SETHOST INFORMATION

FOR PCSA V2.0
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PROBLEM: VT240 Emulator displays ctrl-Z as "Z"

When emulating a VT240 to VAX, if a VMS-resident program writes an ASCII 26D [1AH], which is control-Z, the emulator displays ASCII 90D, upper case Z. For reference, a real VT240 displays nothing, the VT220 emulator displays 32D [20H], which is " " . The correct behavior is to display nothing, in my opinion. Impact is low - display is corrupted but then, very few applications intentionally display control characters. Puzzling, but other control characters ("W, "V, "A, etc.) display as nothing, so the code must be special casing "Z."
SPR #: 1658
Product: SETHOST
Class: Bug
H/W: VAXMATE/IBM-PC

PROBLEM: SETHOST <F17> Doesn't work properly

<F17> is not honored unless the <ALT> key is held down. On the VAXmate I have <F17> set to toggle me between two VMS processes. This doesn't work on my IBM/PC-XT (with LK250 and KEYBRD) unless I hold the <ALT> key down.
PROBLEM: SETHOST Keypad Comma doesn't work

On my IBM/PC-XT (with LK250 and KEYBRD), the KEYPAD COMMA key doesn't work in NOTES. This is the NEXT-UNSEEN key. What it is doing is more like the ENTER key.
SPR #: 1660
Product: SETHOST
Class: Bug
H/W: VAXMATE/IBM-PC

PROBLEM: SETHOST Doesn't work with DECMODE ,80

SETHOST crashed my system after running it and previously having run DECMODE to increase my keyboard buffer size.
SPR #: 1785
Product: SETHOST
Class: Bug
H/W: VAXMATE/Compaq

PROBLEM: Printscreen in SETHOST hangs system

I am opening this SPR in System Testing because I am unsure where this bug lies. It occurs in SETHOST but may be a keyboard related problem.

While in the Set-Up directory after making a connection to RAINBO, I pressed the F3 key to get out of Set-Up Mode and did not return to the VMS prompt (that in itself is only a documentation problem) but in trying to record the screen, I hit F2 and the screen printed but the system hung and I had to reboot the machine.

This is reproducible.

This occurs on VAXmates and Compaqs when LPT1 is not connected. The user must reboot. There is no hang on IBM AT with enhanced keyboard.
PROBLEM: VT240 not restoring the keyboard mode after exiting back to DOS

There seems to be a problem with the VT240 emulator version 1.01.4 when returning to DOS via the Exit MSDOS or shelling To MSDOS. If I set the keyboard into ISMODE by sending the command code ACh which exits DEC extended mode (this turns the WAIT led on) and invoke the VT240 and then exit, the keyboard will enter DEC extended mode while in the VT240, which is fine, but when it returns to DOS, it remains in DEC extended mode and the previous mode is lost.

I would like to see the VT240 query the keyboard for its current state via the Request Keyboard ID, which returns the keyboard state in BH, and restore the state on exiting back to DOS. This problem shows up when using an applications, like Micro-Emacs for example, that binds the F11 key to the META key. If you set the keyboard to ISMODE then this will work. After running the VT240 emulator, this will no longer work.
Product: 1332
Class: SETHOST
H/W: Bug

PROBLEM: VT240 screen intensity low upon exiting RS/1

Customer complaint:

Customer using VAXmate in VT240 emulation runs RS/1 (vendor graphics package) on VAX. Graphs display fine (with one exception noted at end). Intensity of typed characters (at command prompt, for example) is fine.

However, upon exiting RS/1 to return to DCL-level, VAXmate screen intensity drops by half becoming nearly illegible.

Note: This is not perceived to occur on a VT240 terminal regardless of the mode the VT240 is set to.

Investigation:

Checking the color map parameters in Set-Up reveals that the default color values are no longer set to default. Resetting to default values restores screen intensity.

Called RS/1 support and was told that RS/1 attempts to set the VT240 (terminal) to default color values upon exit. The escape sequence used is:

```
\e7\e[1;24r\e8\e<\eP1pS(EAI0)W(I3P1(M2)AON0S0V)T(A0I0D0S1)
S(M0L0)(AL0)1(L25)(AH0L50S100)2(L50)(AH120L50S100)3(L75)
(AH240L50S100))\e\n```

(Where an '\e' is the symbol for ESCape.) Somewhere within this string is the particular ESCape sequence that resets the terminal.

SPR Questions:

1) Does the VAXmate VT240 emulator produce results which differ from a VT240 terminal in this respect when fed a legitimate escape sequence?
2) If so, why?
3) Is there a work-around?
4) If a bug, when will this this be 'fixed'?

Resources:

Resources available to engineering include a remote system in Atlanta having RS/1 and a line via Atlanta into the vendor’s RS/1 support group.
Exception:

Although graphs display correctly, the RS/1 command line prompt does not appear where it should. It appears on the top left of the screen, but should be on the bottom left of the screen. This will be a separate SPR.
SPR #: 1334
Product: SETHOST
Class: Bug
H/W: VAXMATE/IBM-PC

PROBLEM: Shelling from VT240 results in failure of filter programs

After a few executions of a filter program (such as SORT, FIND, MORE), standard input no longer comes from the keyboard and the filter program exit immediately and display the MS-DOS prompt. Exiting from VT240 results in proper operation.

FIND fails under certain conditions

This failure only occurs under certain conditions which are described below and only affects the 'FIND "text"' version of the command.

1. The VT240 emulator has been shelled out of.
2. The FIND "text" version of the command is used and after entering text CTL/Z is typed.

Further attempts to run this command will result in the immediate return of the prompt. There are some exceptions to this. If the text being searched for has been entered on a command line then the command will work properly as long as there has not been any intervening commands that were validly executed. If the find command is successfully invoked in this manner and terminated using CTL/C then further attempts to run the FIND command will work.

The documentation does not indicate how to properly exit from this mode of the FIND command. The documentation should probably be modified to indicate this.

In addition, the command description in the User's Guide does not indicate that the filename is optional but the comments do state this.

ACTION/REMARKS:

It has been determined that the problem results when shelling from the VT240 emulator. Other filter programs are affected also.
PROBLEM: SETHOST wants DEFAULT.240 on boot drive only

The SETHOST that we released with BL4 appears to only look on the boot drive for DEFAULT.240. Specifically, it doesn't seem to find the file unless it is located at <boot drive>:\DECNET\DEFAULT.240. I believe it should look for the file like many other applications look for their input - check the default directory, then scan the path. It's not very friendly to hardcode the location of a default file.
PROBLEM: SETHOST can crash SEDT on a PS/2

```
sethost
sedt test.txt
```

The screen does not change. Keypad commands move the cursor, but it quickly gets stuck at the bottom center of screen. Machine hung. Forced to reboot. Can reproduce problem on every attempt.

SEDT works fine if SETHOST is not run.

This problem only appears on a PS/2 when the SEDT.CNF file contains the command video-direct. This problem does not occur on my VAXmate. IT could not be reproduced on a AT with the Extended PC keyboard. Removing the video command corrects the problem.

I was using SEDT V3.2 (210) and SETHOST Y1.2.13 (BL24). The sedt.cnf file contained:

```
screen=mono
keyboard=new
video=direct
cursorline=floating
journalling=off
controlz=off
return=off
screenshift=on
numlock=disabled
maxscroll=10
```
PROBLEM: Inverse text unreadable with EGA/MONO

When running SETHOST on a PC or clone equipped with an EGA card and a monochrome monitor, any text which would be displayed in inverse video appears as white blocks.

My best guess is that SETHOST checks for an EGA card, and if it is present, assumes that the monitor must be color. However, the EGA/MONO combination is legal -- more than that, it is actually common in some environments.

To verify this bug, set up a system with an EGA card and a monochrome monitor. Then run SETHOST and bring up any program (such as NOTES) which uses inverse video. SET TERM to anything from a VT100 on up. The text in inverse video will be unreadable.
SPR #: 1190
Product: SETHOST
Class: Bug
H/W: VAXMATE/IBM-PC

PROBLEM: SETHOST graphics/fonts problem

I have a couple of .COM files that set up a VT240 to have "special" prompts. They work okay on a real VT240 but do not work under SETHOST.

Because of the nature of the .COM files I can't include them in this SPR. Whoever it is that is responsible for fixing this bug, send me mail and I'll get the .COM files to you.

ACTION/REMARKS:

For what it's worth, Mark sent me three files. The first one, FACE.COM, sets your VMS prompt to look like a square face, using the VT100 line drawing set. This one works on all versions of SETHOST we have here. I would be surprised if this one didn't work on V1.x SETHOST. (It even works with WPSTERM, 'cause I've used it in the past myself.)

The other two use DRSC, which is a VT220 feature which we can't implement on the PCs at this time. So, there is really no problem with the PC versions of SETHOST. DRCS is actually an EXTENSION of the VSRM level-2, so we can claim level-2 VSRM conformance even if we don't implement it.

The VAXmate version of SETHOST should work with the second two files. However, it seems to have problems. GLASS.COM sets your VMS prompt to a picture of a beer glass (or something). It seems to work, but if you enter Setup and then go back, your beer glass looks pretty sick. The third one, FINGER.COM, doesn't appear to work at all.
PROBLEM: VT240 Color map set to default on exit

The VT240 sets the VAXmate color map to the default color map on exit. Instead the VT240 should read the color map as it starts up and then upon exit restore those values.
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**PROBLEM:** Can't set text colors.

At the field test sight in Merrimack the user can't set the text colors.
PROBLEM: Return key doesn't work with extended keyboard buffer

This problem only occurs on IBM AT's and clones, it works fine on the VAXmate.

Scenerio:

Boot MS-DOS v3.30 or PC-DOS v3.30 on IBM AT (or clone).
Load KEYBRD program
Run DECMODE M,80 or DECMODE U,80 (to expand keyboard buffer to 80 characters)
Run SETHOST via LAT to connect to a VAX.

Problem:

After running SETHOST the return key doesn't work, a CTRL-M must be used to generate a return. The return key does return the correct scan/ascii code when a INT 16h function 00h is called.
SPR #: 1469
Product: SETHOST
Class: Documentation
H/W: VAXMATE/IBM-PC

PROBLEM: To DOS under Setup can result in fragmented memory

If you spawn to DOS while in sethost and start a program that is terminate and stay resident, it will fragment memory permanently. This happened to me with an innocuous little DOS utility called PRINT. It has a terminate and stay resident part. I lost about 200 Kbytes of memory.

The Sethost documentation should have a warning about this. I checked the PCSA V1 VT240 documentation and it did not say anything about this in the setup section on the To DOS command.