DECnet/SNA VMS 3270 Terminal Emulator Installation

Order Number: AA-EZ31D-TE

This manual describes how to install the DECnet/SNA VMS 3270 Terminal Emulator software. It also explains how to read the on-line release notes before or after installing the product. This document applies to the DECnet/SNA VMS 3270 Terminal Emulator V1.5 and all maintenance releases throughout that version.

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Preface

The DECnet/SNA VMS 3270 Terminal Emulator (TE) is a software product that lets VMS operating system users interactively communicate with programs running on an IBM host computer using one of Digital's interconnect systems.

This document tells you how to install the the DECnet/SNA VMS 3270 Terminal Emulator software on the VMS operating system. It is intended primarily for system managers or anyone else who is responsible for installing and maintaining application software.

Keep this document with your distribution kit. You will need it to install maintenance updates or to reinstall the software.

For more information on installing the DECnet/SNA VMS 3270 TE software on VMS systems, refer to the installation/operations guide for your particular processor.

This guide describes the installation procedure step by step. The system prompts you to answer questions and to perform tasks, such as changing volumes, and waits for you to tell it to continue.

Default values appear in brackets ([ ]) throughout the installation procedure. This means that if you simply press return in response to any of the installation questions where an answer or value appears in brackets, the system uses that answer or value.

Associated Documents

You should have the following Digital documents available for reference when you use the TE:

- *DECnet/SNA VMS 3270 Terminal Emulator Installation*
- *DECnet/SNA VMS 3270 Terminal Emulator Reference Card*
- *Introduction to VMS*
- *Guide to VMS Software Installation*
- *VAX Record Management Services Reference Manual*
- *VMS System Messages and Recovery Procedures Reference Manual*
- *DECnet/SNA Guide to IBM Parameters*
- The appropriate user's guide for the Digital terminal in use.

DECnet/SNA Gateway users should also have the following documents available for reference:

- *DECnet/SNA Gateway Installation Guide*
- *DECnet/SNA VMS Gateway Management Guide*
- *DECnet/SNA Gateway Problem Determination Guide*

VMS/SNA users should also have the following documents available for reference:

- *VMS/SNA Installation Guide*
- *VMS/SNA Management Guide*
- *VMS/SNA Problem Determination Guide*

See the *DECnet/SNA Introduction* for an overview of interconnect concepts.

See the following documents for more information about the IBM 3270 Information Display System:

- *IBM 3270 Information Display System*, Order No. GA23-0060
- *IBM 3270 Information Display System Data Stream Programmer's Reference*, Order No. GA23-0059
- *IBM 3270 Information Display System 3274 Control Unit Description and Programmer's Guide*, Order No. GA23-0061

- *Systems Network Architecture—Introduction to Sessions Between Logical Units*, Order No. GC20-1869
- *Systems Network Architecture—Sessions Between Logical Units*, Order No. GC20-1868
- *IBM 3270 Information Display System: Operator's Guide*, Order No. GA27-2742

Graphic Conventions

The following graphic conventions are used throughout this manual:

Convention	Meaning
UPPERCASE LETTERS	Uppercase letters in a command line represent the commands that you must enter.
lowercase italics	Italics in a command indicate that you must supply a precise value.
Special type	This special type in command examples indicates system output and user input.
Ctrl/*x*	The expression Ctrl/*x* refers to a control character keying sequence. When you see this symbol, press the key labeled Ctrl and the appropriate character key simultaneously.
KP *x*	The expression KP *x* refers to a key on the application keypad. When you see this notation, press the appropriate key on the application keypad.
EXT + *x*	The expression EXT + *x* refers to a special combination of two keys. When you see this notation, first press the EXT key (KP .), then press the appropriate character key.

Convention	Meaning
[ ]	Brackets enclose values that either are separated by a vertical bar or listed vertically.
|	Vertical bar indicates that you must choose between the values separated by the bar. Do not type the vertical bar in the command line.
Return	Unless otherwise specified, every command line is terminated by pressing the Return key.

Acronyms

The following acronyms appear throughout this manual:

ACF/NCP	Advanced Communications Function/Network Control Program
ACF/VTAM	Advanced Communications Function/Virtual Telecommunications Access Method
CICS/VS	Customer Information Control System/Virtual Storage
LU	Logical unit
LU2	Logical unit type 2
PLU	Primary logical unit
PU	Physical unit
SLU	Secondary logical unit
SNA	IBM's Systems Network Architecture
SSCP	System services control point
SPR	Software Performance Report
TE	DECnet/SNA VMS 3270 Terminal Emulator software
TSO	IBM's Time Sharing Option
VTAM	Virtual Telecommunications Access Method

Chapter 1

Preparing for Installation

Before you install the DECnet/SNA VMS 3270 Terminal Emulator software, you must prepare your system, its communications components, and the remote system to ensure proper operation of the software.

This chapter describes the preparations and requirements necessary for installing the DECnet/SNA VMS 3270 TE.

Your bill of materials (BOM) specifies the number and contents of your media. Be sure to check the contents of your kit against this information. If your kit is damaged or if you find that parts of it are missing, contact your Digital representative before continuing the installation.

1.1 Required Operating System Components

The DECnet/SNA VMS 3270 TE requires the following VMS V5.0 classes:

- VMS Required Saveset
- Network Support
- Utilities

For more information on classes and VMS tailoring, see the VMS operating system Software Product Description (SPD).

1.2 Prerequisite Software Requirements

Version 1.5 of the TE requires VMS V5.0, or V5.1, including the corresponding version of DECnet/VAX. The Terminal Emulator software also requires one of two possible system configurations for proper operation: Either the DECnet/SNA Gateway-ST, or DECnet/SNA Gateway-CT systems must be part of your DECnet network, or the VMS/SNA software must be installed on the node on which you are planning to install the TE software. For more information on these products, see the following documentation:

- *DECnet/SNA Guide to Gateway Management*
- *DECnet/SNA Gateway-ST Installation*
- *DECnet/SNA Gateway-CT Installation*
- *VMS/SNA Installation*

1.2.1 Accessing the On-line Release Notes

The DECnet/SNA VMS 3270 TE provides on-line release notes. You should read the release notes before you install the product. The release notes contain the latest enhancements to the product, which may include changes to the installation procedure. The installation procedure asks you if you want to display or print the release notes during step five of the installation procedure, if you executed the VMSINSTAL command procedure with the OPTIONS N parameter.

After you have installed the product, you can read the release notes by either typing or printing the file SYS$HELP:SNATE015.RELEASE_NOTES. Do not delete the release notes for previous versions of the Terminal Emulator.

1.3 VMS License Management Facility

The VMS License Management Facility (LMF) is available with Version 5.0 of the VMS operating system. You must install the DECnet/SNA VMS 3270 TE on a VMS V5.0 system, and you must register your software license.

The license registration information you need is contained in the Product Authorization Key (PAK) that is shipped with the DECnet/SNA VMS 3270 TE software. The PAK is a paper certificate that contains information about the license you have to run a particular piece of software.

It is best to register your DECnet/SNA VMS 3270 TE license before you perform the installation. During the installation, VMSINSTAL asks you if you have registered the DECnet/SNA VMS 3270 TE license and loaded the appropriate authorization key. If you have not already done so, you can complete the installation procedure, although you will not be able to run the TE software. Once you perform the license registration and have loaded an authorization key, you will be able to run the TE software.

To register a license under VMS V5.0, first log in to the system manager's account, SYSTEM. You then have a choice of two ways to perform the registration:

- Execute the SYS$UPDATE:VMSLICENSE.COM command procedure. When it prompts you for information, respond with the information that is on your Product Authorization Key (PAK) form.
- Issue the LICENSE REGISTER DCL command with the appropriate qualifiers that correspond to information on the PAK.

For complete information on using LMF, see the manual on the License Management Utility in the VMS V5.0 documentation set.

1.4 Installation Procedure Requirements

The following sections detail the various requirements for installing the DECnet/SNA VMS 3270 TE software.

The installation should take approximately 10 to 15 minutes, depending on the type of media and your system configuration. Before installing the Terminal Emulator software, you must have the following privileges and resources:

- SETPRV privilege, or CMKRNL, WORLD, and SYSPRV privileges. Note that VMSINSTAL disables BYPASS privilege at the start of the installation.
- A minimum of 450 blocks of free disk space during installation.

- Enough physical memory to support a minimum configuration of V5.0 of the VMS operating system.
- A minimum of 227 free global pages
- A minimum of 4 free global sections at installation.

1.4.1 Disk Space

Installing the DECnet/SNA VMS 3270 TE requires a certain amount of free disk space during the installation. Table 1–1 summarizes the storage requirements for the DECnet/SNA VMS 3270 TE.

Table 1–1: Disk Space Requirements

Kit	Blocks During Installation	Blocks After Installation
SNATE015	450	300

To determine the number of free disk blocks on the current system disk, enter the following command at the DCL prompt:

```
$  SHOW DEVICE SYS$SYSDEVICE
```

1.4.2 System Parameters

Table 1–2 lists the minimum required system parameter values for the installation. Depending on the kinds of programs and applications running at your site, you might need higher values for some settings.

Table 1–2: Required System Parameter Values

System Parameter	Value
GBLPAGES[1]	*n* + 222
GBLSECTIONS[1]	*n* + 4

[1]The *n* variable refers to the system parameter values that are currently in use. To install the DECnet/SNA VMS 3270 TE, you must raise those values by the number indicated. (See Section 1.4.2.2.)

The following sections show you how to check system parameter values, with the VMS System Generation Utility (SYSGEN), and calculate values for the GBLPAGES and GBLSECTIONS system parameters, and change parameter values with the VMS AUTOGEN command procedure.

1.4.2.1 Checking System Parameter Values

To check the values of your system parameters, enter the following command at the DCL prompt to invoke the SYSGEN utility:

```
$  RUN SYS$SYSTEM:SYSGEN
SYSGEN>
```

At the SYSGEN> prompt, enter the SHOW command to display the value of each system parameter. The values displayed should equal or exceed the the value of each parameter listed in Table 1–2. The following command displays the value for the WSMAX system parameter:

```
SYSGEN>  SHOW WSMAX
```

After you finish checking the parameters with the SHOW command, you can enter the EXIT command at the SYSGEN> prompt to return to DCL level.

Dynamic parameters changed with the SYSGEN utility become active immediately without any need to reboot your system. In fact, rebooting returns dynamic system parameter values to their previous settings, so you should complete the installation before rebooting the system.

1.4.2.2 Calculating the Values for GBLPAGES and GBLSECTIONS

To install and run the DECnet/SNA VMS 3270 TE, you must set the correct values for the GBLPAGES and GBLSECTIONS system parameters.

The *n* + *nnn* values for GBLPAGES and GBLSECTIONS in Table 1–2 indicate that you must have at least 512 unused pages or sections available on your system for the installation to process successfully. To calculate how many unused global pages and global sections your system has, perform the following steps:

1. Run the VMS Install Utility (INSTALL) using the following DCL commands:

```
$  INSTALL LIST /GLOBAL /SUMMARY
```

The INSTALL utility displays a summary of global pages and global sections used by your system, as well as the current number of unused global pages. For example:

```
                Summary of Local Memory Global Sections

258 Global Sections Used,  22580/3420 Global Pages Used/Unused
```

2. Determine if the number of unused pages (3420 in the example) is equal to or greater than the number specified in Table 1–2. If the number of unused pages is less than the number listed in the table, you need to increase the value for GBLPAGES.
3. Note the amount shown for ''Global Sections Used'' (258 in the example).
4. Run the SYSGEN utility and use the SHOW command to determine the number of global sections that have been allocated:

```
$  RUN SYS$SYSTEM:SYSGEN
SYSGEN>  SHOW GBLSECTIONS


Parameter Name          Current   Default   Minimum   Maximum Unit  Dynamic
--------------          -------   -------   -------   ------- ----  -------
GBLSECTIONS                 512       250        20      4095 Sections
```

5. Subtract the amount shown in the summary (258 in the example) from the amount allocated. If the difference is less than the number required in Table 1–2, you need to increase the value of the GBLSECTIONS parameter.

Section 1.4.2.3 describes the procedures for increasing these values as well as those of other system parameters. Refer to the VMS documentation on system management and operations for more information.

1.4.2.3 Changing System Parameter Values with AUTOGEN

You use the AUTOGEN command procedure to change system parameters. AUTOGEN automatically adjusts values for parameters that are associated with the ones you reset manually. To change system parameters with AUTOGEN, you must edit the the following file:

```
SYS$SYSTEM:MODPARAMS.DAT
```

For example, to change the setting for the WSMAX system parameter, add this line to the file:

```
WSMAX = 1024
```

Or for incremental SYSGEN parameters:

```
ADD_GBLPAGES = 2000
```

Now, run the AUTOGEN procedure to recalculate your system parameters. Enter the following command at the DCL prompt:

```
$  @SYS$UPDATE:AUTOGEN GETDATA REBOOT
```

AUTOGEN performs an automatic system shutdown and reboots when it has finished. Rebooting your system makes the new parameter values active. Also on VMS V5.0 systems you may wish to add the [NO]FEEDBACK parameter to the AUTOGEN command line. For more information about using AUTOGEN, see the instructions on modifying system parameters in the VMS documentation on System Management and Operations.

1.4.3 VMSINSTAL Requirements

When you run the VMSINSTAL command procedure, it checks the following criteria:

- Whether you have set your default device and directory to SYS$UPDATE
- Whether you are logged in to a privileged account
- Whether you have adequate quotas for the installation
- Whether DECnet is up and running
- Whether any users are logged in to the system

If VMSINSTAL detects any problems during the installation, it notifies you of the problem and asks if you want to continue the installation. In some instances, you can enter YES to continue. To stop the installation process and correct the situation, enter NO or press RETURN. Then correct the problem and restart the installation.

1.4.4 Backing Up Your System Disk

At the beginning of the installation, VMSINSTAL asks if you have backed up your system disk. Digital recommends that you do a system disk backup before installing any software on top of the operating system.

Use the backup procedures that have been established at your site. For details on performing a system disk backup, see the section on the Backup Utility in the VMS documentation set.

1.4.5 License Management Utility Requirements

You will need to register and load your license for the DECnet/SNA VMS 3270 TE before you start the installation in order to run the Installation Verification Procedure.

Refer to the VMS documentation on the License Management Utility for information about registering your license.

Chapter 2

Installation

This chapter describes how to install the DECnet/SNA VMS 3270 TE. It contains a step-by-step description of the installation procedure and tasks you must perform after the installation. The final section contains an actual system log of an installation using PAK information and VMSINSTAL.

Note that throughout the installation default values appear in brackets. To abort the installation procedure at any time, press Ctrl/Y. Doing this causes the installation procedure to delete all files it has created up to that point, and returns to DCL. If you want to retry the installation after aborting it, you must proceed from step two.

2.1 General Information

This section includes information about accessing release notes, determining what files are added to your system, running the Installation Verification Procedure (IVP), and aborting the installation.

On-line help also directs you to the release notes file. After the installation, you can enter the following command to review them through the help facility:

```
$  HELP SNA_TERMINALS RELEASE_NOTES
```

2.1.1 Determining the Files Added to the System

The TE installation procedure adds a number of new files to your system. Appendix B contains a complete listing of all files the installation procedure adds.

2.1.2 Running the Installation Verification Procedure (IVP)

The Installation Verification Procedure (IVP) for the DECnet/SNA VMS 3270 TE verifies that the installation was performed correctly. During the installation, you are asked if you want to run the IVP as part of the installation procedure. If you respond YES, VMSINSTAL runs the IVP. It is recommended that you run the IVP to be sure that the DECnet/SNA VMS 3270 TE is installed correctly.

After the DECnet/SNA VMS 3270 TE is installed, you can run the IVP independently to verify that the software is available on your system. You might also want to run the IVP after a system failure to be sure that users can use the DECnet/SNA VMS 3270 TE software.

2.2 The Installation Procedure

The DECnet/SNA VMS 3270 TE installation process consists of a series of questions and informational messages. The installation procedure takes between ten and fifteen minutes to complete.

Digital recommends that you use a hardcopy terminal to install the Terminal Emulator if you want a copy of the installation process. If you do not have a hard-copy terminal, you can produce a copy of the installation procedure by using the following command:

```
$   SET HOST 0/LOG=file-name
```

where *file-name* is the name of the file in which you wish to store the installation procedure log information. After the installation completes, you can log off from the current session, and print the file that contains the log of the installation procedure. If you do not specify a file name, the system automatically creates a file called SETHOST.LOG.

2.2.1 Steps to Install the DECnet/SNA VMS 3270 TE

To start the installation, execute the VMSINSTAL command procedure from a privileged account, such as the SYSTEM account. Use the following command to start VMSINSTAL:

```
@SYS$UPDATE:VMSINSTAL product-name device-name OPTIONS N
```

where

product-name
is the installation name for the component. For the DECnet/SNA VMS 3270 TE, use the following installation name:

```
SNATE015
```

device-name
is the name of the device on which you plan to mount the media. For example, MTA0: is the device name for a tape drive. It is not necessary to use the console tape drive for this installation. However, if you do use the console tape drive, you should replace any media you removed once the installation is completed.

OPTIONS N
is an optional parameter that indicates you want to be prompted to display or print the release notes. If you do not include the OPTIONS N parameter, VMSINSTAL does not prompt you to display or print the release notes. You are advised to read the release notes before proceeding with the installation.

VMSINSTAL has several other options. For further information, see the VMS documentation on software installation.

The following example displays the command to invoke VMSINSTAL to install the DECnet/SNA VMS 3270 TE from tape drive MTA0: and the system response. This example uses the OPTIONS N parameter for printing or displaying release notes.

```
$  @SYS$UPDATE:VMSINSTAL SNATE015 MTA0: OPTIONS N

      VAX/VMS Software Product Installation Procedure V5.0


It is 14-FEB-1989 at 10:10.
Enter a question mark (?) at any time for help.
```

If you do not supply either the product name or the device name, VMSINSTAL prompts you for this information later on in the installation procedure. VMSINSTAL also prompts you for any options you want to use with the installation.

2.2.2 Installation Questions

This section describes the questions that appear during the installation. See Appendix A for a sample installation procedure.

Each question in the installation is marked with an asterisk (*) at the beginning of the line. Some questions show the default response in brackets, for example [YES]. If you want to give the default response for a particular question, simply press Return.

1. DECnet status

   VMSINSTAL notifies you if DECnet is running and displays a list of all active processes. It then asks if you want to continue the installation. You should install the DECnet/SNA VMS 3270 TE on a standalone system or cluster with DECnet shut down. NO is the default response to the question.

```
%VMSINSTAL-W-DECNET, Your DECnet network is up and running.
   .
   .
   .
* Do you want to continue anyway [NO]?
```

2. System backup

   VMSINSTAL asks you if you have made a backup copy of your system disk. You should always back up your system disk before performing an installation.

```
* Are you satisfied with the backup of your system disk [YES]?
```

   If you are satisfied with the backup of your system disk, press Return. Otherwise, enter NO to discontinue the installation. After you back up your system disk, you can restart the installation.

3. Mounting the media

   You should now mount the first distribution volume on the device you specified when you invoked VMSINSTAL. The device name appears in the line preceding the question. VMSINSTAL then asks you if you are ready to continue with the installation.

   If you respond YES to indicate that you are ready, VMSINSTAL displays a message that the media containing the DECnet/SNA VMS 3270 TE has been mounted on the specified device and that the installation has begun. For example:

```
Please mount the first volume of the set on MUA0:.
* Are you ready?  YES
%MOUNT-I-MOUNTED, SNATE015 MOUNTED ON _MUA0:  (NODE 1)
The following products will be processed:
  SNATE V1.5

    Beginning installation of SNATE V1.5 at 20:01

%VMSINSTAL-I-RESTORE, Restoring product saveset A...
```

If you entered the wrong device name when you invoked VMSINSTAL and need to restart the installation, enter NO in response to the ''Are you ready?'' question. To abort the installation for any other reason, press Ctrl/Y.

4. Release Notes

   If you specified OPTIONS N when you invoked VMSINSTAL, you are now given five options for reviewing the release notes:

```
Release Notes Options:

    1. Display release notes
    2. Print release notes
    3. Both 1 and 2
    4. Copy release notes to SYS$HELP
    5. Do not display, print or copy release notes

* Select option [2]:
```

   If you select option 1, VMSINSTAL displays the release notes immediately on the console terminal. You can terminate the display at any time by pressing Ctrl/C.

   If you select option 2, VMSINSTAL prompts you for the name of the print queue to which you want to send the file:

```
* Queue name [SYS$PRINT]:
```

   Either type in a queue name or press Return to send the file to the default output print device.

   If you select option 3, VMSINSTAL displays the release notes immediately on the console terminal and then prompts you for a queue name for the printed version.

   If you choose option 4, VMSINSTAL copies the release notes to the file SYS$HELP:SNATE015.RELEASE_NOTES.

   If you select option 5, VMSINSTAL does not display, print, or copy the release notes.

5. Continuing the installation

   Regardless of the option you choose, the installation procedure now asks if you want to continue the installation. To continue the installation, enter YES. Otherwise, press Return to terminate the installation procedure.

   ```
   * Do you want to continue the installation [N]?:  YES
   ```

   The release notes are located in the following file:

   ```
   SYS$HELP:SNATE015.RELEASE_NOTES.
   ```

   NOTE

   The name of the release notes file VMSINSTAL copies consists of the current product name and version number. Do not delete release notes for previous versions of the TE software.

6. License Registration

   The installation procedure asks if you have registered and loaded your product authorization key for the TE and displays information specific to the product, for example:

   ```
   Product:          SNA-3270-TE
   Producer:         DEC
   Version:          1.5
   Release Date:     28-APR-1989
   ```

   The installation inquires:

   ```
   * Does this product have an authorization key registered and loaded?
   ```

   If you have not registered and loaded your authorization key, you must answer "NO" to this question. A successful installation of the DECnet/SNA VMS 3270 TE depends on an authorization key being registered and loaded. Please be certain that this has been completed before proceeding with the installation.

7. Choosing to purge files

   You have the option to purge files from previous versions of the DECnet/SNA VMS 3270 TE that this installation supersedes. Purging is recommended, although if you need to keep files from previous versions, enter NO in response to this question.

   ```
   * Do you want to purge files replaced by this installation [YES]?
   ```

8. Choosing to run the Installation Verification Procedure (IVP)

The installation procedure now asks if you want to run the Installation Verification Procedure. The IVP for the DECnet/SNA VMS 3270 TE checks to be sure that the installation is successful. It is recommended that you run the IVP.

```
* Do you want to run the IVP after the installation [YES]?
```

2.2.3 Informational Messages

At this point, the installation procedure displays a number of informational messages that report on the progress of the installation. There are no further questions, except for any that apply to the IVP. If the installation procedure has been successful up to this point, VMSINSTAL moves the new or modified files to their target directories, updates help files, and updates DCL tables, if necessary. If you asked for files to be purged, that work is done now. The following message is displayed:

```
To make the terminal emulator shareable each time the system reboots, you must
add the following line to your system startup procedure:

 @SYS$STARTUP:SNATE$STARTUP
```

This command installs the TE software as a shareable image. If you are installing the TE software on a VAXcluster, you must execute this command file on each node in the cluster. See the chapter on post-installation consideration for more information. The installation procedure also displays the following message:

```
%VMSINSTAL-I-MOVEFILES, files will now be moved to their target
directories...
```

2.2.4 Running the Installation Verification Procedure

If you chose to run the IVP, VMSINSTAL runs it now. When the IVP runs successfully, you see the following display:

```
Starting DECnet/SNA 3270 TE V1.5 IVP
DECnet/SNA 3270 TE V1.5 IVP completed successfully
```

2.2.5 Completing the Installation Procedure

The following messages indicate that the entire installation procedure is complete:

```
   Installation of SNATE V1.5 completed at 15:20

Enter the products to be processed from the next distribution volume set.
* Products: EXIT

   VMSINSTAL procedure done at 15:21
```

The installation procedure also asks you if there are any more products you want to install. If there are more products to install, enter the name of the next software product. If there are no more products to install, type EXIT and press Return.

The installation of the Terminal Emulator is now complete, and you can log out of the privileged account:

```
$  LOGOUT
SYSTEM     logged out at 04-JUN-1989 15:22:23.3
```

Note that VMSINSTAL deletes or changes entries in the process symbol table during the installation. Therefore, if you are going to continue using the system manager's account and you want to restore these symbols, you should log out and then log back in again.

2.3 Error Recovery

If errors occur during the installation itself or when the IVP is running, VMSINSTAL displays failure messages. If the installation fails, the following message is displayed:

```
%VMSINSTAL-E-INSFAIL, The installation of SNATE V1.5 has failed.
```

If the IVP fails, the following messages are displayed:

```
DECnet/SNA 3270 TE V1.5 IVP failed.
```

Errors can occur during the installation if any of the following conditions exist:

- The operating system version is incorrect.
- A prerequisite software version is incorrect.
- Quotas necessary for successful installation are insufficient.

- System parameter values for successful installation are insufficient.
- The VMS help library is currently in use.
- The product is not properly licensed.

For descriptions of the error messages generated by these conditions, see the VMS documentation on system messages, recovery procedures, and VMS software installation. If you are notified that any of these conditions exist, you should take the appropriate action as described in the message. (You might need to change a system parameter or increase an authorized quota value.) For information on installation requirements, see Chapter 1.

Chapter 3

After the Installation

After installing the DECnet/SNA VMS 3270 TE, you may need to perform some or all of the following tasks:

- Edit the system startup file
- Run the IVP
- Reboot the system
- Set user account quotas
- Install the TE on a VAXcluster

3.1 Editing System Files

You must edit the system startup file to provide for automatic startup of the DECnet/SNA VMS 3270 TE when your system is rebooted.

Add the command line that starts the DECnet/SNA VMS 3270 TE to the system startup file, SYS$MANAGER:SYSTARTUP_V5.COM.

@SYS$STARTUP:SNATE$STARTUP

You must position this new command line *after* the line that invokes the network startup command procedure. The following example shows the network startup command line followed by the startup command line for the DECnet/SNA VMS 3270 TE:

```
$ @SYS$MANAGER:STARTNET.COM
      .
      .
      .
$ @SYS$STARTUP:SNATE$STARTUP
```

3.2 Running the Installation Verification Procedure (IVP)

The Installation Verification Procedure (IVP) for the DECnet/SNA VMS 3270 TE verifies the installation. During the installation, you are asked if you want to run the IVP as part of the installation. If you respond YES, VMSINSTAL runs the IVP. It is recommended that you run the IVP to be sure that the TE software is installed correctly.

After the DECnet/SNA VMS 3270 TE is installed, you can run the IVP independently to verify that the software is available on your system.

The IVP for the DECnet/SNA VMS 3270 TE is a command procedure that is stored in the directory SYS$TEST after you install the software. To run the IVP interactively after the installation, issue the following command:

```
$ @SYS$TEST:SNATE$IVP
```

Executing this command procedure runs the IVP independently of the installation procedure.

3.3 Rebooting the System

You can reboot your system after you have installed the DECnet/SNA VMS 3270 TE, edited the system startup file, and reset the system parameters (if necessary). A system reboot verifies that DECnet/SNA VMS 3270 TE is ready for use, and ensures that the edits to the system startup command file are correct, and establishes any new parameter settings. Note, however, that rebooting is optional.

3.4 User Account Requirements

To use the DECnet/SNA VMS 3270 TE, user accounts on your system must have certain privileges and quotas. The next two sections contain information on these requirements.

3.4.1 Privileges

To use the DECnet/SNA VMS 3270 TE, each account must have at least TMPMBX and NETMBX privileges. Use the VMS Authorize Utility to determine whether users have the privileges they require.

3.5 Installing the TE on a VAXcluster System

If you want to run the TE software on multiple nodes of a VAXcluster system, first check to see that you have the appropriate software license. Then, follow these steps after installing the software:

Issue the following commands on each node of the cluster:

```
$  LICENSE LOAD SNA-3270-TE
$  @SYS$STARTUP:SNATE$STARTUP.COM
```

3.6 Determining and Reporting Problems

If an error occurs while the DECnet/SNA VMS 3270 TE is being used and you believe that the error is caused by a problem with the DECnet/SNA VMS 3270 TE software, you should take one of the following actions:

- If you have a BASIC or DECsupport Software Agreement, you should call your Customer Support Center. (With these services, you receive telephone support that provides high-level advisory and remedial assistance.)
- If you have a Self-Maintenance Software Agreement, you can submit a Software Performance Report (SPR).
- If you purchased the DECnet/SNA VMS 3270 TE within the past 90 days and you think the problem is caused by a software error, you can submit a Software Performance Report (SPR).

If you find an error in the DECnet/SNA VMS 3270 TE documentation, you should fill out and submit the Reader's Comments form at the back of the document in which the error was found. Include the section and page number where the error was found.

Appendix A
Sample Installation

This appendix contains a sample installation of the DECnet/SNA VMS 3270 TE. This sample was run on a system that had no previous version of the TE installed.

You should assume that in the sample installation, DECnet has been shut down, no users are logged on to the system, and that OPTIONS N is specified to print the release notes. The Installation Verification Procedure (IVP) runs at the end of the installation.

```
Username: SYSTEM
Password:
 Welcome to VAX/VMS version V5.1 on node LIVY
    Last interactive login on Monday, 27-FEB-1989 15:45
    Last non-interactive login on Thursday, 13-OCT-1988 16:08

$ SET DEF SYS$UPDATE
$ @VMSINSTAL
 VAX/VMS Software Product Installation Procedure V5.1

It is 27-FEB-1989 at 15:48.
Enter a question mark (?) at any time for help.
%VMSINSTAL-W-DECNET, Your DECnet network is up and running.
%VMSINSTAL-W-ACTIVE, The following processes are still active:
 DECW$WM_1
 DECW$TE_1
 DECW$SERVER_0
* Do you want to continue anyway [NO]? Y
* Are you satisfied with the backup of your system disk [YES]? Y
* Where will the distribution volumes be mounted: MTA0

Enter the products to be processed from the first distribution volume set.
* Products: SNATE
* Options: N
```

```
The following products will be processed:
  SNATE V1.5
 Beginning installation of SNATE V1.5 at 15:49

%VMSINSTAL-I-RESTORE, Restoring product saveset A ...
%VMSINSTAL-I-RELMOVED, The product's release notes have been successfully moved to SYS$HELP.
    Release Notes Options:

 1.  Display release notes
 2.  Print release notes
 3.  Both 1 and 2
 4.  Copy release notes to SYS$HELP
 5.  Do not display, print or copy release notes

* Select option [2]:
* Do you want to continue the installation? Y
Product:      SNA-3270-TE
Producer:     DEC
Version:      1.5
Release Date: 28-APR-1989

* Does this product have an authorization key registered and loaded? Y
* Do you want to run the IVP after the installation [YES]?
* Do you want to purge files replaced by this installation [YES]? Y

 To make the terminal emulator shareable each time the system
 reboots, you must add the following line to your system startup
 procedure:

  $ @SYS$STARTUP:SNATE$STARTUP

%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...
 DECnet/SNA 3270 TE V1.5 installation completed successfully
 Installation of SNATE V1.5 completed at 15:52

Enter the products to be processed from the next distribution volume set.
* Products: EXIT
 VMSINSTAL procedure done at 15:52

$ LOGOUT
    SYSTEM logged out at 27-FEB-1989 15:54:41.81
```

Appendix B

Files Installed on Your System

The DECnet/SNA VMS 3270 TE installation procedure installs a number of files on your system. Section B.1 tells where you can find the installed files.

B.1 File Names

The installation procedure creates the following files on your system when you install the DECnet/SNA VMS 3270 TE software.

- SYS$SYSTEM:[SYSEXE]SNATERM.EXE
- SYS$MESSAGE:[SYSMSG]SNATERMMSG.EXE
- SYS$EXAMPLES:[SYSHLP.EXAMPLES]SNATEDEF.MAR
- SYS$EXAMPLES:[SYSHLP.EXAMPLES]SNATEFRE.MAR
- SYS$EXAMPLES:[SYSHLP.EXAMPLES]SNATENUMPAD.MAR
- SYS$STARTUP:[SYSTARTUP]SNATE$STARTUP.COM
- SYS$COMMON:[SYSTEST.SNATE]SNATE$IVP.COM