
1 SYS\$COMMAND BBS - New User Notes

This section contains information for new users of the SYS\$COMMAND BBS. In this section, basic concepts of interacting with PC Bulletin Boards will be discussed.

The intended audience for this section is those who are familiar with the OpenVMS Operating System from Digital Equipment Corporation, and are new to the world of on-line information systems such as PC Bulletin Board Systems, public information services such as CompuServe, Prodigy, and the like, and those who have used such services, but would like some deeper insights into them and how to use and benefit from them.

1.1 Introduction to PC BBS Systems

PC Bulletin Board Systems began as an exchange place for programs, news and data files for users of personal computing systems such as the IBM Personal Computer, Apple Computers including the Macintosh, the Commodore Amiga, and the many various UNIX-based systems.

Most PC BBSes consist of an interactive program running on a machine very similar the one used by the user who is accessing it. Usually, it's just a PC, perhaps with some added communications hardware and some additional system software to allow one machine to serve many incoming lines.

1.2 Communicating with PC BBS Systems.

Access to PC BBSes is usually by dial-up telephone line using a modem on each end to allow the machines to exchange data. It is assumed for this discussion that the user knows what modems are and is at least familiar with the basics for modem usage. The books available at your local computer store should be able to provide an understanding of modems well beyond the intended scope of this document.

Most PC BBS software expects to interact with a terminal emulation program running on a PC workstation, or with a PC-compatible terminal. Such programs and terminals are ANSI compliant with respect to escape sequences, display colors and graphic and line drawing characters. These programs and terminals are character-cell oriented displays, but may support some graphic renditions as well. PC-compatible line drawing characters include the ASCII 155 character which is interpreted as a Control Sequence Introducer by "VT" terminals and VT-compatible emulation programs.

OpenVMS, on the other hand, expects to interact with terminal emulation programs and terminals which conform to the standards set forth by Digital for video terminal ("scope") displays. Digital's line drawing characters are somewhat different from those used in PCs. Also, most Digital "VT" terminals do not support ANSI color.

One small difference that causes big problems is in the character used as the "rub out" or "delete" character. The host software usually sends the following three characters to the terminal when the "rub out" character is received from the keyboard: BS Space BS.

That is, a backspace (ASCII 8), to move the cursor backwards to the last character typed, a space (ASCII 32) to clear that character from the screen, and another backspace to put the cursor into the position on the screen occupied previously by the character just erased.

For PCs and PC BBS software, the BACKSPACE key, usually located near the top right of the main keypad on a 101-key enhanced PC keyboard, generates the equivalent of the ASCII BS character which has a decimal value of 8 and can also be generated by the CTRL+H keystroke combination under most circumstances.

For OpenVMS, the "rub out" character is the ASCII DELETE character which has a decimal value of 127, and is generated by the DELETE key or the RUB OUT key on VT terminals and others. On VT300 series terminals and later, this can be controlled using the terminal setup, on the Keyboard Menu.

Note that the BACKSPACE key is not the same as the CURSOR LEFT key, sometimes also called the LEFT ARROW key. The cursor keys generate different codes than the alphanumeric keys, and generally result in an escape sequence being sent to host. That is DEFINITELY not what you want to do.

When communicating with PC Bulletin Board Systems, it is usually best to use a terminal emulation program running on a PC. These programs are also called Communication programs, since they usually support file transfer, as well as provide for terminal emulation.

When configuring your communication program, the following guidelines are good for a majority of the systems and services available:

Data Format:	8 bits, no parity, 1 stop bit
Data Rate (baud):	As appropriate for your modem
BACKSPACE Key Sends:	BACKSPACE
Received backspace is:	non-destructive
Terminal Emulation:	ANSI or ANSI-BBS

It is also possible to use a Digital "VT" terminal, preferably a VT300 series or newer, by setting up the terminal to match the guidelines above. Be sure to select the proper character to be sent by the DELETE key: it should send BS, not DELETE.

1.3 Communicating with a PC BBS from VMS Systems

As mentioned previously, it is possible to communicate with PC BBS systems from a VMS System and/or a Digital "VT" terminal, with certain caveats:

- You must use CTRL+H instead of the DELETE key, or you must change the setup on your VT300 series or newer terminal so that the DELETE key sends a BS (ASCII 8) character instead of DELETE (ASCII 127).
- You should set your VT200-series or newer terminal to expect 7-bit control sequences to prevent ANSI/PC line drawing characters from causing your terminal to "lock up". This does not guarantee anything, but it may help.

- If you are using a terminal emulation program on a PC workstation to communicate with your VMS System, and you are attempting to access a PC BBS system using SET HOST/DTE, do not attempt any file transfers since this may result in your workstation sending a CTRL+\ character to VMS, which causes the DTEPAD program (which facilitates SET HOST/DTE) to exit to DCL.

1.4 Transferring Files To/From a PC BBS System

File Transfer is one of the greatest features of Bulletin Boards and information services. The files available can contain anything from programs to technical help and explanations, program documentation, news on current events, and other information of interest.

File Transfer always requires two programs interacting with each other: one on the sending system, which usually controls the transfer, and the other on the receiving system which accepts commands from the sending program as to how to transfer the file, whether or not any data conversion should be performed, etc.

When transferring files to or from a PC BBS system using an MS-DOS based terminal program or communication program, you usually don't leave that program to perform the file transfer. The necessary protocols are usually built into the program. These protocols include, but are not limited to, Kermit, XMODEM, YMODEM and ZMODEM. The matching portion of the protocol is usually built into the BBS software, or somehow linked to it as an external protocol.

When transferring files to or from a PC BBS system using an OpenVMS based terminal, you will need use a program on your OpenVMS system to provide your end of the file transfer protocol.

For OpenVMS, your choices are bit limited. The most common file transfer program for OpenVMS is called Kermit-32, Kermit for VAX/VMS. This is one of many flavors of Kermit available from Columbia University.

Of recent, a new version of Kermit has emerged called C-Kermit for OpenVMS-VAX. Terry Kennedy of St. Peter's College is credited with the primary development efforts. C-Kermit, by many claims, is capable of performance equalling ZMODEM for error correction and compression. According to Kevin G. Barkes, Sysop of the SYS\$OUTPUT BBS in Library, PA (412-854-0511), and former author of the "DCL Dialogue" column in the DEC Professional Magazine (now known as Digital Age): when used in conjunction with the latest and greatest MS-Kermit, C-Kermit allows file transfers between DOS and OpenVMS which fully preserve RMS attributes when the files are eventually returned to OpenVMS. On MS-DOS, of course, they are simply files containing data and the information necessary to restore their RMS attributes when written back to OpenVMS by C-Kermit.

To help you deal with all of this, DJE Systems makes available, to inaugural members of SYS\$COMMAND, a DOS diskette containing everything you need to get C-Kermit uploaded to your OpenVMS system. You should find it in your membership kit accompanying this manual. If it's missing, please call up the BBS with your modem and leave a note to the Sysop explaining that your membership diskette was missing - we'll see that you get a replacement. If you joined SYS\$COMMAND after the inaugural period, you can obtain the C-Kermit diskette kit by filling out the questionnaire on-line. The price will be posted on SYS\$COMMAND in the new user bulletin (bulletin #1). The

price covers only postage, materials (one diskette) and handling. Selling Kermit for profit is not permitted.

The kit is also available for download in ASCII text form on the BBS in the file areas as CKRMTKIT.TXT. You will need to cut this file up with your text favorite editor to produce the constituent files. It's probably too big for the Windows Notepad, so you'll need to use the MS-DOS editor. You can also download this in ASCII mode (SET HOST/DTE/LOG) to your VMS system, and create C-Kermit by following the instructions contained in the kit using the EDT, TPU or TECO editors. (Does anyone use TECO anymore?)

Kermit can also be obtained directly from Columbia University at the following address:

Kermit Development and Distribution
Columbia University
612 W. 115th St.
New York, NY 10025
Phone: (212)854-3703
FAX: (212)663-8202
E-Mail: kermit@columbia.edu (Internet)
KERMIT@CUVMA (BITNET/EARN/CREN)

Programs providing the XMODEM, YMODEM and ZMODEM protocols are available (for a price) from Omen Technology, Inc. Contact Omen for current pricing and availability at the following address:

Omen Technology, Inc.
P.O. Box 4681
Portland, OR 97208
Phone: (503)621-3406 (message service)
FAX: (503)621-3735

The above information is provided as a convenience and is not guaranteed to be accurate. This information is subject to change without notice.

1.5 BBS Etiquette and Principles

In general, the rules of BBS Etiquette are fairly common sense and straight forward. We go over them here just to make sure that everyone has access to them, even off-line.

1.5.1 BBS Privacy

In compliance with the Communications Privacy act of 1986, we give the following notice:

The SYS\$COMMAND BBS is provided as a service to the general public, with our target audience being OpenVMS professionals. As a "public" service, the user is hereby notified that no facility is provided on the BBS for private or confidential messages. The Sysop and a limited number of other privileged users can, and probably will, at any time, review any message or file on the system in the normal course of maintaining the system and to ensure compliance with other laws governing the operation of such systems.

Any information you enter into this system is subject to these rules. It is recommended, therefore, that this system not be used for commercial purposes or any purpose where confidentiality needs to be maintained.

1.5.2 Copyrighted Materials

Except as noted otherwise in specific, individual files and cases, all files on this BBS are public domain, freeware or shareware. At no time will the SYS\$COMMAND BBS carry, in the public file areas, any copyrighted materials that are not public domain, freeware or shareware.

You should not, therefore, upload to the BBS any copyrighted materials (programs, graphics, data files, etc.) other than public domain, freeware and shareware. Such materials will be removed from the system as soon as they are discovered. Anyone uploading such materials for public access will reported to the proper authorities and will forfeit their membership in The SYS\$COMMAND BBS.

1.5.3 Obscene or Offensive Language

Obscenity, profanity and any other offensive language on this system will not be tolerated. Messages containing obscenities, profanity, racial or ethnic slurs, and any and all other offensive language will be deleted from the system as soon as they are discovered. Offending users will forfeit their membership in The SYS\$COMMAND BBS.

All conversation in message threads is expected to be polite and considerate, even in the more "animated" and profound exchanges. "Flaming" and other forms of angry expression are expected to be constrained and free from insults and derogations, and any language that may be construed as offensive. When necessary, the Sysop will intervene in such exchanges and will exercise such corrective action as may be appropriate, including restricting access and revoking memberships.

1.5.4 Memberships and Subscriptions

Membership in The SYS\$COMMAND BBS is by subscription, although subscribing to the BBS is optional. Non-subscribers will be limited in their access and download privileges and in their daily on-line time. See the New User Bulletin (bulletin #1) on the BBS for the current policy.

Subscriptions are for a one year period and are not renewed automatically. You must manually renew your subscription at the end of your one-year subscription period. Subscriptions may include discounts on BBS services. See the New User Bulletin (bulletin #1) on the BBS for the current subscription rates and payment policies.

Memberships cancelled for disciplinary reasons will not be subject to any refunds. Likewise, all membership fees are non-refundable.