

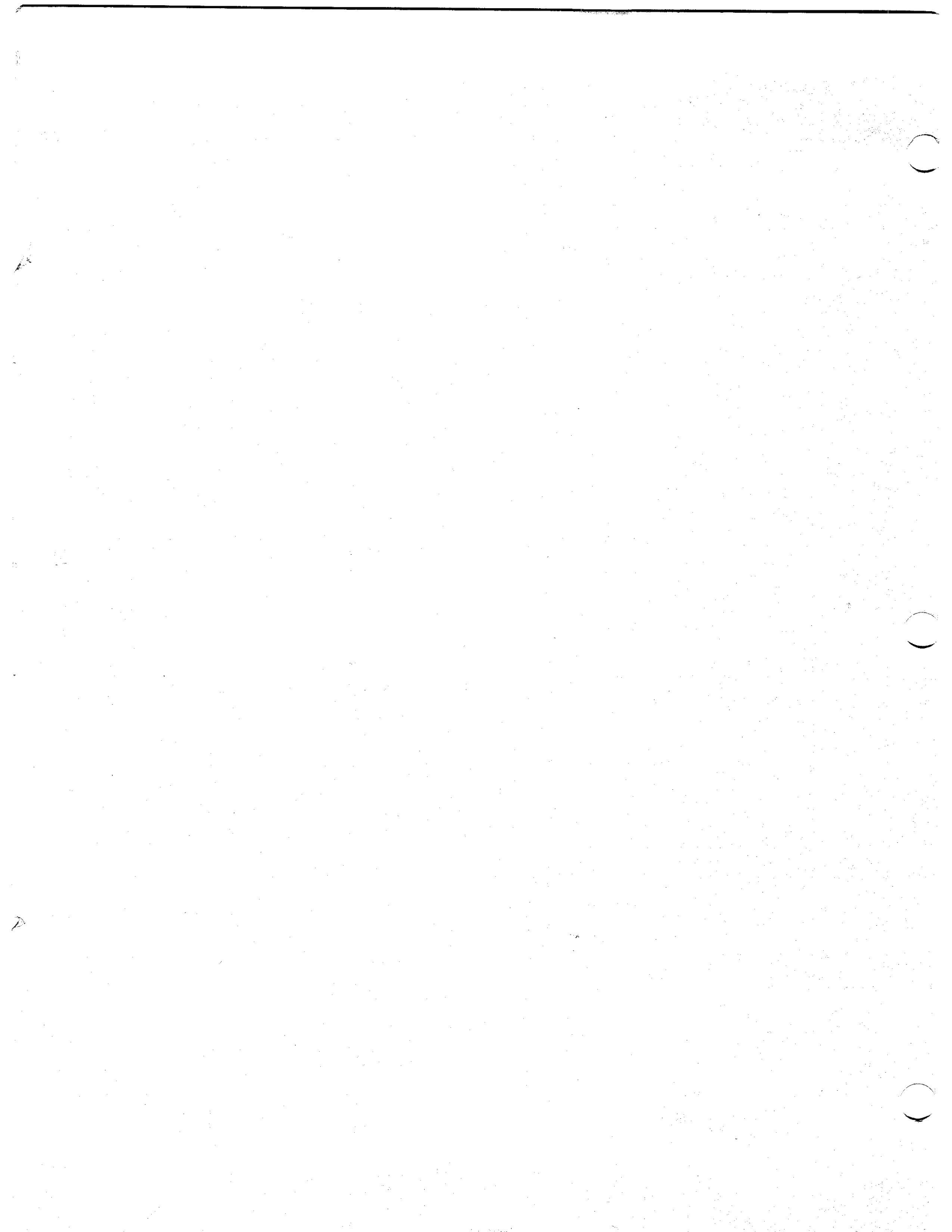
BASIC SIG

SEPTEMBER 1984



STEERING COMMITTEE

ELECTION



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Wish number: 0001
Subject: REMAP ON CHANNEL
Date: 24-Oct-83 11:35 AM

The capability to REMAP by channel number rather than or in addition to REMAP by PSECT name is needed in VAX-11 BASIC. We at NCCS have found that though REMAP is absolutely terrific, without the ability to control what we a REMAPing at run-time (rather than at compile time), REMAP is totally useless. If we could REMAP on channel number, we could junk all usage of FIELD. REMAP is very powerful. We love REMAP. We can't use it unless remap on channel number is provided.

For more information please don't hessitate to contact
Dan Cook or Rocky Hayden at North County Computer Services
2235 Meyers Avenue
Escondido, CA 92025
(619) 745-6006

Thank you.

Response from D.E.C. 22-Mar-84 02:31 PM
Will consider.



Wish List

Wish number: 0002
Subject: PASS ENTIRE VIRT ARRAY
Date: 24-Oct-83 11:42 AM

BASIC+2 V2 on RSTS/E allows one to pass an entire Virtual Array by descriptor. This is quite usefull. It allows the experienced programmer to change the channel number that the virtual array is "connected to". The lose of this "feature" when converting to VAX-11 BASIC was indeed tramatic. Please change your minds and allow us to pass entire virtual arrays by descriptor.

Response from D.E.C. 22-Mar-84 02:31 PM
Will consider.

Wish number: 0003
Subject: TRUE RMS BLOCK IO
Date: 24-Oct-83 11:45 AM

VAX BASIC should really support true RMS Block I/O. Currently, only Record I/O is supported. Though Block I/O does not support file sharing, file sharing is a small price to pay for the shear speed and simplicity of true block I/O. I get the feeling that you DEC folks don't have any idea just how much of a DOG RMS record I/O is under any operating system.

Supporting RMS block I/O would also ease migration from other operating systems to VMS. (Really)

Response from D.E.C. 22-Mar-84 02:32 PM
Will consider

Wish number: 0004
Subject: DATA BLOCKS
Date: 24-Oct-83 03:32 PM

I wish that the BASIC language contained a compiled-time storage directive similar to the FORTRAN "DATA BLOCK" statement. Currently, the only way I can get data stored into a program is to (1) load it into selected variables and COMMONs via the READ statement which reads data from a DATA list or (2) LINK (or TKB) together with a module compiled from MACRO-32 (or MACRO-11) that has pre-compiled data in a PSECT used as a COMMON or a MAP in BASIC.

Response from D.E.C. 22-Mar-84 02:33 PM
Will strongly consider for VAX BASIC.

Wish number: 0005
Subject: VMS STREAM FILES
Date: 25-Oct-83 12:16 PM

Provide some easy-to-use way to access stream files on VMS.

Response from D.E.C. 22-Mar-84 02:34 PM
Desirable, will investigate.

Wish number: 0006
Subject: WISHLIST CHANGE
Date: 25-Oct-83 12:19 PM

Modify the wishlist program so that when you are reading wishes, pressing RETURN will take you to the next wish (so you don't have to type "NEXT" just to get to the next item.

has some nice features, but don't lose the capabilities of the old one.

Eliminate the double prompt in "Text>?". Take out either the right angle bracket or the question mark. Change "terminate" to "end".

Response from D.E.C. 22-Mar-84 02:35 PM

All provided commands can be entered with only the first character. Other suggestions will be considered.

Wish number: 0007
Subject: SLOW INTERPRET MODE
Date: 25-Oct-83 12:23 PM

Add an interpret mode to Basic-Plus-2. When I am developing and modifying a large program, I don't care how slow the darn thing runs, but the hour-and-a-half compiles and task-builds are killers. I need some way to test changes on OVERLAID programs more quickly. The RUN command is useless because the programs that need it the most have CALLs and lots of overlays.

Response from D.E.C. 22-Mar-84 02:36 PM

No extensions are planned for the RUN - LOAD capability of BP2.



Wish number: 0008
Subject: I AND D SPACE
Date: 25-Oct-83 12:26 PM

Use I and D space for Basic-Plus-2 and Basic-Plus (yes, we still use Basic-Plus a lot for production work). More address space would be wonderful.

Response from D.E.C. 22-Mar-84 02:36 PM
BASIC PLUS is a stable product. Will consider for BP2 if provided by RSTS.

Wish number: 0009
Subject: DOCUMENT SCALE FACTOR
Date: 25-Oct-83 12:28 PM

Explain in the manuals the pros and cons of scaling more clearly.

Response from D.E.C. 22-Mar-84 02:37 PM
We will pass this information on to the documentation writers.

Wish number: 0010
Subject: SHARED FILES WITH LARGE RECORD
Date: 25-Oct-83 12:29 PM

Provide a way to share files on VMS with record sizes larger than 512 characters. I realize this may be an RMS problem; if so, please pass this wish on.

Response from D.E.C. 22-Mar-84 02:37 PM
Only sequential files are restricted to Fixed files with record sizes of 512 characters. We will pass suggestion onto RMS.

Wish number: 0011
Subject: Provide substring capability--
Date: 25-Oct-83 12:31 PM

Provide the ability to change characters within a string
without moving the string. Some format such as:

LET AS[4:6] = 'FOO'

Response from D.E.C. 24-Apr-84 04:22 PM

Will consider.

Wish number: 0012
Subject: One character input
Date: 25-Oct-83 01:16 PM

BASSONECHR to work, or a SIMPLE alternative.

Response from D.E.C. 22-Mar-84 02:38 PM

Will investigate some similar functionality.

Wish number: 0013
Subject: RADIX CONSTANT SUPPORT
Date: 25-Oct-83 01:16 PM

ALLOW RADIX CONSTANTS LIKE ON VAX, DO NOT GIVE ERROR MESSAGE
RADIX NOT SUPPORTED ON RSTS.....IT PROBABLY TAKES MORE CODE TO
FIND AND PRINT THE ERROR, THAN JUST TO DO THE CONVERSION!!!!

Response from D.E.C. 22-Mar-84 02:39 PM

Will consider.

Wish number: 0014
Subject: USER-SECTIONING
Date: 25-Oct-83 01:17 PM

ALLOW A USER SECTIONING TYPE DIRECTIVE ALA COBOL SECTION NUMBERS
SO WE DO NOT HAVE TO REMEMBER A COMPLICATED SECTION SYSTEM FOR
DIFFERENT PROGRAMS.....ALL BP2 WOULD HAVE TO DO IS SET UP DIFFERENT
PSECTS AND REMEBER THEM FOR THE BUILD....

Response from D.E.C. 22-Mar-84 02:39 PM

Not likely.

Wish number: 0015
Subject: DEF GOSUBS
Date: 25-Oct-83 01:18 PM

ALLOW A GOSUB FROM WITHIN A DEF....A GOSUB IS INHERENTLY A CLOSED-LOOP
THEREFORE SHOULD NOT BE MARKED AS 'BAD CODE'

Response from D.E.C. 22-Mar-84 02:39 PM

No, use CALL from within DEF's.



Wish number: 0016
Subject: Resume to a LABEL
Date: 25-Oct-83 02:28 PM

It would be nice to allow resuming to a label, so that most line numbers can be eliminated. Presently we try to write our code in a COBOL-LIKE paragraph manner using the labels like paragraph names, but for the "paragraphs" that errors must resume to we are forced to add a line number also.
exit

Response from D.E.C. 22-Mar-84 02:40 PM
Will consider.

Wish number: 0017
Subject: BP2 COMMAND LINE INTERPRETER
Date: 25-Oct-83 03:02 PM

ADD A COMMAND LINE INTERPRETER OF THE FORM

BP2 A,A=A/<SWITCHES>

Response from D.E.C. 22-Mar-84 02:40 PM
Will consider, but support will be needed from the operating systems.



Wish number: 0019
Subject: Wish number 109
Date: 25-Oct-83 04:16 PM

In Basic wish number 109 someone is interested in getting the system date in internal (16 bit) format without using peek(512) and therefore having a privileged program. The RSTS sys call get monitor tables returns the system date in internal format and does not require privileges. This has worked for me for several years now.

Response from D.E.C. 22-Mar-84 02:41 PM

Thank you.

Wish number: 0020
Subject: STATEMENT LABELS
Date: 25-Oct-83 05:21 PM

The idea of statement labels may seem nice, but in every shop I've worked in there is a standard that labels are to start with an ascending number. This makes statement labels in Basic equivalent to a line number followed by a comment, ie.

2000 !Begin Main Process

Response from D.E.C. 22-Mar-84 02:52 PM

Change your conventions. If you insist on ascending numbers, precede the numbers with a single letter. For example:

L2000_BEGIN_MAIN_PROCESS

Wish number: 0021
Subject: Implicit channel when passing
Date: 26-Oct-83 09:28 AM

This has been a problem on version 1.6 BASIC, if fixed on 2.0 or 2.1 the
n
ignore this request. Else.... HEAR YEA, HEAR YEA!!

The "DIM #n, ..." statement is required for declaring/defining a virtual
array in BASIC. So far, the value of "n" has had to be a constant value
and not a integer variable. When passed to subprograms, it makes it ne-
cessary for the subprogram to know which channel the calling (sub)progra
m
is using in order for the subprogram to use the virtual array passed to
it
in the argument list. This hinders modular/independant subroutines con-
siderably.

WISH: (1) that a virtual array passed by description will automatically
include the channel number specification (I know that this is in the de-
scription block passed so why not use it?) and all that the subprogram
need do is declare the argument array as a virtual array or (2) let the
value "n" take on a variable value and let the programmer pass both the
virtual array reference and the channel number (two arguments) so that i
n
the subprogram, the "DIM #n,..." will properly declare the virtual array
being passed.

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Response from D.E.C. 24-Apr-84 04:25 PM

Will investigate.

In BP2, you can pass the entire virtual array as a parameter to the subprogram. This way, the SUB need not know anything about the channel number.

Wish number: 0022
Subject: NEW COMPILER DIRECTIVES
Date: 26-Oct-83 09:38 AM

The use of the %VARIANT is a great idea. However, you did not take it far enough. The current implementation requires that the program know in advance what values the /VARIANT qualifier needs in order to compile his/her program.

WISH: Introduce an inquiry function to allow the compiler to initiate a simple dialog with the programmer when compilation is started. E.g. a "%lex_value = %INQUIRE 'Prompt string...'" compiler directive could be used to ask the programmer if debug statements are to be included. Additionally, a '%PRINT "..."' compiler directive could be used to print diagnostic information or %INQUIRE menus during such a compilation.

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Response from D.E.C. 24-Apr-84 10:58 AM

Some of this functionality can be achieved using DCL
command procedures. These suggestions will be considered
for VAX BASIC.

Wish number: 0023
Subject: FIELD STATEMENT
Date: 26-Oct-83 10:46 AM

Stop flagging FIELD as a declining feature, and stop telling us that
dynamic MAPPING can do everything FIELDing can do when it isn't true.

It is annoying to see the diagnostic message dozens of times in a progra
m
when it is impossible to replace the FIELD statements with MAPs.

MAPs make it impossible to write generalized I/O routines.

I have two subprograms that retrieve data from and store data into
data records. The GET module, given the channel, the record number,
the starting position, and the length of the field, returns the data:

```
CALL GET(channel%, recno., start%, len%, fielddata$)
```

In the module, it looks something like this:

```
Calculate the physical block from the recno. and the record size  
FIELD #channel%, start% - 1% AS z$, len% AS fielddata$
```

There is absolutely no way to do this with mapping at present, so
please stop trying to tell us maps are always better than fielding.

us a way to either:

1. move the map to an I/O buffer at run time, such as
MOVE (A) TO #3%
2. Point a particular variable from a map into any buffer:
REMAP #channel%, z\$ = start% - 1%,

fielddata\$ = len%

The map is just an offset in memory. If you need to, untie it from a PSECT when we need the capability.

Response from D.E.C. 22-Mar-84 03:01 PM

The declining feature flagger can be turned off using the FLAG:NODECLINING qualifier. The suggestions in this wish will be considered.

Wish number: 0024
Subject: COMMONs and MAPs
Date: 26-Oct-83 01:58 PM

COMMONs and MAPs (on VMS) generate read/write shareable .PSECTs. This causes you to share data if the basic routine containing them is made part of a shareable image, which is a disaster if you are using them as I/O buffers or for passing arguments to subprograms. There should be a keyword or compile-time directive to set the .PSECT attributes for the COMMONs and MAPs, or at least the default attribute should be changed to "NOSHARE". The only way to override the .psect attributes currently is to use the PSECT_ATTR linker option. If, for example, you link the BASIC routine with a MACRO routine which defines the same .PSECT as NOSHR, the linker complains with a "PSECT attributes not matched" warning and generates a shareable section in the image.

There are arguments on both sides of this issue. We will investigate further.

Wish number: 0025
Subject: Page #'s on Listings
Date: 26-Oct-83 03:02 PM

Please add a page number to the program listings from the compiler.

Response from D.E.C. 22-Mar-84 03:03 PM
Will consider. This already exists in VAX BASIC.

Wish number: 0026
Subject: LC in Compiler Prompt
Date: 26-Oct-83 03:03 PM

Please allow the input of a lower case BP2 compiler prompt when building the compiler. Currently you force the prompt to UPPER CASE when doing a build. Patching the command file is not a good way to get a lower case prompt.

Response from D.E.C. 24-Apr-84 04:27 PM

There in V2.2.



Wish number: 0027
Subject: RECORD datatype in BP2
Date: 26-Oct-83 03:04 PM

Please add some form of single level record datatype on the 11
even if we are only able to define one level of record without
groups, it would provide a means to help us remove FIELDS faster.

Response from D.E.C. 22-Mar-84 03:04 PM

Not likely.

Wish number: 0028
Subject: DUMP debug keyword
Date: 26-Oct-83 03:06 PM

Provide a DUMP keyword in debug on BP2 to force a Post-Mortem dump
directly from the debugger after you get too deep in it to figure
out the status of your program.

Response from D.E.C. 22-Mar-84 03:04 PM

This is available now with BPT (unsupported).

Wish number: 0029
Subject: LIST PAGE #
Date: 26-Oct-83 03:08 PM

HOW ABOUT PUTTING PAGE NUMBERS ON THE LISTING FILE FROM BP2

Response from D.E.C. 22-Mar-84 03:06 PM

Will consider.

Wish number: 0030
Subject: LIST VARIANT NUMBER
Date: 26-Oct-83 03:08 PM

HOW ABOUT PUTTING VARIANT VALUES ON THE LISTING FILE SO WE CAN FIGURE
OUT WHAT VARIANT WAS USED FOR A COMPILE

Response from D.E.C. 22-Mar-84 03:06 PM

The VARIANT value is printed on the listing in the 'SHOW' output.

Wish number: 0031
Subject: User "Caused" errors
Date: 26-Oct-83 03:07 PM

Provide a user-level method for "causing" an error to occur
which would perform in the same manner as when an actual error
occurs in the language (BP2). ie- 10 ERROR 15 would cause the
same trapping and setting of err, erl, and ern\$ as had an actual
error 15 occurred during execution.

Response from D.E.C. 22-Mar-84 03:08 PM

For BP2, CALL \$FRCER BY REF with the error number (unsupported).

For VAX BASIC, we may consider this suggestion.

Wish number: 0032
Subject: %PRINT ??
Date: 26-Oct-83 03:09 PM

HOW ABOUT A %PRINT "<<MESSAGE>>" COMPILIER
COMMAND TO PRINT A LINE TO THE SCREEN, IT WOULD HELP TWOFOLD.
1) YOU CAN WATCH WHERE YOUR COMPILE CURRENTLY IS AND
2) ON AN ABORT, YOU CAN PRINT MORE THAN ONE LINE BEFORE ABORTING

Response from D.E.C. 22-Mar-84 03:45 PM
Will consider for VAX BASIC.

Wish number: 0033
Subject: %INQUIRE ??
Date: 26-Oct-83 03:11 PM

HOW ABOUT A %INQUIRE "<<TEXT>>" %VAR COMPILIER COMMAND????
IT WOULD LET YOU INPUT COMPILE-TIME VARIABLES 'ON THE FLY'

Response from D.E.C. 22-Mar-84 03:46 PM
See wish #22.

Wish number: 0034
Subject: Trappable Print Using error
Date: 26-Oct-83 03:09 PM

PLEASE!!!! PLEASE!!!!

"Print Using" format strings, please provide a means to either trap a "Print Using format error" at run-time or have the format\$ function trap to another error code which is actually trappable at run-time. The Print Using code is large enough already- users should not have to re-invent the same stuff to allow the input of formats at run-time.

Response from D.E.C. 22-Mar-84 03:46 PM

Will investigate.

Wish number: 0035
Subject: %PDP11 %VAX PREDEFINED VARIA
Date: 26-Oct-83 03:12 PM

INSTEAD OF MAKING A USER TYPE %LET %PDP11 = 1 AND %LET %VAX = 2 IN EVERY PROGRAM, HOW ABOUT PREDEFINING THEM IN A STANDARD WAY....BETTER YET, PREDEFINE %RSX, %IAS, %RSTS, %VMS, ??? %UNIX ???

Response from D.E.C. 22-Mar-84 03:47 PM

Will strongly consider some of these suggestions.

Wish number: 0036
Subject: More error Handling documentat
Date: 26-Oct-83 03:12 PM

Please document the pitfalls (run-time problems) involved in the error handling process in the basics and how they differ from one another. This is specially true concerning the execution of gosubs, functions, calls, etc. while an error is actually pending. Also document the difference between ON ERROR GOTO nnn and ON ERROR GO BACK more carefully since they are really such different beasts.

Will consider, but you should not do these things while
an error is pending.

Wish number: 0037
Subject: FIELD documentation
Date: 26-Oct-83 03:14 PM

Please document the differences in handling of variables in field
statements between the 11 and the VAX much more carefully as the
following innocent (and common on RSTS) statements operate very
differently on VAX and RSTS:

5 OPEN "FOO" FOR OUTPUT AS FILE 1%

6 FIELD #1% 3% AS AS

7 INPUT AS

.....

On RSTS, AS becomes a dynamic string and will accept any length input
while on VAX AS seems to remain a static string and will only
accept 3 characters.....

Also what happens on the VAX when channel 1 is closed????

Response from D.E.C. 22-Mar-84 03:51 PM

Will investigate.



6

Wish number: 0038
Subject: Where are my channels?
Date: 26-Oct-83 03:17 PM

BASIC 2 1.6 allowed program use of channels 13 and 14. Basic 2.0 gives an error. This is obviously an oversight and the channels are greatly missed. A correction would be appreciated.

Response from D.E.C. 22-Mar-84 03:51 PM
No.

Wish number: 0039
Subject: Poor code generation.
Date: 26-Oct-83 03:19 PM

The PDP BASIC 2 version 2 compiler produces more inefficient code than the older compiler did. Specifically in the areas of loops, integer comparisons with 0 (1.6 would check for =0, <>0, etc. while 2.0 actually pushes the value of 0 and does a compare, ergo more code and more time). If your programs don't do much comparison of logical true/false conditions then this won't be much of an impact.

Response from D.E.C. 22-Mar-84 03:52 PM
Will investigate.



Wish number: 0040
Subject: +=
Date: 26-Oct-83 03:28 PM

Some sort of syntax such that

<lhs> = <lhs> <oper> <exper>

i.e. A%
= A% + 1%

= A% + 1%

could instead be

<lhs> <oper> <exper>

i.e. A% += 1%

What this means is that you would not have to repeat the target of the modifications on both sides.

In a complex case this is both easier to write and clearer:

BALANCE% = BALANCE% + TRANSACTION%

becomes

BALANCE% += TRANSACTION%

Response from D.E.C. 22-Mar-84 03:52 PM

No.

Wish number: 0041
Subject: %MAP & %NOMAP
Date: 26-Oct-83 03:33 PM

The ability to turn on and off the listing of variables in the storage map that is part of the listing. This would work with %NOCROSS and %NOLIST in supressing the listing of a section of code. This is useful when a large number of files are INCLUDED/APPEDED to declare variables, and many of the variables are not used (for instance, you include the map of a file and then reference two variables out of 200).

Response from D.E.C. 22-Mar-84 03:52 PM

Will investigate for VAX BASIC. It is more likely to have the ability to see only referenced items.

Wish number: 0042
Subject: resume on label
Date: 26-Oct-83 04:41 PM

Response from D.E.C. 22-Mar-84 03:53 PM

See wish #16.

Wish number: 0043
Subject: SUFFIX ON DECLARED VARIABLES
Date: 26-Oct-83 07:23 PM

ALLOW MATCHING SUFFIX ON DECLARED VARIABLES

Response from D.E.C. 22-Mar-84 03:53 PM

May consider.

Wish number: 0044
Subject: I & D SPACE FOR BASIC-PLUS
Date: 26-Oct-83 07:24 PM

PROVIDE I & D SPACE FOR BASIC-PLUS ON RSTS/E

Response from D.E.C. 22-Mar-84 03:54 PM
No. BASIC PLUS is a stable product.

Wish number: 0045
Subject: RMS hashing
Date: 27-Oct-83 09:46 AM

When??????

Response from D.E.C. 22-Mar-84 03:54 PM
Submit to RMS wishlist.

Wish number: 0046
Subject: USER LIBRARY
Date: 27-Oct-83 09:58 AM

ADD SUPPORT FOR USER LIBRARY IN BUILD COMMAND OF BASIC-PLUS II

Response from D.E.C. 22-Mar-84 03:54 PM
Will consider.

Wish number: 0047
Subject: MULTIPLE LIBRARIES
Date: 27-Oct-83 09:59 AM

Don't force clusterable libraries to be in LB: account. Allow the account specification from the task build command file.

Response from D.E.C. 22-Mar-84 03:54 PM

No, these are operating system restrictions.

Wish number: 0048
Subject: build
Date: 27-Oct-83 10:00 AM

It would be nice if there could be several builds with simple switches. For example, BUILD would build the default odl/cmd's, BUILD/1 or whatever would build one of many possible odl/cmd's. I find that every time I go to a new site the default build is different, and it can get confusing.

Response from D.E.C. 22-Mar-84 03:56 PM

Not likely.

Wish number: 0049
Subject: Labels:
Date: 27-Oct-83 10:23 AM

What progress has been made in making BASIC II Version 2 code NON-position dependant. Case in point: Line labels/numbers/code. This is a very undesirable characteristic for BASIC.

These restrictions are not likely to change. The restrictions on what begins in the first column of your source code will remain the same.

Wish number: 0050
Subject: Abbreviation notation for reco
Date: 27-Oct-83 10:39 AM

It would be nice to have something similar to PASCAL's
WITH record-variable DO statement

Response from D.E.C. 22-Mar-84 03:59 PM
May consider.

Wish number: 0051
Subject: BeepBeep
Date: 27-Oct-83 12:49 PM

Beep terminal every 60 seconds while compiling to prevent programmer from falling asleep...

(We are referring to BP2 V2.1 on RSTS/E here...)

We figure that we would average at least 15 beeps...

(probably more)

Response from D.E.C. 22-Mar-84 04:00 PM

We would prefer to spend the time speeding up the compiler.



Wish number: 0052
Subject: Transportability
Date: 27-Oct-83 12:53 PM

Something similar to /FLAG:DECLINING which would /FLAG:RSTS or
/FLAG:VMS or /FLAG:RSX for operating-system dependent statements.

Response from D.E.C. 22-Mar-84 04:00 PM

Not likely.

Wish number: 0053
Subject: HELP MESSAGES
Date: 27-Oct-83 12:56 PM

Make the HELP facility actually PAUSE until RETURN is pressed,
instead of just SAYING it's pausing when it really doesn't.

Response from D.E.C. 22-Mar-84 04:00 PM

Will investigate.

Wish number: 0054
Subject: INCREMENT
Date: 27-Oct-83 12:57 PM

Add a simple increment and decrement operation, such as

INCR A% [BY b%]

DECR A% [BY b%]

or

A% += [B%] (default is 1% if B% is left out)

A% -= [B%]

Response from D.E.C. 22-Mar-84 04:01 PM

Not likely.

Wish number: 0055
Subject: POINTER TYPE
Date: 27-Oct-83 12:59 PM

Add a pointer data type--it IS in the philosophy of BASIC:
throw anything in that we need.

Response from D.E.C. 22-Mar-84 04:01 PM

Will investigate for VAX BASIC.

Wish number: 0056
Subject: REMAP
Date: 27-Oct-83 02:46 PM

FIX YOUR EXAMPLE ON THE REMAP IN THE HELP TEXT
IT DOES NOT SHOW A GOOD EXAMPLE OF THE POWER OF THE
REMAP STATEMENT

Response from D.E.C. 22-Mar-84 04:01 PM

Thank you.

Wish number: 0057
Subject: Stack dump
Date: 27-Oct-83 03:04 PM

On a stack dump, if the statement number is greater than 99, then
it is printed as **. Couldn't this be fixed.

Response from D.E.C. 22-Mar-84 04:01 PM

Will investigate.

Wish number: 0058
Subject: Error trapping & Labels
Date: 27-Oct-83 03:05 PM

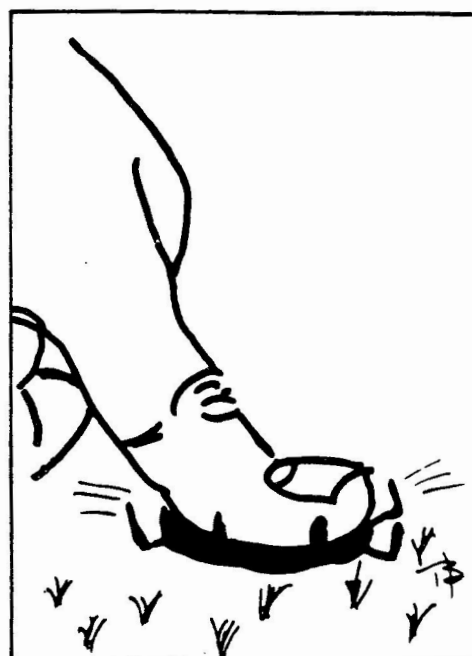
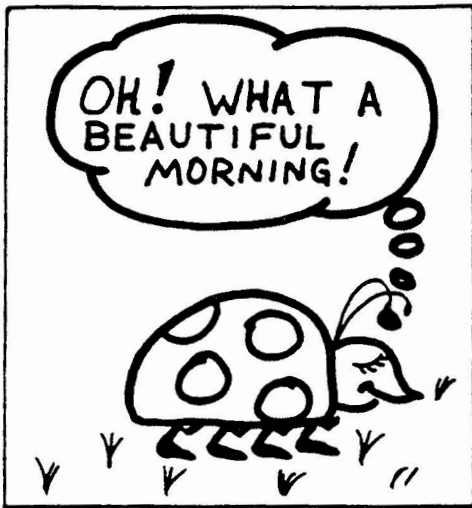
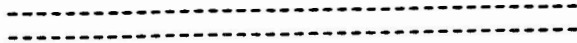
The ability to compare something like ERL to a label, ie.

If ERL=Read_disk:

also the ability to resume to a label.

Response from D.E.C. 22-Mar-84 04:01 PM

Not likely.

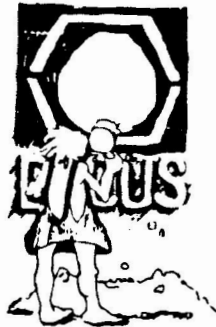


DECUS PROCEEDINGS

For your convenience and information listed below are the current DECUS Proceedings that are available and can be ordered through the DECUS office in Marlboro, Massachusetts. As availability changes this list will be updated.

			DECUS Part No.	Media Service Codes
Canada	1982	Toronto, Canada	PRO-82/V08.3	YA
U.S. Spring	1982	Atlanta, Georgia	PRO-82/V08.4	YA
Europe	1982	Warwick, UK	PRO-EUR-82	YA
U.S. Fall	1982	Anaheim, California	PRO-ANA-82	YA
U.S. Spring	1983	St. Louis, Missouri	PRO-STLO-83	YA
U.S. Fall	1983	Las Vegas, Nevada	PROC-FALL-83	YA

PLEASE NOTE: The DECUS Proceedings are no longer grouped together in one volume; they are each listed separately. European, Canadian and Australian Proceedings will be listed by the year, date and place of the symposium. U.S. Proceedings will be listed by the year, season (Spring or Fall) and place of the symposium.



U.S. CHAPTER DECUS Program Library SOFTWARE ABSTRACTS

Symposium Tape from the European RT-11 SIG, 1982, Warwick

Version: Fall 1982

Author: Various

Submitted By: Ray Carpenter

Operating System: RT-11

Source Language: Various

This symposium tape from the European RT-11 SIG is a collection of programs collated at the DECUS Europe Symposium held in September 1982, in Warwick.

No guarantees are made as to the completeness, usability, or quality of the programs on the tape. The material has not been checked or reviewed and documentation may or may not be included.

Restrictions: Sources may or may not be included.

Media (Service Charge Code): 2400' Magtape (PS)

Format: RT-11

Keywords: Symposia Tapes -
RT-11
Operating System Index: RT-11

April 2, 1984

9



DECtalk Application Support Library

Version: February 1984

Submitted By: Digital Equipment Corporation

Operating System: RSTS/E V7.1, VAX/VMS V3.4, P/OS V1.7 with
native tcoikit, UNIX 4.2 BSD.

Source Language: BASIC-PLUS, C, MACRO-11, COBOL

Memory Required: Varies

Special Hardware Required: DECTalk DTC01

The DECTalk support library contains an extensive collection of subroutines, written in C, that should simplify application development. It includes subroutines to carry out DECTalk specific functions, such as answering the phone, as well as low-level operating-system specific functions, such as generating and parsing escape sequences.

Several simple application programs are also provided, including the DECTalk telephone demonstration program and a "spoken fortune cookie" program. There are also sample programs written in BASIC-PLUS and COBOL for RSTS/E.

All source modules are provided, including several operating-specific libraries also distributed with C Language System (DECUS No. 11-SP-18). The VAX distribution contains source files and executable code, while the PDP-11 distribution contains only source modules. Unix installations should obtain the PDP-11 distribution and make their own arrangements for tape file format translation.

Note: VAX users refer to DECUS No. V-SP-20. UNIX users should obtain DECUS No. 11-SP-5A.

Restrictions: There may be release-specific code for UNIX systems. PDP-11 and compatibility mode implies DECUS C, No. 11-SP-18.

Documentation on magnetic media. The documentation presupposes access to the DECTalk hardware documentation.

Media (Service Charge Code): Manual (EC), 500' Magtape (MC)

Format: DOS-11

Keywords: Tools - Application
Development
Operating System Index:
RSTS/E, VAX/VMS, P/OS

April 16, 1984

DECtalk Application Support Library

Version: February 1984

Submitted By: Digital Equipment Corporation

Operating System: RSTS/E V7.1, VAX/VMS V3.4, P/OS V1.7 with
native toolkit, UNIX V4.2 BSD.

Source Language: BASIC-PLUS, C, MACRO-11, COBOL

Memory Required: Varies

Special Hardware Required: DECtalk DTC01

The DECtalk support library contains an extensive collection of subroutines, written in C, that should simplify application development. It includes subroutines to carry out DECtalk specific functions, such as answering the phone, as well as low-level operating system specific functions, such as generating and parsing escape sequences.

Several simple application programs are also provided, including the DECtalk telephone demonstration program and a "spoken fortune cookie" program. There are also sample programs written in BASIC-PLUS and COBOL for RSTS/E.

All source modules are provided, including several operating-specific libraries also distributed with C Language System (DECUS No. 11-SP-19). The VAX distribution contains source files and executable code, while the PDP-11 distribution contains only source modules. Unix installations should obtain the PDP-11 distribution and make their own arrangements for tape file format translation.

Note: PDP-11 users and Unix users should refer to DECUS No. 11-SP-58.

Restrictions: There may be release-specific code for UNIX systems. PDP-11 and compatibility mode implies DECUS C, No. 11-SP-18.

Documentation on magnetic media. The documentation presupposes access to the DECtalk hardware documentation.

Media (Service Charge Code): Manual (EC), 600' Magtape (MC)

Format: VMS/BACKUP

Keywords: Tools - Application
Development
Operating System Index:
RSTS/E, VAX/VMS, P/OS

April 16, 1984

CAI: Computer Assisted Instruction Package

Version: V1.0, January 1984

Author: William B. Leng, Southern Connecticut State University,
New Haven, CT

Operating System: RSTS/E V7.1

Source Language: BASIC-PLUS-2

Memory Required: 31KB

Other Software Required: BASIC-PLUS-2 Compiler and task builder

Special Hardware Required: VT100 or compatible terminal

The CAI system is a system of programs to handle instructor-written tests and quizzes on those texts. A weighting algorithm is employed to modify the students' scores as a function of the time allowed for each quiz and the time utilized by the students.

Note: Operating system version dependent because of RSTS/E system calls to identify the user.

Documentation on magnetic media.

Media (Service Charge Code): Manual (EA), 600' Magtape (MA)

Format: DOS-11

Keywords: Computer Assisted
Instruction
Operating System Index:
RSTS/E

April 16, 1984



9 FETCH.B

Version: January 1984

Author: Wayne Levine, Owatonna High School, Owatonna, MN

Operating System: RT-11

Source Language: MU-BASIC

Memory Required: 1500 Words

This program takes the place of an editor while you are in MU-BASIC. It can be used on data files, FORTRAN source files, text files and configuration files. This program actually writes a second program. The second program can be edited like a normal basic program, and when you run it your original files is recreated.

Documentation on magnetic media.

Media (Service Charge Code): Floppy Diskette (KA),
600' Magtape (MA)

Format: RT-11

S1372
840305/

Keywords: MU-BASIC, Tools -
Software Development, Editors
Operating System Index: RT-11

April 23, 1984

SELECT

Version: VIA, February 1984

Author: Mark Gilmore, The California State University, Long Beach, CA

Operating System: RSTS/E V8.0

Source Language: BASIC-PLUS

Memory Required: 7KW

Other Software Required: EDT editor, V2 or V3

This program allows the user to specify a wildcard file specification to edit, and then repeatedly invokes EDT (version 2 or 3) to do the editing chores.

This program does not need privileges and should not be privileged. While actual editing of other users' files is not allowed by RSTS/E, cross-account directories may be obtained on systems where it is not normally allowed.

The program may be RUN or entered by two CCL commands. If the program is RUN, it will prompt for a filename specification. If entered via the CCL commands, it expects the file spec in core common. This program should not be CHAINED to except at line zero. Several switches are allowed as modifiers to the file spec string. These have the following effects:

/RO or /MO:8192	Opens the files read-only.
/DE or /K	Deletes EDT temp files.
/ZE	Zeroes EDT temp files.
/P:nn	Pauses nn seconds between printing message and chaining to EDT for edit.

The CCL command are any chosen by the system manager. Two entry points are available: line 30000 will edit the files specified, line 30500 will append the /RO switch to the file spec. Suggested CCL commands are SELECT and INSPECT, respectively.

Restrictions: 255 files maximum (may be changed).

Documentation on magnetic media.

Media (Service Charge Code): 600' Magtape (MA)

Format: DOS-11

S1373
840306/

Keywords: Editors
Operating System Index:
RSTS/E

April 23, 1984

Vol. 1 Various CP/M Utility Programs

Version: April 1984

Author: Various

Submitted By: Digital Equipment Corporation

Operating System: CP/M-80

Source Language: Various

Memory Required: 64KB-128KB

The following is a brief description of the programs to be found on the diskette:

CATALOG.1	CONTENTS OF CP/M GROUP VOL 1
VOLUME1.DOC	COMMENTS ON CERTAIN PROGRAMS ON VOLUME
ASSIGN.ASM	IOBYTE ASSIGN. USE WITH VBIOS31
CASDSK.ASM	CASSETTE TO DISK TRANSFER
COPY.ASM	COPY SYSTEM, DATA OR WHOLE DISKETTE FROM DRIVE A TO B
COPY.COM	AS ASM, USED TO COPY THIS DISK
COPYX.ASM	AS COPY, USES INTERNAL SCRATCH INSTEAD OF AREA AT 40H
DIABLO.ASM	ROMABLE HYTYPE/QUME DRIVER
DISASSM1.ASM	CHRISTENSEN DISASSEMBLER AS PER DR. DOBB'S OF FEB. 1977. SEE ALSO SEDIT.ASM BELOW
DISASSM2.ASM	INTEL LIBRARY DISASSEMBLER
DISKTEST.ASM	PROGRAM TO SEARCH FOR SOFT AND HARD SECTOR ERRORS IN DISK I/O DESTROYS FILES ON DISKETTE AND ONLY RUNS IN 16K SYSTEMS
DSKCAS.ASM	DISKETTE TO CASSETTE TRANSFER
ED3.ASM	PATCHES FOR 'R' BUG IN CP/M ED.COM
EXAM.ASM	SECTOR VIEWER FOR VDM. SEE DISK1.DOC
FILES.COM	GIVES CONSOLE DISPLAY OF DIRECTORY RECORD NUMBER ASSIGNED TO EACH FILE. OFFERS TO DELETE FAULTY DIRECTORY ENTRIES.
GETVEC.LIB	ASM ROUTINE TO CREATE BIOS PRIMITIVE JUMP TABLE.
BIG IMPROVEMENT ON ARG'S IN COPY.	TOM KIRK SAYS A Z80 CAN DO IT ALL IN 4 INSTRUCTIONS!!
HYS13.ASM	DIABLO DRIVER FOR 3P+S IN Z80
HY15.ASM	DIABLO DRIVER FOR 3P+S IN 8080
ICOPY.ASM	COPY A FILE FROM ISIS DISKETTE ON B TO CP/M DISKETTE ON A. USE IDIR FIRST TO IDENTIFY FILENAMES
IDIR.COM	LISTS TO CONSOLE DIRECTORY OF ISIS DISKETTE IN B.
LIOS.ASM	CP/M I/O SUBROUTINES. SEE PRINT FOR APPLICATION.
LTG.ASM	
MAZE.ASM	INTEL MAZE PROGRAM
MEMTEST.ASM	INTEL RAM TEST
PRINT.ASM	MOD OF PRNT TO PERMIT CONDITIONAL ASSEMBLY FOR CON:/LST AND FOR HARDWARE [FF] OR NONE
PRNT.ASM	TRANSIENT TO PRINT FILES WITH PAGINATION AND PAGE NUMBERS

RELOC.ASM	CP/M RELOCATION PROGRAM
RTE.ASM	INTEL REAL-TIME EXECUTIVE
SEDIT.ASM	SYMBOL TABLE EDITOR OF DISASSM1
SPACE.ASM	GAME
SPAT.ASM	RE-WRITE OF EXAM TO ALLOW WRITING. SEE VOL 3
	FORMAT.BAS AND README.FMI
TRAIN.ASM	VDM GRAPHIC
TREAD.ASM	TAPE READER TO DISK TRANSFER
VBIOS31.ASM	BIOS FOR 32K OF MEMORY WITH VDM
VBOOT31	COLD BOOT FOR VBIOS31
XSTAT.COM	SIMILAR TO STAT. REPORTS # OF FILES AND NULL FILES.
	KNOWN BUG IS THAT IS REPORTS NULL EXTENTS TO NON-NULL FILES. DON'T
	DELETE A FILE BASED ON THIS!!!

This package was developed on a Z80 chip. It was not developed on a Digital Equipment Corporation personal computer. In some cases, the source code might make specific calls to the hardware which would require changes to the sources.

There are no guarantees that this software will run "AS IS" across the Rainbow-Series, the DECmate II, or the Professional-300 Series of computers.

Sources may or may not be included. Documentation on magnetic media.

Media (Service Charge Code): 5 1/4" Floppy Diskette (JA)

Keyword Index: CP/M-80 -
Utilities
Operating System Index:
CP/M-80

April 30, 1984



Lawrence Livermore BASIC and Disk Tiny BASIC

Version: April 1984

Author: Various

Submitted By: Digital Equipment Corporation

Operating System: CP/M-80

Source Language: Various

Memory Required: 64KB - 128KB

The following is a brief description of the programs to be found on the diskette:

CATALOG.2	CONTENTS OF CP/M VOLUME 2
LLL BASIC.ASM	LLL BASIC INTERPRETER SOURCE
LLL BASIC.COM	SIMPLE PATCHED COM FOR CP/M (NOT ECONOMICAL, BUT INSTRUCTIVE)
.LLL BASIC.DOC	NOTES ON LLL BASIC
.LLL FP.ASM	FLOATING POINT PACKAGE FOR LLL BASIC
LLL MON.ASM	KLUGE MONITOR TO TEST LLL IN LLL BASIC.COM
STARTREK.DOC	COMMENTS ON STARTREK.TBI
STARTREK.TBI	TINY BASIC LOADABLE STARTREK
TINYBAS.COM	SHERRY VERSION OF WANG PALO ALTO TINY BASIC, WITH DISK SAVE AND LOAD OF PROGRAMS FOR CP/M
TINYBAS.DOC	FULL INSTRUCTIONS FOR TINYBAS

This package was developed on a Z80 chip. It was not developed on a Digital Equipment Corporation personal computer. In some cases, the source code might make specific calls to the hardware which would require changes to the sources.

There are no guarantees that this software will run "AS IS" across the Rainbow-Series, the DECmate II, or the Professional-300 Series of computers.

Sources may or may not be included. Documentation on magnetic media.

Media (Service Charge Code): 5 1/4" Floppy Diskette (JA)

Keywords: CPM-80 -
Utilities, CPM-80 - Games
Operating System Index:
CP/M-80

April 30, 1984

Vol 3. Various BASIC E Games and Programs

Version: April 1984

Author: Various

Submitted By: Digital Equipment Corporation

Operating System: CP/M-80

Source Language: BASIC

Memory Required: 64KB - 128KB

The following is a brief description of the programs to be found on the diskette:

CATALOG 3	CONTENTS OF CP/M VOLUME 3
VOLUME3A.DOC	COMMENTS ON SOME PROGRAMS
VOLUME3B.DOC	COMMENTS ON OTHER PROGRAMS
ACE.BAS	BASIC-E PROGRAM.SEE DOC'S
AMAZE.BAS	BASIC-E PROGRAM.SEE DOC'S
ANIMAL.BAS	BASIC-E PROGRAM.SEE DOC'S
BAGELS.BAS	BASIC-E PROGRAM.SEE DOC'S
BAGELS2.BAS	BASIC-E PROGRAM.SEE DOC'S
BIOPRINT.BAS	BASIC-E PROGRAM.SEE DOC'S
BLKFRI.BAS	BASIC-E PROGRAM.SEE DOC'S
BLKFRI2.BAS	BASIC-E PROGRAM.SEE DOC'S
CANNONS.BAS	BASIC-E PROGRAM.SEE DOC'S
CHASE.BAS	BASIC-E PROGRAM.SEE DOC'S
CHOMP.BAS	BASIC-E PROGRAM.SEE DOC'S
COMBINE.BAS	BASIC-E PROGRAM.SEE DOC'S
CORE.BAS	BASIC-E PROGRAM.SEE DOC'S
CORETEST.BAS	BASIC-E PROGRAM.SEE DOC'S
CRAPS.BAS	BASIC-E PROGRAM.SEE DOC'S
EUCLID.BAS	BASIC-E PROGRAM.SEE DOC'S
FIB.BAS	BASIC-E PROGRAM.SEE DOC'S
FIT.BAS	BASIC-E PROGRAM.SEE DOC'S
FORMAT.BAS	BASIC-E PROGRAM.SEE DOC'S
FORMAT.FMI	INSTRUCTIONS FOR FORMAT.BAS IN FORMAT CODE
HANG.BAS	BASIC-E PROGRAM.SEE DOC'S
HELLO.BAS	BASIC-E PROGRAM.SEE DOC'S
KENO.BAS	BASIC-E PROGRAM.SEE DOC'S
LANDER.BAS	BASIC-E PROGRAM.SEE DOC'S
LANES.BAS	BASIC-E PROGRAM.SEE DOC'S
LEM.BAS	BASIC-E PROGRAM.SEE DOC'S
LOAN.BAS	BASIC-E PROGRAM.SEE DOC'S
LOVE.BAS	BASIC-E GRAPHIC
PLOT2.BAS	BASIC-E PROGRAM.SEE DOC'S
POET.BAS	BASIC-E PROGRAM.SEE DOC'S
README.FMI	ANOTHER FORMAT SOURCE WITH NOTES ON-THE
AUTHOR, ON ML80 AND ON SPAT	

S/TREK.BAS	BASIC-E PROGRAM.SEE DOC'S
STARS.BAS	BASIC-E PROGRAM.SEE DOC'S
STARTREK.BAS	BASIC-E PROGRAM.SEE DOC'S
STORY.BAS	BASIC-E PROGRAM.SEE DOC'S
STRIKE9.BAS	BASIC-E PROGRAM.SEE DOC'S
TREKINST	INSTRUCTIONS FOR STARTREK.BAS
TTT.BAS	BASIC-E PROGRAM.SEE DOC'S
WUMPUS.BAS	BASIC-E PROGRAM.SEE DOC'S

This package was developed on a Z80 chip. It was not developed on a Digital Equipment Corporation personal computer. In some cases, the source code might make specific calls to the hardware which would require changes to the sources.

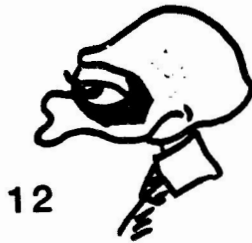
There are no guarantees that this software will run "AS IS" across the Rainbow-Series, the DECmate II, or the Professional-3000 Series of computers.

Sources may or may not be included. Documentation on magnetic media.

Media (Service Charge Code): 5 1/4" Floppy Diskette (JA)

Keywords: CPM-80 - Games
Operating System Index:
CP/M-80

April 30, 1984



Vol. 5 BASIC-E Compilers and Interpreters, BASIC-E Programs
Continued From Volume 3, Microsoft BASIC Programs

Version: April 1984

Author: Various

Submitted By: Digital Equipment Corporation

Operating System: CP/M-80

Source Language: BASIC

Memory Required: 64KB - 128KB

The following is a brief description of the programs to be found on the diskette:

CATALOG.5	CONTENTS OF CP/M GROUP VOL 5
VOLUME5.DOC	COMMENTS
21.ASC	MICROSOFT BASIC PROGRAM
BAS2-0.COM	BASIC-E COMPILER
BAS2-1.COM	BASIC-E COMPILER
BIO-FF.ASC	MICROSOFT BASIC PROGRAM
BIORYTH.ASC	MICROSOFT BASIC PROGRAM
BLKFRI2.ASC	MICROSOFT BASIC PROGRAM
DECISION.ASC	MICROSOFT BASIC PROGRAM
EDTEXT.ASC	MICROSOFT BASIC PROGRAM
FORMAT.ASC	MICROSOFT BASIC PROGRAM
OTHELLO.BAS	BASIC-E PROGRAM
OTHELLO.DOC	INSTRUCTIONS FOR OTHELLO.BAS
RADIX.ASC	MICROSOFT BASIC PROGRAM
RECOVERY.ASC	MICROSOFT BASIC PROGRAM
RUN2-2.COM	BASIC-E INTERPRETER
RUN2-3.COM	BASIC-E INTERPRETER
RUNK2-0.COM	BASIC-E INTERPTETER
SLOT.ASC	MICROSOFT BASIC PROGRAM
SORT.ASC	MICROSOFT BASIC PROGRAM
STARTREK.ASC	MICROSOFT BASIC PROGRAM
SUPTRK3.ASC	MICROSOFT BASIC PROGRAM

This package was developed on a 280 chip. It was not developed on a Digital Equipment Corporation personal computer. In some cases, the source code might make specific calls to the hardware which would require changes to the sources.

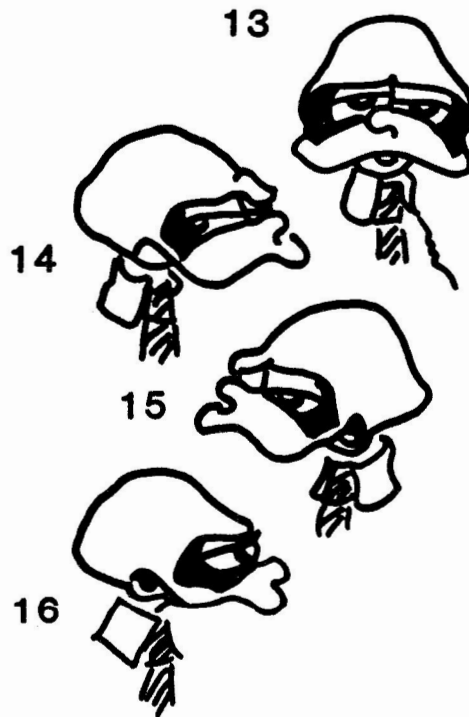
There are no guarantees that this software will run "AS IS" across the Rainbow-Series, the DECmate II, or the Professional-300 Series of computers.

Sources may or may not be included. Documentation on magnetic media.

Media (Service Charge Code): 5 1/4" Floppy Diskette (JA)

Keywords: CP/M-80 -
Compilers, CP/M-80 - Language
Interpreters
Operating System Index:
CP/M-80

April 30, 1984



new
PRO-117

GRASP: Graphics Applications Processor

Version: V1.9, January 1984

Author: Mark Anacker, General Telephone Co. NW, Inc., Everett, WA

Operating System: P/OS V1.5 or V1.7

Source Language: PRO BASIC

Memory Required: 128KB

Other Software Required: PRO BASIC

GRASP is a graphics editor for the Professional - 300 Series of personal computers designed to produce drawings and other graphical images. It has extensive 2-D image manipulation capabilities, and may be expanded to process data from other programs. GRASP currently consists of four programs written in PRO BASIC and may be used without any additional hardware.

Restrictions: Works best with extended graphics option.

Documentation on magnetic media.

Media (Service Charge Code): Write-Up and Listing (DA), 5 1/4" Floppy Diskette (JA)

Format: FILES

Keywords: Graphics, PRO-300
Series
Operating System Index: P/OS

April 30, 1984

new
11-702

SIMQU: Simulated Line Printer Queue

Version: V1, January 1984

Author: William B. Leng, Southern Connecticut State University, New Haven, CT

Operating System: RSTS/E

Source Language: BASIC-PLUS-2

Memory Required: 15KW

Special Hardware Required: VT100 Terminal

The SIMQU system is used to allow any printing terminal to simulate a line printer. The system is used to allow hard copy output at or near terminal locations. It has been found to be extremely useful in a student learning environment, using a LA120 for 'quick' and 'dirty' printouts during program development, without disturbing the system printer.

Documentation on magnetic media.

Media (Service Charge Code): Write-Up (AA), 600' Magtape (MA)

Format: DOS-11

Keywords: Printer
Operating System Index:
RSTS/E

April 30, 1984

FIXIT: BASIC Translator

Version: V1.0, October 1983

Submitted By: Digital Equipment Corporation

**Operating System: RSTS/E V8.0, RSX-11M-PLUS V2.1, RSX-11S V4.1,
VAX/VMS V3.4**

Source Language: VAX-11 BASIC V2.1, BASIC-PLUS 2

Memory Required: 64KB

This program assists in converting either BASIC-PLUS-2 V1.6 programs or programs written in one of the numerous MicroBASIC implementations into VAX BASIC V2 program format. The program can be compiled and run under VAX-11 BASIC or under PDP-11 BASIC-PLUS-2.

The program asks for input and output file names, for information regarding the type of BASIC and some formatting information. It performs the following operations:

Prettyprinting-indenting to show structure, END IF insertion-to allow for removal of line numbers, movement of MAP, DIM, and COMMON statements to low-numbered statement numbers, blank insertion-for programs with blanks compressed out, removal of backslash characters, and removal of unnecessary ampersand characters.

When converting programs written in one of the MicroBASIC (e.g. MicroSoft BASIC) dialects, numerous special-case transformations are made to assist the conversion effort.

Restrictions: This utility does NOT handle all possible dependencies of the many MicroBASIC systems in the marketplace, rather it assists by handling mechanical changes. The program is written with the goal of being easy to modify, especially for handling specific variants of the MicroBASIC implementations.

Documentation on magnetic media.

Media (Service Charge Code): 600' Magtape (MA)

Format: DOS-11

Keywords: Conversion, BASIC,
Tools - Applications
Development
Operating System Index:
RSTS/E, RSX-11/IAS, VAX/VMS

March 19, 1984

Compendium Tape from the Australian RT-11 SIG

Version: Spring 1980 - Fall 1983

Author: Various

Submitted By: R.N. Caffin, CSIRO Textile Physics, Ryde NSW,
Australia

Operating System: RT-11 V4, V5

Source Language: BASIC-11, C, FOCAL, FORTRAN IV, MACRO-11, PASCAL

This is a collection of software acquired by the submitter over the years from various sources. Some of it comes from other SIG tapes from past DECUS symposia, some of it comes direct from various authors around the world. It is arranged as a series of .DSK files which may be treated as logical disks by LD or XD, or they may be copied as device images to RX01 discs. Included on the tape are a couple of non-DSK files which summarize and index the contents of most of the DSK files.

No guarantees are made as to the completeness, usability or quality of the programs on the tape. The material has not been checked or reviewed and documentation may or may not be included.

Sources may or may not be included. Documentation may or may not be included on the magnetic media.

Media (Service Charge Code): 2400' Magtape (PC)

Format: RT-11

Keywords: Symposia Tapes -
RT-11, Software Collections
Operating System Index: RT-11

May 14, 1984

CONEFR.BAS: Cone Frustrum Layout

Version: February 1984

Author: Fred Fortman, National Metal Fabricators, Elk Grove
Village, IL

Operating System: RT-11 V2, V3

Source Language: BASIC-11

Memory Required: 16K minimum

The program "CONEFR" (Cone Frustrum) is for obtaining all the data needed to layout any size cone frustum which has a common centerline through the large and small diameters. The data the program requires is self explanatory. It will ask for the material thickness, diameters, vertical height, slant height, or the angle off the vertical centerline of the side. Any three of these are all the program requires.

There are then options as to the number of segments you wish to make or the size material you wish to use. Using the size option the program will give you the number of segments needed.

The data will be shown on the CRT and, if required, will produce a hard copy of the data on the line printer.

Documentation on magnetic media.

Media (Service Charge Code): Floppy Diskette (KB),
600' Magtape (MA)

Format: RT-11

Keywords: Scientific,
Industrial
Operating System Index: RT-11

May 14, 1984

RSTS System Utilities from the University of Tennessee

Version: February 1984

Author: Harry Flowers and John Gill, University of Tennessee,
Memphis, TN

Operating System: RSTS/E V7.1 or later

Source Language: BASIC-PLUS

Memory Required: Varies

Other Software Required: DEC spooling package for SPLRUN program

This package contains four separate utilities. Following is a brief description of each:

SPLRUN patch - We have patched SPLRUN to count pages. If you use the big spooling package and would like to keep track of the pages you print, this patch works fairly well. One known problem with it is it comes up one short if there is no job burst page printed...shouldn't be too hard to fix if it matters to you. On our system, SPLRUN sends a message to our online accounting program. For purposes of this patch, the information is being sent to the OSC through OPSER.

SPLRUN.PAT patch to SPLRUN (BASIC-PLUS)
SPLPAT.COMD ATPK command file for patch and compile (read before you execute)

System monitoring package (MONITR) - The package performs similar to a combination of DYNPRI and KBMON. If you have both of these programs running, you can save a job slot with MONITR. MONITR also has some additional features which can be very useful.

Package consists of:

MONITR.BAS monitoring program (runs detached)
KBOARD.BAS keyboard report and maintenance
KBOARD.MTR keyboard data file (created by KBOARD.BAS)
SNDMTR.BAS message sender to MONITR
MONITR.DOC documentation for this package
MONITR.COMD command file for CUSP compiling

For further details, see MONITR.DOC documentation.

Billboard - public notes system which acts as a billboard. Care was taken to write this program without cursor control so that it may be run from any terminal. See source code for further details. You will probably wish to modify the help screen, as it contains references to UTCHS.

BILBRD.BAS billboard program

BILBRD.BAS must be compiled with the privileged bit set in the protection code, as [232].

Password changers - programs which will change the passwords to accounts. You are prompted for the old password, then the new password twice to make sure it's right.

PASWRD.BAS changes password to any user account

PRIVP .BAS changes the password to all privileged accounts
PASWRD.BAS must be compiled with the privileged bit set in the protection code, as [232].

PRIVP.BAS should NOT have the privileged bit set, to force running it from a privileged account.

Restrictions: SPLRUN gives one less page than was printed if no job burst page was specified. For MONITR a maximum of 128 configured keyboards, assumes OPSER online, but will run without OPSER. See documentation for further details.

For SPLRUN only patch is included. Documentation on magnetic media.

Media (Service Charge Code): 600' Magtape (MA)

Format: DOS-11

Keywords: RSTS/E - Utilities,
Operating System Index:
RSTS/E

May 14, 1984

SKIPAG: File Utility to Skip Blocks/Pages

Version: February 1984

Author: Kim H. Colwell, Gray, Cary, Ames & Frye, San Diego, CA

Operating System: RSTS/E V6.C, V7.0

Source Language: BASIC-PLUS

Memory Required: 4KW

SKIPAG is a BASIC-PLUS software utility used for skipping a specified number of blocks of pages in a RSTS/E data file. A common use for this program would be to skip to the middle or end of a print file to resume printing at a specified point. Another use would be to create 'sub-files' from ASCII data files for use as test data files. The input file can be any RSTS/E ASCII file. The output file can be another disk file or device such as a terminal or printer. Either blocks or pages may be specified to the program; and both a starting block (or page), and how many blocks (pages) to be copied, are optional.

Restrictions: Cannot use wildcards in file names.

Documentation on magnetic media.

Media (Service Charge Code): Write-Up and Listing (DA),
600' Magtape (MA)

Format: DOS-11

Keywords: RSTS/E - Utilities,
Tools - Application Development
Operating System Index:
RSTS/E

May 14, 1984

Real-Time Interface Support for the Nicolet Explorer via RS232 for the Professional-300 Series

Version: March 1984

Author: Alan Schweitzer

Submitted By: Digital Equipment Corporation

Operating System: Developed under VAX/VMS V3.5, tested under P/OS V1.7

Source Language: BASIC-PLUS2

Memory Required: 512KB

Other Software Required: No other run-time software required. Modification requires Pro Toolkit, Toolkit BASIC-PLUS2, Pro Real-Time Interface Library.

Special Hardware Required: PC3XX-AA (Pro Real-Time Interface). Nicolet Model 2090-III Oscilloscope with 2082 interface, external cabling.

This package permits the Pro-350 user to control, receive data from, and send data to the Nicolet Explorer Model 2090 Oscilloscope using an RS232 port on the Pro Real-Time Interface board. The application program also includes the capability of graphing the data, sorting and retrieving from disk files, and performing a simple FFT and graphing the real component, imaginary component, or power spectrum of the transformed data. The program, written as a demonstration of the Pro-350 real-time interface, is entirely menu-driven, with ease-of-use being a primary goal.

Restrictions: The target system must be P/OS V1.7 because of real-time interface library dependency.

Documentation on magnetic media.

Media (Service Charge Code): 5 1/4" Floppy Diskette (JA)

Format: FILES-11

Keywords: Nicolet Explorer, PRO-300 - Series
Operating System Index: P/OS

May 28, 1984

Vol.6 Chicago Area Computer Hobbyist Exchange Software

Version: April 1984

Author: Various

Submitted By: Digital Equipment Corporation

Operating System: CP/M-80

Source Language: BASIC, ASSEMBLY

Memory Required: 64KB-128KB

The following is a brief description of the programs to be found on the diskette:

CATALOG.6	CONTENTS OF CP/M VOLUME 6
EDVDM.DOC	ED.COM PATCH TO CHANGE LINES OF P COMMAND. SEE EXPLAIN.DOC
EXPLAIN.DOC	COMMENTS ON CERTAIN PROGRAMS
MAILLIST.DOC	DOCUMENTATION ON CACHE MAILLIST PROGRAMS
RANDY.DOC	COMMENTS ON XREFASM.ASM
BLOAD.ASM	TARBELL TAPE MITS 3.1 BASIC CSAVE TO ASCII
CCOS1.ASM	CACHE CASSETTE OPERATING SYSTEM
CKSUM.ASM	CHECKSUMS CP/M FILES
COMPARE.ASM	COMPARES TWO CP/M FILES
CUTTER.ASM	SEEMS TO BE VDM TO CASSETTE PROGRAM, BUT DOCUMENTATION STILL AWAITED
IDUMP.ASM	INTERPRETED FILE DUMP
MAINT.BAS	MAILLIST MODULE
MODEM.ASM	PROGRAM TO SEND AND RECEIVE FILES AND CONTROL REMOTE COMPUTERS VIA MODEM
PONG.ASM	VDM PONG GAME. THIS FILE IS FAULTY.
PREFMT.BAS	MAILLIST MODULE
PURGE.ASM	DISKETTE DIRECTORY PURGE
QUICKIE.BAS	MAILLIST MODULE
REPORT.BAS	MAILLIST MODULE
SIZE.ASM	GIVES SIZE OF CP/M FILE
SLOAD.ASM	LOADER MODULE OF CCOS1
SORT.ASM	MAILLIST MODULE
TISQ.ASM	TIMES SQUARE (NEWSCASTER) LETTERS TO VDM
TLOAD.ASM	TARBELL LOADER FOR TSAVED FILES
TMAP.ASM	MAP OF TAPE WITH TSAVED FILES
TSAVE.ASM	CP/M FILE TO TARBELL TAPE WITH CHECKSUM

XREFASM.ASM

CP/M COMPATIBLE ASSEMBLER PRODUCES
XREF TABLES. (CP/M ASSEMBLER WILL
NOT ASSEMBLE THIS WITHOUT EXTENSIVE
MODS TO RE-LABEL WHERE RESERVED
WORDS WERE USED, AND VERY LARGE
NUMBER OF 8-BIT IMMEDIATE OPERATIONS
WITH 16 BIT EXPRESSIONS.)

This package was developed on a Z80 chip. It was not developed on a Digital Equipment Corporation personal computer. In some cases, the source code might make specific calls to the hardware which would require changes to the sources.

There are no guarantees that this software will run "AS IS" across the Rainbow-Series, the DECmate II with the CP/M softcard or the Professional-300 with CP/M softcard Series of computers.

Sources may or may not be included. Documentation on magnetic media.

Media (Service Charge Code): 5 1/4" Floppy Diskette (JA)

Keywords: Software
Collections
Operating System Index:
CP/M-80

May 28, 1984

Vol. 9 General Ledger Program

Version: April 1984

Author: Various

Submitted By: Digital Equipment Corporation

Operating System: CP/M-80

Source Language: BASIC

Memory Required: 64KB-128KB

These twelve programs were published in machine readable form as page 32A of Interface Age Magazine, Volume 2, Issue 10, dated September 1977.

The system was described in a series of three articles in the issues of September through November. In the final issue, full typed listings were given for the twelve programs plus two others, "CHART" and "GENPRO", neither of which were on the "FLOPPY ROM".

CATALOG.9

COPCON.ASC	SEE MAGAZINE REFERENCES ABOVE
COPRAN.ASC	SEE MAGAZINE REFERENCES ABOVE
GETPUT.ASC	SEE MAGAZINE REFERENCES ABOVE
GL1.ASC	SEE MAGAZINE REFERENCES ABOVE
GL2.ASC	SEE MAGAZINE REFERENCES ABOVE
GL3.ASC	SEE MAGAZINE REFERENCES ABOVE
GL4.ASC	SEE MAGAZINE REFERENCES ABOVE
GL5.ASC	SEE MAGAZINE REFERENCES ABOVE
GL6.ASC	SEE MAGAZINE REFERENCES ABOVE
GL7.ASC	SEE MAGAZINE REFERENCES ABOVE
GLMENU.ASC	SEE MAGAZINE REFERENCES ABOVE
SORTGL.ASC	SEE MAGAZINE REFERENCES ABOVE

This package was developed on a Z80 chip. It was not developed on a Digital Equipment Corporation personal computer. In some cases, the source code might make specific calls to the hardware which would require changes to the sources.

There are no guarantees that this software will run "AS IS" across the Rainbow-Series, the DECmate II with the CP/M softcard, or the Professional-300 with the CP/M softcard Series of computers.

Note: The versions here are in full ASCII. The language is MITS 12K disk BASIC version 4.0. In certain cases, the comment preambles were removed from the heads of the files, to permit loading in the system used to recover the code.

Sources may or may not be included. Documentation on magnetic media.

Media (Service Charge Code): 5 1/4" Floppy Diskette (JA)

Keywords: CP/M - Business
Applications
Operating System Index:
CP/M-80

May 28, 1984

FILEDT

Version: V4.1, February 1984

Author: Brent Dunlock, Arizona State University, Tempe, AZ

Operating System: RSTS/E V8.0

Source Language: BASIC-PLUS2

Memory Required: 15KW

FILEDT is a specialized text editor designed to edit disk files block by block. The data in any given block may be examined in a variety of formats. They include ASCII, OCTAL WORD, OCTAL BYTE, RAD50, HEXADECIMAL, INTEGER, BINARY, and FLOATING POINT. A user may change any word of any block in a file. This is most useful for editing object or executable files.

Documentation on magnetic media.

Media (Service Charge Code): 600' Magtape (MA)

Format: DOS-11

Keywords: Editors
Operating System Index:
RSTS/E

May 28, 1984

Grade Book

Version: February 1984

Author: James E. Gregory, Jr., Clark Technical College,
Springfield, OH

Operating System: RSTS/E V8.07

Source Language: BASIC-PLUS-2

Memory Required: 21KW

Special Hardware Required: VT100 or Adds Viewpoint Terminals

Grade Book is a program to store and average student grades. Up to 50 students per class may be entered. There are 4 categories of grades: Quiz, Report, Project, and Test. Up to 10 grades per category may be stored. Each grade may be assigned a weight so that weighted averages may be calculated. Grades based on total points achieved may also be used. Printouts may be generated for individual students as well as the class as a whole along with a final summary average listing. Low grades for each category may optionally be dropped (with the ability to indicate that a specific grade should not be dropped even if it is the low grade).

Restrictions: Program has cursor control for two types of terminals. Cursor controls are defined in functions and can easily be modified.

Documentation on magnetic media.

Media (Service Charge Code): 500' Magtape (MA)

Format: DOS-11

Keywords: Educational
Operating System Index:
RSTS/E

May 28, 1984

GRASP: Graphics Applications Processor

Version: V1.9, January 1984

Author: Mark Anacker, General Telephone Co. NW, Inc., Everett, WA

Operating System: P/OS V1.5 or V1.7

Source Language: PRO BASIC

Memory Required: 128KB

Other Software Required: PRO BASIC

GRASP is a graphics editor for the Professional - 300 Series of personal computers designed to produce drawings and other graphical images. It has extensive 2-D image manipulation capabilities, and may be expanded to process data from other programs. GRASP currently consists of four programs written in PRO BASIC and may be used without any additional hardware.

Restrictions: Works best with extended graphics option.

Documentation on magnetic media.

Media (Service Charge Code): Write-Up and Listing (DA),
5 1/4" Floppy Diskette (JA)

Format: FILES

S1349
840221/

Keywords: Graphics, PRO-300
Series
Operating System Index: P/OS

Vol 3. Various BASIC E Games and Programs

Version: April 1984

Author: Various

Submitted By: Digital Equipment Corporation

Operating System: CP/M-80

Source Language: BASIC

Memory Required: 64KB - 128KB

The following is a brief description of the programs to be found on the diskette:

CATALOG 3	CONTENTS OF CP/M VOLUME 3
VOLUME3A.DOC	COMMENTS ON SOME PROGRAMS
VOLUME3B.DOC	COMMENTS ON OTHER PROGRAMS
ACE.BAS	BASIC-E PROGRAM.SEE DOC'S
AMAZE.BAS	BASIC-E PROGRAM.SEE DOC'S
ANIMAL.BAS	BASIC-E PROGRAM.SEE DOC'S
BAGELS.BAS	BASIC-E PROGRAM.SEE DOC'S
BAGELS2.BAS	BASIC-E PROGRAM.SEE DOC'S
BIOPRINT.BAS	BASIC-E PROGRAM.SEE DOC'S
BLKFRI.BAS	BASIC-E PROGRAM.SEE DOC'S
BLKFRI2.BAS	BASIC-E PROGRAM.SEE DOC'S
CANNONS.BAS	BASIC-E PROGRAM.SEE DOC'S
CHASE.BAS	BASIC-E PROGRAM.SEE DOC'S
CHOMP.BAS	BASIC-E PROGRAM.SEE DOC'S
COMBINE.BAS	BASIC-E PROGRAM.SEE DOC'S
CORE.BAS	BASIC-E PROGRAM.SEE DOC'S
CORETEST.BAS	BASIC-E PROGRAM.SEE DOC'S
CRAPS.BAS	BASIC-E PROGRAM.SEE DOC'S
EUCLID.BAS	BASIC-E PROGRAM.SEE DOC'S
FIB.BAS	BASIC-E PROGRAM.SEE DOC'S
FIT.BAS	BASIC-E PROGRAM.SEE DOC'S
FORMAT.BAS	BASIC-E PROGRAM.SEE DOC'S
FORMAT.FMI	INSTRUCTIONS FOR FORMAT.BAS IN FORMAT CODE
HANG.BAS	BASIC-E PROGRAM.SEE DOC'S
HELLO.BAS	BASIC-E PROGRAM.SEE DOC'S
KENO.BAS	BASIC-E PROGRAM.SEE DOC'S
LANDER.BAS	BASIC-E PROGRAM.SEE DOC'S
LANES.BAS	BASIC-E PROGRAM.SEE DOC'S
LEM.BAS	BASIC-E PROGRAM.SEE DOC'S
LOAN.BAS	BASIC-E PROGRAM.SEE DOC'S
LOVE.BAS	BASIC-E GRAPHIC
PLOT2.BAS	BASIC-E PROGRAM.SEE DOC'S
POET.BAS	BASIC-E PROGRAM.SEE DOC'S
README.FMI	ANOTHER FORMAT SOURCE WITH NOTES ON THE
AUTHOR, ON ML80 AND ON SPAT	

S/TREK.BAS	BASIC-E PROGRAM.SEE DOC'S
STARS.BAS	BASIC-E PROGRAM.SEE DOC'S
STARTREK.BAS	BASIC-E PROGRAM.SEE DOC'S
STORY.BAS	BASIC-E PROGRAM.SEE DOC'S
STRIKE9.BAS	BASIC-E PROGRAM.SEE DOC'S
TREKINST	INSTRUCTIONS FOR STARTREK.BAS
TTT.BAS	BASIC-E PROGRAM.SEE DOC'S
WUMPUS.BAS	BASIC-E PROGRAM.SEE DOC'S

This package was developed on a Z80 chip. It was not developed on a Digital Equipment Corporation personal computer. In some cases, the source code might make specific calls to the hardware which would require changes to the sources.

There are no guarantees that this software will run "AS IS" across the Rainbow-Series, the DECmate II, or the Professional-386 Series of computers.

Sources may or may not be included. Documentation on magnetic media.

Media (Service Charge Code): 5 1/4" Floppy Diskette (JA)

S1415

Keywords: CPM-80 - Games
Operating System Index:
CP/M-80

Vol. 5 BASIC-E Compilers and Interpreters, BASIC-E Programs
Continued From Volume 3, Microsoft BASIC Programs

Version: April 1984

Author: Various

Submitted By: Digital Equipment Corporation

Operating System: CP/M-80

Source Language: BASIC

Memory Required: 64KB - 128KB

The following is a brief description of the programs to be found on the diskette:

CATALOG.5	CONTENTS OF CP/M GROUP VOL 5
VOLUME5.DOC	COMMENTS
Z1.ASC	MICROSOFT BASIC PROGRAM
BAS2-0.COM	BASIC-E COMPILER
BAS2-1.COM	BASIC-E COMPILER
BIO-FF.ASC	MICROSOFT BASIC PROGRAM
BIORYTH.ASC	MICROSOFT BASIC PROGRAM
BLKFRI2.ASC	MICROSOFT BASIC PROGRAM
DECISION.ASC	MICROSOFT BASIC PROGRAM
EDTEXT.ASC	MICROSOFT BASIC PROGRAM
FORMAT.ASC	MICROSOFT BASIC PROGRAM
OTHELLO.BAS	BASIC-E PROGRAM
OTHELLO.DOC	INSTRUCTIONS FOR OTHELLO.BAS
RADIX.ASC	MICROSOFT BASIC PROGRAM
RECOVERY.ASC	MICROSOFT BASIC PROGRAM
RUN2-2.COM	BASIC-E INTERPRETER
RUN2-3.COM	BASIC-E INTERPRETER
RUNK2-0.COM	BASIC-E INTERPRETER
SLOT.ASC	MICROSOFT BASIC PROGRAM
SORT.ASC	MICROSOFT BASIC PROGRAM
STARTREK.ASC	MICROSOFT BASIC PROGRAM
SUPTRK3.ASC	MICROSOFT BASIC PROGRAM

This package was developed on a Z80 chip. It was not developed on a Digital Equipment Corporation personal computer. In some cases, the source code might make specific calls to the hardware which would require changes to the sources.

There are no guarantees that this software will run "AS IS" across the Rainbow-Series, the DECmate II, or the Professional-300 Series of computers.

Sources may or may not be included. Documentation on magnetic media.

Media (Service Charge Code): 5 1/4" Floppy Diskette (JA)
S1417

Keywords: CP/M - Compilers,
CP/M - Language Interpreters
Operating System Index:
CP/M-80

DECtalk Application Support Library

Version: February 1984

Submitted By: Digital Equipment Corporation

Operating System: RSTS/E V7.1, VAX/VMS V3.4, P/OS V1.7 with native toolkit, UNIX 4.2 BSD.

Source Language: BASIC-PLUS, C, MACRO-11, COBOL

Memory Required: Varies

Special Hardware Required: DECTalk DTC01

The DECTalk support library contains an extensive collection of subroutines, written in C, that should simplify application development. It includes subroutines to carry out DECTalk specific functions, such as answering the phone, as well as low-level operating-system specific functions, such as generating and parsing escape sequences.

Several simple application programs are also provided, including the DECTalk telephone demonstration program and a "spoken fortune cookie" program. There are also sample programs written in BASIC-PLUS and COBOL for RSTS/E.

All source modules are provided, including several operating-specific libraries also distributed with C Language System (DECUS No. 11-SP-18). The VAX distribution contains source files and executable code, while the PDP-11 distribution contains only source modules. Unix installations should obtain the PDP-11 distribution and make their own arrangements for tape file format translation.

Note: VAX users refer to DECUS No. V-SP-20. UNIX users should obtain DECUS No. 11-SP-59.

Restrictions: There may be release-specific code for UNIX systems. PDP-11 and compatibility mode implies DECUS C, No. 11-SP-18.

Documentation on magnetic media. The documentation presupposes access to the DECTalk hardware documentation.

Media (Service Charge Code): Manual (EC), 600' Magtape (MC)

Format: DOS-11
S1387
840314

Keywords: Tools - Application
Development
Operating System Index:
RSTS/E, VAX/VMS, P/OS

Symposium Tape from the European RT-11 SIG, 1982, Warwick

Version: Fall 1982

Author: Various

Submitted By: Ray Carpenter

Operating System: RT-11

Source Language: Various

This symposium tape from the European RT-11 SIG is a collection of programs collated at the DECUS Europe Symposium held in September 1982, in Warwick.

No guarantees are made as to the completeness, usability, or quality of the programs on the tape. The material has not been checked or reviewed and documentation may or may not be included.

Restrictions: Sources may or may not be included.

Media (Service Charge Code): 2400' Magtape (PS)

Format: RT-11

S1337
840312

Keywords: Symposia Tapes -
RT-11
Operating System Index: RT-11

Compendium Tape from the Australian RT-11 SIG

Version: Spring 1980 - Fall 1983

Author: Various

Submitted By: R.N. Caffin, CSIRO Textile Physics, Ryde NSW,
Australia

Operating System: RT-11 V4, V5

Source Language: BASIC-11, C, FOCAL, FORTRAN IV, MACRO-11, PASCAL

This is a collection of software acquired by the submitter over the years from various sources. Some of it comes from other SIG tapes from past DECUS symposia, some of it comes direct from various authors around the world. It is arranged as a series of .DSK files which may be treated as logical disks by LD or XD, or they may be copied as device images to RX01 discs. Included on the tape are a couple of non-DSK files which summarize and index the contents of most of the DSK files.

No guarantees are made as to the completeness, usability or quality of the programs on the tape. The material has not been checked or reviewed and documentation may or may not be included.

Sources may or may not be included. Documentation may or may not be included on the magnetic media.

Media (Service Charge Code): 2400' Magtape (PC)

Format: RT-11

S1393

Keywords: Symposia Tapes -
RT-11, Software Collections
Operating System Index: RT-11

DISPLY Enhancement

Version: V8.01, October 1983

Author: Ben Ethridge

Operating System: RSTS/E V7.2

Source Language: BASIC-PLUS-2

Memory Required: 32K

Other Software Required: Digital Equipment Corporation's DISPLY Program V7.2

This program performs the following functions:

User defined keyboards are sent messages from the DISPLY program if user defined warning levels are exceeded. For example, the user has told the DISPLY program to warn keyboards 40 and 45 of any irregular system static. Also, the user has set the disk space warning level for device "DB0:" to 5000 blocks. If the DISPLY program sees that the free disk space on DB0: has dropped to 4000 blocks it sends a broadcast message to keyboards 40 and 45 giving the date, time, the message: "Disk DB0 is at 4000 Blocks" and a warning bell.

Actions are performed by the DISPLY program if certain warning levels are exceeded or certain conditions are met when the DISPLY program checks the system statistics. For example, the user has told the DISPLY program to hold shutup if account [1,50] is still online when shutup is run. If the DISPLY program sees that shutup is running and [1,50] is online it changes the priority of the shutup job to -128. It further sends all user defined keyboards a message that [1,50] is online and shutup has been suspended.

The user may enter special "@" commands to force the DISPLY program to detach and process the "@" command file. This gives the user the ability to run any program the user desires from the DISPLY program. For example, the user has predefined the "@ut" command to mean "Log into the System Account and Run the Utility Program."

Documentation on magnetic media.

Media (Service Charge Code): 600' magtape (MA)

Format: DOS-11

Keywords: Utility - System
Management, RSTS - Utilities
Operating System Index:
RSTS/E

FIXIT: BASIC Translator

Version: V1.0, October 1983

Submitted By: Digital Equipment Corporation

Operating System: RSTS/E V8.0, RSX-11M-PLUS V2.1, RSX-11S V4.1,
VAX/VMS V3.4

Source Language: VAX-11 BASIC V2.1, BASIC-PLUS 2

Memory Required: 54KB

This program assists in converting either BASIC-PLUS-2 V1.6 programs or programs written in one of the numerous MicroBASIC implementations into VAX BASIC V2 program format. The program can be compiled and run under VAX-11 BASIC or under PDP-11 BASIC-PLUS-2.

The program asks for input and output file names, for information regarding the type of BASIC and some formatting information. It performs the following operations:

Prettyprinting-indenting to show structure, END IF insertion-to allow for removal of line numbers, movement of MAP, DIM, and COMMON statements to low-numbered statement numbers, blank insertion-for programs with blanks compressed out, removal of backslash characters, and removal of unnecessary ampersand characters.

When converting programs written in one of the MicroBASIC (e.g. MicroSoft BASIC) dialects, numerous special-case transformations are made to assist the conversion effort.

Restrictions: This utility does NOT handle all possible dependencies of the many MicroBASIC systems in the marketplace, rather it assists by handling mechanical changes. The program is written with the goal of being easy to modify, especially for handling specific variants of the MicroBASIC implementations.

Documentation on magnetic media.

Media (Service Charge Code): 500' Magtape (MA)

Format: DOS-11

S1303
840201

Keywords: Conversion, BASIC,
Tools - Applications
Development
Operating System Index:
RSTS/E, RSX-11/IAS, VAX/VMS

CAI- Computer Assisted Instruction Package

Version: V1.0, January 1984

Author: William B. Leng, Southern Connecticut State University,
New Haven, CT

Operating System: RSTS/E V7.1

Source Language: BASIC-PLUS-2

Memory Required: 31KB

Other Software Required: BASIC-PLUS-2 Compiler and task builder

Special Hardware Required: VT100 or compatible terminal

The CAI system is a system of programs to handle instructor-written tests and quizzes on those texts. A weighting algorithm is employed to modify the students' scores as a function of the time allowed for each quiz and the time utilized by the students.

Note: Operating system version dependent because of RSTS/E system calls to identify the user.

Documentation on magnetic media.

Media (Service Charge Code): Manual (EA), 600' Magtape (MA)

Format: DOS 11

S1351
840229/

Keywords: Computer Assisted
Instruction
Operating System Index:
RSTS/E

new
11-705

9 FETCH.B

Version: January 1984

Author: Wayne Levine, Owatonna High School, Owatonna, MN

Operating System: RT-11

Source Language: MU-BASIC

Memory Required: 1500 Words

This program takes the place of an editor while you are in MU-BASIC. It can be used on data files, FORTRAN source files, text files and configuration files. This program actually writes a second program. The second program can be edited like a normal basic program, and when you run it your original files is recreated.

Documentation on magnetic media.

Media (Service Charge Code): Floppy Diskette (KA),
600' Magtape (MA)

Format: RT-11

S1372
840305/

Keywords: MU-BASIC, Tools -
Software Development, Editors
Operating System Index: RT-11

SELECT

Version: V1A. February 1984

Author: Mark Gilmore, The California State University, Long
Beach, CA

Operating System: RSTS/E V8.0

Source Language: BASIC-PLUS

Memory Required: 7KW

Other Software Required: EDT editor, V2 or V3

This program allows the user to specify a wildcard file specification to edit, and then repeatedly invokes EDT (version 2 or 3) to do the editing chores.

This program does not need privileges and should not be privileged. While actual editing of other users' files is not allowed by RSTS/E, cross-account directories may be obtained on systems where it is not normally allowed.

The program may be RUN or entered by two CCL commands. If the program is RUN, it will prompt for a filename specification. If entered via the CCL commands, it expects the file spec in core common. This program should not be CHAINED to except at line zero. Several switches are allowed as modifiers to the file spec string. These have the following effects:

/RO or /MO:8192	Opens the files read-only.
/DE or /K	Deletes EDT temp files.
/ZE	Zeroes EDT temp files.
/P:nn	Pauses nn seconds between printing message and chaining to EDT for edit.

The CCL command are any chosen by the system manager. Two entry points are available: line 30000 will edit the files specified, line 30500 will append the /RO switch to the file spec. Suggested CCL commands are SELECT and INSPECT, respectively.

Restrictions: 255 files maximum (may be changed).

Documentation on magnetic media.

Media (Service Charge Code): 600' Magtape (MA)

Format: DOS-11

S1373
840306/

Keywords: Editors
Operating System Index:
RSTS/E

CONEFR.BAS: Cone Frustrum Layout

Version: February 1984

Author: Fred Fortman, National Metal Fabricators, Elk Grove
Village, IL

Operating System: RT-11 V2, V3

Source Language: BASIC-11

Memory Required: 16K minimum

The program "CONEFR" (Cone Frustrum) is for obtaining all the data needed to layout any size cone frustum which has a common centerline through the large and small diameters. The data the program requires is self explanatory. It will ask for the material thickness, diameters, vertical height, slant height, or the angle off the vertical centerline of the side. Any three of these are all the program requires.

There are then options as to the number of segments you wish to make or the size material you wish to use. Using the size option the program will give you the number of segments needed.

The data will be shown on the CRT and, if required, will produce a hard copy of the data on the line printer.

Documentation on magnetic media.

Media (Service Charge Code): Floppy Diskette (KB), 600' Magtape
(MA)

Format: RT-11

S1375
840306

Keywords: Scientific,
Industrial
Operating System Index: RT-11

RSTS System Utilities from the University of Tennessee

Version: February 1984

Author: Harry Flowers and John Gill, University of Tennessee,
Memphis, TN

Operating System: RSTS/E V7.1 or later

Source Language: BASIC-PLUS

Memory Required: Varies

Other Software Required: DEC spooling package for SPLRUN program

This package contains four separate utilities. Following is a brief description of each:

SPLRUN patch - We have patched SPLRUN to count pages. If you use the big spooling package and would like to keep track of the pages you print, this patch works fairly well. One known problem with it is it comes up one short if there is no job burst page printed...shouldn't be too hard to fix if it matters to you. On our system, SPLRUN sends a message to our online accounting program. For purposes of this patch, the information is being sent to the OSC through OPSER.

SPLRUN.PAT patch to SPLRUN (BASIC-PLUS)
SPLPAT.CMD ATPK command file for patch and compile (read before you execute)

System monitoring package (MONITR) - The package performs similar to a combination of DYNPRI and KBMON. If you have both of these programs running, you can save a job sict with MONITR. MONITR also has some additional features which can be very useful.

Package consists of:

MONITR.BAS monitoring program (runs detached)
KBOARD.BAS keyboard report and maintenance
KBOARD.MTR keyboard data file (created by KBOARD.BAS)
SNDMTR.BAS message sender to MONITR
MONITR.DOC documentation for this package
MONITR.CMD command file for CUSP compiling

For further details, see MONITR.DOC documentation.

Billboard - public notes system which acts as a billboard. Care was taken to write this program without cursor control so that it may be run from any terminal. See source code for further details. You will probably wish to modify the help screen, as it contains references to UTCMS.

BILBRD.BAS billboard program
BILBRD.BAS must be compiled with the privileged bit set in the protection code, as [232].

Password changers - programs which will change the passwords to accounts. You are prompted for the old password, then the new password twice to make sure it's right.

PASWRD.BAS changes password to any user account

PRIVP .BAS changes the password to all privileged accounts

PASWRD.BAS must be compiled with the privileged bit set in the protection code, as [232].

PRIVP.BAS should NOT have the privileged bit set, to force running it from a privileged account.

Restrictions: SPLRUN gives one less page than was printed if no job burst page was specified. For MONITR a maximum of 128 configured keyboards, assumes OPSEK online, but will run without OPSEK. See documentation for further details.

For SPLRUN only patch is included. Documentation on magnetic media.

Media (Service Charge Code): 600' Magtape (MA)

Format: DOS-11

S1385
840305/

Keywords: RSTS/E - Utilities,
Operating System Index: RSTS/E
RSTS/E - System Management

SKIPAG: File Utility to Skip Blocks/Pages

Version: February 1984

Author: Kim H. Colwell, Gray, Cary, Ames & Frye, San Diego, CA

Operating System: RSTS/E V6.C, V7.0

Source Language: BASIC-PLUS

Memory Required: 4KW

SKIPAG is a BASIC-PLUS software utility used for skipping a specified number of blocks of pages in a RSTS/E data file. A common use for this program would be to skip to the middle or end of a print file to resume printing at a specified point. Another use would be to create 'sub-files' from ASCII data files for use as test data files. The input file can be any RSTS/E ASCII file. The output file can be another disk file or device such as a terminal or printer. Either blocks or pages may be specified to the program; and both a starting block (or page), and how many blocks (pages) to be copied, are optional.

Restrictions: Cannot use wildcards in file names.

Documentation on magnetic media.

Media (Service Charge Code): Write-Up and Listing (DA),
600' Magtape (MA)

Format: DOS-11

S1388
844409/

Keywords: RSTS/E - Utilities,
Tools - Application Development
Operating System Index:
RSTS/E

DECTalk Application Support Library

Version: February 1984

Submitted By: Digital Equipment Corporation

Operating System: RSTS/E V7.1, VAX/VMS V3.4, P/OS V1.7 with
native toolkit, UNIX V4.2 BSD.

Source Language: BASIC-PLUS, C, MACRO-11, COBOL

Memory Required: Varies

Special Hardware Required: DECTalk DTC01

The DECTalk support library contains an extensive collection of subroutines, written in C, that should simplify application development. It includes subroutines to carry out DECTalk specific functions, such as answering the phone, as well as low-level operating system specific functions, such as generating and parsing escape sequences.

Several simple application programs are also provided, including the DECTalk telephone demonstration program and a "spoken fortune cookie" program. There are also sample programs written in BASIC-PLUS and COBOL for RSTS/E.

All source modules are provided, including several operating-specific libraries also distributed with C Language System (DECUS No. 11-SP-18). The VAX distribution contains source files and executable code, while the PDP-11 distribution contains only source modules. Unix installations should obtain the PDP-11 distribution and make their own arrangements for tape file format translation.

Note: PDP-11 users and Unix users should refer to DECUS No. 11-SP-59.

Restrictions: There may be release-specific code for UNIX systems. PDP-11 and compatibility mode implies DECUS C, No. 11-SP-18.

Documentation on magnetic media. The documentation presupposes access to the DECTalk hardware documentation.

Media (Service Charge Code): Manual (EC), 600' Magtape (MC)

Format: VMS/BACKUP (Blocked at 2048)

S1387
840313

Keywords: Tools - Application
Development
Operating System Index:
RSTS/E, VAX/VMS, P/OS



NOMINEES

Chairman

Ted A. Bear

Bill Tabor



TEAR OUT



AND



MAIL IN



The GREAT T-shirt selection and committee chairman nomination!

Ballot for the BASIC SIG T-shirt

Color (Vote for one):

BASIC Black Red White Blue

Other

Logo (Vote for one):

Number (as seen throughout this issue)

Other (picture included)

Placement (Vote for one):

Large

full front full back

Small

right front left front

right back left back

right sleeve left sleeve

Other

Moto (Vote for no more than two):

BASIC SIG logo BASIC BASIC PROGRAMMER

BASIC IS MAGIC DECUS BASIC BASIC NICE GUY

DECUS BASIC SIG Nothing Other

NOMINATION OF BASIC SIG STERRING COMMITTEE CHAIRMAN

In accordance with the BASIC SIG by-laws, section 5.0.1, I am submitting the following name, along with a short biography, for nomination as BASIC SIG steering committee chairman.

5 required signatures:



DECUS/USA Chapter Exexutive Secretary
249 Northboro Road, BP02
Marlboro, MA 01752

**DECUS
BASIC Special Interest Group Operating Procedures**

**Article I
Name**

- 1.0 The name of the organization is the BASIC Special Interest Group, or BASIC SIG.

**Article II
Purpose**

- 2.0 The SIG is established as a SPECIAL USER GROUP under the bylaws of the DECUS/USA Chapter.
- 2.1 The SIG is established, as empowered by the DECUS bylaws, to serve its members having a common interest as follows:
- 2.1.1 Promote the interchange of information and ideas concerning the utilization of computers, computer peripheral equipment, software, and other products and services marketed or otherwise made available by Digital Equipment Corporation (DEC) as relates to BASIC language products.
 - 2.1.2 Advance the art of computer usage through mutual education and exchange of ideas and information.
 - 2.1.3 Establish standards and provide channels to facilitate the exchange of computer programs and related information among SIG members.
 - 2.1.4 Provide feedback to DEC on equipment, software, product services, and other needs which may arise.
 - 2.1.5 Provide feedback to ANSI and other industry institutions regarding the development of the BASIC language.

**Article III
Membership**

- 3.0. Any member of the DECUS/USA Chapter who expresses such interest is accepted as a member of the SIG.

**Article IV
Structure**

4.0 Steering Committee

The administration of the SIG is entrusted to a steering committee composed of three elected officers, two appointed officers, three or more appointed at-large members, and the Chairman of each sub-SIG. All members of the steering committee are voting members of the steering committee for the purpose of electing officers. All other business of the SIG are performed by the Chairman, his designee, or other appropriate officer of the SIG in consultation with members of the steering committee.

The elected officers of the SIG are CHAIRMAN, PUBLICATIONS COORDINATOR, and STANDARDS REPRESENTATIVE.

4.0.1 Chairman

The Chairman is the chief executive and operational officer of the SIG. The responsibilities of the Chairman are:

- 4.0.1.1 To perform the normal administrative functions necessary to the accomplishment of the SIG goals.
- 4.0.1.2 To interface to DEC and DECUS as main liaison for the SIG.
- 4.0.1.3 To adopt interim procedures and policies when necessary on behalf of the SIG as a whole.

4.0.2 Publications Coordinator

- 4.0.2.1 The Publications Coordinator has responsibility for the editing and publication of a SIG newsletter.
- 4.0.2.2 The Publications Coordinator maintains close contact with the DECUS Publications staff and has primary responsibility for the printing and distribution of any hard copy materials the SIG may produce.

4.0.3 Standards Representative

The Standards Representative serves as the SIG's representative on the DECUS Standards Committee and coordinates such activities within the SIG as are required to fulfill the needs of the SIG and its membership as relates to the areas of standards.

- 4.0.3.1 The Standards Representative appoints and coordinates the representation of the SIG on the ANSI Standards Committee.
- 4.0.3.2 The Standards Representative has responsibility for and coordinates the DIGITAL Standard Review Committee.

4.0.4 Library Coordinator

The Library Coordinator is the main liaison between the SIG, the DECUS Library Committee, and the DECUS library staff to ensure that the needs of the SIG and its members in this area are met. The Library Coordinator is appointed by the SIG Chairman and serves at the pleasure of the Chairman.

4.0.4.1 The Library Coordinator may solicit such persons from the membership of the SIG for any portion of his duties or areas of responsibility as he sees fit and may organize such persons into a library working group.

4.0.4.2 The Library Coordinator organizes and oversees the SIG tape copy activity.

4.0.5 Symposium Coordinator

The Symposium Coordinator coordinates the SIG's activities at DECUS symposia. The Symposium Coordinator is appointed by the SIG Chairman and serves at the pleasure of the Chairman. The Symposium Coordinator's responsibilities include, but are not necessarily limited to:

4.0.5.1 Serve on and represent the interests of the SIG to the Symposium Review Committee of DECUS.

4.0.5.2 Solicit input from SIG members.

4.0.5.3 Organize Symposium submissions received and prepare a Symposium schedule.

4.0.5.4 Negotiate scheduling with the DECUS Symposium Committee.

4.0.5.5 Provide and organize such printed material as handouts, reviews, and papers as may be produced in conjunction with a symposium.

4.0.5.6 The Symposium Coordinator may solicit such persons from the SIG membership for any portion of these duties as he may deem useful and expedient to their completion.

4.0.6 At-Large Members

The At-Large Members of the Steering Committee are appointed by the Chairman and serve at his pleasure. There may be no fewer than three such At-Large Members, but the Chairman may appoint any larger number of At-Large Members as he deems useful and expedient. Chairman of Sub-Sigs may be considered at-large members of the steering committee.

4.1 Sub-SIGS

From time to time various homogeneous groups within the SIG may petition the Steering Committee for recognition as a sub-SIG. Upon recognition of such sub-SIG, its Chairman becomes an ex-officio member of the Steering Committee.

4.2 Ad Hoc Committees

The Chairman may, from time to time, establish such Ad Hoc committees as the business of the SIG requires.

4.3 LUGs

The members of the SIG are encouraged to associate themselves with Local User Groups (LUG's) in their area, and all such LUG's are encouraged and invited to maintain communications with the SIG Steering Committee.

**Article V
Elections**

5.0 Nominations

5.0.1 The SIG steering committee, at its meeting at the annual Spring symposium, shall nominate a slate of candidates to fill the SIG elective offices the terms of which expire at the following Spring Symposium. This slate shall be published by the Publications Coordinator in the first SIG Newsletter following the close of such Spring Symposium. Additional nominations shall be accepted from the SIG membership for a period of sixty (60) days following the publication of the names of the existing nominees. All nominations shall be submitted to the DECUS/USA Chapter Executive Secretary in writing with the signatures and membership numbers of five (5) SIG members. Nominations received after such sixty (60) days have expired shall not be accepted by the DECUS/USA Chapter Executive Secretary.

5.0.2 Should any office have only one nominee after the close of nominations, that nominee shall be declared elected.

5.0.3 When necessary, the DECUS/USA Chapter Executive Secretary shall compile a ballot within two (2) weeks following the close of nominations. Such ballot shall contain a listing of the candidates for each elective office under consideration and a list of qualifications for each candidate. One (1) ballot shall be mailed to each SIG member.

5.0.4 All ballots shall be returned to the DECUS/USA Chapter Executive Secretary by the due date specified on the ballot, which shall be not less than four (4) nor more than eight (8) weeks from the date ballots are mailed to the SIG members. Ballots not received by the DECUS/USA Chapter Executive Secretary by such due date, regardless of postmark or other considerations, are null and void and shall not be counted.

5.0.5 Ballots shall be counted within one (1) week following the due date. No ballots deemed null and void due to 5.0.4 above shall be counted. Upon completion of counting, all Steering Committee members and candidates for offices shall be notified by mail of the election results.

5.1 The term of office of all elected officers is two years, from Spring Symposium to Spring Symposium. Installation of newly-elected officers shall take place during the Spring Symposium SIG business meeting. Any officer-elect not currently serving on the steering committee becomes a member of the steering committee immediately upon election or upon being declared elected.

5.2 Recall

5.2.1 Members of the steering committee may be recalled at any time by vote of the members of the SIG. The procedure for recall is as follows:

5.2.1.1 A recall petition stating the name and position of the steering committee member(s) to be recalled, accompanied by a formal statement of the reasons for which the recall is being sought, is to be submitted to the DECUS Chapter Executive Secretary. This petition is to be signed by a minimum of fifteen (15) voting members of the SIG, one of which must be named as spokesman for the group seeking the recall.

5.2.1.2 During the thirty (30) days following receipt of the petition, the petition may be withdrawn by a majority of its signers.

5.2.1.3 After thirty (30) days, but before sixty (60) days from the receipt of the petition, a recall ballot is to be distributed to the membership of the SIG. Accompanying this ballot is to be the statement of reasons for which the recall is being sought and, optionally, a rebuttal by the steering committee member(s) against whom the recall petition has been filed.

5.2.1.4 Members of the SIG will be responsible for returning the ballot at their expense to the DECUS office. Ballot procedures detailed in sections 5.0.3 and 5.0.4 are to be followed.

5.2.1.5 The ballots will be tabulated by the DECUS office and the steering committee member(s) will be removed from office if two thirds (2/3) of ballots returned approve the recall and the number of ballots approving the recall exceeds one third (1/3) of the number of SIG members in attendance at the last semi-annual DECUS symposium.

5.2.1.6 The recall becomes effective immediately upon notification of the results of the election.

5.2.2 Vacancies created through recall proceedings are to be filled as are all other vacancies as specified in article VII.

**Article VI
Amendments**

6.0 Amendments to these operating procedures may be proposed by the Steering Committee or by the written petition of fifteen members of the SIG.

6.1 Amendments shall be ratified by a two thirds (2/3) majority of votes cast in an election carried out under the same conditions as those for an officer election.

- 6.2 Amendments to these operating procedures shall not conflict with any provision of the DECUS bylaws of the DECUS/USA Chapter bylaws.

**Article VII
Vacancy in SIG elected office**

- 7.0 Should any elected office of the SIG become vacant, it shall be immediately filled by the officer-elect for that position should such officer-elect be available. Should no officer-elect be available, the Steering Committee shall fill the vacant position by simple majority vote of the remaining Steering Committee members. A quorum of the Steering Committee for this purpose shall be not less than fifty (50) percent of the remaining members. Such election may be conducted by mail ballot of all Steering Committee members at the discretion of the Chairman, or in his absence, the Publications Coordinator.

**Article VIII
Implementation**

- 8.0 These Operating Procedures shall be submitted to the SIG members for ratification under the procedure for amendment of the operating procedures.
- 8.1 Upon approval of these procedures, the current SIG coordinator shall become SIG Chairman.
- 8.2 The SIG Chairman will appoint persons to fill all other Steering Committee positions.
- 8.3 The Publications Coordinator appointed under this article shall serve a term of not less than one (1) nor more than two (2) years. The Chairman and the Standards Representative appointed under this article shall serve terms of not less than two (2) nor more than three (3) years. All such appointive terms of office shall expire at the Spring Symposium following the minimum terms of office as stated in this section.

**Article IX
Interpretation**

- 9.0 Should any dispute arise from the interpretation of these operating procedures, the SIG Chairman shall be considered the final authority for any such interpretation.