monitor run in WAIT state if idle - saves lots of power-(electricity) on core systems, better UNIBUS flow for fast devices, lights show how busy system is.

7. Tree structured overlay handler.

8. Transfer console keyboard from FG or BG.

9. Recognize Z as end-of-input (such as on command line to PIP) as on RSTS T for mini-systat to print JOB NAME, FG at BG mode, elapsed time, current state I/O wait, etc.

10. Optional ETX/ACK terminal protocol for DIABLO terminals.

11. Parameter support for Indirect Command Files.

12. Set & clear bits in status registers via monitor rather than having to use a MOV instruction.

13. More complete indexing - include FT, BASIC, etc.

14. More coordinated examples, useful, tested & more sophisticated illustrations of examples.

15. Monitor support of programmable baud rate of DLVIIE & F.

16. Time Share Option for Monitor even though not as sophisticated as RSTS.

17. More String support in BASIC.

18. Random access files in BASIC.

19. Unbundled DIBOL language.

20. Support of more than two dimensions in BASIC Arrays.

Additions to this list for inclusion in subsequent lists may be sent directly to:

Marilyn L. Runyon
39 Locust Point Road
Locust, NJ 07760

1978 San Francisco DECUS RT-11 Mag Tape

DATBAS.TEC	1	28-Nov-78	Nick Bourgeois, Sandia Laboratories,
DATBAS.HLP	9	28-Nov-78	(505) 264-8088
DATBAS.BAS	22	28-Nov-78	Set of BASIC V2 extensions to READ/WRITE
DATBAS.DAT	3	28-Nov-78	WORDS/BYTES/BITS at any implemented bus
DATBAS.MAC	87	28-Nov-78	address. V1B set is DECUS 11-294.
DATBAS.MAP	26	28-Nov-78	
DATBAS.DIR	2	28-Nov-78	
DATBAS.RNO	106	28-Nov-78	
DATBAS.DOC	135	28-Nov-78	
WDOSMT.FOR	12	28-Nov-78	Calls EXTMT to write DOS/BATCH mag tapes.
RDOSMT.FOR	13	28-Nov-78	Calls EXTMT to read DOS/BATCH mag tapes.
EXTMT .MAC	23	28-Nov-78	Allows READ/WRITE of any stranger mag tapes,
EXTMT .DOC	3	28-Nov-78	DECUS 11-337.
CROSSV.BAS	22	28-Nov-78	Produces cross reference listing of BASIC
CROSS0.BAS	7	28-Nov-78	programs. CROSSV requires 7K user space,
CROSS1.BAS	13	28-Nov-78	CROSS0/1/2 5K, CROSS (CHICAGO tape) 12K.
CROSS2.BAS	7	28-Nov-78	
TSTE .MAC	16	28-Nov-78	Luther T. Nieh, General Electric,
TSTE .LST	41	28-Nov-78	(502) 452-3614
			Time Share Terminal Emulator
INDEX .DOC	20	28-Nov-78	M. Levine, Naval Weapons Lab, (714) 939-3575
INDEX .HLP	3	28-Nov-78	Produces a cross reference listing of a
INDEX .COM	2	28-Nov-78	FORTRAN program.
IDXLST.COM	1	28-Nov-78	
IDXXFR.COM	2	28-Nov-78	
INDEX .MAP	7	28-Nov-78	
INDEX .SAV	23	28-Nov-78	
INDEX .MAC	5	28-Nov-78	
OUTPUT.MAC	8	28-Nov-78	
STORE .MAC	10	28-Nov-78	
RAD50 .MAC	3	28-Nov-78	
IOLINE.MAC	11	28-Nov-78	
GET .MAC	14	28-Nov-78	
OPNCLO.MAC	12	28-Nov-78	
IOCHR .MAC	4	28-Nov-78	
EVAL .MAC	22	28-Nov-78	
TABLE .MAC	4	28-Nov-78	
LINETP.MAC	9	28-Nov-78	
SUPER .MAC	13	28-Nov-78	
IMPURE.MAC	4	28-Nov-78	
BUFFER.MAC	1	28-Nov-78	
ODT11T.MAC	110	28-Nov-78	ODT super set, includes tracing, interrupt
ODT11T.DOC	4	28-Nov-78	emulation, monitor memory location.
DISASM.MAC	45	28-Nov-78	Makes .MAC files from .LDA and .SAV files.
DISASM.DOC	17	28-Nov-78	
ROLLIN.MAC	151	28-Nov-78	Copy utility, useful for backup to mag tape.
ROV3 .MAC	17	28-Nov-78	"Read Only" handler, can extract individual
			files from ROLLIN disk image on mag tape.

MMERR .MAC	3	28-Nov-78	David J. Ritchie, Fermi National Accelerator
MMINIT.MAC	7	28-Nov-78	Laboratory
MMONOF.MAC	4	28-Nov-78	Set of memory management utilities (poster
RPAGE .MAC	5	28-Nov-78	paper).
SPAGE .MAC	6	28-Nov-78	
EXTMA .MAC	4	28-Nov-78	Odd bit I/O for 0-124K I/O driver subroutine.
MRO .MAC	28	28-Nov-78	Memory resident overlay handler.
ABS16L.MAC	16	28-Nov-78	Fred Zeise, Data systems, (?) 548-4766
ABS8KL.MAC	16	28-Nov-78	Allows saving .LDA paper tapes as .SAV
DUMP .MAC	57	28-Nov-78	Octal comare.
FLPBOT.MAC	5	28-Nov-78	"1775601" floppy paper tape boot.
FRDTBT.MAC	10	28-Nov-78	Boot for diagnostic below.
FRDTST.MAC	192	28-Nov-78	RX01 diagnostic.
UNPAL .MAC	26	28-Nov-78	Dissassembler from core image area.
SETCLK.LST	8	28-Nov-78	James R. Cuttler, University of Michigan,
SETTER.LST	8	28-Nov-78	(313) 763-9940
SETTER.MAC	3	28-Nov-78	Subroutines for Digital Pathways TC-50 and
SETTIT.MAC	3	28-Nov-78	TC-100 hardware clocks.
SETTIT.LST	7	28-Nov-78	
SETCLK.FOR	5	28-Nov-78	
LPLCC .MAC	23	28-Nov-78	LP handler, LP: or LP1: = standadr DEC handler
			LP1: uses logical carriage control.
HELLO .LST	8	28-Nov-78	SJ date and time set.
HELLO .FOR	4	28-Nov-78	
RUNMIN.MAC	1	28-Nov-78	Carl D. Lowenstein, (714) 452-2308
RUNOFF.MAC	125	28-Nov-78	Text formattins program.
RUNXXX.RNO	62	28-Nov-78	
RUNXXX.DOC	76	28-Nov-78	
HYPHEN.MAC	64	28-Nov-78	
BOOTS .MAC	7	28-Nov-78	?
DXV2C .MAC	26	28-Nov-78	
DXV3 .MAC	33	28-Nov-78	
RT .TAP	1	28-Nov-78	
RT1 .TAP	2	28-Nov-78	
LPV3 .MAC	14	28-Nov-78	
LSPPIP.MAC	4	28-Nov-78	
LSRPIP.MAC	5	28-Nov-78	
LPLCC .LST	52	28-Nov-78	
RT .LST	3	28-Nov-78	

MEDIA CONVERSIONS FOR THE 1979 SPRING DECUS SYMPOSIUM

In order to minimize the time required for production of the 1979 New Orleans DECUS RT-11 tape with our all volunteer labor we ask that all submittals be on 9-track mag tape in RT-11 PIP format. For the benefit of those of you who do not have access to a tape drive the persons listed below have agreed to perform the indicated media conversions prior to the symposium. Please send the means to return your media (postage) or the media will be considered a gift. Anyone else who is willing to offer media conversion please try to let Nick Bourgeois know in time to inform the SIG in the next Minitasker.

John Runson Philip Morris Intl 100 Park Ave., 3rd Floor New York, NY 10017 (212) 679-1800 x1077	RK06 RX01 TE16(TU10) PC11
Mark Terrell Bldg 238-1 NASA Ames Research Center Moffet Field, CA 94035 (415) 965-5974	RK05 TE16(TU10)
Carl Lowenstein Marine Physical Lab San Diego, CA 92152 (714) 452-2308	RK05 RX01 TU10
Nick Bourgeois / 1736 Sandia Laboratories P O Box 5800 Albuquerque, NM 87185 (505) 264-8088	RK05 RX01 TU10

RT-11 MARKETPLACE

Along with the announcement of what RT-11 V 4.0 will bring, was an announcement 'of equal' importance to many RT-11 symposium attendees. That was, the sale of RT-11 T-shirts. They were quickly sold out. Due to popular demand, they can be bought through the mail. Each yellow shirt comes in 5 sizes (boy's small, men's small, medium,large, & extra large). The front has a red heart which surrounds the letters 'RT-11'. The back has bold black letters which declare 'Who Says You Can't Love Something That's Small And Finishes Fast?'. The cost is $5.00 plus 6% tax for California residents. Send your check to:

Rainbow Computing Inc.
10723 White Oak Avenue
Granada Hills, California
91344 213 360-2171

tiny C
tiny c associates
post office box 269
holmdel, new jersey 07733

November 10, 1978

Mr. Ken Demers
MS-48
United Technologies Research Center
Silver Lane
East Hartford, Conn. 06108

Dear Ken:

I am happy to enclose some information about tiny-c, an interpreted subset of the C language, currently available to users of RT-11. Readers of the mini-tasker are invited to write us for more details or call me at 609-443-3992, evenings.

Thanking you for your attention, I remain

Cordially yours,

Scott B. Guthery

tiny C
tiny c associates
post office box 269
holmdel, new jersey 07733

'tiny-c' Interpreter Runs on 8080 and PDP-11

Holmdel, New Jersey - An interpreter for a subset of the C structured programming language which runs on both DEC PDP-11 and Intel 8080 processors is available from Tiny-c Associates. The tiny-c Owner's Manual sets a new standard for comprehensive documentation of hobbyist software. It includes a complete reference description of the language, a tutorial walkthrough of a training program, lots of sample programs including comments on their programming style, and a description of the Program Preparation System. It also includes commented source code listings of both the 8080 and PDP-11 interpreters, and a chapter on how the interpreter works.

Tiny-c is intended primarily for the education and hobbyist markets. The tiny-c language handles integer and character data, and arrays of either type. Other features include compound statements, if-else and while statements, global and local variables, pointer variables, and functions. Functions may have arguments and may return results. Recursion is allowed. The interpreter also recognizes calls to functions written in machine language. These, too, may have arguments and return results. A minimum of 16K bytes of memory is recommended to run tiny-c.

The package includes a Program Preparation System with which the user can write, edit, run, debug, store, recall, and link tiny-c programs. The PPS includes a standard library of tiny-c software tools. The PPS is written in tiny-c! Thus it serves as an example of a significant use of tiny-c, and is also easily adapted to a user's or operating system's requirements.

The Owner's Manual is available for from Tiny-c Associates, P. O. Box 269, Holmdel, New Jersey 07733. Machine readable copies of the interpreter are available separately on several formats of tape and disk.

USER RESPONSES

TEXAS TECH UNIVERSITY

Department of Chemistry

Box 4260, Lubbock, Texas 79409

November 17, 1978

Mr. David Yost
8464 1/2 Kirkwood Drive
Hollywood, California 90046

Dear Mr. Yost:

I am writing this in response to your letter which appeared in the DECUS RT-11 SIG MINITASKER of VOL 4, No. 4. I believe I can answer two of your queries.

Query No. 2: Both the right brace and tilde (octal 175 and 176) are interpreted by TECO as an escape. The file TECO.SAV may be patched to eliminate this. Address 124 from the bottom of TECO.SAV must be patched. The value of 22700 at this address must be changed to 207. Running version 28 TECO with RT-11 V-03, my bottom address is 3756. A sample run to patch with my system would be:

```
R PATCH
TECO.SAV
3756; 0R
0, 124/ 22700   207  (CR)
E
```

(Of course, always make a backup file before patching.) I suggest you inspect addresses below 3756 to insure they are all zero (i.e., that this is the bottom address).

Query No. 3: I do not know of a simple command. It is easy, however, to set up two macro commands to perform this operation. One simply stores the number of characters the pointer has already passed in the buffer from the top. The other macro moves the pointer this number of characters in from the top of the buffer.

```
MACRO 1:  .UA
MACRO 2:  JQAC
```

Use is, therefore, M1$S<search string>$$. If the search is unsuccessful, one simply commands M2$ and you are back where you started.

I hope this has been of help. If you learn how to run scope mode with terminals other than VT-11 and VT-52, please let me know.

Sincerely yours,

Roy A. Auerbach
(806) 742-3099

RAA:me

cc: Mr. Ken Demers

NOVEMBER 7, 1978

FROM: FRED L. MAGEE, DIV 7525
SANDIA CORPORATION, PO BOX 5800, ALBUQUERQUE, NM 87115
(505) 264-4896

TO: HARLAN E. CLARK
ES INDUSTRIES
8 S. MAPLE AVE
MARLTON, NJ 08053

RE: YOUR USER REQUEST IN VOL 4 NO 4 OF MINITASKER, OCT 1978

UNFORTUNATELY DEC DROPPED SUPPORT FOR THE TELETYPE IN THE RELEASE OF RT11. THE PROBLEM WAS PARTIALLY ALLEVIATED IN THE PUBLICATION OF THE LSRPIP.MAC INSTRUCTIONS IN THE 11 DIGITAL SOFTWARE NEWS, APRIL, 1974. SO IT MAY TAKE AN OLD TIMER TO GET YOU ON THE AIR WITH THIS. ATTACHED IS A COPY OF THE RELEASE AS DEC PUBLISHED IT. I SEEM TO RECALL THAT WE HAD SOME PROBLEMS WITH THIS IN A CLASS THAT I TAUGHT AT THE UNIVERSITY OF NEW MEXICO A COUPLE OF YEARS AGO.

YOU TELL ME THAT YOU ARE USING VERSION 2 OF THE RT11. ATTACHED IS A PAPER TAPE AND A LISTING OF A PROGRAM THAT HAS BEEN UPDATED TO RUN UNDER RT11/V02C. YOU WILL NEED TO CORRECT THE VECTORS FOR YOUR CONFIGURATION (OUR TELEPHONE CONVERSATION THIS DATE).

GOOD LUCK, SEE YOU AT DECUS.

COPY (LESS PAPER TAPE)
JOHN T. RASTED
JR ASSOCIATES
58 RASTED LANE
MERIDEN, CT 06450

ENCLOSURES

"LOW SPEED READER SUPPORT"
11 DIGITAL SOFTWARE NEWS, APRIL 1974

LISTING OF SOURCE CODE OF SLA VERSION OF LSRPIP.MAC

PAPER TAPE OF SOURCE CODE OF SLA VERSION OF LSRPIP.MAC

```
.TITLE  LSRPIP
        .MCALL  ..V2..,.REGDEF,.TTYIN,.WRITW,.PRINT,.CSIGEN
        .MCALL  .CLOSE,..V1..
        ..V2..
        .REGDEF
START:  BIC     #10000,44       ;USE TELETYPE IN GENERAL MODE FOR CSI
        .CSIGEN #DEVSPC,#DEFEXT,#0      ;USE CSI TO GET AND OPEN
                                ;OUTPUT FILE
        BIS     #10000,44       ;SET TELETYPE TO SPECIAL MODE FOR
                                ;PRUMPT
        .PRINT  #MSG            ;PRINT SETUP MESSAGE
        .TTYIN                  ;WAIT FOR HIS KEYBOARD STROKE
        CLR     BLOCK           ;NEW FILE=ZERO BLOCK NUMBER
BUFCLR: MOV     #BUFFER,R1      ;POINT R1 TO BUFFER
CLRLP:  CLR     (R1)+           ;CLEAR THE BUFFER
        CMP     R1,#BUFEND      ;DONE?
        BLO     CLRLP           ;LOOP IF NOT
        MOV     #BUFFER,R1      ;YES=RESET R1 TO POINT TO BUFFER
TTINLP: MOVB    #1,177560       ;DISABLE TTY INT, SET READER RUN
WAIT:   TSTB    177560          ;BYTE IN YET?
        BMI     BYTEIN          ;BRANCH IF YES
        INC     COUNT           ;NO=BUMP TIMEOUT COUNTER
        BNE     WAIT            ;IF TIMEOUT NOT ZERO, LOOP
        .WRITW  #AREA,#0,#BUFFER,#400,BLOCK     ;WE TIME OUT=WRITE LAST BLOCK
        .CLOSE  #0      ;CLOSE OUTPUT FILE
        MOV     #100,177560     ;WE=ENABLE KEYBOARD INTERRUPT
        BR      START           ;AND CYCLE

BYTEIN: CLR     COUNT           ;RESET TIMEOUT COUNTER
        MOVB    177562,(R1)+    ;PUT BYTE IN BUFFER
        CMP     R1,#BUFEND      ;BUFFER FULL?
        BLO     TTINLP          ;GO GET NEXT BYTE IF NOT
        .WRITW  #AREA,#0,#BUFFER,#400,BLOCK     ;YES=WRITE IT OUT
        INC     BLOCK           ;BUMP BLOCK NUMBER
        BR      BUFCLR          ;AND ZERO BUFFER
BUFFER: .B,+1000
BUFEND:
DEFEXT: 0
        0
        0
        0                       ;DEFAULT EXTENSION BLOCK FOR CSIGEN
COUNT:  0                       ;TIME OUT COUNTER
BLOCK:  0                       ;FILE BLOCK NUMBER
AREA:   .BLKW 10
MSG:    .ASCII  /PLACE TAPE IN READER, SET SWITCH TO START,/
        .BYTE   15,12
        .ASCIZ  /THEN STRIKE ANY KEY TO BEGIN TRANSFER,/
        .EVEN
DEVSPC:
        .END    START
```

1076 memory — enough.

Low Speed Reader Support

This RT-11 program allows the user to PIP a file from the low speed paper tape reader to a file-structured device.

First, use the editor to create the source file LSRPIP.MAC. Then, assemble and link the program as follows:

```
.R MACRO
*LSRPIP=LSRPIP
*^C
.R LINK
*LSRPIP=LSRPIP
*^C
.
```

Then, use the operating instructions given on the following pages.

Low Speed Reader Support

```
;LSRPIP
;PROGRAM TO TRANSFER FILE FROM LOW SPEED PAPER
;TAPE READER TO RT-11 FILE NAMED IN COMMAND STRING.


;OPERATING INSTRUCTIONS

;CALL PROGRAM BY TYPING "R LSRPIP"
;RESPOND TO CSI "*" WITH NAME OF FILE TO
;BE CREATED, FOLLOWED BY AN "=" OR "<". LSRPIP
;WILL ASK YOU TO PREPARE THE TAPE,THEN STRIKE A
;KEY WHEN TAPE IS READY. TAPE WILL BE READ INTO
;THE FILE,AND AN "*" WILL APPEAR TO
;INDICATE READINESS FOR THE NEXT CYCLE.
;THE TAPE WILL PAUSE OCCASIONALLY DURING THE READ PROCESS,BUT THE
;OPERATION IS NOT COMPLETE UNTIL THE "*" FOR THE NEXT COMMAND IS
;PRINTED.

;THE KEYBOARD IS DISABLED DURING THE TAPE TRANSFER.
;TO ABORT AN UNDESIRED OPERATION,SET THE LOW SPEED READER CONTROL
;SWITCH TO "STOP", WHICH WILL TERMINATE THE READ AND RETURN WITH
;AN "*". A CTRL/C CAN THEN BE TYPED.

;ANY LEGAL OUTPUT FILE OR DEVICE MAY BE USED TO TRANSFER TO; AN
;ASCII TAPE MAY EVEN BE "LISTED" BY USING "TT:" AS THE OUTPUT FILE.

;SAMPLE USAGE:          .R LSRPIP<CR>
;                       *TAPE1.BIN=<CR>
;                       PLACE TAPE IN READER,SET SWITCH TO START,
;                       THEN STRIKE ANY KEY TO BEGIN TRANSFER.
;                       *TAPE2.BIN=<CR>
;                       PLACE TAPE.......(ETC)

;CREATE THE PROGRAM WITH EDIT,CALLING THE OUTPUT FILE LSRPIP.MAC
;ASSEMBLE IT WITH MACRO (*LSRPIP=LSRPIP),THEN LINK IT WITH LINK
;(*LSRPIP=LSRPIP). IT IS THEN READY TO GO.
```

Low Speed Reader Support

```
        R1=%1
        .MCALL  .TTYIN,.WRITW,.PRINT,.CSIGEN,.CLOSE, ..V1..
        ..V1..
START:  BIC     #10000,44       ;USE TELETYPE IN GENERAL MODE FOR CSI
        .CSIGEN #DEVSPC,#DEFEXT,#0      ;USE CSI TO GET AND OPEN
                                        ;OUTPUT FILE
        BIS     #10000,44       ;SET TELETYPE TO SPECIAL MODE FOR PROMPT
        .PRINT  #MSG            ;PRINT SETUP MESSAGE
        .TTYIN                  ;WAIT FOR HIS KEYBOARD STROKE
        CLR     BLOCK           ;NEW FILE-ZERO BLOCK NUMBER
BUFCLR: MOV     #BUFFER,R1      ;POINT R1 TO BUFFER
CLRLP:  CLR     (R1)+           ;CLEAR THE BUFFER
        CMP     R1,#BUFEND      ;DONE?
        BLO     CLRLP           ;LOOP IF NOT
        MOV     #BUFFER,R1      ;YES-RESET R1 TO POINT TO BUFFER
TTINLP: MOVB    #1,177560       ;DISABLE TTY INT,SET READER RUN
WAIT:   TSTB    177560          ;BYTE IN YET?
        BMI     BYTEIN          ;BRANCH IF YES
        INC     COUNT           ;NO-BUMP TIMEOUT COUNTER
        BNE     WAIT            ;IF TIMEOUT NOT ZERO,LOOP
        .WRITW  0,#BUFFER,#400,BLOCK    ;WE TIMED OUT-WRITE LAST BLOCK
        .CLOSE  0               ;CLOSE OUTPUT FILE
        MOV     #100,177560     ;RE-ENABLE KEYBOARD INTERRUPT
        BR      START           ;AND CYCLE

BYTEIN: CLR     COUNT           ;RESET TIMEOUT COUNTER
        MOVB    177562,(R1)+    ;PUT BYTE IN BUFFER
        CMP     R1,#BUFEND      ;BUFFER FULL?
        BLO     TTINLP          ;GO GET NEXT BYTE IF NOT
        .WRITW 0,#BUFFER,#400,BLOCK     ;YES-WRITE IT OUT
        INC     BLOCK           ;BUMP BLOCK NUMBER
        BR      BUFCLR          ;AND ZERO BUFFER
```

Low Speed Reader Support

```
BUFFER: .P.+1000
BUFEND:
DEFEXT: 0
        0                       ;DEFAULT EXTENSION BLOCK FOR CSIGEN
COUNT:  0                       ;TIMEOUT COUNTER
BLOCK:  0                       ;FILE BLOCK NUMBER
MSG:    .ASCII  /PLACE TAPE IN READER,SET SWITCH TO START,/
        .BYTE   15,12
        .ASCII  /THEN STRIKE ANY KEY TO BEGIN TRANSFER,/
        .EVEN
DEVSPC:
        .END    START
```


UNIVERSITY OF OTAGO
Box 56 Dunedin New Zealand
Physics Department,

13 November 1978

Mr John T. Rasted,
J.R. Associates,
58 Rasted Lane,
Meriden, CT 06450,
U.S.A.

Dear Mr Rasted,

Concerning Dr Clark's letter in the October "Mini-Tasker", I think I may be able to help.

In my system, when using PIP to read a paper tape file from TT:, a CTRL Z (either on the tape or from the keyboard) is necessary in order to have PIP close the file. I also have been unsuccessful in reading non-ASCII tape files from TT:

My problem arose from having two systems, an 11/03 with floppies only and an 11/10 with paper tape only. Retyping all my BASIC sources was too depressing to contemplate, and no ASR teletype was readily available. A quick dirty program was written for the 11/10 to make it, a spare DL11W, the PC11 and the LA30S, behave like a 300 baud ASR33 when attached to the 11/03's console DLV11. Operation is not without its problems. Unexpected entries to the 11/03's console microcode occur and occasionally a character is dropped and reinserted several characters later. Due to the relatively small quantity of material to be transferred, the first problem can be dealt with by strong language and repetition of the transfer. The second problem can be dealt with by transferring each program twice (with different file names) followed by the use of SRCCOM and EDIT to detect and correct discrepancies.

The arrival of floppies for the 11/10 is expected to render the above procedures redundant.

Yours sincerely,

L.E.S. Amon
Scientific Officer

RT-11 SPOTLIGHT

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REGIONAL MEDICAL CENTRE

SERVICE PÉNITENTIARE CANADIEN
CENTRE MÉDICAL RÉGIONAL

CANADA

P. O. BOX 3000
ABBOTSFORD, B.C.

Mr. Ken Demers
MS-48
United Technologies Research Ctr.
Silver Lane
East Hartford, Conn.
06108

PLEASE QUOTE REFERENCE
VEUILLEZ MENTIONNER

November 7, 1978

Dear Sir;

This letter is a response to your reference to an "RT-11 Spotlight" section mentioned in the last "MINI-TASKER".

Our installation consists of a 24 K PDP 11/10 under RT-11 (V02C), soon to be upgraded to V03. Peripherals include a pair of RK05 disks, a TA-11 cassette drive, and a TM-11 9 track tape drive. Communication is done with low speed console terminals. Our work environment is that of a research facility within a psychiatric hospital. This in turn is part of the Canadian Department of the Solicitor General.

The majority of the applications during the (approximate) 4 year life span of the installation have fallen into the general category of data gathering and analysis in support of research experiments. Our main hardware interface consists of an LPS-11 A/D converter; the software being the Fortran extensions library. The other interface, currently not being used, is an optical scanning device which was used to process psychological test results.

In addition to the experimental work we have developed a statistical analysis package, a reasonably sophisticated pharmaceutical inventory system and a patient census system. The last mentioned is in BASIC whereas the others are in FORTRAN.

I would be most interested in liasing with other users involved in similar applications especially as they relate to the LPS hardware and software.

Yours truly,
R. Gilbert
Data Processing Manager

Your input to the RT-11 spotlight section is always welcome. This gives you an opportunity to express to others what you are doing. Exchanging ideas is beneficial to all. If responses increase, I will be happy to have more than one application spotlighted in each issue.

LUG NEWS

There was a high level of interest in San Francisco concerning LUGs (Local user groups). People wished to know what LUGs existed and how they could form their own. I am printing a list of LUGs known to me. If I omitted any LUGs from the list, please send me the necessary information to enable users to contact you. If you wish to start a LUG, send me your request and I will put it into the newsletter.

I would like to announce the creation of a Connecticut LUG. Hopefully, we will be able to use the DEC facilities in Meriden for our meetings. Until our membership's background is established, it will be a general PDP-11 LUG. Persons using any operating system in any application are welcome. For more information contact Ken Demers

LOCAL USER GROUPS(LUGS) AVAILIBLE TO RT-11 USERS

CONN LUG
KEN DEMERS
MS 48
UNITED TECH. RES. CTR.
EAST HTFD.,CT. 06108
203-727-7241

EAST COAST LUG
NORMAN R. KASHDUN
ASSISTANT DIRECTOR
MT SINAI INST. OF COMPUTER SCIENCE
5TH AVE. @ 100TH STREET
NEW YORK, N.Y. 10029

NY/METRO LUG
JOHN B. RUNYON
39 LOCUSTPOINT RD.
LOCUST, N.J. 07760

ST. LOUIS LUG
RICHARD L. AURBACH
MONSANTO AG. PRODUCTS
800 N. LINDBERG BLVD.
ST. LOUIS, MO. 63166

SOUTHEASTERN MICHIGAN LUG
JAMES R. CUTTLER
SPACE PHYSICS RESEARCH LABORATORY
UNIVERSITY OF MICHIGAN
2455 HAYWARD
ANN ARBOR, MICH.
48105

TORONTO LUG
JOHN MORTON
BNSR
522 UNIVERSITY AVE.
TORONTO, ONTARIO M5G-1W7
CANADA
416-598-0196

WASHINGTON D.C. LUG
DR. L. MICHAEL FRASER
NAVAL MEDICAL RESEARCH
MAIL STOP 38
BETHESDA, MARYLAND 20014

SPR'S

SYSTEM PROGRAM AND VERSION (OR DOCUMENT)	MONITOR AND VERSION	DATE
FORTRAN IV/RT-11 V2	RT11 V3 FB	10/1/78

NAME: Dr. Donald E. Williams
FIRM: University of Louisville
ADDRESS: Chemistry Department
University of Louisville
Louisville, Kentucky ZIP 40208

SUBMITTED BY: D. E. Williams PHONE: 502/588-5975
LIST ATTACHMENTS

DEC OFFICE: Louisville, Kentucky

REPORT TYPE
- ☐ LOGIC/CODING ERROR
- ☐ DOCUMENTATION ERROR
- ☐ SUGGESTION
- ☒ INQUIRY
- ☐ FOR YOUR INFORMATION

PRIORITY
- ☐ LOW
- ☐ STANDARD
- ☒ HIGH

CAN THE PROBLEM BE REPRODUCED AT WILL?
☒ YES ☐ NO

CPU TYPE	SERIAL NO.	SYSTEM DEVICE	MEMORY SIZE	DISTRIBUTION MEDIUM
11/34	81	RK05	64K words	RK05

Reference: RT-11/RSTS/E Fortran IV User's Guide
Section 2.6, "Converting a Program to VIRTUAL".

In practice, the instructions given for converting a program to VIRTUAL are impossible to implement. The reason for this is that VIRTUAL and non-VIRTUAL arrays cannot be mixed in subroutine calls. Normal programming practice in FORTRAN intermixes common and non-common arguments in subroutine calls. This rules out a possible solution to the problem, which would be to make all non-common arrays VIRTUAL. The offending restriction is spelled out in Section 2.2.6.4.

This restriction effectively defines a new type of incompatible array. This restriction is totally incompatible with FORTRAN concepts of transfer of subroutine arguments.

I strongly recommend that some way be found to use memory management in FORTRAN without the extreme limitations imposed by the VIRTUAL array concept. New FORTRAN programs could be written to satisfy the VIRTUAL restrictions, if it is judged worth the sacrifice. The bulk of FORTRAN programs are old, established, and debugged. These programs are practically impossible to convert using the VIRTUAL concept.

14 November 1978

Dr. Donald E. Williams
University of Louisville
Chemistry Department
University of Louisville
Louisville, Kentucky 40208

SUBJECT: SPR No. 11-20491

The response for your Software Performance Report is as follows:

STATEMENT

Restrictions on Virtual array in FORTRAN IV.

RESPONSE

Thank you for your inquiry.
We are sorry to say that there is no plan to lift those restrictions.

If further assistance is required, please direct any problems or inquiries to our central control area:

Administrative Services Group/SWS
SPR Administration
P. O. Box F
Maynard, MA 01754

OPERATING SYS:	VERSION	SYSTEM PROGRAM OR DOCUMENT TITLE	VERSION OR DOCUMENT PART NO.	DATE
RT-11	V03	See below	See Below	9-28-78

(SEE EXAMPLE IN INSTRUCTIONS)

NAME: Fred Magee 1523
FIRM: Sandia Laboratories
ADDRESS: P. O. Box 5800
Albuquerque, NM
ZIP: 87185

SUBMITTED BY: Nick Bourgeois
PHONE: 264-8088

DEC OFFICE: Albuquerque

DO YOU HAVE SOURCES? YES ☒ NO ☐

REPORT TYPE
- ☐ SOFTWARE ERROR
- ☐ DOCUMENTATION ERROR
- ☐ INQUIRY
- ☒ FOR YOUR INFORMATION/SUGGESTION

PRIORITY
- ☐ LOW
- ☐ STANDARD
- ☐ HIGH

CAN THE PROBLEM BE REPRODUCED AT WILL? YES ☒ NO ☐

ATTACHMENTS: MAG TAPE ☐ FLOPPY DISKS ☐ LISTING ☐ DECTAPE ☐ OTHER

COULD THIS SPR HAVE BEEN PREVENTED BY BETTER OR MORE DOCUMENTATION? PLEASE EXPLAIN IN PROVIDED SPACE BELOW. YES ☒ NO ☐

CPU TYPE	SERIAL NO.	MEMORY SIZE	DISTRIBUTION MEDIUM	SYSTEM DEVICE	DO NOT PUBLISH
11/34	807	32KW	RK05	RK05	☐

DEC-11-LIBUA-A-D BASIC-11/RT-11 User's Guide
DEC-11-LIBTA-A-D BASIC-11/RT-11 Installation Guide

Problem:

When implementing assembly language routines with BASIC there is a conflict between the bottom address as specified by SUCNFG.BAS and the variable $STKEX of BSASM.MAC. The bottom address as specified by SUCNFG.BAS overrides any attempt to extend the stack with $STKEX.

Fix:

Prior to execution of the command file produced by SUCNFG.BAS the bottom address specification (/B:N) must be increased as required for the user's assembly language routine(s).

DECUS

DIGITAL EQUIPMENT COMPUTER USERS SOCIETY
ONE IRON WAY, MR2-3/E55
MARLBORO, MASSACHUSETTS 01752

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