DECnet/SNA VMS APPC/LU6.2 Programming Interface Installation

AA-EV68D-TE

This document tells the user how to install the DECnet/SNA VMS APPC/LU6.2 Programming Interface software.

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Operating System and Version: VMS Version 5.3

Software Version: DECnet/SNA VMS APPC/LU6.2 Programming Interface Version 2.2

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About This Guide

The DECnet/SNA VMS APPC/LU6.2 Programming Interface enables VMS users to communicate with programs running on IBM systems. This manual is for system managers responsible for planning and installing the software.

Document Structure

This manual has the following chapters:

- Chapter 1, Preparing for Installation, provides instructions on how to install the APPC/LU6.2 Programming Interface using the VMSINSTAL procedure.
- Chapter 2, Installing the APPC/LU6.2 Programming Interface software, provides a step-by-step process for installing the software.
- Chapter 3, After the Installation, describes steps you must take to verify the installation of the APPC/LU6.2 Programming Interface software.

Related Documents

- *DECnet/SNA VMS APPC/LU6.2 Programming Interface Programming*
- *DECnet/SNA VMS Gateway Management Installation*
- *DECnet/SNA VMS Gateway Management Management*
- *VMS/SNA Installation*
- *VMS/SNA Problem Solving*
- *VMS/SNA Guide to IBM Parameters*
- *Installing the DEC MicroServer*
- *Installing the DEC MicroServer-SP*
- *DECnet/SNA Gateway-ST Installation*
- *DECnet/SNA Gateway-ST Problem Solving*
- *DECnet/SNA Gateway-ST Guide to IBM Parameters*
- *DEC ChannelServer Hardware Installation Guide*
- *DEC ChannelServer Hardware Troubleshooting Guide*
- *DEC ChannelServer II Installation*
- *DEC ChannelServer II Problem Solving*
- *DECnet/SNA Gateway-CT Installation*
- *DECnet/SNA Gateway-CT Problem Solving*
- *DECnet/SNA Gateway-CT Guide to IBM Parameters*
- *VMS License Management Utility Manual*
- *VMS System Manager's Manual*

Conventions

This manual uses the following conventions:

Conventions	Meaning
Special Type	Represents system input and output. System output prints in black; user input is in red.
UPPERCASE LETTERS	Represent constant values or symbols. Code these exactly as they are specified.
[ ]	Square brackets enclose optional values. Do not type the brackets in the command line.
$\boxed{\text{Return}}$	Unless otherwise specified, terminate every command line by pressing $\boxed{\text{Return}}$.
$\boxed{\text{Ctrl}/x}$	Control characters are shown as $\boxed{\text{Ctrl}/x}$, where *x* is an alphabetic character. Press $\boxed{\text{Ctrl}}$ and the appropriate character key simultaneously.

1

Preparing for Installation

This chapter tells you how to prepare for installing the APPC/LU6.2 Programming Interface on systems running either VMS/SNA V2.0, DECnet/SNA Gateway-CT V2.0, or DECnet/SNA Gateway-ST V1.1 software.

Inspecting the Distribution Kit

The software Bill of Materials (BOM) included with your distribution kit shows the contents of the kit. Carefully compare the items you received against the BOM. Report any missing or damaged components to Digital Equipment Corporation before continuing with the installation.

Preparing the IBM SNA Environment

Before you can use the APPC/LU6.2 Programming Interface Software, you must prepare certain software components in the IBM environment, as follows:

- The *VMS/SNA Guide to IBM Parameters* explains the IBM parameters to define for successful communication between the IBM host and VMS/SNA.
- The *DECnet/SNA Gateway-ST Guide to IBM Parameters* explains the IBM parameters to define for successful communication between the IBM host and your Gateway-ST.

- The *DECnet/SNA Gateway-CT Guide to IBM Parameters* explains the IBM parameters to define for successful communication between the IBM host and your Gateway-CT.

You should view the Digital documentation as an adjunct to the IBM documentation; the IBM documentation remains the authoritative source for IBM software concepts and procedures.

Note *Since IBM system programmers reconfigure and generate their systems according to a set schedule, give them as much advance notice as possible.*

VMS System Requirements

Table 1–1 shows the minimum VMS system requirements. More detailed explanations follow the table.

Table 1–1 Installation Requirements for the VMS APPC/LU6.2 Programming Interface

Requirements	Specifications
Software Version	VMS Version 5.3 or Version 5.4
Privileges	System manager level (SYSPRV)
Disk space	4400 blocks minimum during installation; 4400 blocks after installation
Global sections	4
Global pages	341
Approximate installation time	6 to 30 minutes, depending on the type of medium used
Related documents	*VMS System Manager's Manual*

Verifying the Required VMS Version

Your VMS system must be running VMS V5.3 or V5.4. Use the SHOW SYSTEM command to determine the current version. If you do not have the required version, you must install it before you install the APPC/LU6.2 Programming Interface software. The *VMS System Manager's Manual* explains how to install VMS software.

Verifying Necessary Privileges

To install the APPC/LU6.2 Programming Interface software, you must be logged in to an account that has SYSPRV. Use the SHOW PROCESS/PRIVILEGES command to check privileges.

Verifying Required Disk Space

The APPC/LU6.2 Programming Interface software requires 4400 free blocks on the system disk during installation, and 4400 blocks after installation. Use the SHOW DEVICE command to check available disk space.

The APPC/LU6.2 Programming Interface software supports VMS tailoring for installation on systems that have limited system disk space. The APPC/LU6.2 Programming Interface Software Product Description (SPD) explains VMS tailoring and lists the necessary VMS system classes. The VMS SPD provides more information on classes and VMS tailoring.

Determining Available Global Sections and Global Pages

The APPC/LU6.2 Programming Interface requires a minimum of four (4) global sections and 341 global pages. To check the number of global sections and global pages available on your system, type the following command at the VMS prompt ($).

$ install list/summary/global

The VMSINSTAL utility will display the number of global sections and global pages available on your system.

Registering and Loading the Product Authorization Key

Make sure that you have registered and loaded the Product Authorization Key (PAK) before your begin the installation. Refer to the *VMS License Management Utility Manual* for this information.

Installing the Required Gateway Management Software

DECnet/SNA Gateway Management V2.1 software must be installed before you can use the APPC/LU6.2 Programming Interface software. Use Gateway Management software to configure and manage the Gateway-CT or Gateway-ST.

DECnet/SNA VMS Gateway Management Installation explains how to install the Gateway Management software.

Installing the Required Transport Software

VMS/SNA V2.0, DECnet/SNA Gateway-ST V1.1, or DECnet/SNA Gateway-CT V2.0 software must be installed before you can use the APPC/LU6.2 Programming Interface software. Use the transport software to communicate with the IBM host. See the Software Product Description (SPD) for more information.

Backing Up Your System Disk

Before you start an installation that involves writing to your system disk, Digital Equipment Corporation recommends that you make a backup copy of your system disk. The *VMS System Manager's Manual* explains how to back up your system disk.

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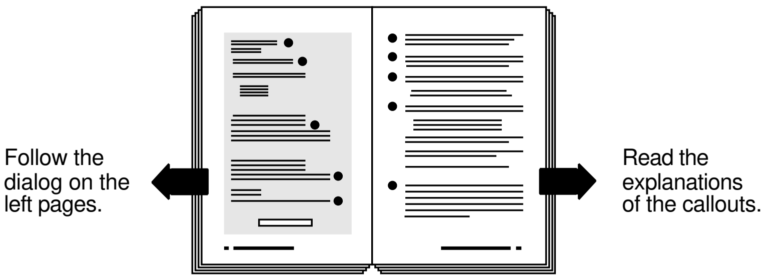
Installing the APPC/LU6.2 Programming Interface

You install files on a VMS system through an automatic question-and-answer session or dialog. You simply answer the questions that are displayed as the procedure (VMSINSTAL) runs. Most questions require a simple yes (Y) or no (N) answer.

This manual supplies installation information in the following format:



Default answers appear in brackets throughout the installation procedure. Press Return to accept a default answer.

Press Ctrl/Y to abort the installation procedure at any time; later, you can restart the installation at ❷ in the dialog that follows.

```
Username:  SYSTEM    Return  ❶
Password:  password  Return

$  SET DEFAULT SYS$UPDATE  Return

$  @VMSINSTAL SNALU62022 ddcu:  [OPTIONS N]  Return  ❷

        VAX/VMS Software Product Installation Procedure V5.3

It is dd-mmm-yyyy at hh:mm.

Enter a question mark (?) at any time for help.

%VMSINSTAL-W-ACTIVE, The following processes are still active:

   JONES

* Do you want to continue anyway [NO]?  ❸
* Are you satisfied with the backup of your system disk [YES]?  ❹

Please mount the first volume of the set on  MUA0:.
* Are you ready?  Y  Return ❺
%MOUNT-I-MOUNTED, SNALU6 mounted on _MUA0:
```

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❶ Digital Equipment Corporation recommends that you install software from the system manager's account [SYSTEM] with your default device and directory set to SYS$UPDATE.

❷ VMSINSTAL prompts you if you do not supply the product and device names. If you want to be prompted for the product name, device name, and installation options, type the following:

```
$ @SYS$UPDATE:VMSINSTAL Return
```

ddcu:
A device name where the distribution kit will be mounted for the APPC/LU6.2 installation media, where *dd* is the device, *c* is the controller, and *u* is the unit number. MTA0: is the device name used in examples in this document.

OPTIONS N
An optional parameter you should provide if 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, but it does copy the release notes to SYS$HELP. VMSINSTAL also permits the use of several other options. For more information on options, see your processor-specific installation/operations guide.

❸ If users are logged in, you are asked whether you want to continue the installation. To continue, type Y and press Return. To stop the installation, press Return.

❹ Before you proceed with the installation, make sure you have a good backup copy. If you are satisfied with the backup of your system disk, press Return. If you do not have a good backup copy, type N and press Return to end the installation.

❺ Mount the distribution kit volume on the appropriate drive. Type Y and press Return when you are ready.

```
The following products will be processed:

    SNALU62 V2.2


       Beginning installation of SNALU62 V2.2 at hh:mm


%VMSINSTAL-I-RESTORE, Restoring product save set A...

Release notes included with this kit are always copied to SYS$HELP.

Additional Release Notes Options:

    1. Display release notes
    2. Print release notes
    3. Both 1 and 2
    4. None of the above

* Select option [2]:  ❻
* Queue name [SYS$PRINT]:
Job SNALU62022 (queue SYS$PRINT, entry 681) started on LPA0

* Do you want to continue the installation? [NO]  Y Return ❼
%VMSINSTAL-I-RELMOVED, The products release notes have been successfully
moved to SYS$HELP.

        Product:      SNA-APPC-LU6.2
        Producer:     DEC
        Version:      V2.2
        Release Date: 16-JUN-1990

* Does this product have an authorization key registered and loaded? Y Return ❽
* Do you want to purge files replaced by this installation [YES]?  Return ❾
```

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❻ This step applies only if you specified OPTIONS N at ❷.

If you select option 1, VMSINSTAL displays the release notes. Press Ctrl/C to terminate the display.

If you select option 2, VMSINSTAL prompts you for a queue name. Either type 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 and then prompts you for a queue name.

If you select option 4, VMSINSTAL does not display or print the release notes.

Read the release notes carefully before continuing with the VMSINSTAL procedure.

❼ To continue the installation, type Y and press Return. If you type N or press Return, VMSINSTAL moves the release notes to SYS$HELP and ends the installation.

❽ Use the VMS License Management Facility (LMF) to register the product.

Check to see if this is the same information contained in your Product Authorization Key (PAK). Type Y or N in response to the question.

If you do not register and load your authorization key, the product will not run. For more information on LMF, refer to the *VMS License Management Utility Reference Manual*.

❾ If you answer Y to this prompt, VMSINSTAL deletes previous versions of the distribution files.

Press Return after the following prompt if you want to purge the files replaced during installation. If this is your first APPC/LU6.2 software installation, type NO and press Return.

```
* Do you want to run the IVP after the installation [YES]?  Return ⑩
%SNALU62-I-NOQUEST, no further questions will be asked ⑪

        To install the SNALU62SH.EXE and SNALU62MG.EXE images as shareable
        each time the system reboots, you must add the following line to
        your system startup procedure:

                $ @SYS$STARTUP:SNALU62$STARTUP


        On line release notes for this product can be found in the file,
                SYS$COMMON:[SYSHLP]SNALU62022.RELEASE_NOTES

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

** DECnet/SNA VMS APPC/LU6.2 Programming Interface V2.2 Installation Test
       Beginning **

.... Testing the APPC/LU6.2 Programming Interface V2.2

** DECnet/SNA VMS APPC/LU6.2 Programming Interface V2.2 Test Completed
       Successfully **
        Installation of SNALU62 V2.2 completed at 14:50


        VMSINSTAL procedure done at 14:50 ⑫

$  LOGOUT  Return ⑬

SYSTEM     logged out at dd-mmm-yyyy hh:mm
```

⑩ The installation verification procedure (IVP) runs tests to check whether the installation procedure was successful. Press Return to run the IVP after the installation. If you do not want to run the IVP, type NO and press Return.

If you have not registered APPC/LU6.2 with LMF, the following text appears:

```
** DECnet/SNA VMS APPC/LU6.2 Programming Interface
                            V2.2 Installation Test Beginning**

%LICENSE-F-NOAUTH, DEC SNA-APPC-LU6.2 use is not
                   authorized on this node
-LICENSE-F-NOLICENSE, no license is active for this
                      software product
-LICENSE-I-SYSMGR, please see your system manager
%Failed to test program with shareable image

** DECnet/SNA VMS APPC/LU6.2 Programming Interface
                                  V2.2 Test FAILED **
```

Stop the installation and register APPC/LU6.2 with LMF as described in step 8.

⑪ No more input is required. If you typed Y in response to the prompt at ❾, previous versions of the files are now purged.

If the installation procedure is successful, the executable files are moved to their target directory.

⑫ When the installation procedure is complete, VMSINSTAL will finish and return you to the dollar sign ($) prompt.

⑬ VMSINSTAL deletes or changes entries in the process symbol tables during the installation. Therefore, if you are going to continue using the system manager's account and want to restore those symbols, you should log out and log in again.

Installed Files

VMSINSTAL installs the following files on your system:

- SYS$SHARE:SNALU62SH.EXE
  APPC/LU6.2 shareable image
- SYS$MESSAGE:SNALU62MG.EXE
  APPC/LU6.2 message file
- SYS$LIBRARY:SNALU62DF.ADA
  Symbol file for ADA
- SYS$LIBRARY:SNALU62DF.BAS
  Symbol file for BASIC
- SYS$LIBRARY:SNALU62DF.FOR
  Symbol file for FORTRAN
- SYS$LIBRARY:SNALU62DF.H
  Symbol file for C
- SYS$LIBRARY:SNALU62DF.LIB
  Library file
- SYS$LIBRARY:SNALU62DF.MAR
  Symbol file for MACRO
- SYS$LIBRARY:SNALU62DF.PAS
  Symbol file for Pascal
- SYS$LIBRARY:SNALU62DF.PEN
  Environment file for Pascal
- SYS$LIBRARY:SNALU62DF.PLI
  Symbol file for PLI
- SYS$LIBRARY:SNALU62DF.R32
  Symbol file for BLISS
- SYS$STARTUP:SNALU62$STARTUP.COM
  Startup command procedure
- SYS$TEST:SNALU62$IVP.COM
  Verification command procedure
- SYS$HELP:SNALU62022.RELEASE_NOTES
  Release notes

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After the Installation

This chapter describes some tasks to complete after you install the Programming Interface software.

Verifying the Installation

If you have chosen the IVP option, the IVP runs automatically at the end of the installation. You can also run the IVP after the installation to verify that the APPC/LU6.2 programming interface is installed and working properly. To do so after the installation, type the following command from your terminal:

```
$  @SYS$TEST:SNALU62$IVP.COM
```

The following message indicates that the software has been successfully installed:

```
** DECnet/SNA VMS APPC/LU6.2 Programming Interface V2.2
                           Installation Test Beginning **

.... Testing the APPC/LU6.2 Programming Interface V2.2

** DECnet/SNA VMS APPC/LU6.2 Programming Interface V2.2
                           Test Completed Successfully **
```

Note *The IVP does not verify that the APPC/LU6.2 Programming Interface can connect to an IBM system.*

If the software was not installed properly, error messages appear. Correct the problems indicated by the messages and rerun the installation procedure. If you receive IVP errors, you have a damaged kit; contact your Digital representative.

For information about configuring your IBM SNA software components for logical unit (LU) type 6.2 communications, see the *VMS/SNA Guide to IBM Parameters*.

If you have not registered APPC/LU6.2 with LMF, the following text appears:

```
** DECnet/SNA VMS APPC/LU6.2 Programming Interface V2.2
                           Installation Test Beginning **

%LICENSE-F-NOAUTH, DEC SNA-APPC-LU6.2 use is not
                   authorized on this node
-LICENSE-F-NOLICENSE, no license is active for this
                      software product
-LICENSE-I-SYSMGR, please see your system manager
%Failed to test program with shareable image

** DECnet/SNA VMS APPC/LU6.2 Programming Interface V2.2
                                           Test FAILED **
```

Stop the installation and register APPC/LU6.2 with LMF.

Using the APPC/LU6.2 Software in a VAXcluster

After you have installed the APPC/LU6.2 software on one node of a VAXcluster, you can install it on the other nodes by executing the SNALU62$STARTUP.COM procedure on each node as follows:

```
$ @SYS$STARTUP:SNALU62$STARTUP.COM
```

You must activate an APPC/LU6.2 license for each node in the VAXcluster that will execute and run the APPC/LU6.2 software. You can activate the license in one of the following ways:

- Log in to each VAXcluster node and enter the LICENSE LOAD command.
- Invoke the VMS SYSMAN Utility to execute the LICENSE LOAD command on the desired VAXcluster nodes. See the *VMS SYSMAN Utility Manual* for details on defining your management environment, and executing commands on other nodes.

For more information on the LICENSE LOAD command, refer to the *VMS License Management Utility Manual*.

Installing the APPC/LU6.2 Programming Interface as a Shareable Image

SYS$STARTUP:SNALU62$STARTUP.COM contains the start-up command procedure for the APPC/LU6.2 Programming Interface. To install the APPC/LU6.2 Programming Interface as a shareable image, execute the command procedure as follows:

```
$ @SYS$STARTUP:SNALU62$STARTUP.COM
```

Include this command in your system start-up procedure to automatically install the APPC/LU6.2 Programming Interface as a shareable image when you boot the system.

Adding the SNA_APPC HELP File to the HELP File of an Editor

You can insert the APPC/LU6.2 Programming Interface HELP information (added to the HELPLIB file during installation) into the HELP file of an editor, for programmers who use editors to develop DECnet/SNA or VMS/SNA applications. You need system manager privileges to perform this operation. Use the following commands to insert the HELP information into the HELP file of an editor:

```
$  LIBRARY/HELP/EXTRACT=SNA_APPC/OUTPUT=SNAAPPC -
_$  SYS$HELP:HELPLIB
$  LIBRARY/HELP/INSERT SYS$HELP:xxxHELP SNAAPPC
$  DELETE SNAAPPC.HLP;*
```

where *xxx* is the name of your editor, for example, EDT or LSE.

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